

# CURRICULUM VITAE

Date of last revision: October 23, 2017

## A. IDENTIFICATION

**NAME** John Antoniou, M.D., Ph.D., FRCSC

**OFFICE ADDRESS** Jewish General Hospital, Room E-003  
3755 Côte Ste-Catherine Road  
Montréal, Québec, H3T 1E2

**TELEPHONE** (514) 340-8222 ext. 4615

**FAX** (514) 340-7595

**DATE OF BIRTH** September 2, 1967

**PLACE OF BIRTH** Canada

**CITIZENSHIP** Canadian / European (Greece)

## B. EDUCATION:

### Medical

1986-1991 McGill University, Montreal, **M.D.**, Medical school

### Graduate

1993-1999 McGill University, Montreal, **Ph.D.** *Quantitative Biochemical Changes in the Human Lumbar Intervertebral Disc* (Thesis submitted 3/1/99 – Oral Defense 4/14/99) – Experimental Surgery

### Post-Graduate (clinical)

1999 University of Pennsylvania, Shoulder and Elbow Service, Philadelphia, **Fellow**, Shoulder and Elbow Fellowship, Department of Orthopaedics, *Fellowship in Shoulder and Elbow Surgery*

1998-1999 Rush-Presbyterian-St.Lukes Medical Center, Central Dupage Hospital, Chicago, **Fellow**, *Fellowship in Total Joint Arthroplasty*

1998 University of Washington, Seattle, **Senior Fellow**, *Fellowship in Shoulder and Elbow Surgery*

1991-1997 McGill University, Montreal, **FRCSC** – Orthopaedic Surgery Residency

## Professional Certifications

**Licensing Exams:** American Board of Orthopaedic Surgeons Licensing Exam (July, 2002 – Recertified – July 2011)  
European Licensing examination (October, 1997)  
Quebec Orthopaedic Licensing examination (September, 1997)  
FRCSC (registration # 0454106 - September 12, 1997)  
LMCC (registration # 75317 - May 91)  
FLEX (State of New York - state board # 00229 - December 91)

**Medical Licenses:** State of New York (Limited permit # P10742)  
1999-2000  
  
State of Illinois (License # 0036-097278)  
1998-2000  
  
European Medical License (Greece)  
1998-present  
  
Quebec Orthopaedic License (License # 1-974336)  
1997-present  
  
State of Washington (License # MD00035099)  
1997-2000  
  
Commonwealth of Pennsylvania (License # MD-053912-L)  
1994-present  
  
Province of Ontario (License # 66054, OHIP # 208223)  
1992-present

**Professional Development:**  
Leadership Development Program  
January 19 – 22, 2010

## C. FACULTY APPOINTMENTS

### University

Full Professor (tenured)  
Division of Orthopaedic Surgery (Department of Surgery)  
11/2011 – present  
McGill University

Research Director  
Division of Orthopaedic Surgery (Department of Surgery)  
3/2007 – present  
McGill University

Associate Professor (tenured)  
Division of Orthopaedic Surgery (Department of Surgery)  
6/2006 – 11/2011  
McGill University

Assistant Professor  
Division of Orthopaedic Surgery (Department of Surgery)  
1/2000 – 5/2006  
McGill University

Project Director - Orthopaedic Research lab  
1/2000- present  
Lady Davis Institute, Jewish General Hospital  
McGill University, Division of Orthopaedic Surgery

Fellow  
8/1999 – 12/1999  
Shoulder and Elbow Fellowship  
J.P. Iannotti, G.R. Williams  
University of Pennsylvania, Shoulder and Elbow Service

Clinical Instructor / Fellow  
8/1998-7/1999  
Adult Reconstruction Fellowship  
W. Paprosky, G. Galante, A. Rosenberg  
Rush-Presbyterian-St.Lukes Medical Centre, Central Dupage Hospital

Senior Fellow  
1/1998-7/1998 - Shoulder and Elbow Fellowship  
University of Washington  
F.A. Matsen III (Chairman)

Orthopaedic Surgery Resident  
1991- 1997  
M. Aebi (Chairman)  
McGill University

Research Fellow  
1993-1994 - Orthopaedic Research Laboratory, Royal Victoria Hospital  
McGill University  
M. Aebi (Director)

Research Technician  
1987 - Notre Dame Hospital  
University of Montreal  
P. Brazeau (Director)

## Hospital

Staff, Orthopaedic Surgeon  
1/2000-present  
Jewish General Hospital  
Montreal, Quebec, Canada

Orthopaedic Surgeon (surgical assistant)  
10/1997- 12/1997  
Santa Cabrini Hospital  
Montreal, Quebec, Canada

Research Assistant  
1990-1992  
A. Hadjipavlou (Director)  
Jewish General Hospital

## D. HONORS AND AWARDS

- 2017-05-11 Annual Visiting Professor Day, McGill Orthopaedics. (Best basic science award).  
*Ca<sup>2+</sup> and PO<sub>4</sub> Regulate Matrix Protein Synthesis in Intervertebral Disc Cells* (co-author).
- 2015-07-04 Winner of the 2<sup>nd</sup> AmorChem Knock-Out™ event, Montreal (co-applicant).  
Prize: \$500,000  
*LINK N peptide as a therapeutic agent to treat intervertebral disc degeneration, arthritis and pain.*
- 2014-01-23 Annual Experimental Surgery Research Day, McGill Orthopaedics (2<sup>nd</sup> place TED talk presentation).  
*The extracellular calcium sensing receptor as a regulator of cartilaginous endplate intervertebral disc degeneration* (co-author).
- 2013 Second International Philadelphia Spine Research Symposium. Philadelphia, PA (2<sup>nd</sup> best poster award)  
*Mechanism of proteoglycan synthesis by bovine and human Link N* (co-author).
- 2013-2017 Chercheur National  
*L'efficacité du Link N en tant que médiateur de la réparation biologique du disque intervertébral dégénéré*  
Fonds de la recherche en santé du Québec (FRSQ)  
(1<sup>st</sup> Orthopaedic surgeon to ever win this award in Quebec – 1<sup>st</sup> surgeon in over a decade)
- 2013 Best Paper NASS 2013  
*Link-N can stimulate proteoglycan synthesis in the degenerated human intervertebral discs*

R. Gawri, **J. Antoniou**, J. Ouellet, W. Awwad, T. Steffen, P. Roughley, L. Haglund, F. Mwale.

- 2011 – 2014 Hansjörg Wyss Award 2011  
*Biological repair of intervertebral disc degeneration*  
AO/ASIF Foundation Switzerland
- 2011-2013 Chercheurs-boursier cliniciens Senior  
*Tissue engineering of the human intervertebral disk*  
**J. Antoniou**  
Fonds de la recherche en santé du Québec (FRSQ) (2011)
- 2011 McGill MedStar Award  
*Development of an organ culture system for long term survival of the intact human intervertebral disc*  
R. Gawri, F. Mwale, **J. Antoniou**  
McGill University, Faculty of Medicine
- 2010 Canadian Orthopaedic Association Top Poster Award  
*Cobalt and chromium ions in the blood of patients with surface replacement head/conventional femoral stem hybrid total hip arthroplasty.*
- 2010 Founder's award (best paper) – CORS 2010 meeting  
*Effect of Link-N on disc repair in a rabbit model of disc degeneration*
- 2010 Berton Rahn Prize Award - (2<sup>nd</sup> prize)  
*Quantitative magnetic resonance imaging as a diagnostic tool of intervertebral disc degeneration*  
AO Foundation, Switzerland
- 2008 – 2013 William Dawson Scholar (renewed) – Tier II CRC  
*Quantitative MR imaging of the intervertebral disc*  
**J. Antoniou**  
McGill University
- 2007 ABC Traveling Fellowship  
American Orthopaedic Association
- 2005 Carroll A. Laurin Award  
*Serum metal ion levels in patients with metal-on-metal hip prostheses*  
**J. Antoniou**  
Canadian Orthopaedic Association
- 2004 J. Edouard Samson Award  
*Advances in the Diagnosis and Treatment of Degenerative Disc Disease*  
**J. Antoniou**  
Canadian Orthopaedic Association
- 2005 - 2010 CIHR New Investigator Award  
*Quantitative magnetic resonance imaging as a diagnostic tool of intervertebral disc matrix composition and integrity*  
**J. Antoniou**

Canadian Institutes of Health Research

- 2004 Royal College Gold Medal Award in Surgery  
*A Synthetic Peptide of Link Protein Stimulates the Biosynthesis of Collagen II, IX, and Proteoglycan by Cells of the Intervertebral Disc.*  
**J. Antoniou**  
Royal College of Physicians and Surgeons of Canada
- 2003 – 2008 William Dawson Scholar  
*Quantitative MR imaging of the intervertebral disc*  
**J. Antoniou**  
McGill University
- 04/2001 Chercheurs-boursier cliniciens Junior 1  
*La résonance magnétique quantitative comme outil diagnostique de la composition et l'intégrité de la matrice des disques intervertébraux*  
**J. Antoniou**  
Fonds de la recherche en santé du Québec (FRSQ) (2001)
- 03/2001 Charles S Neer II, MD Award  
*Iliotibial Graft Reconstruction for Treatment of Glenohumeral Instability Associated with Irreparable Subscapularis Tears and Capsular Deficiency*  
(Best shoulder research - Worldwide)  
**J. Antoniou**, J. Iannotti, G. Williams, M. Ramsey  
American Shoulder and Elbow Society Specialty Day
- 03/2000 New Investigator Research Award (finalist)  
*Use of Apparent Diffusion Coefficient in Disc Degeneration*  
**J. Antoniou** M.D., Ph.D., G. Beaudoin Ph.D., T. Goswami Ph.D., M. Aebi M.D., M. Alini Ph.D.  
Orthopaedic Research Society
- 11/1999 2000 Hellenic Board of Trade of Montreal  
Platinum Award of Academic Excellence  
**J. Antoniou**
- 07/1997 1997 McLaughlin Fellowship  
Postgraduate Awards Committee  
**J. Antoniou**
- 1997 Eugene Rogala prize (Basic Science)  
*Apparent Diffusion Coefficient in the Assessment of Intervertebral Disc Matrix*  
**J. Antoniou**, G. Beaudoin, T. Steffen, M. Aebi, M. Alini  
McGill Orthopaedics, Resident Research Competition
- 1996 **J. Antoniou**, T. Steffen, F. Nelson, N. Winterbottom, A. Hollander, A.R. Poole, M. Aebi, M. Alini: The Human Lumbar Intervertebral Disc: Evidence for Changes in the Biosynthesis and Denaturation of the Extracellular Matrix with Growth, Maturation, Ageing and Degeneration. *J Clin Invest* 98(4): 996-1003,

1996. (*Selected as work of broad interest and published as press release in over 40 journals, newspapers and news services*)

- 09/1996 QOA research prize (Quebec Orthopaedic Association)  
*Matrix Integrity and Composition Related to the Quantitative MR assessment of the Human Lumbar Intervertebral Disc*  
**J. Antoniou**, M. Alini, B. Pike, T. Steffen, H.G. Baramki, M. Aebi  
Quebec Orthopaedic Association Symposium, Montebello
- 05/1996 CORA basic research award - 2<sup>nd</sup> prize (Canadian Orthopaedic Resident Association)  
*Matrix Integrity and Composition: Important Variables in the Quantitative MR Assessment of the Human Lumbar Intervertebral Disc*  
**J. Antoniou**, M. Alini, B. Pike, T. Steffen, H.G. Baramki, M. Aebi  
C.O.R.A. Meeting, Banff
- 1996 Eugene Rogala prize – 1<sup>st</sup> prize,  
*Matrix Integrity and Composition Related to the Quantitative MR assessment of the Human Lumbar Intervertebral Disc*  
**J. Antoniou**, M. Alini, B. Pike, T. Steffen, H.G. Baramki, M. Aebi  
McGill Orthopaedics, Resident Research Competition
- 06/1995 CORE/ACORE Award (Canadian Orthopaedic Association)  
*Quantitative Magnetic Resonance- Diagnostic Tool of Intervertebral Disc Matrix Integrity and Turnover*  
**J. Antoniou**  
C.O.A. Meeting, Halifax
- 05/1995 CORA basic research award - 2<sup>nd</sup> prize (Canadian Orthopaedic Resident Association)  
*Characterization of synthetic modulation and matrix turnover in the developing and degenerating human lumbar intervertebral disc*  
**J. Antoniou**, M. Alini, N.M. Goudsouzian, T.F. Heathfield, T. Steffen, N. Winterbottom, A.R. Poole, M. Aebi  
C.O.R.A. Meeting, Quebec
- 1995 Eugene Rogala - 1<sup>st</sup> prize  
*Lumbar Segmental Ranges of Motion Measured in vivo*  
T. Steffen, H.G. Baramki, R. Rubin, **J. Antoniou**, D. Marchesi, M. Aebi  
McGill Orthopaedics, Resident Research Competition
- 1995 Eugene Rogala 3<sup>rd</sup> prize  
*Phases of Matrix Turnover in the Developing and Degenerating Human Lumbar Intervertebral Disc*  
**J. Antoniou**, M. Alini, N.M. Goudsouzian, T.F. Heathfield, T. Steffen, N. Winterbottom, A.R. Poole, M. Aebi  
McGill Orthopaedics, Resident Research Competition
- 1991 Joseph P. Shugar Award- Orthopaedic Prize  
McGill University, 1991

1986-87 Faculty Scholar  
McGill University

## **E. TEACHING**

### **1. McGill Courses:**

#### **Undergraduate**

- |            |  |
|------------|--|
| 01/11/2007 | Lecturer: Physical and occupational therapy:<br><i>Conditions and Surgical Management of the Shoulder</i>  |
| 11/9/2006  | Lecturer: Medical Students<br><i>Life as Physician Seminar</i>   |
| 01/19/2006 | Lecturer: Physical and occupational therapy:<br><i>Conditions and Surgical Management of the Shoulder</i>  |
| 01/6/2005  | Lecturer: Physical and occupational therapy:<br><i>Conditions and Surgical Management of the Shoulder</i>  |
| 01/13/2004 | Lecturer: Physical and occupational therapy:<br><i>Conditions and Surgical Management of the Shoulder</i>  |
| 01/20/2003 | Lecturer: Physical and occupational therapy:<br><i>Conditions and Surgical Management of the Shoulder</i>  |
| 04/03/2002 | Lecturer: Back to Basics: Bone Metabolism: when things go<br>wrong, <i>Biomaterials and Bioengineering</i> |
| 10/23/2001 | Lecturer: Physical and occupational therapy:<br><i>Conditions and Surgical Management of the Shoulder</i>  |
| 01/08/2001 | Lecturer: Physical and occupational therapy:<br><i>Conditions and Surgical Management of the Shoulder</i>  |

#### **Post-graduate**

- |            |   |
|------------|---|
| 12/10/2015 | Academic Half Day Teaching, McGill Orthopaedic Residents (R1-<br>R5) – Revision Hip Arthroplasty                            |
| 1/29/2015  | Academic Half Day Teaching, McGill Orthopaedic Residents (R1-<br>R5) – Revision Hip Arthroplasty                            |
| 1/15/2015  | Orthopaedic Resident Review in Reconstructive Surgery Case<br>absed learning for residents from across the country- Toronto |



- 1/17/2014 Orthopaedic Resident Review in Reconstructive Surgery Case absed learning for residents from across the country- Toronto
- 9/19/2013 Academic Half Day Teaching, McGill Orthopaedic Residents (R1-R5) – Revision Hip Arthroplasty
- 5/2/2013 Academic Half Day Teaching, McGill Orthopaedic Residents (R1-R5) – Hip Arthroplasty
- 1/18/2013 Orthopaedic Resident Review in Reconstructive Surgery Case absed learning for residents from across the country- Toronto
- 4/19/2012 Academic Half Day Teaching, McGill Orthopaedic Residents (R1-R5) – Hip Arthroplasty
- 9/22/2011 Orthopaedic Grand Rounds, Shriners’s Hospital for Children, *Adverse local soft tissue reaction to non-metal on metal hip replacements*
- 5/27/2011 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 12/15/2010 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 11/16/2010 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 10/18/2010 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 9/22/2010 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 8/25/2010 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 3/30/2010 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 3/1/2010 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 2/11/2010 Academic Half Day Teaching, McGill Orthopaedic Residents (R1-R5) – *Hip Arthroplasty*
- 12/16/2009 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*

- 12/7/2009 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 11/10/2009 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 10/29/2009 McGill Medical Student Supervision (24 students) - Orthopedic session on Physical Exam – McGill Medical Simulation Center
- 10/5/2009 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 9/15/2009 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 8/10/2009 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 5/27/2009 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 3/18/2009 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 3/12/2009 Academic Half Day Teaching, McGill Orthopaedic Residents (R1-R5) – *Hip Arthroplasty II*
- 2/19/2009 Academic Half Day Teaching, McGill Orthopaedic Residents (R1-R5) – *Hip Arthroplasty*
- 2/10/2009 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 12/8/2008 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 9/10/2008 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 8/13/2008 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 4/14/2008 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 3/31/2008 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*

- 3/21/2008 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 12/6/2007 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 10/4/2007 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 8/9/2007 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 3/21/2007 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 2/1/2007 McGill Orthopaedic Residents (arthroplasty teaching session) *Revision Total Knee Arthroplasty*
- 1/18/2007 McGill Medical Student Lecture, Professional Skill, *Physical Examination of the Musculoskeletal System*
- 11/30/2006 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 10/18/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Revision Total Knee Arthroplasty*
- 10/17/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Stiff Total Knee*
- 9/21/2006 McGill Orthopaedics Residents Seminar, Shriners' Hospital for Children, *Indications and Techniques for Total Shoulder Arthroplasty*
- 8/31/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Femoral Revision Arthroplasty*
- 7/26/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Periprosthetic Fractures in THA*
- 7/6/2006 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 5/29/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Periprosthetic Fractures*

- 5/8/2006 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 5/1/2006 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 4/26/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Femoral Revision Arthroplasty*
- 4/16/2006 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 4/12/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Stiff Total Knee*
- 4/6/2006 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 3/22/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Revision TKA*
- 3/1/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Periprosthetic Fractures*
- 2/23/2006 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 2/1/2006 McGill Orthopaedic Residents (arthroplasty teaching session) *Femoral Revision Arthroplasty*
- 1/19/2006 McGill Medical Student Lecture, Professional Skill, *Physical Examination of the Musculoskeletal System*
- 12/30/2005 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 12/6/2005 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 12/1/2005 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 11/2/2005 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 9/2/2005 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*

- 6/30/2005 McGill Medical Student (POM)  
OSCE Surgical Examination (examiner)
- 6/23/2005 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 5/12/2005 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 5/6/2005 McGill Medical Student (POM)  
OSCE Surgical Examination (examiner)
- 4/13/2005 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 3/31/2005 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 1/27/2005 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 1/6/2005 McGill Medical Student Lecture, Professional Skill, *Physical Examination of the Musculoskeletal System*
- 1/3/2005 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 11/4/2004 Orthopaedic Grand Rounds, Shriners' Hospital for Children, *The use of large femoral heads in Hip Arthroplasty*
- 9/16/2004 McGill Orthopaedics Residents Seminar, Shriners' Hospital for Children, *Periprosthetic Fractures*
- 8/26/2004 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 5/27/2004 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 4/16/2004 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 4/9/2004 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 2/5/2004 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*

- 1/15/2004 McGill University, ICM medical students, lecture, *The Musculoskeletal System, Evaluation of the Shoulder*
- 1/8/2004 McGill Orthopaedics Residents Seminar, Shriners' Hospital for Children, *Revision Hip Arthroplasty*
- 12/11/2003 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 11/13/2003 McGill Orthopaedics Residents Seminar, Shriners' Hospital for Children, *Indications and Techniques for Total Shoulder Arthroplasty*
- 10/30/2003 Orthopaedic Grand Rounds, Shriners' Hospital for Children, *The Indications for Constrained Total knee Arthroplasty*
- 10/20/2003 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 08/21/2003 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 05/29/2003 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 5/10/2003 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 04/10/2003 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 04/10/2003 Orthopaedic Grand Rounds, Shriners' Hospital for Children, *Advances in Osteolysis Science, Diagnosis, Treatment*
- 02/17/2003 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 12/19/2002 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 10/24/2002 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 09/12/2002 McGill Orthopaedics Residents Seminar, Shriners' Hospital for Children, *Periprosthetic fractures*
- 08/22/2002 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*

- 06/17/2002 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 5/13/2002 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 03/07/2002 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 03/07/2002 Orthopaedic Grand Rounds, Shriner's Hospital for Children, *Revision Femur Arthroplasty*
- 12/20/2001 McGill Medical Student Lecture (POM), *Arthritis and Management*
- 11/15/2001 Orthopaedic Grand Rounds, Shriner's Hospital for Children, *Revision hip arthroplasty*
- 11/05/2001 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 09/06/2001 McGill Orthopaedics Residents Seminar, Shriner's Hospital for Children, *Shoulder Arthroplasty*
- 09/06/2001 McGill Medical Student Lecture (POM), *Arthritis and Management*
- 06/14/2001 McGill Medical Student Lecture (POM), *Orthopaedic Trauma*
- 05/31/2001 Orthopaedic Grand Rounds, Shriner's Hospital for Children, *Infected Total Hip Arthroplasty*
- 05/03/2001 McGill Orthopaedics Residents Seminar, *Complications after total hip replacements*
- 5/1/2001 McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
- 04/12/2001 McGill Medical Student Lecture (POM), *Management of Common Orthopaedic Problems*
- 11/30/2000 McGill Medical Student Lecture, *Common Orthopaedic Problems*
- 08/10/2000 McGill Orthopaedics Residents Seminar, *Fractures of the Shaft of the Humerus and Fractures and Dislocations around the Elbow Joint*

06/08/2000	Orthopaedic Grand Rounds, McGill University, (Arthroplasty Group) <i>Dislocations and the total Hip</i>
04/27/2000	McGill Orthopaedics Residents Seminar, April 27 <sup>th</sup> , 2000 <i>Cementless THA – Indications &amp; Results in Primary &amp; Revision Surgery</i>
4/15/2000	McGill Orthopaedic Residents (R5), Moc Oral Examination for Royal College examination
02/17/2000	Orthopaedic Grand Rounds, McGill University, (Arthroplasty Group) <i>Periprosthetic Fractures</i>

## 2. Research Trainees

### Post-Doctoral Fellows

7/2017 – 6/2018	– <b>Dr. Nikolaos Davarinos</b> – Arthroplasty fellow
7/2017 – 6/2018	– <b>Dr. Ahmad Alshammari</b> – Arthroplasty fellow
7/2016 – 6/2017	<b>Dr. Zaki Alhifzi</b> – Arthroplasty fellow
7/2016 – 6/2017	<b>Dr. Ahmad Abou Zeid</b> – Arthroplasty fellow
7/2015 – 6/2016	<b>Dr. Saleh Alkhaldi</b> – Arthroplasty fellow
7/2015 – 6/2016	<b>Dr. Nikolas Stavropoulos</b> – Arthroplasty fellow
7/2014 – 6/2015	<b>Dr. Mohammed Al Sobeai</b> – Arthroplasty Fellow
7/2014 – 6/2015	<b>Dr. Emmanouil Liodakis</b> – Arthroplasty Fellow
7/2013 – 6/2014	<b>Dr. Yaron Brin</b> – Arthroplasty Fellow
7/2013 – 6/2014	<b>Dr. Mohammed Alattas</b> – Arthroplasty Fellow
9/2012 – 8/2014	<b>Dr. Michael Grant</b> – Post-Doctoral Fellow: <i>Calcium receptors involvement in intervertebral disc degeneration</i>
7/2012- 6/2013	<b>Dr. Angelos Politis</b> – Arthroplasty Fellow
7/2011-6/2012	<b>Dr. Abdulrahman Al Garni</b> – Arthroplasty Fellow
7/2011-6/2012	<b>Dr. Gregory Manoudis</b> – Arthroplasty Fellow
7/2010-6/2012	<b>Dr. Avishai Reuven</b> – Arthroplasty Fellow



- 7/2009 – 6/2010 **Dr. Allan Walsh** – Arthroplasty Fellow
- 7/2008 – 6/2009 **Dr. Vassili Nikolaou** – Arthroplasty Fellow
- 04/2000-11/2001 **Dr. Fackson Mwale** – Post-Doctoral Fellow: *Tissue Engineering of the Intervertebral Disc*

#### **Ph.D. Students**

- 3/2013 – 4/2014 PhD co-supervisor – **Insaf Hadjab**, Experimental Surgery, *Micromechanics of intervertebral disc degeneration*
- 6/2008 – 8/2013 PhD co-supervisor – **Rahhul Gawri**, Experimental Surgery, *Intervertebral disc repair in bovine and human organ culture models.*
- 9/2015 – present PhD co-supervisor **Omar Salem**, Experimental Surgery, McGill University. *The role of calcium and the extracellular calcium receptor in osteoarthritis.*

#### **Masters Students**

- 09/2016 – present MSc supervisor – **Peter Dust**, Experimental Surgery, McGill University. Co-director.
- 04/2016 – present MSc supervisor – **Yazeed AlSaran**, Experimental Surgery, McGill University. *Effect of free calcium and phosphate on the extracellular matrix of the intervertebral disc.* Co-director.
- 01/2015 – present MSc supervisor – **Muhammad Albsher**, Experimental Surgery, McGill University. *A Short Novel Peptide for the Repair of Cartilage in Osteoarthritic Joints.* Co-director.
- 9/2014- present MSc supervisor – **Ahmed Habis**, Experimental Surgery, *The effect of Oxitoxin on the extracellular matrix of the intervertebral disc.*
- 9/2014- present MSc supervisor – **Husam Almajed**, Experimental Surgery, *The role of the extracellular calcium sensing receptor in osteonecrotic bone marrow derived MSCs.*
- 9/2014- present MSc supervisor – **Abdualltef Alrashoudi**, Experimental Surgery, *The interplay between calcium and PTHrP in disc degeneration.*
- 9/2014- 9/2015 MSc supervisor – **Omar Salem**, Experimental Surgery, *The role of calcium and the extracellular calcium sensing receptor in osteoarthritis.*

- 1/2014- present MSc supervisor – **Rakan Bokhari**, Experimental Surgery, *The effect of free calcium on the extracellular matrix of the intervertebral disc.*
- 1/2013- present MSc supervisor – **Nizar AlGarni**, Experimental Surgery, *Effect of Link N on osteoarthritic cartilage.*
- 1/2013- present MSc supervisor – **Mortaz Alaqeel**, Experimental Surgery, *Effect of Link N on osteoarthritic cartilage.*
- 1/2013- 12/2015 MSc supervisor – **Hussain Noorwali**, Experimental Surgery, *Effect of Link N treatment on pain related to intervertebral disc degeneration.*
- 1/2012- 7/2013 MSc supervisor – **Abdulrahman Alaseem**, Experimental Surgery, *The effect of drug therapy on human mesenchymal stem cell differentiation.*
- 1/2012- 7/2013 MSc supervisor – **Sultan Ahmad Aldebeyan**, Experimental Surgery. *Effect of Link N on bovine intervertebral disc cells.*
- 7/2010 –2012 MSc supervisor – **Abdulaziz Almaawi**, Experimental Surgery, *Expression of type X collagen in mesenchymal stem cells from osteoarthritic patients: Effect of disease profile or drug therapy.*
- 9/2009 – 8/2011 MSc supervisor - **Sora Al-Rowas**, Experimental Surgery, *Effect of neonatal exposure to Diethylstilbesterol on lumbar bone in female mice at adulthood.*
- 9/2009 – 8/2011 MSc supervisor – **Sonia Rampersad**, Experimental Surgery, *Chondrogenesis in mesenchymal stem cells from osteoarthritic patients pre-cultured on novel nitrogen-rich plasma polymer coatings.*
- 1/2009 – 8/2010 MSc co-supervisor **Rahul Gawri**, Experimental Surgery. *Optimization and validation of a human organ culture model used for studying repair in mildly degenerate intervertebral disc.*
- 6/2007 – 1/2010 MSc supervisor – **Gergana Hristova**, Experimental Surgery, *Evaluation Link-N growth peptide in a rabbit model of disc degeneration*
- 6/2007 – 1/2010 MSc supervisor – **Kevin Debiparshad**, Experimental Surgery, *Analysis of knock out mice (ERG-1receptor) and it's effect of disc and cartilage*
- 06/2004-2006 MSc supervisor – **Ioana Ciobanu**, Experimental Surgery, *The effect of low oxygen tension on the generation and metabolism of the intervertebral discs*
- 01/2003-12/2004 MSc supervisor – **Dorothy Stachura**, Experimental Surgery, *Human Stem Cell Differentiation into a Disc Like Phenotype*, McGill University

**Orthopaedic Surgery Resident**

- 09/2015- 00/2018 **Dr. Thamer Alraiwes**, (Orthopaedic surgery resident); *Survivorship of Cemented and Cementless Polyethylene Liner Exchange: A Single-institution Experience*, McGill University
- 09/2015- 06/2018 **Dr. Mina Morcos**, (Orthopaedic surgery resident); *Studies on NSQUIP data*, McGill University
- 09/2015- 06/2017 **Dr. Justin Drager**, (Orthopaedic surgery resident); *Studies on NSQUIP data*, McGill University
- 09/2014- 06/2017 **Dr. Adam Hart**, (Orthopaedic surgery resident); *Studies on NSQUIP data*, McGill University
- 09/2012- 06/2015 **Dr. Anthony Albers** (Orthopaedic surgery resident); *Short, Tapered, Highly Porous, Proximally Coated Cementless Femoral Stem at a Minimum 4-Year Follow-Up*, McGill University.
- 9/2012- 06/2015 **Dr. Ahmed Aoude** (Orthopaedic surgery resident); *Midterm Outcomes of the Recently FDA Approved Ceramic on Ceramic Bearing in Total Hip Arthroplasty* McGill University
- 9/2011- 9/2014 **Dr. Sarantis Abatzoglou** (Orthopaedic surgery resident); *Comparison of 36mm, 40mm and 44mm metal-on-metal total hip arthroplasty*, McGill University
- 09/2011– 06/2014 **Dr. Alberto Carli** (Orthopaedic surgery resident); *Clinically significant corrosion at the head-neck taper interface in total hip arthroplasty: a systematic review and case series.*
- 9/2011- 9/2012 **Dr. Khalid Alsheikh** (Orthopaedic surgery resident); *Analysis of MRI MARS studies, metal ion levels and radiographaphic parameters in patients with the ASR prosthesis*, McGill University
- 5/2010 – 9/2011 **Dr. Mathiew Mann** (Orthopaedic surgery resident); *EBRA Evaluation of Trilock Stem*, McGill University
- 8/2009 – 7 /2010 **Dr. S Gupta** (Orthopaedic surgery resident); *EBRA Evaluation of THA*, McGill University
- 1/2009 – 9/2012 **Dr. N Desy** (Orthopaedic surgery resident); – *Hip Arthritis in the Young*, McGill University
- 1/2009 – 9/2011 **Dr. M Bernstein** (Orthopaedic surgery resident); – *Outcomes of Metal on Metal Hip Arthroplasty*, McGill University
- 1/2008 – 7/2010 **Dr. S. Bergeron** (Orthopaedic surgery resident); – *Resurfacing Hip Arthroplasty*, McGill University

- 06/2005-2007 **Dr. S. Sharma** (Orthopaedic surgery resident); – *Comparing cemented versus hybrid TKA (ps design)*, McGill University
- 01/2005-2007 **Dr. C. Richards** (Orthopaedic surgery resident); – *Resurfacing Hip Arthroplasty*, McGill University
- 01/2002-7/2005 **Dr. P. Martineau** (Orthopaedic surgery resident); - *Comparison of Direct and Indirect Costs of Joint replacement surgery in Canada versus the United States*, McGill University
- 01/2001-04/2001 **Dr. J. Theodoropoulos** (Orthopaedic surgery resident); - *Four Part proximal humerus fractures treated with hemiarthroplasty*, McGill University

### Undergraduate Students

- 05/2017-05/2018 Student in 3<sup>rd</sup> year in Medical School, Universite de Montreal – **Lydia Goff** *Psychological impact of living with a recalled implant.*
- 09/2015-06/2016 Student in 1<sup>st</sup> year in Medical School, Research Fundamentals Program - **Casey Wang** - *Ceramic on metal vs metal on metal total hip arthroplasty*, McGill University.
- 5/2009- 8/2009 Summer Student Research Bursary Program – **Jesse Eisenberg**: *Oxidative stress marker in patients with metal-on-metal total hip replacements/*
- 07/2007 Summer Student Research Bursary Program – **Charles Lamfookon** – McGill University Research Bursary Program, Clinical outcome and bearing survivorship after metal-on-metal hip replacement, McGill University (1400\$ support award)
- 06/2007-08-2007 Undergraduate student in Biochemistry – **Irina Semova** – Oxidative stress in blood of patients with metal-on-metal arthroplasty.
- 07/2004-08/2004 Summer Student Research Bursary Program – **Ooi Yen Hoong** – McGill Research Bursary Program, *Tissue Engineering of the Intervertebral Disc*, McGill University (2700\$ support award)
- 07/2004-08/2004 Summer Student Research Bursary Program – **Kim Lin Ayuen** – McGill Research Bursary Program, *Effect of cobalt and chromium ions on human mesenchymal stem cells*, McGill University (2700\$ support award)
- 07/2003-08/2003 Summer Student Research Bursary Program – **Robert Segal** – McGill Research Bursary Program, *Tissue Engineering of the Intervertebral Disc*, McGill University (2700\$ support award)

- 05/2003-08/2003 Undergraduate Student – **Valerie Thermil** – CIHR/McGill Skeletal Summer Training Program, *Tissue Engineering of the Intervertebral Disc*, McGill University (5000\$ support award)
- 05/2002-08/2002 Undergraduate Student – **Valerie Thermil** – *Synthesis of polymer scaffolds for tissue engineering of the intervertebral disc*
- 05/2002-07/2003 Undergraduate Student - **Jessica Chicoine** – *Synthesis of polymer scaffolds for tissue engineering of the intervertebral disc*
- 07/2001-07/2002 Undergraduate Student - **Vivian Lim** - *Analysis of extracellular matrix proteins in the disc: Collagens*

### **Summer Students**

- 06/2001-11/2001 Cegep Student - **Daniel Unger** – *Characterization of the bovine disc*

### **Volunteers**

- 06/2001-06/2002 **Wayne Douglas** (B.Sc.) - *Analysis of extracellular matrix proteins in the disc: Proteoglycans*

### 3. Invited Speaker / Lecturer / Instructor:

#### Outside McGill

- 1/20/2017 Speaker - *"Top 10 Things You Need to Know" Hip Revision* - Orthopaedic Resident Review in Reconstructive Surgery. Toronto, Ontario.
- 11/24/2016 Panel member – Case session arthroplasty  
Canadian Arthroplasty Society Meeting. Toronto, Ontario
- 6/10/2016 Speaker - *ASR has ruined all- 7<sup>th</sup> Advanced Hip resurfacing Course* – Ghent, Belgium
- 1/22/2016 Speaker - *"Top 10 Things You Need to Know" Hip Revision* - Orthopaedic Resident Review in Reconstructive Surgery. Toronto, Ontario.
- 1/22/2016 OSCE Examiner - *Arthroplasty* - Orthopaedic Resident Review in Reconstructive Surgery. Toronto, Ontario.
- 11/26/2015 Moderator – Metal on Metal Issues.  
Canadian Arthroplasty Society Meeting. Ottawa, Ontario
- 1/16/2015 Speaker - *"Top 10 Things You Need to Know" Hip Revision* - Orthopaedic Resident Review in Reconstructive Surgery. Toronto, Ontario.
- 1/16/2015 OSCE Examiner– *Arthroplasty* - Orthopaedic Resident Review in Reconstructive Surgery. Toronto, Ontario.
- 11/27/2014 Moderator – Metals in THA.  
Canadian Arthroplasty Society Meeting. Toronto, Ontario
- 11/10/2014 Speaker – *Corrosion at the Head-Neck Taper Interface Affects the prognosis of Hip Revision Surgery* – ASTM – Symposium on Modularity and Tapers in Total Joint Replacement Devices - New Orleans, LA
- 8/16/2014 Speaker – *Work-Up for the Painful Metal on Metal Hip* Technology for the Treatment of Adult Hip and Knee Disorders —Baltimore, MD
- 8/16/2014 Speaker – *Ceramic-on-Ceramic: Better than We Thought* New Technology for the Treatment of Adult Hip and Knee Disorders —Baltimore, MD
- 5/29/2014 Speaker – *MoM hip resurfacing should be banned* - Resurfacing Advanced Course – Ghent, Belgium
- 1/17/2014 Speaker - *"Top 10 Things You Need to Know" Hip Revision* - Orthopaedic Resident Review in Reconstructive Surgery. London, Ontario.

- 1/17/2014 OSCE examiner *Arthroplastyn* - Orthopaedic Resident Review in Reconstructive Surgery. Toronto, Ontario.
- 11/22/2013 Speaker- *ALTR evaluation and natural history using MRI MARS*. Candian Arthroplasty Society Meeting. Montreal, Quebec
- 11/22/2013 Moderator – New technologies. Candian Arthroplasty Society Meeting. Montreal, Quebec
- 11/14/2013 Keynote speaker – University of Toronto Orthopaedic Research Day  
Visiting professor  
*Advances in the Diagnosis and treatment of Degenerative Disc Disease*
- 11/14/2013 University of Toronto Orthopaedic Research Day  
Visiting professor  
*The Research-Clinic and Work-Life Balance*
- 10/15/2013 Chairperson/Moderator – Intervertebral Disc Degeneration Repair Combined Orthopaedic Research Society Meeting - Venice
- 8/24/2013 Speaker –*Evaluation of the Painful Metal on Metal Hip arthroplasty* New Technology for the Treatment of Adult Hip and Knee Disorders — Baltimore, MD
- 8/24/2013 Panelist – Cases Presentations – Complex Knee cases - New Technology for the Treatment of Adult Hip and Knee Disorders —Baltimore, MD
- 4/13/2013 Speaker - *Use of RM/CT imaging –Is There Still a Place for Metal- Metal Bearings in Hip Arthroplasty?* – Rome, Italy, April 12-13, 2013.
- 1/26/2013 Speaker - *Tribocorrosion from a Clinicians Point of View: An Old New Problem* – Workshop on Tribocorrosion in Orthopaedic Implants – A New approach to an Old Problem - 59th Annual Meeting of the Orthopaedic Research Society. San Antonio, TX. January 26-29, 2013.
- 1/18/2013 OSCE examiner- *Arthroplasty* - Orthopaedic Resident Review in Reconstructive Surgery. Toronto, Ontario.
- 1/18/2013 Speaker - *"Top 10 Things You Need to Know" Hip Revision* - Orthopaedic Resident Review in Reconstructive Surgery. London, Ontario.
- 11/18/2012 Speaker/ Symposium Organizer/ Moderator - *MRI MARS in diagnosis of failed metal on metal hip replacement*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China.
- 11/15/2012 Speaker- *Eight Year follow up of a recalled Hip resurfacing Implant*. Candian Arthroplasty Society Meeting. London, Ontario

- 8/25/2012 Speaker – *Evaluating the Painful metal on metal hip arthroplasty* – New Technology for the Treatment of Adult Hip and Knee Disorders – Baltimore, MD
- 8/25/2012 Speaker -*Adverse Local Tissue Reactions after Non-Metal-on-Metal Bearing Interfaces* New Technology for the Treatment of Adult Hip and Knee Disorders —Baltimore, MD
- 8/25/2012 Moderator – Cases Presentations – Can this joint be saved - New Technology for the Treatment of Adult Hip and Knee Disorders — Baltimore, MD
- 8/28/2011 Speaker - *Evaluation of Painful Resurfacing* - Hip Joint Preservation & Resurfacing Arthroplasty Course –Baltimore, MD
- 6/15/2012 Speaker – *The impact of the negative publicity on health authorities, surgeons and patients in Cana* - Resurfacing Advanced Course – Ghent, Belgium
- 6/14/2012 Speaker – *MRI as a diagnostic and screening tool for adverse local reactions* - Resurfacing Advanced Course – Ghent, Belgium
- 4/27/2012 Speaker – *Role for a Short Stem?* - Practical Solutions for Complex Issues in the Hip and Knee- Miami, Florida
- 4/27/2012 Speaker – *Thoughts on Hip Balancing-* Practical Solutions for Complex Issues in the Hip and Knee- Miami, Florida
- 4/27/2012 Speaker – *The Role for a Monoblock Stem-* Practical Solutions for Complex Issues in the Hip and Knee- Miami, Florida
- 4/27/2012 Moderator - *It's all about the Bearing-* Practical Solutions for Complex Issues in the Hip and Knee- Miami, Florida
- 10/28/2011 Speaker – *Resurfacing Still an Option?* - Total Hip Solutions Course - Montreal, Quebec
- 10/28/2011 Speaker – *Adverse local Soft Tissue Reactions in Non Metal on Metal Hips* Total Hip Solutions Course -Montreal, Quebec
- 10/28/2011 Speaker – *Recalls* - Total Hip Solutions Course -Montreal, Quebec
- 10/4/2011 Speaker – *The Short Femoral Stems in THR* 4<sup>th</sup> KSU international orthopaedic symposium – Riyadh, Saudi Arabia
- 10/5/2011 Speaker – *Alternate Bearing Hip Replacements in Young Patients.* 4<sup>th</sup> KSU international orthopaedic symposium – Riyadh, Saudi Arabia



- 10/5/2011 Speaker - *Adverse local tissue reactions in Non Metal on Metal Total Hip.* 4<sup>th</sup> KSU international orthopaedic symposium – Riyadh, Saudi Arabia
- 10/6/2011 Speaker - *My Research Lab Experience.* 4<sup>th</sup> KSU international orthopaedic symposium – Riyadh, Saudi Arabia
- 10/6/2011 Speaker - *My Practice and Hip Resurfacing.* 4<sup>th</sup> KSU international orthopaedic symposium – Riyadh, Saudi Arabia
- 8/27/2011 Speaker – *Adverse Local Tissue Reactions after Non-Metal-on-Metal Bearing Interfaces - Hip Joint Preservation & Resurfacing Arthroplasty Course* –Baltimore, MD
- 8/28/2011 Speaker – *Metal-on-Metal Total Hip Arthroplasty (Metal Ions and Biological Responses to These Ions).* Hip Joint Preservation & Resurfacing Arthroplasty Course –Baltimore, MD
- 8/28/2011 Speaker - *Evaluation of Painful Resurfacing - Hip Joint Preservation & Resurfacing Arthroplasty Course* –Baltimore, MD
- 7/7/2011 Speaker – *The Case of Metal on Metal Implant Recalls--What Have We Learned?* Part of symposium - Adverse events and Monitoring New Implants– COA meeting – St. John’s, NFL
- 7/7/2011 Moderator - COA/CORS Combined Paper Session 5: Arthroplasty – COA meeting – St. John’s, NFL
- 5/28/2011 Moderator - 17<sup>th</sup> Annual Canadian Connective Tissue Conference, Session: Stem cells, biomaterials and tissue regeneration session– Montreal, QC
- 3/26/2011 Speaker - *Hips: The Different Patient – What Would You Choose?* Des cas complexes et des controverses au sujet de l’arthroplastie Montreal, QC
- 1/16/2011 Moderator - ORS – Arthroplasty session – Long Beach, California
- 12/2/2010 Speaker – *Alternate Bearing Hip Arthroplasty in Young Patients–* Depuy Dinner meeting - Los Angeles, CA
- 10/29/2010 Speaker – *Evaluating the Painful MoM THA - The New Millenium Hip Patient Course -* Montreal, QC
- 10/29/2010 Speaker – *Resurfacing Hip Replacement- What I learned-* The New Millenium Hip Patient Course -Montreal, Quebec
- 9/23/2010 Speaker – *Metal on Metal Hip Arthroplasty Demistifying the problem–*

Depuy Dinner meeting - San Antonio, TX

- 8/29/2010 Speaker – *Adverse Local Tissue Reactions after Non-Metal-on-Metal Bearing Interfaces* - Hip Joint Preservation & Resurfacing Arthroplasty Course – Baltimore, MD
- 8/29/2010 Speaker – *Prosthesis and Head Size Risk Factors: Total Hip Replacement versus Resurfacing* Hip Joint Preservation & Resurfacing Arthroplasty Course – Baltimore, MD
- 8/28/2010 Speaker - *Evaluation of Painful Resurfacing* - Hip Joint Preservation & Resurfacing Arthroplasty Course –Baltimore, MD
- 7/7/2010 Speaker - *Quantitative MRI approaches to diagnosing disc degeneration: how far into the future?* - World Forum for Spine Research – Montreal, QC
- 6/18/2010 Moderator - COA/CORS Combined Paper Session 2: Arthroplasty – COA meeting – Edmonton, AB
- 5/7/2010 Speaker – *Resurfacing How to avoid complications-* The New Millenium Hip Patient Course – Vancouver, BC
- 5/7/2010 Speaker –*Cases and Video Vignettes-* The New Millenium Hip Patient Course - Vancouver, BC
- 11/27/2009 Speaker – *Resurfacing versus Large head THA* - The New Millenium Hip Patient Course - Montreal, QC
- 11/27/2009 Speaker – *Approaches-* The New Millenium Hip Patient Course Montreal, QQ
- 11/9/2009 Rapporteur (working group) – The 2009 Bone Health Research concensus conference – Toronto, ON
- 10/9/2009 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr Sequiera, Nova Scotia)
- 10/2/2009 Speaker – *Revision Resurfacing Arthroplasty – As simple as we think?* Quebec orthopaedic Association – Malbaie, Quebec
- 10/2/2009 Speaker – *Total Hip Arthroplasty - What to do on the acetabular side-* Quebec orthopaedic Association – Malbaie, Quebec
- 9/5/2009 Speaker – *Prosthetic Variables and Ion Levels* - Hip Joint Preservation & Resurfacing Arthroplasty Course –Baltimore, MD

- 9/4/2009 Speaker – *Prosthesis and Head Size Risk Factors: Total Hip Replacement versus Resurfacing* Hip Joint Preservation & Resurfacing Arthroplasty Course –Baltimore, MD
- 9/4/2009 Speaker - *Evaluation of Painful Resurfacing* - Hip Joint Preservation & Resurfacing Arthroplasty Course –Baltimore, MD
- 6/28/2009 Speaker – Treatment of Hip Arthritis in the young Annual HMAQ summer meeting – Mani, Greece
- 6/18/2009 Speaker – Resurfacing Hip Arthroplasty in Canada Resurfacing Advanced Course – Ghent, Belgium
- 6/18/2009 Speaker – Resurfacing Surgical Technique Resurfacing Advanced Course – Ghent, Belgium
- 6/17/2009 Speaker –Contraindications to Resurfacing Resurfacing Advanced Course – Ghent, Belgium
- 5/22/2009 Speaker - L'Association québécoise des médecins du sport – annual meeting - *Les lésions méniscales: Méniscectomie, réparation ou observation: préciser l'indication* Manoir St-Castin, Lac Beauport
- 5/14/2009 Speaker *Preventing DVT in Orthopaedic Surgery- New therapeutic Options* Granby and Cowansville Hospitals Rounds
- 5/1/2009 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr Roy, Laval)
- 1/22/2009 Speaker – *The New Oral Anticoagulants in Orthopaedic Surgery* Lakeshore General Hospital Monthly grand rounds
- 1/9/2009 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr Kris Berein, Minesota)
- 12/5/2008 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr Joe Hanna, Washington)

- 11/27/2008 Speaker – *The New Oral Anticoagulants in Orthopaedic Surgery*  
St-Jean sur Richelieu Hospital Orthopaedic grand rounds
- 11/7/2008 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr.  
Antoniou to visiting surgeon (Dr Jeff Lozman, Albany)
- 11/5/2008 Speaker - *Rivaroxaban: An oral direct Factor Xa inhibitor for the  
prevention of venous thromboembolism after orthopaedic surgery*  
The Principles and Practice of Clinical Research – Toronto, Canada
- 11/1/2008 Advisory board member – Bayer Canada – Rivaroxaban  
Bayer speaker training meeting (Toronto, Canada)
- 10/31/2008 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr.  
Antoniou to visiting surgeons (Dr Wilson Choy, Delaware)
- 10/24/2008 Speaker - *Evaluation of Painful Resurfacing*  
U.S. Comprehensive Course - Resurfacing Arthroplasty -Los Angeles, CA
- 10/24/2008 Speaker - *My Three Most Important Lessons*  
U.S. Comprehensive Course - Resurfacing Arthroplasty -Los Angeles, CA
- 10/23/2008 Speaker - *Hip Resurfacing – indications, patient selection, my experience*  
Advancing Tribology – Dinner panel – Los Angeles, CA
- 10/10/2008 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr.  
Antoniou to visiting surgeons (Dr Ted Lambert and Dr. David Whiddon,  
Portsmouth, Virginia)
- 9/26/2008 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr.  
Antoniou to visiting surgeons (Dr. Ian Katz, Johnstown, PA. And Dr.  
Edward Carroll, Philadelphia, PA)
- 8/29/2008 Interactive Educational Learning Center Izegem Hospital, Belgium  
Live resurfacing surgeries/presentation being taught by Dr. Antoniou to  
host surgeon (Dr. Francis Vandendriessche)
- 7/25/2008 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University

- Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr. Michael Ayres, Boston, Mass. And Dr. Manuel Banzon, New Jersey)
- 6/28/2008 Speaker/ Demonstrator – Cadaver workshop for resurfacing Resurfacing Advanced Course – Ghent, Belgium
- 6/27/2008 Moderator – Approach for HRA Resurfacing Advanced Course – Ghent, Belgium
- 6/27/2008 Speaker – resurfacing Videosurgery Resurfacing Advanced Course – Ghent, Belgium
- 6/26/2008 Speaker – What is what? / Diagnostic Value – Radiology in HRA Resurfacing Advanced Course – Ghent, Belgium
- 6/26/2008 Speaker – Age limit/ Bone condition/ Activity - Contraindications to Resurfacing Resurfacing Advanced Course – Ghent, Belgium
- 6/21/2008 Speaker –resurfacing arthroplasty workshop Ibero-American Forum – Madrid, Spain
- 6/20/2008 Speaker- *Complex Surgery in Hip Reconstruction - Osteolysis* Ibero-American Forum – Madrid, Spain
- 6/19/2008 Speaker- *Cross-Fire: Resurfacing Arthroplasty* Ibero-American Forum – Madrid, Spain
- 6/19/2008 Speaker - *Cross- Fire: Metal on Metal Joint replacement* Ibero-American Forum – Madrid, Spain
- 6/9/2008 Speaker –*Basics of Osteoarthritis* – Perioperative management of TJR Bayer Sales meeting - Montreal
- 6/6/2008 Speaker – *Hip resurfacing – Why I do it*, ICL Arthroplasty Combined Meeting of the AOA-COA/CORS (Quebec City)
- 6/5/2008 Moderator – CORS Arthroplasty session Combined Meeting of the AOA-COA/CORS (Quebec City)
- 7/25/2008 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr. Michael Ayres, Boston, Mass. And Dr. Manuel Banzon, New Jersey)

- 5/16/2008 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr. Gomez Amescua, Mexico City, Mexico)
- 5/9/2008 Speaker - Seventh Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip  
*Femoral Neck Fracture: A Biomechanical Risk*, Montreal, QC
- 5/3/2008 Co-Chair/ Speaker – Rivaroxaban Consultant Meeting  
*Reviewing the RECORD studies*, Montreal, QC
- 4/8/2008 Moderator/ CAN – AO BAB Strategic Workshop  
*Tissue Repair*, Toronto, ON
- 3/28/2008 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. Young Ho Oh, Boston, Mass.)
- 2/12/2008 Speaker/ Total Joint Arthroplasty: Updates and Controversies  
*Issues in Revision TKA*, Whistler, BC.
- 2/12/2008 Speaker/ Total Joint Arthroplasty: Updates and Controversies  
*Extensor Mechanism: Complications/Resurfacing Issues*, Whistler, BC.
- 2/12/2008 Speaker/ Total Joint Arthroplasty: Updates and Controversies  
*Ligament Instability: Etiology & Management*, Whistler, BC.
- 2/12/2008 Speaker/ Total Joint Arthroplasty: Updates and Controversies  
*Instability/LLD*, Whistler, BC.
- 2/12/2008 Moderator/ Total Joint Arthroplasty: Updates and Controversies  
*Post Operative Issues in THA*, Whistler, BC.
- 2/11/2008 Speaker/ Total Joint Arthroplasty: Updates and Controversies  
*There is a Role for patellofemoral Replacements: Disagree*, Whistler, BC.
- 2/11/2008 Speaker/ Total Joint Arthroplasty: Updates and Controversies  
*Implanting and TKA- Getting it Right*, Whistler, BC.
- 2/10/2008 Speaker/ Total Joint Arthroplasty: Updates and Controversies  
*There is a role for Hip Resurfacing: Agree*, Whistler, BC.
- 2/10/2008 Moderator/ Total Joint Arthroplasty: Updates and Controversies  
*Implanting a Resurfacing – Getting It Right*, Whistler, BC.

- 2/8/2008 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. John Nevulus, Philadelphia, Pennsylvania)
- 1/26/2008 Moderator – Disc Regeneration Session  
World Forum for Spine Research – Intervertebral Disc, Kyoto, Japan
- 1/25/2008 Invited lecture, “Quantitative MRI in Degenerative Disc Disease”  
World Forum for Spine Research – Intervertebral Disc, Kyoto, Japan
- 1/23/2008 Invitation to the Spine research network: “Quantitative MRI in Degenerative Disc Disease”, Kyoto, Japan
- 1/14/2008 Visitation to DePuy headquarters, Consultation on future products and presentation “Resurfacing: The Canadian experience”
- 1/11/2008 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. Russel Tiggis, Albany, New York)
- 11/30/2007 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr. Dan Hoeffel, Dr. Jack Drog, Dr. Peter Simpson, Minneapolis, Minnesota)
- 11/16/2007 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr. David Lucas, Orlando, FL)
- 11/9/2007 Resurfacing arthroplasty – The Canadian Experience  
U.S. Comprehensive Course - Resurfacing Arthroplasty – Annapolis, MD
- 11/7/2007 Hip Resurfacing - indications and patient selection.  
High Performance THA vs. Hip Resurfacing – Annapolis, MD
- 10/22/2007 Chairperson/Moderator – Total Knee Arthroplasty  
Combined Orthopaedic Research Society Meeting - Hawaii
- 10/5/2007 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr. Brian McDermott and Dr. Mike Martinic, Virginia)

- 9/22/2007 Interactive Educational Learning Center - presentation/ saw bones being taught by Dr. Antoniou to surgeons (Dr Covall, Dr. Bowerman – in Atlanta Georgia)
- 9/21/2007 Interactive Educational Learning Center - presentation/ saw bones being taught by Dr. Antoniou to surgeons (Dr. Gupta, Dr. Hanna, Dr. Bradbury – in Atlanta Georgia)
- 9/15/2007 Speaker/ Primary & Revision TJA: Current Concepts Symposium  
*Constraint/ The Role of Hinges*, Niagara on the Lake, ON.
- 9/15/2007 Speaker/ Primary & Revision TJA: Current Concepts Symposium  
*Resurfacing, Why I do it*, Niagara on the Lake, ON.
- 9/16/2007 Moderator/ Primary & Revision TJA: Current Concepts Symposium  
*It Never Happens to me, so...*, Niagara on the Lake, ON.
- 8/17/2007 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. Tony Carter, Virginia)
- 8/10/2007 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. Victor Antonaci Chicago, IL)
- 7/20/2007 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. Pat Morgan, Minneapolis, Minnesota)
- 6/22/2007 Speaker – Latin American Forum (4<sup>th</sup>) – Miami, FL  
*Articular Surface Replacement Symposium*
- 6/22/2007 Speaker – Latin American Forum (4<sup>th</sup>) – Miami, FL  
*Key Concepts When Selecting a Metal on Metal Implant*
- 6/22/2007 *Hip Resurfacing: resurfacing training*  
Miami, Florida (Johnson and Johnson – Depuy)
- 6/15/2007 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. Yogesh Mittal, Tulsa, Oklahoma)
- 6/2/2007 Chairperson / Moderator- Arthroplasty Subspecialty half day



Canadian Orthopaedic Association, 61<sup>st</sup> Annual meeting – Halifax

- 5/21/2007 *Hip Resurfacing: resurfacing hemiresurfacing training*  
Las Vegas, Nevada (Johnson and Johnson – Depuy)
- 5/17/2007 ABC traveling Fellowship (Auckland, New Zealand)  
*Hip Resurfacing – the McGill Experience*
- 5/11/2007 ABC traveling Fellowship (Melbourne, Australia)  
*Metal on Metal in Total Hip Arthroplasty – Clinical and Biologic Implications*
- 5/8/2007 ABC traveling Fellowship (Brisbane, Australia)  
*Metal on Metal in Total Hip Arthroplasty – Clinical and Biologic Implications*
- 5/7/2007 ABC traveling Fellowship (Sydney, Australia)  
*Metal on Metal in Total Hip Arthroplasty – Clinical and Biologic Implications*
- 5/2/2007 ABC traveling Fellowship (Imperial College, London, England)  
*Metal on Metal in Total Hip Arthroplasty – Clinical and Biologic Implications*
- 5/1/2007 ABC traveling Fellowship (Stanmore, England)  
*Metal on Metal in Total Hip Arthroplasty – Clinical and Biologic Implications*
- 4/27/2007 ABC traveling Fellowship (Warwick, England)  
*Tissue Engineering of the Intervertebral Disc*
- 4/25/2007 ABC traveling Fellowship (Wrightington, England)  
*Metal on Metal in Total Hip Arthroplasty – Clinical and Biologic Implications*
- 4/24/2007 ABC traveling Fellowship (Sheffield, England)  
*Metal on Metal in Total Hip Arthroplasty – Clinical and Biologic Implications*
- 4/20/2007 ABC traveling Fellowship (Edinburgh, Scotland)  
*Tissue Engineering of the Intervertebral Disc*
- 4/18/2007 ABC traveling Fellowship (Bristol, England)  
*Hip Resurfacing – the McGill Experience*
- 3/30/2007 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University

- Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. George Chimento, New Orleans, Louisiana)
- 2/13/2007 *Hip Resurfacing: An Update*  
San Diego, California (Johnson and Johnson – Depuy)
- 2/10/2007 Orthopaedic and Sports Medicine Symposium  
*Hip Pain in the young active patient* (Tremblant, QC)
- 12/8/2006 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. Anthony Pretto, Vancouver, BC)
- 11/16/2006 Quebec Orthopaedic Association Meeting  
*Tissue Engineering of the Intervertebral Disc*, Sherbrooke, Quebec
- 11/8/2006 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeon (Dr. Brian Burkhart, Calgary, AB)
- 10/20/2006 Interactive Educational Learning Center at Jewish General Hospital,  
McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Perfectos surgeons – 10 Orthopaedic surgeons from France)
- 9/17/2006 Speaker/ Primary & Revision TJA: Current Concepts Symposium  
*Constraint/ The Role of Hinges*, Mont Tremblant, QC.
- 9/17/2006 Speaker/ Primary & Revision TJA: Current Concepts Symposium  
*The Stiff/Painful TKA*, Mont Tremblant, QC.
- 9/17/2006 Moderator/ Primary & Revision TJA: Current Concepts Symposium  
*Updates in Technology*, Mont Tremblant, QC.
- 9/15/2005 Speaker/ Primary & Revision TJA: Current Concepts Symposium  
*Hip Resurfacing – The Montreal Experience*, Mont Tremblant, QC.
- 7/15/2006 Panel Member - International Arthroplasty Congress, Arthroplastia Rio  
Rio De Janeiro, Brazil  
*Deep Venous Thrombosis Panel*
- 7/15/2006 Speaker - International Arthroplasty Congress, Arthroplastia Rio  
Rio De Janeiro, Brazil  
*Acetabular Bone Loss in Hip Revision*

- 7/13/2006 Speaker - International Arthroplasty Congress, Arthroplastia Rio Rio De Janeiro, Brazil  
*The Stiff Total Knee Arthroplasty*
- 7/13/2006 Speaker - International Arthroplasty Congress, Arthroplastia Rio Rio De Janeiro, Brazil  
*Metal on Metal in Total Hip Arthroplasty*
- 7/13/2006 Speaker - International Arthroplasty Congress, Arthroplastia Rio Rio De Janeiro, Brazil  
*Resurfacing Hip Arthroplasty: Advances, Current Issues, Clinical Results and Metal Ion data*
- 6/16/2006 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (José Alberto Angeli)
- 6/10/2006 Speaker/ Demonstrator - Joint Preserving and Minimally Invasive Surgery of the Hip – Ottawa, ON  
*Articular Surface Replacement Surgical Technique*
- 6/9/2006 Speaker - Bioengineering for the restoration of joint function workshop (CAN) – Vancouver, British Columbia  
*Hip replacements: Advances and limitations*
- 5/7/2006 Speaker – Latin American Forum (3<sup>rd</sup>) – Buenos Aires, Argentina  
*What to Use in the 20, 40, and 60 Year Old Patient - Resurfacing*
- 5/2/2006 Speaker – Pfizer Learning Center (Queen Elizabeth Hotel - Montreal)  
*Low Molecular Weight in the Perioperative Setting*
- 5/2/2006 Interacting Educational Learning Center at Lakeshore General Hospital, Live resurfacing surgery, Dr. David Whiltshire
- 4/30/2006 Clinical Day, Hellenic Medical Association, *Arthritis*, Montreal, Quebec
- 4/28/2006 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr. Greg Jaroszynski, Dr. Alexander Pyper, Dr. David Whiltshier, and Dr. Michael Rhodes)
- 4/27/2006 Interactive Educational Learning Center at Jewish General Hospital, McGill University

- Live resurfacing surgery/presentation/ saw bones being taught by Dr. Antoniou to visiting surgeons (Dr. Marc Charles, Dr. Sevan Ortaaslan, Dr. Hani Daoud)
- 4/20/2006 Panel Discussion (member) – Career as a Canadian Researcher  
Pfizer- Scriver Family Clinicians-Scientists Scholars Meeting - Montreal
- 4/15/2006 Television Interview (Hellas Spectrum) – Arthritis in the elderly  
Global Montreal
- 3/2006 Chairperson / Moderator- Disc Biology Session  
Orthopaedic Research Society, 52<sup>nd</sup> Annual meeting – Chicago
- 3/9/2006 Moderator (Montreal) – DePuy International  
*An Interactive Forum on Bearing Technology*  
Presentation: *Our Experience with Resurfacing Hip Technology*
- 01/12/2006 National Meeting - Depuy Canada, *Update on Resurfacing Hip Replacement Surgery*, Phoenix, AZ.
- 9/28/2005 Resurfacing (Depuy) Investigator’s meeting, Boston, MA.
- 9/18/2005 Speaker/ Current Techniques in Arthroplasty. *The Stiff Knee*, Muskoka, ON
- 9/18/2005 Moderator/ Current Techniques in Arthroplasty. *Knee Arthroplasty*, Muskoka, ON.
- 9/17/2005 Speaker/ Current Techniques in Arthroplasty. *My treatment of Acetabular Osteolysis*, Muskoka, ON.
- 9/17/2005 Speaker/ Current Techniques in Arthroplasty. *The Fifty year old with medial compartment knee arthritis - Total knee arthroplasty*, Muskoka, ON.
- 9/16/2005 Speaker/ Current Techniques in Arthroplasty. *Resurfacing Hip Arthroplasty – A Good Idea*, Muskoka, ON.
- 7/13/2005 *Resurfacing Hip Arthroplasty*  
Advances in Medicine and Surgery in 2005  
Halkidiki, Greece
- 6/3/2005 J. Edouard Samson Award/ Royal College Gold Medal (Surgery)  
*Advances in the Diagnosis and Treatment of Degenerative Disc Disease*  
Canadian Orthopaedic Association Annual Meeting  
Montreal, Canada
- 5/5/2005 Lakeshore General Hospital, Invited Surgical Lecturer

*Advances in Hip Replacement Surgery*

- 4/22/2005 Interacting Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery being taught by Dr. Antoniou to visiting surgeons (Dr. John Tsarouhas, Dr. Panagiotis Mystidis Greece)
- 4/18/2005 Interacting Educational Learning Center at Kelowna Hospital,  
Live resurfacing surgery being taught by Dr. Antoniou to surgeons (Dr. Gary O'Connor, Dr. David Peters)  
Kelowna, British Columbia, Canada
- 4/11/2005 Future Trends in Orthopaedic Nursing  
Canadian Orthopaedic Nurses Association Meeting  
*Perspective on Orthopaedic Client Care (The Surgeon)*  
Montreal, Canada
- 4/8/2005 A "Joint" Discussion  
Catherine Booth Rehabilitation Meeting  
*Hip Resurfacing Technique*  
Montreal, Canada
- 2/23/2005 Consultants Meeting on COXIBs (Panel Member)  
Pfizer Canada  
Washington, DC, USA
- 12/8/2004 Resurfacing (Depuy) Investigator's meeting, teleconference, Montreal, Canada
- 11/20/2004 John Antoniou  
Annual Combined Hip and Knee Meeting  
Hellenic Association of Orthopaedic Surgery and Traumatology  
*The Purpose of using Large Heads in THR*  
Athens, Greece
- 10/13/2004 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery being taught by Dr. Antoniou to visiting surgeons (Dr. João Pedro Dantas, Dr. José Roxo Neves, Dr. António Dimas Oliveira, Portugal)
- 10/11/2004 Combined Orthopaedic Research Society - Symposium (Banff, AB)  
Intervertebral Disc Degeneration: The Problem and its Treatment  
*"Biological Approaches to Disc Treatment – How Far into the Future?"*
- 10/2/2004 Review Panel on the treatment of Arthritis  
Pfizer Canada,  
Montreal, QC

- 10/1/2004 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery being taught by Dr. Antoniou to visiting surgeon (Dr. Mario Giroux, Trois Rivières)
- 9/29/2004 Cité de la Santé Orthopaedic lecture series  
*Resurfacing Hip Replacement* (presentation)  
Laval, QC
- 8/20/2004 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery being taught by Dr. Antoniou to visiting surgeons (Dr. Vince Burke, Miami and Dr. Gavin Duffy, Mayo)
- 6/11/2004 Interactive Educational Learning Center at Jewish General Hospital, McGill University  
Live resurfacing surgery being taught by Dr. Antoniou to visiting surgeons (Dr. Justin deBeer, Hamilton General Hospital)
- 6/2004 Chairperson/Moderator – Spine & Trauma Session  
Canadian Orthopedic Association (COA/CORS), 58th – Calgary, AB.
- 6/2004 John Antoniou  
*Overview of Current Implant Designs - The Science behind Surface Arthroplasty - Joint Preserving and Minimally Invasive Surgery of the Hip*, 3<sup>rd</sup> symposium – Montreal, QC.
- 5/7/2004 OSCARE Investigator's meeting  
Paris, France
- 4/27/2004 Canadian Association of Emergency Physicians (CAEP/AMUQ) meeting  
*L'évaluation de l'épaule à l'urgence* – Podium.  
Montreal, QC
- 12/18/2003 Resurfacing (Depuy) Investigator's meeting, teleconference, Montreal, QC.
- 10/2003 Chairperson/Moderator – CAN Research Showcase III  
Canadian Arthritis Network Meeting, 4<sup>th</sup> – Montreal, QC.
- 10/2003 Chairperson/Moderator – Spine & Trauma Session  
Canadian Orthopedic Association (COA/CORS), 58th – Winnipeg, MB.
- 9/22/2003 Resurfacing Investigator's meeting, Rome, Italy
- 9/6/2003 Faculty/ Current Techniques in Knee Arthroplasty: Primary and Revision.  
*The Role for Hinges*, Niagra on the Lake, ON.

- 9/5/2003 Faculty/ Current Techniques in Knee Arthroplasty: Primary and Revision. *The Stiff Knee*, Niagra on the Lake, ON.
- 06/21/2003 OL Huk, **J Antoniou**, DJ Zukor. 2<sup>nd</sup> Joint and Bone Preserving Surgery of the Hip - 2<sup>nd</sup> International Conference on Metal-Metal Hip Prostheses: Past Performance and Future Directions. *Where are we with metal-metal total hips? Canadian experience*. Montreal, QC.
- 6/21/2003 OL Huk, I Catelas, DJ Zukor, **J Antoniou**, A Petit. 2<sup>nd</sup> Joint and Bone Preserving Surgery of the Hip - 2<sup>nd</sup> International Conference on Metal-Metal Hip Prostheses: Past Performance and Future Directions. *Metal wear products and apoptosis/necrosis*. Montreal, QC.
- 5/18/2003 Clinical Day, Hellenic Medical Association, *Arthritis*, Montreal, QC.
- 11/06/2002 Research Governors Society Lecture, *Tissue Engineering of the Intervertebral Disc*, Jewish General Hospital, Montreal, QC.
- 08/4-9/2002 4<sup>th</sup> World Congress of Biomechanics Symposium, *Disc Changes with Ageing and Degeneration*, Calgary, AB.
- 04/20/2002 *Osteoarthritis Consensus Conference*, Canadian Institute of Health Research, Toronto, ON.
- 03/09/2002 Depuy Annual meeting, *Recent Advances in Arthroplasty*, Whistler, BC.
- 11/23/2001 The Grey Cup 2001 Sports Medicine Conference, *Shoulder Dislocation, Instability, Repair and AC Separations, Clavicular Fractures, Osteolysis*, (McGill University) Montreal, QC.
- 6/2/2001 Chairperson/Moderator – Polyethylene Wear Debris Combined Orthopaedic Research Society Meeting - Rhodes
- 03/30/2001 Chairperson/Moderator – Common Geriatric Fractures “Tips and Tricks” Old Bones and Joints 2 – Montreal, QC
- 03/30/2001 Old Bones and Joints 2, *Osteoporosis: Orthopaedic Issues and Approaches in the New Millennium*, Montreal, QC.
- 2/2001 Chairperson / Moderator- Hip Arthroplasty Session Orthopaedic Research Society, 47<sup>th</sup> Annual meeting – San Francisco, CA.
- 02/02/2001 National Meeting - Depuy Canada, *Revision Hip Arthroplasty - Modern Day Issues*, Toronto, ON.
- 01/18/2001 International Symposium, Disc Degeneration, Synos Foundation Berne, *MR Imaging of Extracellular Disc Matrix Alteration*,

- Berne, Switzerland
- 11/24/2000 Moderator  
Cadaveric Shoulder Workshop - Zimmer- Toronto, ON.
- 11/24/2000 Zimmer Workshop, *Cadaveric Shoulder Workshop*, Toronto, ON.
- 6/2000 Chairperson/Moderator  
Canadian Orthopedic Research Society - Arthroplasty Session. 34<sup>th</sup>  
Annual meeting – Winnipeg, MB.
- 05/2000 Chairperson/Moderator  
Canadian Connective Tissue Conference, 6<sup>th</sup> Annual meeting
- 04/25/2000 Jewish General Hospital Physiotherapy department,  
*The Evaluation and Management of the Acute Shoulder*
- 02/2000 Update in Emergency Medicine 2000, Canadian Association of  
Emergency Physicians, *Assessment of the Acute shoulder*, Montreal, QC
- 6/1999 Staff Assistant – Orthopaedic Learning Center  
DePuy learning center – Central DuPage Hospital  
*Primary and Revision Hip Arthroplasty*
- 6/1999 Staff Assistant – Orthopaedic Learning Center  
Zimmer learning center – Rush-Presbyterian-St.Lukes Medical ctr  
*Revision Knee Arthroplasty*
- 5/1999 Staff Assistant – Orthopaedic Learning Center  
DePuy learning center – Central DuPage Hospital  
*Revision Hip Arthroplasty*
- 04/1999 Staff Assistant – Orthopaedic Learning Center  
Zimmer learning center – Rush-Presbyterian-St.Lukes Medical ctr  
*Revision Knee Arthroplasty*
- 04/1999 Staff Assistant – Orthopaedic Learning Center  
American Academy of Orthopaedic Surgeons – Orthopaedic Learning Ctr.  
*Complex Knee Problems: Surgery for the Active Knee*
- 01/1999 University of Florida, Department of Orthopaedic Surgery, Jacksonville,  
Florida, *Correlating Quantitative Magnetic Resonance Assessment with  
Spine Pathology* (Presentation)
- 11/1998 Staff Assistant – Orthopaedic Learning Center  
American Academy of Orthopaedic Surgeons – Orthopaedic Learning Ctr.  
*Current Techniques in Open and Arthroscopic Shoulder Surgery*



- 06/1998           **J. Antoniou**, O. Huk, D. Zukor, D. Eyre, M. Alini. Merck Inc., National Research Headquarters, New Jersey, *Cross-linked N-Telopeptides as Markers for Evaluating Particulate Osteolysis* (Presentation)
- 1-3/1998           Anatomy Demonstrator - University of Washington School of medicine
- 03/1998           **J. Antoniou**. University of Washington Orthopaedic Research Lab, University of Washington School of medicine, *Intervertebral Disc Degeneration – Quantitative Magnetic Resonance Assessment* (Presentation)

### McGill University

- 5/11/2016           Moderator of McGill Orthopaedics, Resident Research Competition, Montreal
- 5/14/2015           Moderator of McGill Orthopaedics, Resident Research Competition, Montreal
- 5/14/2014           Moderator of McGill Orthopaedics, Resident Research Competition, Montreal
- 4/11/2013           Moderator of McGill Orthopaedics, Resident Research Competition, Montreal
- 3/29/2012           Rahhul Gawri, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Effect of Intervertech-1 Levels on Proteoglycan Synthesis by Intervertebral disc Cells*. Eugene Rogala prize – 1<sup>st</sup> place (basic science)
- 3/29/2012           Khalid Alsheikh, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Analysis of MRI MARS studies, metal ion levels and radiographaphic parameters in patients with the ASR prosthesis*.
- 3/29/2012           Sarantis Abatzoglou, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Clinical, radiographic, and metal ion comparison of 36mm,40mm and 44mm metal-on-metal total hip arthroplasty*. Eugene Rogala prize – 3<sup>rd</sup> place
- 3/29/2012           Moderator of McGill Orthopaedics, Resident Research Competition, Montreal
- 10/22/2011           Speaker- Surface Replacement from Wagner & Amstutz to the Present, McGill Centennial Reunion, Montreal
- 3/30/2011           Moderator of McGill Orthopaedics, Resident Research Competition, Montreal

- 3/30/2011 Mitch Bernstein, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Long term follow-up of patients with metal on metal total hip arthroplasty.*
- 3/30/2011 Ahmed Almaawi, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Effect of naproxen on human mesenchymal stem cells.*
- 3/30/2011 Avishai Reuven, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Software-dependent inconsistencies between intraoperative navigation and post-operative weight bearing x-rays in total knee arthroplasty.*
- 4/15/2010 Sonia Rampersad, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Type X collagen expression in mesenchymal stem cells from osteoarthritis patients.*
- 4/15/2010 Rahhul Gawri, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Developing of a Whole organ intervertebral disc culture system.*
- 4/15/2010 Stephane Bergeron, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Rise of Cobalt and Chromium ion levels in patients undergoing bilateral hip resurfacings. Eugene Rogala prize – 1<sup>st</sup> place*
- 4/15/2010 Sumit Gupta, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Can Outlier Cobalt and Chromium Levels in Patients with metal on metal hip implants be explained?*
- 4/15/2010 Mitch Bernstein, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal. *Metal ions in patients with small and large femoral heads metal-on-metal total hip arthroplasty.*
- 4/15/2010 Moderator of McGill Orthopaedics, Resident Research Competition, Montreal
- 6/2/2009 **J. Antoniou**. Department of Family Medicine – Jewish General Hospital Continuing Medical Education lecture series (speaker)  
“OA of the Hip - What are the Options?”
- 4/23/2009 Stephane Bergeron, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *The effect of a single pre-operative dexamethasone dose after total hip arthroplasty.*
- 4/23/2009 G Hristova, **J. Antoniou**. McGill Orthopaedics, Research Competition, Montreal, *Scoliosis and disc degeneration are characterized by extracellular matrix calcification.*

- 4/2/2009 Speaker – *The New Oral Anticoagulants in Orthopaedic Surgery*  
Jewish General Hospital, Anaesthesia grand rounds
- 4/2008 Stephane Bergeron, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Classification of femoral head deformity in hip resurfacing*.
- 4/2008 Kevin Debiparshad, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Skeletal phenotype of mice lacking early growth response protein-1 (EGR01)*.
- 4/2008 Gergana Hristova, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Classification in intervertebral disc degeneration and scoliosis*.
- 4/2008 Moderator of McGill Orthopaedics, Resident Research Competition, Montreal
- 6/2007 Moderator of McGill Orthopaedics, Resident Research Competition, Montreal
- 6/2007 Ahmed Al Gamdy, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Preoperative Templating in Total Hip Replacement*.
- 5/2006 C. Richards, T. Steffen, O Huk, D. Zukor, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Valgus versus Varus placement of resurfacing arthroplasty components*. Eugene Rogala prize – 2<sup>nd</sup> place
- 5/2006 S. Sharma, O Huk, D. Zukor, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Cemented versus hybrid TKA ps designs*
- 4/2005 P. Martineau, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *The Direct and Indirect Cost of High Volume versus Low Volume Hip Replacement Surgery Centers in Canada*  
Eugene Rogala prize – 1<sup>st</sup> place
- 4/2004 A. Bin-Nasser, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *The Use of Cages in Revision Total Hip Arthroplasty*
- 5/2003 A. Pickle, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Perioperative Autologous Blood Transfusion a Randomized Prospective Trial*

- 4/2002 A. Pickle, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *The Need for Perioperative Autologous Blood Transfusion*
- 4/2002 F. Moola, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Allele Polymorphism in Osteoarthritis and Lower Back Pain*
- 4/2002 P. Martineau, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *The Direct and Indirect Cost of American versus Canadian Hip Replacement Surgery*
- 4/2001 J. Theodoropoulos, **J. Antoniou**. McGill Orthopaedics, Resident Research Competition, Montreal, *Treating proximal humerus fractures with a hemiarthroplasty*
- 03/29/2001 Surgical Grand Rounds, Jewish General Hospital, *The Shoulder*
- 10/2000 McGill Winter Sports Medicine Conference, *Shoulder Injuries*
- 04/1999 McGill University, Department of Orthopaedic Surgery, Montreal, Canada (Ph.D. Defense), *Quantitative Biochemical Changes in the Human Lumbar Intervertebral Disc*
- 09/1997 **J. Antoniou**. Twentieth Anniversary Conference of the Joint Diseases Laboratory, Shriners Hospital for Children, Montreal, *Magnetic Resonance Imaging in the Assessment of the Intervertebral Disc* (Presentation)
- 05/1997 **J. Antoniou**, G. Beaudoin, T. Steffen, M. Aebi, M. Alini., McGill Orthopaedics, Resident Research Competition, Montreal, *Apparent Diffusion Coefficient in the Assessment of Intervertebral Disc Matrix* (Presentation)
- 06/1996 **J. Antoniou**, M. Alini, B. Pike, T. Steffen, M. Aebi. Fraser Gurd Day (McGill University, Montreal) *Matrix Integrity and Composition Related to the Quantitative MR assessment of the Human Lumbar Intervertebral Disc* (Presentation)
- 04/1996 **J. Antoniou**, M. Alini, B. Pike, T. Steffen, H.G. M. Aebi. *Matrix Integrity and Composition Related to the Quantitative MR assessment of the Human Lumbar Intervertebral Disc*. McGill Orthopaedics, Resident Research Competition, Montreal
- 12/1995 **J. Antoniou**. *Degenerative Disc Disease - New Perspectives in Assessment* Combined Bone Rounds (McGill University), Montreal (Presentation)



## 5. Clinical Teaching Tools

- 2006 *The Athlete's Elbow* – American Academy of Orthopaedic Surgeons, Shoulder Physical Examination Section (writer - editor) – DVD - worldwide distribution
- 2003 *The Athlete's Shoulder, Volume 2*– American Academy of Orthopaedic Surgeons, Shoulder Anatomy Section (writer - editor) – DVD - worldwide distribution
- 2003 *Athlete's Shoulder Rehabilitation*– American Academy of Orthopaedic Surgeons, Shoulder Anatomy Section (writer-editor) – DVD - worldwide distribution
- 2002 Co-author and producer of DVD - *Physical Examination of the Knee* (Funded by Maurice E. Muller Foundation) - worldwide distribution
- 2002 Co-author and producer of DVD - *Physical Examination of the Shoulder* (Funded by Maurice E. Muller Foundation) - worldwide distribution
- 2002 *The Athlete's Shoulder* – American Academy of Orthopaedic Surgeons, Shoulder Anatomy Section (writer - editor) – DVD - worldwide distribution
- 2001 *The Arthritic Knee* - American Academy of Orthopaedic Surgeons, *Knee Anatomy Section* (writer - editor) – CD - worldwide distribution

## F. OTHER CONTRIBUTIONS

### 1. Journals

#### Editor

Canadian Orthopaedic Association – Bulletin  
Editor in Chief  
8/2009 – 7/2011

Canadian Orthopaedic Association – Bulletin  
Scientific Editor  
1/2005 – 7/2009

#### Editorial Board

2012 – 2015      Journal of Bone and Joint Surgery – Orthopaedic Highlights (Knee Surgery)

2012 – present      Journal of Arthroplasty (honoured as top elite reviewer in 2015)

#### Reviewer

2012 – present	Journal of Bone and Joint Surgery (12 articles reviewed/ year)
2010 – present	Journal of Arthroplasty (12 articles reviewed/year – elite reviewer)
2008 – present	Clinical Orthopaedic and Related Research (2 articles reviewed/year)
2007 – 2012	Journal of Bone and Joint Surgery British (12 articles reviewed/ year)
2005 – present	Journal of Orthopaedic research (1 article/ year)
2002 – present	Tissue Engineering Journal (6 articles reviewed/ year)
2000 – 2010	European Spine Journal (editorial board)
1998 – 2010	Spine (12 articles reviewed / year)

### **Ad hoc review**

2/2009	Instructional course lecture Reviewer- 2009 AAOS meeting
1/2009	American Academy of Orthopaedic Surgeons (CD review)
12/2008	Canadian Journal of surgery
9/2004	European Cells and Materials
10/2001	British Journal of Sports Medicine
5/2002	Health Reports/ Statistics Canada
6/2002	British Journal of Sports Medicine

## **2. Grant Reviews**

### **Panel Member**

2014-2017	Canadian Arthritis Society - Scientific Advisory Committee <i>The Arthritis Society's Training Award competition</i>
2/2013	Canadian Institute of Health Research <i>CIHR New Investigator Salary Award committee - HPA</i>
2/2013	Fonds de la recherche en santé (FRSQ) Site and Grant review <i>Centre de Recherche de l'Hopital du Sacre Coeur de Montreal</i>
2/2012	Canadian Institute of Health Research <i>CIHR New Investigator Salary Award committee - HPA</i>

- 5/30/2011           Fonds de la recherche en santé (FRSQ)  
Site and Grant review (evaluation mi-parcour)  
*Centre de Recherche de l'Hopital du Sacre Coeur de Montreal*
- 2/2011               Canadian Institute of Health Research  
*CIHR New Investigator Salary Award committee - HPA*
- 2/19 /2010          Canadian Institute of Health Research  
*CIHR New Investigator Salary Award committee - HPA*
- 2/2/09               Fonds de la recherche en santé (FRSQ)  
Site and Grant review  
*Centre de Recherche de l'Hopital du Sacre Coeur de Montreal*
- 1/2009 - present   Reviewer/ Royal College of Physicians and Surgeons  
Gold Medal for Surgery (chairman)
- 2/19 /2008          Canadian Institute of Health Research  
*CIHR New Investigator Salary Award committee - HPA*
- 2/19 /2007          Canadian Institute of Health Research  
*CIHR New Investigator Salary Award committee - HPA*
- 1/20/ 2007          Canadian Institute of Health Research  
*High Risk, Team Planning and Invention Grants*
- 2/20 /2006          Canadian Institute of Health Research  
*CIHR New Investigator Salary Award committee - HPA*
- 5/30 – 31/2005     Canadian Institute of Health Research  
*Clinical Investigation B*
- 2/12/05             Fonds de la recherche en santé (FRSQ)  
Site and Grant review  
*Centre hospitalier affilié de Québec Research Center Evaluation*
- 12/9 – 10/2004     Canadian Institute of Health Research



*Clinical Investigation B*

- 9/26 - 28/2004 Canadian Institute of Health Research  
*High Risk, Team Planning and Invention Grants*
- 5/20 – 21/2004 Canadian Institute of Health Research  
*Clinical Investigation B*
- 10/16 –17 /2003 Canadian Institute of Health Research / Institute of Musculoskeletal  
Health and Arthritis  
*RFA special review panel for Development and Innovation*
- 7/2002 – 12/2003 Clinical Investigation/ Canadian Institute of Health Research  
*Clinical Investigation*

**Ad hoc reviews**

- 10/2015 Reviewer of the Sunnybrook Orthopaedic program (including Holand  
center)
- 1/2014 Reviewer of the Samson Award winner and CORL award winner  
CORS committee
- 3/2012 External reviewer for AO Foundation
- 9/2009 Reviewer of the Samson Award winner – CORS committee
- 4/2008 Canadian Institute of Health Research  
*Studentship in musculoskeletal, oral and skin health, and mobility*
- 1/2008 Reviewer/ Royal College of Physicians and Surgeons  
Gold Medal for Surgery (reviewer)
- 11/2007 External reviewer for CIHR - Experimental surgery panel
- 1/2007 Reviewer/ Royal College of Physicians and Surgeons  
Gold Medal for Surgery (reviewer)

- 3//2005            Reviewer/ Canada Foundation for Innovation  
*Establishment of a Tissue and Cellular Engineering Research Facility within the Centre for Bioengineering Research and Education at the University of Calgary*
- 2/2005            External Reviewer/ MUHC Research Ethics Board  
*Randomized Clinical Trial Comparing Minimally Invasive Surgery (MIS) to Conventional Approach in Hip Fractures*
- 1/2004            External Reviewer Alberta Heritage Foundation for Medical Research  
*Tissue engineering of the nucleus pulposus of the intervertebral disc*
- 5/2003            External Reviewer/ Research Grants Council / Hong Kong  
*Intervertebral Disc Morphology and Stiffness of the Osteoporotic Spine*
- 4/2002            External Reviewer/ Biomedical Engineering/ Canadian Institute of Health Research  
*An acellular matrix containing bioactive peptides for use in bladder reconstruction*  
(200203MOP-BME-100689-D)

### **3. Administrative Responsibilities**

#### **External**

- 9/2017-3/2018    SIGMA santé – arthroplasty advisory panel for selection of implants
- 7/2017– 6/2018    Canadian Orthopaedic Association  
first president elect
- 6/2017- 3/2018    ORS annual meeting committee – international committee rep
- 7/2016– 6/2017    Canadian Orthopaedic Association  
Second president elect
- 11/2015- 2017    INESSS Quebec Committee evaluating MRI in MSK conditions

- 1/2014- 2017 The Arthritis Society: Orthopaedic expert for the Scientific Advisory Committee
- 10/2013– present International COMbnd Orthopaedic research society (iCORS)  
Canadian Representative
- 7/2013- present Orthopaedic Research Society International Committee  
Co-chair
- 2/2013- 2017 American Academy of Orthopaedic Surgeons  
Adult Reconstruction – Hip Program Committee - Member
- 7/2013-6/2014 Canadian Orthopaedic Research Society  
Outgoing President
- 3/2011 – 10/2013 Combined Orthopaedic Research Society organizing committee (2013)  
Canadian Representative
- 7/2012– 6/2013 Canadian Orthopaedic Research Society  
President
- 2/2012- 3/2013 Orthopaedic Research Society  
Membership Committee – Ex - Officio
- 7/2011– 2016 Canadian Orthopaedic Association (Board Member)  
Secretary
- 7/2011- 6/2012 Canadian Orthopaedic Research society  
Program Chairman
- 12/9/2010 Volunteer Appointment Committee –  
Orthopaedic Research Society- select volunteer members to  
committees
- 2/2011- 3/2012 Orthopaedic Research Society  
Membership Committee – Chairman
- 1/2010- 1/2011 Research Task Force  
Canadian Orthopaedic Association/ COF - member
- 2/2010- 2/2011 Orthopaedic Research Society  
Membership Committee – Vice chair
- 7/2010- 6/2011 Canadian Orthopaedic Research society  
Secretary
- 7/2009 – 6/2010 Canadian Orthopaedic Research Society  
Member at large

- 2/2009- 2/2010 Orthopaedic Research Society  
Membership Committee - member
- 7/2009 – 7/2011 Communications Committee  
Canadian Orthopaedic Association  
Chairman
- 12/2008 – present Chairman of Data Safety and Monitoring Board (DSMB) for the  
HEALTH study (multicenter study funded by the CIHR and NIH) –  
yearly meetings for review.
- 3/2008 – 6/2010 Combined Orthopaedic Research Society organizing committee (2010)  
Canadian Representative
- 12/2008 –12/2009 Medal Award in Surgery Sub-Committee  
Royal College of Physicians and Surgeons Canada  
Chairman
- 3/2006 – 10/2007 Combined Orthopaedic Research Society organizing committee (2007)  
Canadian Representative
- 3/2006 – 11/2008 Medal Award in Surgery Sub-Committee  
Royal College of Physicians and Surgeons Canada  
Member
- 5/2004 – 7/2009 Communications Committee  
Canadian Orthopaedic Association  
Quebec Representative
- 11/2005-4/2006 Hellenic Medical Association of Quebec  
Clinical Day Subcommittee
- 11/2002-5/2003 Hellenic Medical Association of Quebec  
Clinical Day Subcommittee
- 09/27-29/2002 Canadian Arthritis Network – Tissue engineering panel, Calgary,  
Alberta (Invited Member)
- 04/20-21/2002 CIHR 2002 Osteoarthritis Initiative Consensus Conference (Institute  
of Musculoskeletal Health and Arthritis), Toronto, Ontario (Invited  
scientific consultant)
- 3/8-10/2002 DePuy Annual Review course, Pinnacle study planning group,  
Whistler, British Columbia (Invited scientific consultant and principal  
investigator)

- 01/2001-2015 Hellenic Medical Association of Quebec  
Executive Committee
- 08/13-14/2001 CIHR Second Brainstorming Session, Ottawa, Ontario  
(Invited scientific consultant)

**McGill**

- 11/2013 Middle East Resident selection committee, McGill University  
Division of Orthopaedic Surgery
- 11/2012 Middle East Resident selection committee, McGill University  
Division of Orthopaedic Surgery
- 11/14/2011 Middle East Resident selection committee, McGill University  
Division of Orthopaedic Surgery
- 2/2011 CARMS/NRMP (Resident Selection Committee)  
McGill University, Residency Selection Committee,  
Division of Orthopaedic Surgery
- 11/30/2010 Middle East Resident selection committee, McGill University  
Division of Orthopaedic Surgery
- 8/2010 PhD Committee - Yoon Chi- McGill University- *Endoglin Expression  
in OA*
- 2/2010 CARMS/NRMP (Resident Selection Committee)  
McGill University, Residency Selection Committee,  
Division of Orthopaedic Surgery
- 11/24/2009 Middle East Resident selection committee, McGill University  
Division of Orthopaedic Surgery
- 4/23/2009 Judge for the annual Eugene Rogala Resident Research competition
- 2/2009 CARMS/NRMP (Resident Selection Committee)  
McGill University, Residency Selection Committee,  
Division of Orthopaedic Surgery
- 11/2008 Middle East Resident selection committee, McGill University  
Division of Orthopaedic Surgery
- 2/2008 CARMS/NRMP (Resident Selection Committee)  
McGill University, Residency Selection Committee,  
Division of Orthopaedic Surgery

- 2/2008 – present McGill University Division of Orthopaedic surgery - Fellowship committee director
- 3/2008 CARMS/NRMP (Resident Selection Committee)  
McGill University, Residency Selection Committee,  
Division of Orthopaedic Surgery
- 11/2007 Saudi Resident selection committee, McGill University  
Division of Orthopaedic Surgery
- 10/2007 - present McGill University Division of Orthopaedic surgery - Residency committee member (6 meetings / year)
- 9/2007 - present McGill University Division of Orthopaedic surgery - Executive committee member (8 meetings / year)
- 5/2007 Master of Ceremony - annual Eugene Rogala Research competition
- 4/28/2005 Judge for the annual Eugene Rogala Resident Research competition
- 3/2004 CARMS/NRMP (Resident Selection Committee)  
McGill University, Residency Selection Committee,  
Division of Orthopaedic Surgery
- 3/24/2002 McGill University, Division of Orthopaedic Surgery, Strategic Planning Retreat
- 3/2002 CARMS/NRMP (Resident Selection Committee)  
McGill University, Residency Selection Committee,  
Division of Orthopaedic Surgery
- 2001-present MOCOMP Committee  
McGill University  
Division of Orthopaedic Surgery
- 2000-present Orthopaedic Research Laboratory Director  
Lady Davis Institute, Jewish General Hospital  
McGill University

### **Hospital**

- 2/2013 – 2016 Ortho Continuous Quality Improvement Team (Jewish General Hospital)
- 4/2008 – 2009 Academic Leadership Committee (Jewish General Hospital)

4/2003–2006	PACS Implementation Committee, Jewish General Hospital
01/30/2002	Infection Control Committee, Jewish General Hospital
2000-present	Chairman of MOCOMP Department of Orthopaedic Surgery, Jewish General Hospital
2000-2008	Chairman of Morbidity and Mortality Rounds Department of Orthopaedic Surgery, Jewish General Hospital
2000-2003	Operating Room Expansion Committee – Jewish General Hospital Chairman of Modernization (Image Guided systems and Robotics)

#### **4. Committees (See Administrative Responsibilities)**

## 5. Professional and Learned Societies

### Officer - Nil

### Meeting Organizer

- 5/2016-6/2019 Chairman and Meeting organizer  
*International Combined Orthopaedic Research Society*, Montreal, Canada
- 10/2011- 5/2012 Chairman and Meeting organizer  
*Canadian Orthopaedic Research Society*, Ottawa, Canada
- 2/2011 -2013 Combined Orthopaedic Research Society organizing committee (2013)  
Canadian Representative
- 10/28/2011 Chairman and Course organizer  
*The New Millennium Hip Course*, Montreal, Canada
- 5/27-5/29/2011 Co- Chairman and Course organizer  
*Canadian Connective Tissue Conference*
- 10/29/2010 Chairman and Course organizer  
*The New Millennium Hip Course*, Montreal, Canada
- 11/27/2009 Chairman and Course organizer  
*The New Millennium Hip Course*, Montreal, Canada
- 10/17/2010 Workshop organizer. *Updates on the Biological Treatment of Disc Degeneration*. Combined ORS meeting. Kyoto, Japan.
- 2/2008 -2010 Combined Orthopaedic Research Society organizing committee (2010)  
Canadian Representative
- 10/2007 Workshop on Intervertebral disc repair, Combined ORS meeting, Honolulu, HI. Co-organizer.
- 2/2006 -10/2007 Combined Orthopaedic Research Society organizing committee (2007)  
Canadian Representative
- 4/30/2006 Clinical Day. Hellenic Medical Association, Montreal, Quebec
- 7/11-13/2005 Advances in Medicine and Surgery in 2005, Halkidiki, Greece
- 5/18/2003 Clinical Day. Hellenic Medical Association, Montreal, Quebec
- 10/16-17/2001 Coordinator (Host), North American Traveling Fellows,  
Division of Orthopaedic Surgery, McGill University



- 3/29-3/30/2001 Member of organizing committee  
*Old Bones and Joints II*  
2001 McGill Geriatric/Orthopaedic Course Meeting
- Reviewer**
- 2013 - 2017 American Academy of Orthopaedic Surgeons  
Adult Reconstruction Hip Program Committee Member  
Grade new symposiums and new abstracts
- 9/2012 Canadian Orthopaedic Research Society (reviewer of abstracts for annual meeting) – 45 abstracts reviewed
- 9/2011 Canadian Orthopaedic Research Society (reviewer of abstracts for annual meeting) – 45 abstracts reviewed
- 9/2010 Canadian Orthopaedic Research Society (reviewer of abstracts for annual meeting) – 45 abstracts reviewed
- 9/2010 Orthopaedic Research Society (reviewer of abstracts for annual meeting) – 45 abstracts reviewed
- 5/2010 Combined ORS –  
Evaluation of 100 submitted abstracts to the combined ORS meeting to be held in Kyoto, Japan (10, 2010)
- 9/2009 Canadian Orthopaedic Research Society (reviewer of abstracts for annual meeting) – 45 abstracts reviewed
- 9/2009 Orthopaedic Research Society (reviewer of abstracts for annual meeting) – 45 abstracts reviewed
- 8/2007 Combined Orthopaedic Research Society (reviewer of abstracts for annual meeting) – 30 abstracts reviewed
- 9/2008 Orthopaedic Research Society (reviewer of abstracts for annual meeting) – 45 abstracts reviewed
- 09/2005 Orthopaedic Research Society

Evaluation of 158 submitted abstracts to the 52nd annual ORS meeting to be held in Chicago, Illinois (March 19-22, 2006)

### Examination Boards

- 9/2010 External Examiner (University of Montreal) – Master’s thesis – Ait Yahia Chabane  
*Évaluation de la densité osseuse péri acétabulaire après resurfaçage versus prothèse totale de la hanche métal-métal non cimentée*
- 8/2010 PhD Committee. Yoon Chi. Endoglin expression in OA- McGill University, QC.
- 11/19/2008 External Examiner (University of Toronto) – Master’s thesis – Amy Hoang  
*Functional outcomes in the aged with hip fractures: a systematic review of randomized controlled trials*
- 05/07/2006 Medical Council of Canada Qualifying Examination, Part II (MCCQE Part II). Montreal, QC.
- 10/23/2004 Medical Resident Examiner, Licensing Medical Council of Canada (LMCC), Qualifying Exam Part II  
*Examiner*
- 5/2/2004 Medical Resident Examiner, Licensing Medical Council of Canada (LMCC), Qualifying Exam Part II  
*Examiner*
- 4/19/2004 External Examiner (University of Calgary) – PhD thesis- Sabina Bruehlmann  
*In Situ Mechanical Environment of Cells in the Annulus Fibrosus of the Intervertebral Disc*
- 5/22/2003 Internal Examiner (McGill University) – PhD thesis- Gustavo Duque  
*Molecular Changes in the Aging Osteoblast*
- 5/4/2003 Medical Resident Examiner, Licensing Medical Council of Canada (LMCC), Qualifying Exam Part II  
*Examiner*
- 10/26/2002 Medical Resident Examiner, Licensing Medical Council of Canada (LMCC), Qualifying Exam Part II  
*Examiner*
- 10/20/2001 Medical Resident Examiner, Licensing Medical Council of Canada (LMCC), Qualifying Exam Part II

*Examiner*

2/1996

Canadian Association of Sports Medicine

*Examiner*

**Memberships**

Hip Society  
Active member  
2015-present

Interurban Orthopaedic Society  
Active member  
2013-present

American Association of Hip and Knee Surgeons  
Fellow Member  
2008 - present

Canadian Arthritis Network  
Member  
2001-2012

Arthroscopy Association of North America  
Associate member (08479)  
1999-2005

Member of the Orthopaedic Research Society (175410)  
1998-present

Fellow of the Royal College of Physicians and Surgeons of Canada  
*FRCSC* (454106)  
1997- present

Fédération des médecins spécialistes du Québec  
1997-present

Canadian Orthopaedic Association  
1994- present

Quebec Association of Orthopaedic Surgeons  
1993- present

American Academy of Orthopaedic Surgeons (# 100720)  
1993- present (member)  
Fellow since 2005

Hellenic Medical Association of Quebec  
*Executive Committee*  
1995- present

Junior Association of the Museum of Montreal  
*Executive Committee*  
1992- 1997

## 6. Other Professional and Scientific Contributions

10/2005 Medical Officer – Eastern Challenge Junior Skating Championship (Montreal)

12/2003 Medical Officer – Eastern Challenge Junior Skating Championship (Montreal)

09/2002 Medical Officer – World Junior Skating Championship (Montreal)

### MEETINGS ATTENDED:

Hip Society Closed meeting (50 <sup>th</sup> )	Omaha, 10/16
Canadian Orthopedic Association (COA/CORS), 71 <sup>st</sup>	Ottawa, 6/16
American Academy of Orthopaedic Surgeons, 83 <sup>rd</sup>	San Diego, 3/17
Orthopaedic Research Society, 63 <sup>rd</sup>	San Diego, 3/17
Orthopaedic Resident Review in Reconstructive Surgery	Toronto, 1/17
Canadian Arthroplasty Society Meeting	Toronto, 11/16
Hip Society Closed meeting (49 <sup>th</sup> )	Boston, 10/16
Canadian Orthopedic Association (COA/CORS), 70 <sup>th</sup>	Quebec, 6/16
Resurfacing Advanced Course, 7 <sup>th</sup>	Ghent, 6/16
Orthopaedic Resident Review in Reconstructive Surgery	Toronto, 1/16
Canadian Arthroplasty Society Meeting	Ottawa, 11/15
Interurban Orthopaedic Society meeting	Los Angeles, 10/15
Canadian Orthopedic Association (COA/CORS), 69 <sup>th</sup>	Vancouver, 6/15
American Academy of Orthopaedic Surgeons, 81 <sup>st</sup>	Las Vegas, 3/15
Orthopaedic Research Society, 61 <sup>st</sup>	Las Vegas, 3/15
Orthopaedic Resident Review in Reconstructive Surgery	Toronto, 1/15
Canadian Arthroplasty Society Meeting	Toronto, 11/14
ASTM – Symposium on Modularity and Tapers in TJR	New Orleans, 11/14
New Technology for the Treatment of Adult Hip and Knee Disorders	Baltimore, 8/14
Canadian Orthopedic Association (COA/CORS), 69 <sup>th</sup>	Montreal, 6/14
Resurfacing Advanced Course, 6 <sup>th</sup>	Ghent, 5/14
AMGEN Advisory board	Toronto, 4/14
American Academy of Orthopaedic Surgeons, 80 <sup>th</sup>	New Orleans, 3/14
Orthopaedic Research Society, 60 <sup>th</sup>	New Orleans, 3/14
Orthopaedic Resident Review in Reconstructive Surgery	Toronto, 1/14
Canadian Arthroplasty Society Meeting	Montreal, 11/13
Visiting Professor University of Toronto	Toronto, 11/13
Combined Orthopaedic Research Society, 8 <sup>th</sup>	Venice, 10/13
New Technology for the Treatment of Adult Hip and Knee Disorders	Baltimore, 8/13
Canadian Orthopedic Association (COA/CORS), 68 <sup>th</sup>	Winnipeg, 6/13
Is there a Place of Metal on Metal Hip Arthroplasty	Rome, 4/13
American Academy of Orthopaedic Surgeons, 79 <sup>th</sup>	Chicago, 3/13
Orthopaedic Research Society, 59 <sup>th</sup>	San Antonio, 1/13
Orthopaedic Resident Review in Reconstructive Surgery	Toronto, 1/13

Canadian Orthopaedic Association /Mid-winter meeting (board)	Toronto, 1/13
7th International Congress of Chinese Orthopaedics Association	Beijing, 11/12
Canadian Arthroplasty Society Meeting	London, 11/12
New Technology for the Treatment of Adult Hip and Knee Disorders	Baltimore, 8/12
World Forum for Spine Research	Helsinki, 6/12
Resurfacing Advanced Course, 5 <sup>th</sup>	Ghent, 6/12
Canadian Orthopedic Association (COA/CORS), 67 <sup>th</sup>	Ottawa, 6/12
Canadian Orthopaedic Association/ BOD RETREAT	Toronto, 5/12
Practical Solutions for Complex Issues in the Hip and Knee	Miami, 4/12
American Academy of Orthopaedic Surgeons, 78 <sup>th</sup>	San Francisco, 2/12
Orthopaedic Research Society, 58 <sup>th</sup>	San Francisco, 2/12
Canadian Orthopaedic Association /Mid-winter meeting (board)	Toronto, 1/12
McGill Orthopaedics Centennial Reunion	Montreal, 10/11
Orthopaedic Research Society Board meeting	Portland, 10/11
THR 4th KSU international orthopaedic symposium	Riyadh, 10/11
Canadian Orthopedic Association (COA/CORS), 66 <sup>th</sup>	St. John's, 7/11
Canadian Connective Tissue Conference, 17 <sup>th</sup>	Montreal, 5/11
Orthopaedic Research Society Board meeting	Washington, 4/11
Des cas complexes et des controverses au sujet de l'arthroplastie	Montreal, 3/11
American Academy of Orthopaedic Surgeons, 77 <sup>th</sup>	San Diego, 2/11
Orthopaedic Research Society, 57 <sup>th</sup>	Long Beach, 1/11
Canadian Orthopaedic Association /Mid-winter meeting (board)	Toronto, 1/11
Depuy Orthopaedic Dinner meeting	Los Angeles, 12/10
Millenium Hip Course, Depuy	Montreal, 10/10
Xarelto Orthopedic Surgery Advisory Board	Toronto, 9/10
Depuy Orthopaedic Dinner meeting	San Antonio, 9/10
Hip Joint Preservation and Resurfacing Arthroplasty Course, 4 <sup>th</sup>	Baltimore, 8/10
World Forum for Spine Research	Montreal, 7/10
Canadian Orthopedic Association (COA/CORS), 65 <sup>th</sup>	Edmonton, 6/10
Millenium Hip Course, Depuy	Vancouver, 5/10
Adept training meeting, Depuy (Dr. Isbister)	WolverHampton, 4/10
American Academy of Orthopaedic Surgeons, 76 <sup>th</sup>	New Orleans, 3/10
Orthopaedic Research Society, 56 <sup>th</sup>	New Orleans, 3/10
Canadian Orthopaedic Association /Mid-winter meeting	Toronto, 12/09
Bone Health Research concensus conference	Toronto, 11/09
Millenium Hip Course, Depuy	Montreal, 11/09
Silent training meeting, Depuy	Keil, 10/09
Hip Joint Preservation and Resurfacing Arthroplasty Course, 3 <sup>rd</sup>	Baltimore, 9/09
Xarelto Orthopedic Surgery Advisory Board	Montreal, 9/09
Advances in Medicine and Surgery in 2009, 5 <sup>th</sup>	Mani, 6/09
Resurfacing Advanced Course, 3 <sup>rd</sup>	Ghent, 6/09
American Academy of Orthopaedic Surgeons, 75 <sup>th</sup>	Las Vegas, 2/09
Orthopaedic Research Society, 55 <sup>th</sup>	Las Vegas, 2/09
CAS training session (Depuy/ Brainlab)	Las Vegas, 11/08
The Principles and Practice of Clinical Research	Toronto, 11/08
Bayer speaker training meeting	Toronto, 11/08
U.S. Comprehensive Course on Total Hip Resurfacing Arthroplasty	Los Angeles, 10/08
Resurfacing Advanced Course, 2 <sup>nd</sup>	Ghent, 6/08

Ibero American Forum, 1 <sup>st</sup>	Madrid, 6/08
Combined Meeting of the AOA-COA/CORS, 2nd	Quebec, 6/08
Rivaroxaban Consultant Meeting	Montreal, 5/08
CAN – AO BAB Strategic Workshop	Toronto, 4/08
American Academy of Orthopaedic Surgeons, 74 <sup>th</sup>	San Francisco, 3/08
Orthopaedic Research Society, 54 <sup>th</sup>	San Francisco, 3/08
Total Joint Arthroplasty: Updates and Controversies	Whistler, 2/08
World Forum for Spine Research	Kyoto, 1/08
U.S. Comprehensive Course on Total Hip Resurfacing Arthroplasty	Annapolis, 11/07
Combined Orthopaedic Research Society, 6 <sup>th</sup>	Hawaii, 10/07
Current Techniques in Hip and Knee Arthroplasty	Niagara on the Lake, 9/07
Canadian Orthopedic Association (COA/CORS), 62 <sup>nd</sup>	Halifax, 6/07
Latin American Forum, 4 <sup>th</sup>	Miami, 5/07
American Academy of Orthopaedic Surgeons, 73 <sup>rd</sup>	San Diego, 2/07
Orthopaedic Research Society, 53 <sup>rd</sup>	San Diego, 2/07
Orthopaedic and Sports Medicine Symposium	Tremblant, 2/07
Quebec Orthopaedic Association Meeting	Sherbrook, 11/06
Current Techniques in Hip and Knee Arthroplasty	Tremblant, 9/06
International Arthroplasty Congress, Arthroplastia Rio, 4 <sup>th</sup>	Rio de Janeiro, 7/06
Joint Preserving and Minimally Invasive Surgery of the Hip, 5 <sup>th</sup>	Ottawa, 6/06
Bioengineering for the restoration of joint function workshop (CAN)	Vancouver, 6/06
Canadian Orthopedic Association (COA/CORS), 61 <sup>st</sup>	Toronto, 6/06
Latin American Forum, 3 <sup>rd</sup>	Buenos Aires, 5/06
Pfizer Learning Center (Queen Elizabeth Hotel)	Montreal, 5/06
American Academy of Orthopaedic Surgeons, 72 <sup>nd</sup>	Chicago, 3/06
Orthopaedic Research Society, 52 <sup>nd</sup>	Chicago, 3/06
DePuy International; <i>An Interactive Forum on Bearing Technology</i>	Montreal, 3/06
DePuy National Sales meeting	Phoenix, 1/06
DePuy Investigator's meeting	Boston, 9/05
Current Techniques in Hip and Knee Arthroplasty	Muskoka, 9/05
Advances in Medicine and Surgery in 2005, 3 <sup>rd</sup>	Halkidiki, 7/05
European Cells & Materials Conference, 5 <sup>th</sup>	Davos, 7/05
Canadian Orthopedic Association (COA/CORS), 60 <sup>th</sup>	Montreal, 6/05
Canadian Connective Tissue Conference, 11 <sup>th</sup>	Montreal, 5/05
Canadian Orthopaedic Nurses Association, 28 <sup>th</sup>	Montreal, 4/05
A "Joint" Discussion, Catherine Booth Rehab Conference	Montreal, 4/05
American Academy of Orthopaedic Surgeons, 71 <sup>st</sup>	Washington, 2/05
Orthopaedic Research Society, 51 <sup>st</sup>	Washington, 2/05
Annual Combined Hip and Knee Meeting	Athens, 11/04
Canadian Arthritis Network Meeting, 5 <sup>th</sup>	Vancouver, 11/04
Combined Orthopaedic Research Society, 5 <sup>th</sup>	Banff, 10/04
Royal College of Physicians and Surgeon, 75 <sup>th</sup>	Ottawa, 10/04
Canadian Orthopedic Association (COA/CORS), 59 <sup>th</sup>	Calgary, 6/04
Joint Preserving and Minimally Invasive Surgery of the Hip, 3 <sup>rd</sup> symposium	Montreal, 6/04
American Academy of Orthopaedic Surgeons, 70 <sup>th</sup>	San Francisco, 3/04
Orthopaedic Research Society, 50 <sup>th</sup>	San Francisco, 3/04
DePuy Annual Review Course	Whistler, 2/04
Canadian Arthritis Network Meeting, 4 <sup>th</sup>	Montreal, 11/03

Canadian Orthopedic Association (COA/CORS), 58 <sup>th</sup>	Winnipeg, 10/03
Resurfacing Investigator's meeting	Rome, 9/03
Current Techniques in Knee Arthroplasty: Primary and Revision	Niagra on the Lake, 9/03
Minimally Invasive Hip Replacement	Dallas, 8/03
American Academy of Orthopaedic Surgeons, 69 <sup>th</sup>	New Orleans, 2/03
Orthopaedic Research Society, 49 <sup>th</sup>	New Orleans, 2/03
American Shoulder and Elbow Surgeons Open Meeting, 19 <sup>th</sup>	New Orleans, 2/03
The Hip Society, Open Meeting, 14 <sup>th</sup>	New Orleans, 2/03
Canadian Arthritis Network Meeting, 3 <sup>rd</sup>	Calgary, 9/02
World Congress of Biomechanics, 4 <sup>th</sup>	Calgary, 8/02
CIHR 2002 Osteoarthritis Initiative Consensus Conference	Toronto, 4/02
DePuy Annual Review Course	Whistler, 3/02
American Academy of Orthopaedic Surgeons, 68 <sup>th</sup>	Dallas, 2/02
Orthopaedic Research Society, 48 <sup>th</sup>	Dallas, 2/02
American Shoulder and Elbow Surgeons Open Meeting, 18 <sup>th</sup>	Dallas, 2/02
The Hip Society, Open Meeting, 13 <sup>th</sup>	Dallas, 2/02
CIHR Brainstorming Session, 2 <sup>nd</sup>	Ottawa, 8/01
Combined Orthopaedic Research Society, 4 <sup>th</sup>	Rhodes, 6/01
Canadian Connective Tissue Conference, 7 <sup>th</sup>	Toronto, 5/01
Old Bones and Joints, 2 <sup>nd</sup>	Montreal, 3/01
American Academy of Orthopaedic Surgeons, 68 <sup>th</sup>	San Francisco, 3/01
Orthopaedic Research Society, 47 <sup>th</sup>	San Francisco, 3/01
American Shoulder and Elbow Surgeons Open Meeting, 17 <sup>th</sup>	San Francisco, 3/01
Depuy National Sales meeting	Toronto, 2/01
International Symposium, Disc Degeneration, Synos Foundation, 1 <sup>st</sup>	Berne, 1/01
Zimmer Workshop, Shoulder Cadaveric Workshop	Toronto, 11/00
McGill Winter Sports Medicine Conference, 2 <sup>nd</sup>	Montreal, 10/00
Canadian Orthopedic Association (COA/CORS), 55 <sup>th</sup>	Edmonton, 6/00
Canadian Connective Tissue Conference, 6 <sup>th</sup>	Quebec, 5/00
American Academy of Orthopaedic Surgeons, 67 <sup>th</sup>	Orlando, 3/00
American Shoulder and Elbow Surgeons Open Meeting, 16 <sup>th</sup>	Orlando, 3/00
Orthopaedic Research Society, 46 <sup>th</sup>	Orlando, 3/00
Update in Emergency Medicine, C.A.E.P., 3 <sup>rd</sup>	Montreal, 2/00
International Symposium for Technology in Arthroplasty, 12 <sup>th</sup>	Chicago, 9/99
American Academy of Orthopaedic Surgeons, 66 <sup>th</sup>	Anaheim, 2/99
Orthopaedic Research Society, 45 <sup>th</sup>	Anaheim, 2/99
American Shoulder and Elbow Surgeons Open Meeting, 15 <sup>th</sup>	Anaheim, 2/99
Current Techniques in Open and Arthroscopic Shoulder Surgery	Rosemont, 11/98
Scoliosis Research Society, 33 <sup>rd</sup>	New York, 9/98
Arthroscopy and Arthroplasty of the Shoulder, 15 <sup>th</sup>	San Diego, 6/98
Canadian Orthopedic Association (COA/CORS), 53 <sup>rd</sup>	Ottawa, 6/98
American Academy of Orthopaedic Surgeons, 65 <sup>th</sup>	New Orleans, 3/98
Orthopaedic Research Society, 44 <sup>th</sup>	New Orleans, 3/98
Current Concepts in Joint Replacement, 14 <sup>th</sup>	Orlando, 12/97
Canadian Orthopedic Association (COA/CORS), 52 <sup>nd</sup>	Hamilton, 6/97
St. Justine Pediatric Orthopaedic Review Course, 10 <sup>th</sup>	Montreal, 4/97
McGill Orthopaedic Review Course, 12 <sup>th</sup>	Mont Tremblant, 3/97
American Academy of Orthopaedic Surgeons, 64 <sup>th</sup>	San Francisco, 2/97

Orthopaedic Research Society, 43 <sup>rd</sup>	San Francisco, 2/97
Quebec Orthopaedic Association Annual Symposium, 47 <sup>th</sup>	Montebello, 9/96
International Society for the study of the Lumbar Spine, 23 <sup>rd</sup>	Burlington, 6/96
Canadian Orthopaedic Association (COA/CORS), 51 <sup>st</sup>	Quebec, 5/96
Canadian Orthopaedic Residents Association, 22 <sup>nd</sup>	Banff, 5/96
International Intradiscal Therapeutic Society, 9 <sup>th</sup>	Amsterdam, 5/96
St. Justine Pediatric Orthopaedic Review Course, 9 <sup>th</sup>	Montreal, 4/96
Orthopaedic Research Society, 42 <sup>nd</sup>	Atlanta, 2/96
Canadian Association of Sports Medicine, 5 <sup>th</sup>	Montreal, 2/96
McGill Orthopaedic Review Course, 11 <sup>th</sup>	Montreal, 10/95
Scoliosis Research Society, 30 <sup>th</sup>	Ashville, 9/95
Canadian Conference on the Musculoskeletal System, 1 <sup>st</sup>	Montreal, 6/95
International Society for the study of the Lumbar Spine, 22 <sup>nd</sup>	Helsinki, 6/95
Canadian Orthopaedic Association (COA/CORS), 50 <sup>th</sup>	Halifax, 6/95
Canadian Orthopaedic Residents Association, 21 <sup>st</sup>	Quebec, 5/95
St. Justine Pediatric Orthopaedic Review Course, 8 <sup>th</sup>	Montreal, 4/95
Orthopaedic Research Society, 41 <sup>st</sup>	Orlando, 2/95
McGill Orthopaedic Review Course, 10 <sup>th</sup>	Montreal, 11/94
Canadian Orthopaedic Association (COA/CORS), 49 <sup>th</sup>	Winnipeg, 6/94
St. Justine Pediatric Orthopaedic Review Course, 7 <sup>th</sup>	Montreal, 4/94
Orthopaedic Research Society, 40 <sup>th</sup>	New Orleans, 2/94
Basic Science Review Course, 7 <sup>th</sup>	Ottawa, 11/93
McGill Orthopaedic Review Course, 9 <sup>th</sup>	Montreal, 11/93
Canadian Orthopaedic Association (COA/CORS), 48 <sup>th</sup>	Montreal, 6/93
St. Justine Pediatric Orthopaedic Review Course, 6 <sup>th</sup>	Montreal, 4/93
McGill Orthopaedic Review Course, 8 <sup>th</sup>	Montreal, 11/92
St. Justine Pediatric Orthopaedic Review Course, 5 <sup>th</sup>	Montreal, 4/92
McGill Orthopaedic Review Course, 7 <sup>th</sup>	Montreal, 11/91
International Intradiscal Therapeutic Society, 4 <sup>th</sup>	Houston, 4/91
St. Justine Pediatric Orthopaedic Review Course, 4 <sup>th</sup>	Montreal, 4/91
McGill Orthopaedic Review Course, 6 <sup>th</sup>	Montreal, 11/90



## **G. RESEARCH**

### **1. Research Activities**

#### **i. Diagnostic tool for intervertebral disc degeneration**

My interest in the development of quantitative magnetic resonance imaging (qMRI) as diagnostic tool for intervertebral disc (IVD) degeneration started during my Ph.D. studies in the Orthopaedic Research Laboratory at the Royal Victoria Hospital. Under the supervision of Dr. Max Aebi, we demonstrated that the human intervertebral disc undergoes important changes in the biosynthesis and denaturation of the extracellular matrix with growth, maturation, aging, and degeneration. This work led to an important article published in *Journal of Clinical Investigations* (J Antoniou et al. *J Clin Invest* 98: 996-1003, 1996) which was selected as work of broad interest and published as press release in over 40 journals, newspapers, and news services. With my collaborators from the beginning (Drs. Max Aebi, Mauro Alini, and Thomas Steffen) and the ones that believe in this project thereafter (Drs. James C. Iatridis [Vermont], Fackson Mwale, and Gilles Beaudoin [Montreal]), we published 8 articles directly related to this quest while 9 other publications related to spine biomechanics, scoliosis, pain, and disc cell metabolism were also published. After several years of work with a bovine animal model, we are presently working on the correlation of human disc degeneration to qMRI parameters. Upon completion of this work, we plan to use this tool in a clinical setting using normal volunteers and comparing the results to patients with disc pathology. We also foresee its use in the assessment of new and established therapeutic modalities in the treatment of disc pathology. Completion of this work will lead to new and exciting advances in the field of spine research.

#### **ii. Tissue engineering of the intervertebral disc**

Directly related to the work on diagnostic tool for degeneration of intervertebral disc is my second research interest on the regeneration of a functional nucleus pulposus (NP) in the degenerated intervertebral disc using autologous mesenchymal stem cells and growth factors. This project was initiated at my arrival at the Lady Davis Institute for Medical Research in 2000 and immediately received a support of over \$350,000 from the Canada Foundation for Innovation. This initial support help our group to obtained operation support in a continuous manner since that time from the CIHR and the AO Foundation and to published 18 articles directly or indirectly related to our goal. This work also received intellectual supports from collaborators in Montreal (Dr. Peter Roughley, Shriners Hospital, Dr. Fackson Mwale, Lady Davis Institute) and San Diego (Koichi Masuda, UCSD) who believe in this project. We are presently working on the development of a human model of disc culture to study more appropriately the repair of human disc in the future. To better understand the effect of Link N, further studies on the mechanisms of action of this peptide, including the receptors with which it interacts and the intracellular signaling pathways that it transducer will also be necessary. Ultimately, these studies should lead to clinical trials on the repair of NP in the degenerated IVD using Link N and MSCs.

#### **iii. Outcome of total hip arthroplasty**

Joint replacement surgery is still the most effective therapy to treat the pain and disability of these patients and improve their quality-of-life. As an alternative to metal-on-polyethylene articulations in which the biological response to polyethylene wear particles is one of the major initiating factors leading to osteolysis, metal-on-metal (MM) articulations were introduced to the THA armamentarium to reduce wear. However, recent data show that Co and Cr ions increased significantly in the blood of patients with MM THA: the most significant concern associated

with MM hip bearings is then the production of these ions, which can lead to cellular toxicity, metal hypersensitivity, and chromosomal changes. In collaboration with Dr. David Zukor and Dr. Olga Huk of the SMBD-Jewish General Hospital, I developed a research project trying to understand the clinical relevance of raised cobalt and chromium levels in patients with MM THA. This project is directly related to our effort to provide the best alternative treatment to our patients suffering of osteoarthritis. This led to 15 articles in basic sciences related to the response to wear particles and ions in vitro and 12 manuscripts on clinical evaluation of outcomes and metal ion levels in patients with metal-on-polyethylene and MM bearings. Several important questions remain however to be answered. For example, can a safe level of metal ions in patients with THAs be determined? Are other markers more relevant? All these questions will be addressed in our ongoing projects on long-term follow-up of patients with MM THAs, on failed THA due to pain but without apparent cause, on the influence of surgical variables on metal ion levels, on the clinical outcome in patients with the new “large head” THAs, and on the effect of metal ions on the sperm parameters of male patients in age of fathering a child. These present study represents a novel and original approach to address the concern about MM hip implants.

**Past:**

1. Ph.D. Graduate of Orthopaedic Research Laboratory:
  - Intervertebral disc matrix turnover
  - Quantitative MR evaluation of the intervertebral disc
2. Fellowships in Joint Replacement and Shoulder Surgery:
  - Outcome studies of arthroplasty and shoulder surgery

**Current:**

1. Laboratory Director at Lady Davis Institute:
  - Tissue engineering of intervertebral disc
  - Quantitative MR analysis of intervertebral disc
  - Cellular response to particulate debris in joint replacements
2. Clinical Research:
  - Outcome analysis of total joint arthroplasty and shoulder surgery
  - Outcomes of Resurfacing Hip Arthroplasty

**2. Personal Support Awards**

07/2013-2017 Chercheur national

*Quantitative Magnetic Resonance Imaging as a Diagnostic Tool of Intervertebral Disc Degeneration and Repair.*

**J. Antoniou**

Fonds de la recherche en santé du Québec (FRSQ).

07/2011-2013 Chercheurs-boursier cliniciens Senior

*Tissue Engineering of the Human Intervertebral Disk*

**J. Antoniou**

- Fonds de la recherche en santé du Québec (FRSQ) (2011)
- 2008-2013 William Dawson Scholar (renewal)  
**J. Antoniou**  
McGill University
- 2005-2010 CIHR New Investigators Award  
*Quantitative Magnetic Resonance Imaging as a Diagnostic Tool of Intervertebral Disc Matrix Composition and Integrity*  
Canadian Institutes of Health Research (CIHR)
- 2003 – 2008 William Dawson Scholar  
**J. Antoniou**  
McGill University
- 04/2001 Chercheurs boursier cliniciens Junior 1  
*La résonance magnétique quantitative comme outil diagnostique de la composition et l'intégrité de la matrice des disques intervertébraux*  
**J. Antoniou**  
Fonds de la recherche en santé du Québec (FRSQ) (2001)

### 3. Patents and Products

#### **PCT/CA2014/000656**

“Methods and Compositions for Treatment of Cartilage and Disc Disorders”

(U.S. Provisional Patent Applications No. 61/870,394/ filed August 27, 2013 and 61/975,329 filed April 4, 2014. International publication date 5 March, 2015).

*The application claims a new pharmaceutical composition comprising the sequence of the sLink N and it uses for the treatment of cartilage and disc tissue pathologies.*

#### 4. Research Grants

OMeGA Medical Grants Association

*OMeGA Fellowship Application*

Applicant: **J. Antoniou**

2017-2018 (1 year)

Amount: US\$ 21,500

Prog de projets recherche concertée sur la santé (IRSC en partenariat avec le CRSNG)

*Injectable Bioactive Hydrogels for the Regeneration of Intervertebral Discs*

Applicants: S Lerouge, F. Mwale, **J. Antoniou**

CIHR, 2017-2020 (3 years)

Amount: Can\$ 585,774

Canadian Institutes of Health Research (CIHR) – Project Grant

*Regulation of TGF-beta Action in Chondrocytes: Signaling via ALK1 versus ALK5 pathways*

Applicants: A. Philip, **J. Antoniou**

CIHR, 2016-2021 (5 years)

Amount: Can\$ 630,715

Canadian Institutes of Health Research (CIHR) – Project Grant

*Short Link N as a Therapeutic Agent for Intervertebral Disc Degeneration*

Applicants: **J. Antoniou**, F Mwale

CIHR, 2016-2021 (5 years)

Amount: Can\$ 749,211

OMeGA Medical Grants Association

*OMeGA fellowship application*

Applicant: **J. Antoniou**

2016-2017 (1 year)

Amount: US\$ 20,500

Bridge Funding, McGill University

Applicant: **J. Antoniou**

McGill University, 2015-2016 (1 year)

Amount: Can\$ 23,000

Canadian Institutes of Health Research (CIHR)

*Regulation of TGF-beta action in chondrocytes: signaling via ALK1 versus ALK5 pathways*

Applicants: A. Philip, **J. Antoniou**

CIHR, 2015-2016 (1 year)

Amount: Can\$ 100,000

Fonds de la recherche en santé du Québec (FRSQ) – Chercheur National  
*The efficacy of Link N as a mediator of repair in Intervertebral Disc Degeneration*

Applicant: **J. Antoniou**

2013-2017 (4 years)

Amount: Can\$ 180,000

Canadian Institutes of Health Research (CIHR) – Operating Grant

*The efficacy of Link N as a mediator of repair in Intervertebral Disc Degeneration*

**Ranked first in the Biomedical Engineering Panel**

Applicants: F. Mwale, **J. Antoniou**

CIHR, 2011-2014 (4 years)

Amount: Can\$ 564,800

Fonds de la recherche en santé du Québec (FRSQ)

*Tissue engineering of the human intervertebral disk*

Applicant: **J. Antoniou**

FRSQ, 2011-2013 (2 years)

Amount: Can\$ 78,217

Hansjörg Wyss Foundation Award

*Biological Repair of Intervertebral Disc Degeneration*

Applicant: **J. Antoniou**

AO Spine Research commission, 2011-2014 (3 years)

Amount: Can\$ 360,000

North American Spine Society (NASS) – Basic Research Grant Award

*Biological repair of intervertebral disc degeneration*

F. Mwale, J Antoniou

NASS, 2011-2012 (1 year)

Amount: US\$ 45,000

Canadian Institutes of Health Research (CIHR) – Operating Grant

*Tissue Engineering of Intervertebral Discs*

Applicant: **J. Antoniou**

CIHR, 2011-2013 (3 years)

Amount: Can\$ 328,002

2011 Berton Rahn Prize Award - (2<sup>nd</sup> prize)

*Quantitative magnetic resonance imaging as a diagnostic tool of intervertebral disc degeneration*

Applicant: **J. Antoniou**, F. Mwale

AO/ASIF Foundation, 2011

Amount: Can\$ 35,000

Canadian Institutes of Health Research (CIHR) (MOP 89782) – Operating Grant

*Quantitative Magnetic Resonance Imaging as a Diagnostic Tool of Intervertebral Disc Matrix Composition and Integrity*

Applicant: **J. Antoniou**  
CIHR, 2008-2011 (3 years)  
Amount: Can\$ 243,737

William Dawson Scholar Award (McGill)  
Applicant: **J. Antoniou**  
McGill University, 2008-2013  
Amount: Can\$ 15,000 (per year)

North American Spine Society  
*Biological repair of intervertebral disc degeneration*  
Applicant: F. Mwale, **J. Antoniou**  
NASS, October 2007-2008 (1 year)  
Amount: Can\$ 50,700

Canadian Institutes of Health Research (CIHR) (MOP 84285) – Operating Grant  
*Tissue Engineering of Intervertebral Disc Tissue Using Mesenchymal Stem Cells*  
Applicant: **J. Antoniou**  
CIHR, 2007-2010 (3 years)  
Amount: Can\$ 225,828

AO/ASIF Grant (06-A31)  
*Quantitative Magnetic Resonance Imaging as a Diagnostic Tool of Intervertebral Disc Matrix Composition and Integrity*  
Applicants: **J. Antoniou**, F. Mwale, J. Iatridis  
AO/ASIF Foundation, 2006-2009  
Amount: Can\$ 180,000

Canadian Orthopaedic Foundation  
*Serum metal ion levels in patients with metal-on-metal hip prostheses*  
Applicants: **J. Antoniou**, O.L. Huk, D.J. Zukor, F. Mwale, S.T. Ahmedali  
Canadian Orthopaedic Foundation, 09/2005-08/2006  
Amount: Can\$ 10,000

AO/ASIF Grant (05-A59)  
*Tissue Engineering of the Intervertebral Disc Using Mesenchymal Stem Cells*  
Applicants: **J. Antoniou**  
AO/ASIF Foundation, 2005-2007  
Amount: Can\$ 133,000

Canadian Institutes of Health Research (CIHR) – Operating Grant  
*Estrogen signaling in chondrocytes: dissociation between genomic and non-genomic effects.*  
Applicants: F. Mwale, **J. Antoniou**  
CIHR, 2004-2005 (1 year)  
Amount: Can\$ 70,000

AO/ASIF Grant (04-A20)  
*Cellular regulation of collagenase by collagen peptides in the intervertebral disc*

Applicants: F. Mwale, **J. Antoniou**  
AO/ASIF Foundation, 2004-2006  
Amount: Can\$ 150,000

Canadian Institutes of Health Research (CIHR) – New Investigator Award  
*Quantitative Magnetic Resonance Imaging as a Diagnostic Tool of Intervertebral Disc Matrix Composition and Integrity*  
Applicant: **J. Antoniou**  
CIHR, 2005-2010 (5 years)  
Amount: Can\$ 250,000

Canadian Institutes of Health Research (CIHR) – Operating Grant  
*Quantitative Magnetic Resonance Imaging as a Diagnostic Tool of Intervertebral Disc Matrix Composition and Integrity*  
Applicant: **J. Antoniou**  
CIHR, 2004-2006 (3 years)  
Amount: Can\$ 252,996

Canadian Institutes of Health Research (CIHR) – Operating Grant  
*Tissue Engineering of Intervertebral Disc Tissue Using Mesenchymal Stem Cells*  
Applicant: **J. Antoniou**  
CIHR, 2003-2005 (3 years)  
Amount: Can\$ 181,983

AO/ASIF Grant (03-A39)  
*Tissue Engineering of the Intervertebral Disc Using Mesenchymal Stem Cells*  
Applicants: **J. Antoniou**  
AO/ASIF Foundation, 2003-2005  
Amount: Can\$ 120,000

Canadian Institutes of Health Research (CIHR) – Operating Grant  
*Tissue Engineering of Intervertebral Disc Tissue Using Mesenchymal Stem Cells*  
Applicant: **J. Antoniou**  
CIHR, 2003-2004 (1 year)  
Amount: Can\$ 57,011

William Dawson Scholar Award (McGill)  
Applicant: **J. Antoniou**  
McGill University, 2003-2008  
Amount: Can \$ 15,000 (per year)

NANO Quebec Grant  
*Controlled Surface Nano-/Micropatterning for the Tissue Engineering of Cartilage and Bone.*  
Applicants: MR Wertheimer, NA Bullett, F Mwale, S Lerouge, O Huk, A Petit, D Zukor, **J. Antoniou**, A Badia, T Ellis, F Winnik.  
Nano Technology, Quebec, 2002-2004  
Amount: Can \$ 60,000 (per year)

AO/ASIF Grant

*Bioengineering of Disc Matrix and Stem Cells*

Applicants: **J. Antoniou**, T. Steffen, M. Alini, M. Aebi

AO/ASIF Foundation, 2002-2005

Amount: Can\$ 150,000 (per year)

Canada Foundation for Innovation

*Tissue Engineering of Intervertebral Disc*

Applicant: **J. Antoniou**

CFI, 2001

Amount: Can\$ 369,906

Fonds de la recherche en santé du Québec (FRSQ)

*La résonance magnétique quantitative comme outil diagnostique de la composition et l'intégrité de la matrice des disques intervertébraux*

Applicant: **J. Antoniou**

FRSQ, 2001-2005 (5 years)

Amount: Can\$ 137,989

Canadian Institutes of Health Research (CIHR) – Grant

*Quantitative Magnetic Resonance Imaging as a Diagnostic Tool of Intervertebral Disc Matrix Composition and Integrity*

Applicant: **J. Antoniou**

CIHR, 2001-2004 (3 years)

Amount: Can\$ 162,000

AO/ASIF Grant (99-A38)

*Quantitative Magnetic Resonance as an Accurate Diagnostic Tool of Intervertebral Disc Matrix Structural Integrity, Degeneration, and Repair*

Applicants: **J. Antoniou**, M. Aebi

AO/ASIF Foundation, 1999-2000

Amount: US\$ 40,799

1998 Hip Hip Hooray Grant

*Cross-linked N-telopeptides as Markers for Evaluating Particulate Osteolysis*

Applicants: **J. Antoniou**, M. Alini, O. Huk, D. Zukor

Canadian Orthopaedic Association, 1998-1999

Amount: Can\$ 10,600

1997 McLaughlin Fellowship

Applicant: **J. Antoniou**

Postgraduate Awards Committee, 1997-1999

Amount: Can\$ 90,000

AO/ASIF Grant (97-A20)



*Quantitative Magnetic Resonance as an Accurate Diagnostic Tool of Intervertebral Disc Matrix Structural Integrity, Degeneration, and Repair*

Applicants: **J. Antoniou**, M. Aebi

AO/ASIF Foundation, 1997-1998

Amount: US\$ 41,291

OREF Resident Grant

*Intervertebral Disc Composition and Integrity Assessed by Quantitative Magnetic Resonance*

Applicant: **J. Antoniou**

Orthopaedic Research and Education Foundation, 1996-1997

Amount: US\$ 15,104

CORE/ACORE Award

*Quantitative Magnetic Resonance- Diagnostic Tool of Intervertebral Disc Matrix Integrity and Turnover*

Applicant: **J. Antoniou**

Canadian Orthopaedic Association, 1995-1996

Amount: Can\$ 15,000

AO/ASIF Grant (95-A50)

*Quantitative Magnetic Resonance as an Accurate Diagnostic Tool of Intervertebral Disc Matrix Structural Integrity, Degeneration, and Repair*

Applicants: **J. Antoniou**, M. Aebi

AO/ASIF Foundation, 1995-1996

Amount: US\$ 35,934

R.V.H. Research Institute Fellowship Grant

*Quantitative Biochemical Changes in the Human Lumbar Intervertebral Disc*

Applicant: **J. Antoniou**

McGill University, 1994-1995

Amount: Can\$ 15,296

*Mechanical Properties of the Loaded Cadaveric Intervertebral Disc Correlated to its Degree of Matrix Denaturation*

Applicants: M. Aebi, T. Steffen, **J. Antoniou**

McGill University, 1994-1995

Amount: Can \$20,000

## 5. Publications:

### A) Papers in Peer-Reviewed Journals:

#### Published –

1. Tchetina EV, Markova GA, Poole AR, Zukor DJ, **Antoniou J**, Makarov SA, Kuzin AN. *Deferoxamine Suppresses Collagen Cleavage and Protease, Cytokine, and COL10A1 Expression and Upregulates AMPK and Krebs Cycle Genes in Human Osteoarthritic Cartilage*. Int J Rheumatol. 2016; 2016:6432867.
2. Algarni N, Grant M, Epure LM, Salem O, Bokhari RF, **Antoniou J**, Mwale F. *Short Link N can induce regeneration of the early degenerate intervertebral disc in a novel long-term organ culture model that includes the bony vertebrae*. Tissue Eng Part A. 2016 Sep 27. [Epub ahead of print].
3. Sutton JC 3rd, **Antoniou J**, Epure LM, Huk OL, Zukor DJ, Bergeron SG. *Hospital Discharge within 2 Days Following Total Hip or Knee Arthroplasty Does Not Increase Major-Complication and Readmission Rates*. J Bone Joint Surg Am. 2016 Sep 7;98(17):1419-28.
4. Grant MP, Epure LM, Bokhari R, Roughley P, **Antoniou J**, Mwale F. *Human cartilaginous endplate degeneration is induced by calcium and the extracellular calcium-sensing receptor in the intervertebral disc*. Eur Cell Mater. 2016 Jul 25; 32:137-51.
5. M. Grant, L.M. Epure, O. Salem, N. AlGarni, O. Ciobanu, M. Alaqeel, **J. Antoniou**, F. Mwale. *Development of a Large Animal Long-Term Intervertebral Disc Organ Culture Model That Includes the Bony Vertebrae for Ex Vivo Studies*. Tissue Eng Part C Methods. 2016 Jul 27; 22(7):636-43.
6. C. Gerarduzzi, Q. He, B. Zhai, **J. Antoniou**, J.A. Di Battista. *Prostaglandin E2-Dependent Phosphorylation of RAS Inhibition 1 (RINI) at Ser 291 and 292 Inhibits Transforming Growth Factor- $\beta$ -Induced RAS Activation Pathway in Human Synovial Fibroblasts: Role in Cell Migration*. J Cell Physiol. Epub 2016 May 2, 232(1):202-15, 20172.
7. A. Hart, **J Antoniou**, Y.S. Brin, O.L. Huk, D.J. Zukor, S.G. Bergeron. *In Reply J Arthroplasty*. 2016 Jul, 31(7):1616-7.
8. E. Liodakis, **J. Antoniou**, D.J. Zukor, O.L. Huk, L.M. Epure, S.G. Bergeron. *Navigated vs Conventional Total Knee Arthroplasty: Is There a Difference in the Rate of Respiratory Complications and Transfusions?* J Arthroplasty, 2016, 31(10):2273-7.
9. E. Liodakis, **J. Antoniou**, D.J. Zukor, O.L. Huk, L.M. Epure, S.G. Bergeron. *Major Complications and Transfusion Rates after Hemiarthroplasty and Total Hip Arthroplasty for Femoral Neck Fractures*. J Arthroplasty, 2016, 31(9):2008-12.

10. J. Drager, A. Hart, J.A. Khalil, D.J. Zukor, S.G. Bergeron, **J. Antoniou**. *Shorter Hospital Stay and Lower 30-Day Readmission After Unicondylar Knee Arthroplasty Compared to Total Knee Arthroplasty* J Arthroplasty. 2016 Feb;31(2):356-61.
11. A. Albers, A.A. Aoude, D.J. Zukor, O.L. Huk, **J. Antoniou**, M. Tanzer. *Favorable Results of a Short, Tapered, Highly Porous, Proximally Coated Cementless Femoral Stem at a Minimum 4-Year Follow-Up*. J Arthroplasty. 2016, 31(4):824-9.
12. A. Hart, **J Antoniou**, Y.S. Brin, O.L. Huk, D.J. Zukor, S.G. Bergeron. *Simultaneous Bilateral Versus Unilateral Total Knee Arthroplasty: A Comparison of 30-Day Readmission Rates and Major Complications*. J Arthroplasty. 2016 Jan;31(1):31-5.
13. A. Hart, S.G. Bergeron, L. Epure, O. Huk, D. Zukor, **J. Antoniou**. *Comparison of US and Canadian Perioperative Outcomes and Hospital Efficiency after Total Hip and Knee Arthroplasty*. JAMA Surg. 2015 Oct;150(10):990-8.
14. N. Alaaeddine, **J. Antoniou**, M. Moussa, G. Hilal, G. Kreichaty, I. Ghanem, W. Abouchedid, E. Saghbini, J.A. Di Battista. *The chemokine CCL20 induces proinflammatory and matrix degradative responses in cartilage*. Inflamm Res. 2015 Sep; 64(9):721-31.
15. E. Liodakis, S.G. Bergeron, D.J. Zukor, O.L. Huk, L.M. Epure, **J. Antoniou**. *Perioperative Complications and Length of Stay after Revision Total Hip and Knee Arthroplasties: An Analysis of the NSQIP Database*. J Arthroplasty. 2015 Nov;30(11):1868-71.
16. P.T. Burgers, R.W. Poolman, T.M. Van Bakel, W.E. Tuinebreijer, S.M. Zielinski, M. Bhandari, P. Patka, E.M. Van Lieshout; *HEALTH and FAITH Trial Investigators*. *Reliability, validity, and responsiveness of the Western Ontario and McMaster Universities Osteoarthritis Index for elderly patients with a femoral neck fracture*. J Bone Joint Surg Am. 2015 May 6;97(9):751-7.
17. **J. Antoniou**, H.T. Wang, I. Hadjab, S. Aldebeyan, M.A. Alaqeel, B.P. Meij, M.A. Tryfonidou, F. Mwale. *The Effects of Naproxen on Chondrogenesis of Human Mesenchymal Stem Cells*. Tissue Eng Part A. 21(13-14):2136-46, 2015.
18. A.A. Aoude, **J. Antoniou**, L.M. Epure, O.L. Huk, D.J. Zukor, M. Tanzer. *Midterm Outcomes of the Recently FDA Approved Ceramic on Ceramic Bearing in Total Hip Arthroplasty Patients Under 65 Years of Age*. J Arthroplasty. 2015 S0883-5403(15)00226-0.
19. E Liodakis, A. Carli, D. Zukor, O. Huk, **J. Antoniou**. *Corrosion at the Head-Neck Taper Interface affects the Prognosis of Hip Revision Surgery*. Journal of ASTM international 2014 in press.
20. A. Hart, J.A. Khalil, A. Carli, O. Huk, D. Zukor, **J. Antoniou**. *Blood Transfusion in Primary Total Hip and Knee Arthroplasty: Incidence, Risk Factors, and 30-Day Complication Rates*. J Bone Joint Surg Am. 96(23):1945-51, 2014.

21. A. Carli, A. Politis, D. Zukor, O. Huk, **J. Antoniou**. *Clinically significant corrosion at the head-neck taper interface in total hip arthroplasty: a systematic review and case series*. Hip Int. 25(1):7-14, 2015.
22. A. Carli, A. Aoude, A. Reuven, B. Matache, **J. Antoniou**, D.J. Zukor. *Inconsistencies between navigation data and radiographs in total knee arthroplasty are system-dependent and affect coronal alignment*. Can J Surg. 2014 Oct; 57(5):305-13.
23. C. Gerarduzzi, Q. He, **J. Antoniou**, J.A. Di Battista. *Quantitative Phosphoproteomic Analysis of Signaling Downstream of the Prostaglandin E2/G-Protein Coupled Receptor in Human Synovial Fibroblasts: Potential Antifibrotic Networks*. J Proteome Res. 13(11):5262-80, 2014.
24. A.M. Alaseem, P. Madiraju, S.A. Aldebeyan, H. Noorwali, **J. Antoniou**, F. Mwale. *Naproxen Induces Type X Collagen Expression in Human Bone-Marrow-Derived Mesenchymal Stem Cells through the Upregulation of 5-Lipoxygenase*. Tissue Eng Part A. Tissue Eng Part A. 21(1-2):234-45, 2015.
25. O. Salem, H.T. Wang, A.M. Alaseem, O. Ciobanu, I. Hadjab, R. Gawri, **J. Antoniou**, F. Mwale. *Naproxen affects osteogenesis of human mesenchymal stem cells via regulation of Indian hedgehog signaling molecules*. Arthritis Res Ther. 2014 Jul 17;16(4):R152.
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**B) Technical Reports**

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In Practical Procedures of Elective Orthopaedic Surgery: A trainee's companion  
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A Walsh, V. Nikolaou, **J. Antoniou**

*Revision of the Acetabular Components: What is the Role of Structural Bulk Allografts and Porous Titanium Implants?*

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*Painful Total Hip Arthroplasty: Pain Without Apparent Cause.*

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**J. Antoniou** M.D. Ph.D, V. Arlet M.D.:

Spinal Deformities, Dewald

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*Microanatomy: Biochemistry of the Intervertebral Disc*

**J. Antoniou** M.D. Ph.D, R. Rozencwaig M.D, D.T. Harryman M.D.:

Orthopaedic Sports Medicine: Principles and Practice, ed 2, DeLee, Drez, Miller

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Orthopaedic Knowledge Update: Hip and Knee Reconstruction, ed 2

American Academy of Orthopaedic Surgeons, Rosemont, IL, 2000

*The Hip: Surgical Approaches and Anatomic Considerations.*

**D) Books**

W.G. Paprosky M.D., **J. Antoniou** M.D., N.V. Greidanus M.D.:

AAOS Monograph Series - 2001

*Revision Hip Arthroplasty*

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- 2006 *The Athlete's Elbow* – American Academy of Orthopaedic Surgeons, Shoulder Physical Examination Section (writer - editor) – DVD - worldwide distribution
- 2005 *The Athlete's Shoulder, Volume 2*– American Academy of Orthopaedic Surgeons, Shoulder Anatomy Section (writer - editor) – DVD - worldwide distribution
- 2003 *Athlete's Shoulder Rehabilitation*– American Academy of Orthopaedic Surgeons, Shoulder Anatomy Section (writer-editor) – DVD - worldwide distribution
- 2002 Co-author and producer of DVD - *Physical Examination of the Knee* (Funded by Maurice E. Muller Foundation) - worldwide distribution
- 2002 Co-author and producer of DVD - *Physical Examination of the Shoulder* (Funded by Maurice E. Muller Foundation) - worldwide distribution
- 2002 *The Athlete's Shoulder* – American Academy of Orthopaedic Surgeons, Shoulder Anatomy Section (writer-editor) – DVD - worldwide distribution
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## 6. Abstracts and Conference Presentations

1. **J Antoniou**, M. Wabah, LM Epure, OL Huk, DJ Zukor, SG Bergeron. *Simultaneous Bilateral versus unilateral THA; A Comparioson of 30-Day Major Complications and Readmission*. The 2017 Summer Meeting of The Hip Society, Omaha, NB. October 6, 2017 – Podium.
2. MP Grant, N AlGarni, LM Epure, O Salem, **J Antoniou**, F Mwale. *Short Link N Stimulates Intervertebral Disc Repair in a Novel Long-term Organ Culture Model that Includes the Bony Vertebrae*. 51<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Research Society, Ottawa, ON. June 15-18, 2017 – Podium.
3. MP Grant, E Elahie, A Bolt, LM Epure, A Papanastasiou, **J Antoniou**, KK Mann, F Mwale. *The Effect of Tungsten in the IVD*. 51<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Research Society, Ottawa, ON. June 15-18, 2017 – Podium.
4. M Grant, M Albeshar, LM Epure, **J Antoniou**, F Mwale. *Biological Repair of Osteoarthritic Cartilage Using Short Link N*. 51<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Research Society, Ottawa, ON. June 15-18, 2017 – Podium.
5. M AlAqeel, M Grant, L Epure, O Salem, O Huk, **J Antoniou**, F Mwale. *Effect of Link N on the Synthesis and Degradation of Matrix Proteins in Human Articular Osteoarthritic Cartilage*. 51<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Research Society, Ottawa, ON. June 15-18, 2017 – Podium.
6. M Albeshar, N Stavropoulos, O Huk, LM Epure, S Bergeron, D Zukor, **J Antoniou**. *Long-term Follow-up of a Second-Generation Metal-on-Metal Total Hip Arthroplasty*. 72<sup>nd</sup> Annual Meeting of the Canadian Orthopaedic Association, Ottawa, ON. June 15-18, 2017 – Podium.
7. M Albeshar, MP Grant, LM Epure, **J Antoniou**, F Mwale. *Biological Repair of Osteoarthritic Cartilage Using Short Link N*. 23<sup>rd</sup> Canadian Connective Tissue Conference, May 18-20, 2017, Montreal, QC, Canada – Podium.
8. Y Alinejad, MP Grant, A Adoungotchodo, LM Epure, **J Antoniou**, F Mwale, S Lerouge. *An Injectable Chitosan Scaffold with Mechanical Properties Optimized for IVD Repair*. 23<sup>rd</sup> Canadian Connective Tissue Conference, May 18-20, 2017, Montreal, QC, Canada – Podium.
9. Y Alsaran, MP Grant, LM Epure, A Papanastasiou, **J Antoniou**, F Mwale. *Ca<sup>2+</sup> and PO<sub>4</sub> Regulate Matrix Protein Synthesis in Intervertebral Disc Cells*. 23<sup>rd</sup> Canadian Connective Tissue Conference, May 18-20, 2017, Montreal, QC, Canada – Poster.
10. MP Grant, LM Epure, Y Alsaran, **J Antoniou**, F Mwale. *Prime Growth<sup>TM</sup> IVD Cell: A Novel Optimized Medium for The Culturing of IVD Cells*. 23<sup>rd</sup> Canadian Connective Tissue Conference, May 18-20, 2017, Montreal, QC, Canada – Poster.

11. MP Grant, A Bolt, Y Alsarani, LM Epure, A Papanastasiou, **J Antoniou**, KK Mann, F Mwale. *The Effect of Tungsten on The Intervertebral Disc: an in Vivo Study*. 23<sup>rd</sup> Canadian Connective Tissue Conference, May 18-20, 2017, Montreal, QC, Canada – Poster.
12. MP Grant, O Salem, LM Epure, OL Huk, DJ Zukor, **J Antoniou**, F Mwale. *A Role for Free Calcium in the Degeneration of Articular Cartilage* - 63<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. March 19-22, 2017 – Poster.
13. MP Grant, N Algarni, LM Epure, O Salem, **J Antoniou**, F Mwale. *Short Link N Stimulates Intervertebral Disc Repair in a Novel Long-term Organ Culture Model That Includes the Bony Vertebrae* - 63<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. March 19-22, 2017 – Poster.
14. F Mwale, A Habis, LM Epure, MP Grant, H Almajed, **J Antoniou**. *Can Quantitative MRI and Matrix Composition of Nucleus Pulposus Predict Calcium and Phosphate Levels in Degenerative Intervertebral Discs?* 63<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. March 19-22, 2017– Poster.
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16. MP Grant, E Elahie, A Bolt, LM Epure, K Mann, **J Antoniou**, F Mwale. *The Effect of Tungsten in the IVD*. 63<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. March 19-22, 2017 – Poster
17. M Al-Sobeai, LM Epure, H Le, F Descepolo, OL Huk, DJ Zukor, **J Antoniou**. *Natural History of Adverse Local Tissue Reactions (ALTRs) Around Hip Arthroplasty as Identified by MARS MRI*. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). San Diego, CA March 14 – 18, 2017 - ePoster.
18. A Hart, **J Antoniou**, L Epure, O Huk, D Zukor, S Bergeron. *Time to Surgery and Thirty-Day Complications Following Hip Fracture – Is Time of the Essence?* Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). San Diego, CA March 14 – 18, 2017 - Podium.
19. **J Antoniou**, NA Stavropoulos, LM Epure, M Albeshar, OL Huk, DJ Zukor. *Our Nine-Year Experience with a Recalled Hip Resurfacing Implant*. 5<sup>th</sup> Annual Canadian Arthroplasty Society Meeting. Toronto, ON. November 25– Podium.
20. OL Huk, N Stavropoulos, LM Epure, DJ Zukor, **J Antoniou**. *The Metasul Metal-on-Metal Total Hip Arthroplasty: A Minimum 15 Year Follow Up*. 5<sup>th</sup> Annual Canadian Arthroplasty Society Meeting. Toronto, ON. November 25– Podium.
21. DJ Zukor, M Al Sobeai, LM Epure, OL Huk, **J Antoniou**. *Mid Term Results of Ceramic on Metal bearing in comparison to Metal on Metal bearing in Total Hip Arthroplasty*. 5<sup>th</sup>

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22. **J Antoniou**, NA Stavropoulos, LM Epure, M Albeshar, OL Huk, DJ Zukor. *Our Nine Year Experience with a Recalled Hip Resurfacing Implant*. The 2016 Summer Meeting of The Hip Society, Boston, MA. October 27-29, 2016 – Podium.
  23. A Philip, **J Antoniou**, Y Chi. *CD109 differentially modulates distinct TGF- $\beta$  signaling pathways and regulates extracellular matrix production in chondrocytes*. 13<sup>th</sup> Congress of the International Cartilage Repair Society, Naples, Italy. September 24-27, 2016 – Podium.
  24. N Stavropoulos, LM Epure, M Albeshar, SH A E Alkhaldi, O Huk, D Zukor, **J Antoniou**. *The metasul metal-on-metal total hip arthroplasty: A minimum 15 year follow-up*. 12<sup>th</sup> Congress of the European Hip Society, Munich, Germany. September 6-9, 2016 – ePoster with short talk.
  25. M Albeshar, MP Grant, LM Epure, OL Huk, **J Antoniou**, F Mwale. *A Short Novel Peptide for the Repair of Cartilage in Osteoarthritic Joints*. 50<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society, Quebec, QC. June 16-19, 2016 – Podium.
  26. MP Grant, R Bokhari, LM Epure, **J Antoniou**, F Mwale. *Ca<sup>2+</sup> Regulates the Content of Type II Collagen and Proteoglycan in Intervertebral Discs by Activating the Extracellular Calcium-sensing Receptor*. 50<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society, Quebec, QC. June 16-19, 2016 – Podium.
  27. MP Grant, LM Epure, O Salem, M Alaqeel, **J Antoniou**, F Mwale. *Development of a Whole Bovine Long-term Organ Culture System that Retains Vertebral Bone for Intervertebral Disc Repair and Biomechanical Studies Using PrimeGrowth Media*. 50<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society, Quebec, QC. June 16-19, 2016 – Podium.
  28. M Al Sobeai, LM Epure, QC; S Bergeron, O Huk, D Zukor, **J Antoniou**. *Impact of Training Level on Postoperative Complications in Total Knee Arthroplasties: US versus Canada*. 71<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Association, Quebec, QC. June 16-19, 2016 – Podium.
  29. A Hart, LM Epure, SG Bergeron, O Huk, D Zukor, **J Antoniou**. *Time to Surgery and Thirty-day Major Complications Following Hip Fracture - Time is of the Essence*. 71<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Association, Quebec, QC. June 16-19, 2016 – Podium.
  30. NA Stavropoulos, LM Epure, DJ Zukor, O Huk, **J Antoniou**. *Our Experience with a Recalled Hip Resurfacing Implant at a Minimum Five-year Follow-up*. 71<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Association, Quebec, QC. June 16-19, 2016 – Podium.

31. F Waly, M Morcos, N Algarni, L Epure, DJ Zukor, O Huk, **J Antoniou**. *A Comparison of the Direct Lateral and Posterior Approaches in Primary Total Hip Arthroplasty*. 71<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Association, Quebec, QC. June 16-19, 2016 – Poster.
32. M Al Sobeai, LM Epure, DJ Zukor, OL Huk, **J Antoniou**. *Mid-term Results of Ceramic-on-Metal Bearing in Comparison to Metal-on-Metal Bearing in Total Hip Arthroplasty*. 71<sup>st</sup> Annual Meeting of the Canadian Orthopaedic Association, Quebec, QC. June 16-19, 2016 – Poster
33. MP Grant, LM Epure, O Salem, M Alaqeel, **J Antoniou**, F Mwale. *Development of a whole bovine long-term organ culture system that retains vertebral bone for intervertebral disc repair and biomechanical studies using PrimeGrowth media*. 5<sup>th</sup> Global Spine Congress, Dubai, United Arab Emirates. April 13-16, 2016 - Podium.
34. MP Grant, A Alrashoudi, O Salem, LM Epure, OL Huk, DJ Zukor, **J Antoniou**, F Mwale. *Calcium Regulates the Regenerative Potential of Parathyroid Hormone Related-Peptide on Osteoarthritic Cartilage*. 62<sup>nd</sup> Annual Meeting of the Orthopaedic Research Society. Orlando, FLA. March 3-7, 2016 – poster.
35. MP Grant, R Bokhari, LM Epure, **J Antoniou**, F Mwale. *The role of Ca<sup>2+</sup> and the Calcium-Sensing Receptor in Intervertebral Disc degeneration*. 62<sup>nd</sup> Annual Meeting of the Orthopaedic Research Society. Orlando, FLA. March 3-7, 2016 – Poster.
36. O Salem, MP Grant, LM Epure, OL Huk, DJ Zukor, **J Antoniou**, F Mwale. *Calcium and Activation of the Extracellular Calcium-Sensing Receptor Induce Articular Cartilage Degeneration in Osteoarthritis*. 62<sup>nd</sup> Annual Meeting of the Orthopaedic Research Society. Orlando, FLA. March 3-7, 2016 – Poster.
37. MP Grant, LM Epure, O Salem, M Alaqeel, J Antoniou, **F Mwale**. *Development of a whole bovine long-term organ culture system that retains vertebral bone for intervertebral disc repair and biomechanical studies using PrimeGrowth media*. 62<sup>nd</sup> Annual Meeting of the Orthopaedic Research Society. Orlando, FLA. March 3-7, 2016 – Podium.
38. E Liodakis, **J Antoniou**, O Huk, D Zukor, LM Epure, S Bergeron. *Complications and Transfusion Rates after Hemi- and Total Hip Arthroplasty for Femoral Neck Fractures*. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Orlando, FL. March 1-5 2016 – Podium.
39. Y Brin, LM Epure, S Bergeron, O Huk, **J Antoniou**, D Zukor. *BMI Affects Postoperative Complications, and 30-Day Readmission Rate, in Total Joint Arthroplasty*. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Orlando, FL. March 1-5 2016 – Podium.
40. A Hart, **J Antoniou**, YS Brin, LM Epure, O Huk, D Zukor, S Bergeron. *Simultaneous Bilateral vs. Unilateral Knee Replacement: Comparing Readmissions and Major*

- Complications*. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Orlando, FL. March 1-5 2016 – Podium.
41. E Liodakis, S Bergeron, D Zukor, O Huk, LM Epure, **J Antoniou**. *Perioperative Complications and Length of Stay after Aseptic Revision Total Hip and Knee Arthroplasty*. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Orlando, FL. March 1-5 2016 – Podium.
  42. M Al-Sobeai, L Epure, S Bergeron, O Huk, D Zukor, **J Antoniou**. *Impact of Training Level on Postoperative Complications in Total Knee Arthroplasties: US versus Canada*. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Orlando, FL. March 1-5 2016 – Podium.
  43. J Drager, A Hart, J Khalil, O Huk, MD, D Zukor, MD, S Bergeron, **J Antoniou**. *Unicondylar Knee Arthroplasty Reduces Hospital Stay and 30-Day Readmission Compared to Total Knee Arthroplasty*. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Orlando, FL. March 1-5 2016 – Poster.
  44. J Drager, **J Antoniou**, L Epure, O Huk, D Zukor, S Bergeron. *Does Early Hospital Discharge Following Total Hip & Knee Arthroplasty increase 30-Days Readmission?* 35<sup>th</sup> Annual Meeting of the Israel Orthopaedic Association, Jerusalem, Israel. December 16-18, 2015 – Podium.
  45. **J Antoniou**, JC Sutton, LM Epure, O Huk, DJ Zukor, SG Bergeron. *Early Hospital Discharge within the First Two Days Following Total Hip and Knee Arthroplasty Does Not Increase Major Complication and Readmission Rates*. 4<sup>th</sup> Annual Canadian Arthroplasty Society Meeting. Ottawa, ON. November 26 -27, 2015 – Podium.
  46. O Huk, J Drager, A Hart, J Aboukhalil, D Zukor, S Bergeron, **J Antoniou**. *Shorter Hospital Stay and Lower 30-Day Readmission following Unicondylar Knee Arthroplasty Compared to Total Knee Arthroplasty*. 4<sup>th</sup> Annual Canadian Arthroplasty Society Meeting. Ottawa, ON. November 26 -27, 2015 – Podium.
  47. DJ Zukor, A Hart, **J Antoniou**, Y Brin, L Epure, O Huk, SG Bergeron. *Simultaneous Bilateral vs Unilateral Knee Replacement: Comparing Readmissions and Major Complications*. 4<sup>th</sup> Annual Canadian Arthroplasty Society Meeting. Ottawa, ON. November 26 -27, 2015– Podium.
  48. A Hart, S Bergeron, JA Khalil, D Zukor, O Huk, **J Antoniou**. *Canada versus USA: Comparison of Outcomes in Primary Total Hip and Knee Arthroplasty*. 49<sup>th</sup> Interurban Orthopaedic Society meeting. Los Angeles, October 1<sup>st</sup> 2015 – Podium.
  49. M Al Sobeai, LM Epure, A Carteleanu, OL Huk, DJ Zukor, **J Antoniou**. *Prognosis of Advanced Local Tissue Reactions (ALTR) Around Hip Arthroplasty as Identified by MARS MRI*. 70<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Vancouver, BC. June 18-21, 2015 – Podium.

50. A Aoude, **J Antoniou**, L Epure, OL Huk, DJ Zukor, M Tanzer. *Midterm Outcomes of the Recently FDA Approved Ceramic on Ceramic Bearing in Total Hip Arthroplasty Patients under 65 Years of Age*. 70<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Vancouver, BC. June 18-21, 2015 – Poster.
51. A Hart, S Bergeron, JA Khalil, D Zukor, O Huk, **J Antoniou**. *Canada versus USA: Comparison of Outcomes in Primary Total Hip and Knee Arthroplasty*. 70<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Vancouver, BC. June 18-21, 2015 – Podium.
52. A Hart, Y Brin, JA Khalil, D Zukor, O Huk, **J Antoniou**, S Bergeron. *Simultaneous Bilateral Total Knee Arthroplasty: A Comparison of 30-Day Perioperative Complications Rate*. 70<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Vancouver, BC. June 18-21, 2015 – Podium.
53. J Drager, A Hart, J Aboukhalil, O Huk, D Zukor, **J Antoniou**, S Bergeron. *Unicondylar Knee Replacement results in a shorter length of hospital stay and reduces 30-day readmission rates compared to Total Knee Arthroplasty: An analysis of 37 000 cases*. 70<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Vancouver, BC. June 18-21, 2015 - ??
54. J Drager, **J Antoniou**, L Epure, M Alattas, O Huk, D Zukor, S Bergeron. *Does Early Hospital Discharge Following Total Hip & Knee Arthroplasty increase 30-Days Readmission?* 70<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Vancouver, BC. June 18-21, 2015 - High Scoring Poster.
55. N AlGarni, MP Grant, LM Epure, O Salem, **J Antoniou**, F Mwale. *Short Link N as a Therapeutic Agent to Treating Early Intervertebral Disc Degeneration*. 49<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Vancouver, BC. June 18-21, 2015 – Podium.
56. R Bokhari, MP Grant, LM Epure, N AlGarni, **J Antoniou**, F Mwale. *Ca<sup>2+</sup> Regulates the Expression of Type II Collagen and Aggrecan in Intervertebral Disc Cells by Activating the Extracellular Calcium-Sensing Receptor*. 49<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Vancouver, BC. June 18-21, 2015 – Podium.
57. O Salem, LM Epure, R Bokhari, OL Huk, **J Antoniou**, F Mwale, MP Grant. *Ca<sup>2+</sup> down-regulates the expression of aggrecan and type II collagen in human cartilage*. 49<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Vancouver, BC. June 18-21, 2015 – Podium.
58. A Habis, N AlGarni, LM Epure, MP Grant, O Salem, **J Antoniou**, F Mwale. *Short Link N as a Therapeutic Agent to Treat Early Intervertebral Disc Degeneration*. 21<sup>st</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 28- 30, 2015 - Poster.
59. MP Grant, LM Epure, O Salem, OL Huk, DJ Zukor, **J Antoniou**, F Mwale. *Degeneration of Articular Cartilage is mediated by Calcium and the Extracellular*



- Calcium-Sensing Receptor in Osteoarthritis*. 21<sup>st</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 28- 30, 2015 - Podium.
60. MP Grant, R Bokhari, LM Epure, **J Antoniou**, F Mwale.  $Ca^{2+}$  Regulates the Expression of Type II Collagen and Aggrecan in Intervertebral Disc Cells by Activating the Extracellular Calcium-Sensing Receptor. 21<sup>st</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 28- 30, 2015 - Podium.
61. H AL Majed, MP Grant, LM Epure, F Mwale, **J Antoniou**. Comparison between osteoarthritic and osteonecrotic bone marrow-derived mesenchymal stem cells: Differences in the expression of the extracellular calcium-sensing receptor and osteogenesis. 21<sup>st</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 28- 30, 2015 - Podium.
62. A Alrashoudi, MP Grant, LM Epure, O Salem, DJ Zukor, OL Huk, F Mwale, **J Antoniou**. Calcium suppresses parathyroid hormone-related peptide-induced synthesis of aggrecan and type II collagen in osteoarthritic chondrocytes. 21<sup>st</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 28- 30, 2015 - Podium.
63. R Bokhari, LM Epure, **J Antoniou**, F Mwale, MP Grant. *Ca<sup>2+</sup> Regulates the Expression of Type II Collagen and Aggrecan in Intervertebral Disc Cells by Activating the Extracellular Calcium-Sensing Receptor*. 4<sup>th</sup> Global Spine Congress, Buenos Aires, Argentina. May 20-23, 2015 - Podium.
64. H Noorwali, P Madiraju, LM Epure, MP Grant, **J Antoniou**, F Mwale. *Link N as a Therapeutic Agent to Treat Pain Associated with Intervertebral Disc Degeneration*. 4<sup>th</sup> Global Spine Congress, Buenos Aires, Argentina. May 20-23, 2015 - Podium.
65. N AlGarni, MP Grant, LM Epure, O Salem, J Antoniou, F Mwale. *Short Link N as a Therapeutic Agent to Treating Early Intervertebral Disc Degeneration*. 4<sup>th</sup> Global Spine Congress, Buenos Aires, Argentina. May 20-23, 2015 - Podium.
66. M Alaqeel, MP Grant, LM Epure, O Salem, OL Huk, **J Antoniou**, F Mwale. *Link N Suppresses Interleukin-1 $\beta$  Induced Human Osteoarthritic Cartilage Degradation Through Down-regulation of Nf- $\kappa$ B Signalling*. 61<sup>st</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. March 28-31 2015 – Poster.
67. YS Brin, LM Epure, AS Cartaleanu, A Albers, OL Huk, DJ Zukor, **J Antoniou**. *Duration of surgery for TKA and THA affects the rate of wound complications unplanned readmissions and length of hospital stay*. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Las Vegas NV. March 24-28 2015 – Podium.
68. A Hart, JA Khalil, O Huk, D Zukor, **J Antoniou**. Blood Transfusion in Primary Total Hip and Knee Arthroplasty. Incidence, Risk Factors, and Thirty-Day Complication Rates. Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Las Vegas NV. March 24-28 2015 – Podium.

69. J Drager, **J Antoniou**, LM Epure, M Alattas, O Huk, D Zukor, S Bergeron. *Does Early Hospital Discharge Following Total Hip & Knee Arthroplasty increase 30-Days Readmission?* Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Las Vegas NV. March 24-28 2015 - High Scoring Poster.
70. S Aldebeyan, LM Epure, MP Grant, A Alaseem, HT Wang, **J Antoniou**, F Mwale. *Link N Activates Smad 1/5 Pathway by Stimulating the Release of BMP by Disc Cells.* Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS). Las Vegas NV. March 24-28 2015 – Poster.
71. DJ Zukor, YS Brin, LM Epure, AS Cartaleanu, OL Huk, **J Antoniou**. *Procedure duration of total knee arthroplasty and total hip arthroplasty affects the rate of wound complications and length of hospital stay.* 3<sup>rd</sup> Annual Canadian Arthroplasty Society Meeting. Toronto, ON. November 27 -28, 2014 - Podium.
72. OL Huk, A Aoude, LM Epure, Y Brin, K Smith, DJ Zukor, M Tanzer, **J Antoniou**. *Ceramic-on-ceramic: Better than We Thought.* 3<sup>rd</sup> Annual Canadian Arthroplasty Society Meeting. Toronto, ON. November 27 -28, 2014 - Podium.
73. **J Antoniou**, A Hart, S Bergeron, OL Huk, DJ Zukor. *Comparison of American and Canadian Perioperative Outcomes in Primary Total Hip and Knee Arthroplasty.* 3<sup>rd</sup> Annual Canadian Arthroplasty Society Meeting. Toronto, ON. November 27 -28, 2014 - Podium.
74. R Gawri, J Ouellet, P Önerfjord, B Alkhatib, T Steffen, D Heinegård, P Roughley, **J Antoniou**, F Mwale, L Haglund. *Link-N is cleaved by human annulus fibrosus cells generating a fragment with retained biological activity.* 48<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014
75. A Alaseem, P Madiraju, S Aldebeyan, **J Antoniou**, F Mwale. *Mechanism of Naproxen induced type X collagen expression in mesenchymal stem cells.* 48<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014.
76. H Noorwali, P Madiraju, **J Antoniou**, F Mwale. *Link-N as a therapeutic agent for pain associated with intervertebral disc degeneration.* 48<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014.
77. M Alaqeel, MP Grant, LM Epure, O Salem, OL Huk, **J Antoniou**, F Mwale. *Effect of Link N on the synthesis and degradation of matrix proteins in human articular osteoarthritic cartilage.* 48<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014.
78. F Mwale, HT Wang, P Roughley, **J Antoniou**, L Haglund. *Link N and stem cell therapy for the repair of intervertebral disc degeneration.* 48<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014.
79. F Mwale, S Aldebeyan, LM Epure, MP Grant, S Rampersad, **J. Antoniou**. *Mechanism of human and bovine Link N - induced proteoglycan synthesis in the intervertebral disc.* 48<sup>th</sup>

- Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014.
80. MP Grant, LM Epure, M Alaqueel, O Salem, OL Huk, **J Antoniou**, F Mwale. *The calcium-sensing receptor in health and osteoarthritis*. 48th Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014.
  81. MP Grant, LM Epure, **J Antoniou**, F Mwale. *Regulation of the Calcium-Sensing Receptor by Link N in the cartilaginous endplates of human intervertebral discs*. 48<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014.
  82. I Hadjab, LM Epure, MP Grant, **J Antoniou**, L'H Yahia, F Mwale. *Fourier transform infrared spectral analysis of human discs with different grades of degeneration*. 48<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 18-21, 2014.
  83. SY Brin, LM Epure, AS Cartaleanu, OL Huk, DJ Zukor, **J Antoniou**. *TKA and THA procedure duration affect the rate of wound complications and length of hospital stay*. 69<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Montreal, QC. June 18-21, 2014.
  84. F Mwale, HT Wang, P Roughley, **J Antoniou**, L Haglund. *The effect of Link N and mesenchymal stem cells on intervertebral disc regeneration*. World Forum for Spine Research Xi'an, China. May 15-17, 2014.
  85. O Salem, S Aldebeyan, LM Epure, MP Grant, **J Antoniou**, F. Mwale. *Mechanism of Proteoglycan Synthesis by Bovine and Human Link N*. World Forum for Spine Research Xi'an, China. May 15-17, 2014.
  86. H Noorwali, P Madiraju, L Epure, **J Antoniou**, F Mwale. *Effect of Link N treatment on pain associated with intervertebral disc degeneration*. World Forum for Spine Research Xi'an, China. May 15-17, 2014.
  87. I Hadjab, LM Epure, **J Antoniou**, L'H Yahia, F Mwale. *Fourier transform infrared spectral analysis of degenerative human intervertebral discs*. World Forum for Spine Research Xi'an, China. May 15-17, 2014.
  88. MP Grant, LM Epure, **J Antoniou**, F Mwale. *Activation of the extracellular calcium-sensing receptor as a contributor in human cartilaginous endplate degeneration*. World Forum for Spine Research Xi'an, China. May 15-17, 2014.
  89. F Mwale, P Madiraju, L Haglund, PJ Roughley, **J Antoniou**. *Link N exerts its growth factor like effects through activation of Smad 1/5 signaling in human IVD cells*. World Forum for Spine Research Xi'an, China. May 15-17, 2014.
  90. R Gawri, J Ouellet, P Önerfjord, B Alkhatib, T Steffen, D Heinegård, P Roughley, **J Antoniou**, F Mwale, L Haglund. *Link-N is cleaved by human annulus fibrosus cells*

- generating a fragment with retained biological activity.* 60th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. March 15-18 2014.
91. F Mwale, P Madiraju, P Roughley, L Haglund, **J Antoniou**. *Link N stimulates proteoglycan synthesis in human intervertebral discs through Smad1/5 phosphorylation.* 60th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. March 15-18 2014.
  92. R Gawri, J Ouellet, P Öennerfjord, B AlKhatib, T Steffen, D Heinegård, P Roughley, **J Antoniou**, F Mwale, L Haglund. *Link-N is cleaved by human annulus fibrosus cells generating a fragment with retained biological activity.* 60th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. March 15-18 2014.
  93. MP Grant, LM Epure, **J Antoniou**, F Mwale. *The extracellular Calcium-Sensing Receptor (CaSR) as a regulator of cartilaginous end-plate intervertebral disc calcification.* 60th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. March 15-18 2014.
  94. I Hadjab, LM Epure, MP Grant, **J Antoniou**, L'H Yahia, F Mwale. *Characterization of intervertebral disc aging and degeneration using FTIR Spectroscopy.* 60th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. March 15-18 2014.
  95. H Noorwali, P Madiraju, **J Antoniou**, F Mwale. *Effect of Link N treatment on pain related to inter-vertebral disc degeneration.* 60th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. March 15-18 2014.
  96. MP Grant, LM Epure, M Alaqeel, O Salem, OL Huk, **J Antoniou**, F Mwale. *The role of the extracellular Calcium-Sensing Receptor in osteoarthritis.* 60th Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. March 15-18 2014.
  97. F Mwale, HT Wang, P Roughley, **J Antoniou**, L Haglund. *The effects of Link N and mesenchymal stem cells on intervertebral disc regeneration.* 60<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. New Orleans, LA. March 15-18 2014. – Poster Accepted.
  98. A Carli, A Politis, H Le, L Epure, DJ Zukor, O Huk, **J Antoniou**. *Identifying predictive factors for developing painful adverse local soft tissue reactions following hip resurfacing and total hip arthroplasty.* 2nd Annual Canadian Arthroplasty Society Meeting. Montreal, QC. November 21 -22, 2013.
  99. A Hart, J Abou Khalil, YS Brin, O Huk, **J Antoniou**, DJ Zukor. *Blood Transfusion in primary total hip and knee arthroplasty: incidence, risk factors and 30-day complication rates.* 2nd Annual Canadian Arthroplasty Society Meeting. Montreal, QC. November 21 - 22, 2013.
  100. AA Aoude, LM Epure, K Simth, OL Huk, DJ Zukor, M Tanzer, **J Antoniou**. *Clinical and radiological outcome of ceramic on ceramic bearings with average six-year follow-up in young patients.* 2<sup>nd</sup> Annual Canadian Arthroplasty Society Meeting. Montreal, QC.

November 21 -22, 2013.

101. R Gawri, **J Antoniou**, P Önerfjord, B Alkhatib, J Ouellet, D Heinegard, P Roughley, F Mwale, L Haglund. Potential of Link N peptide for intervertebral disc repair. Second International Philadelphia Spine Research Symposium. Philadelphia, PA. November 6-8, 2013.
102. H Noorwali, P Madiraju, A Danco, LM Epure, **J Antoniou**, LS Stone, F Mwale. *Effect of Link N treatment on pain associated with intervertebral disc degeneration: potential for intrathecal injection for biological repair.* Second International Philadelphia Spine Research Symposium. Philadelphia, PA. November 6-8, 2013.
103. F Mwale, P Madiraju, L Haglund, PJ Roughley, **J Antoniou**. *Link N exerts its growth factor like effects through activation of Smad 1/5 signaling in human IVD cells.* Second International Philadelphia Spine Research Symposium. Philadelphia, PA. November 6-8, 2013.
104. F Mwale, HT Wang, P Roughley, **J Antoniou**, L Haglund. *The effect of Link N and mesenchymal stem cells on intervertebral disc regeneration.* Second International Philadelphia Spine Research Symposium. Philadelphia, PA. November 6-8, 2013.
105. I Hadjab, LM Epure, MP Grant, **J Antoniou**, L'H Yahia, F Mwale. *A novel protocol for intervertebral disc characterization at a micro-scale level.* Second International Philadelphia Spine Research Symposium. Philadelphia, PA. November 6-8, 2013.
106. MP Grant, LM Epure, **J Antoniou**, F Mwale. *The extracellular calcium-sensing receptor as a regulator of cartilaginous end-plate intervertebral disc calcification.* Second International Philadelphia Spine Research Symposium. Philadelphia, PA. November 6-8, 2013.
107. S Aldebeyan, LM Epure, MP Grant, **J Antoniou**, F Mwale. *Mechanism of proteoglycan synthesis by bovine and human Link N.* Second International Philadelphia Spine Research Symposium. Philadelphia, PA. November 6-8, 2013.
108. R Gawri, **J Antoniou**, J Ouellet, P Roughley, T Steffen, LA Haglund, F Mwale. *Sustained stimulation of aggrecan synthesis in degenerated human intervertebral discs by Link N.* 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013.
109. R Gawri, **J Antoniou**, J Ouellet, T Steffen, P Roughley, F Mwale, LA Haglund. *Link-N stimulates extracellular matrix production by human intervertebral disc cells in the presence of IL-1.* 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013.
110. R Gawri, LA Haglund, P Madiraju, H Wang, J Ouellet, **J Antoniou**, F Mwale. *Intervertech-1: Regeneration of degenerated intervertebral discs by repairing annulus fibrosus.* 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013.

111. F Mwale, HT Wang, P Madiraju, R Gawri, A Almaawi, L Haglund, **J Antoniou**. *Intervertech 1 (IVT 1) can increase the gene expression of extracellular matrix proteins through its receptor in human intervertebral Disc Cells*. 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013.
112. F Mwale, HT Wang, AM Alaseem, L Haglund, PJ Roughley, **J Antoniou**. *Link N can affect the gene expression during the chondrogenic and osteogenic differentiation of mesenchymal stem cells*. 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013.
113. A Alaseem, P Madiraju, S Aldebeyan, **J Antoniou**, F Mwale. *Implication of Mitogen-Activated Protein Kinase in Naproxen induced type X collagen expression in human bone marrow derived mesenchymal stem cells*. 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013.
114. S Aldebeyan, LM Epure, A Alaseem, HT Wang, **J Antoniou**, F Mwale. *Comparative effects of human and bovine Link N on extracellular matrix production by bovine intervertebral disc cells*. 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013.
115. P Madiraju, M Buschmann, R Gawri, **J Antoniou**, F Mwale. *The effect of Fetuin on mineralization of intervertebral disc cells*. 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013.
116. LM Epure, **J Antoniou**, S Aldebeyan, F Mwale. *Quantitative MRI parameters as predictors for annulus fibrosus degeneration*. 47<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Winnipeg, MB. June 20-22, 2013. (Podium)
117. A Politis, PF Zaharia, LM Epure, OL Huk, DJ Zukor, **J Antoniou**. *The ceramic-on-metal versus metal-on-metal coupling in total hip arthroplasty. Short-term results*. 68<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Winnipeg, MB. June 20-22, 2013. (Podium)
118. S Abatzoglou, GN Manoudis, LM Epure, DJ Zukor, OL Huk, **J Antoniou**. *Two to eight year follow-up of a recalled hip resurfacing implant*. 68<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Winnipeg, MB. June 20-22, 2013. (Podium)
119. N Papadopoulos, S Abatzoglou, GN Manoudis, LM Epure, DJ Zukor, OL Huk, **J Antoniou**. *Clinical, metal ion and oxidative stress markers comparison of 36mm, 40mm and 44mm MM total hip arthroplasty*. 68<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Winnipeg, MB. June 20-22, 2013. (Podium)
120. A Carli, A Politis, LM Epure, DJ Zukor, OL Huk, **J Antoniou**. *Identifying predictive factors for developing pain in patients with adverse local soft tissue reactions from total hip arthroplasty*. 68<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Winnipeg, MB. June 20-22, 2013. (Poster)

121. Y Chi, **J Antoniou**, A Philip. *Endoglin regulates TGF- $\beta$  signaling and type II collagen production in chondrocytes*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
122. P Madiraju, M Buschmann, R Gawri, H Noorwali, **J Antoniou**, F Mwale. *The effect of Fetuin on mineralization of intervertebral disc cells*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Podium)
123. R Gawri, **J Antoniou**, J Ouellet, T Steffen, PJ Roughley, L Haglund, F Mwale. *Link-N peptide: Can degenerated human intervertebral discs be repaired?* 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Podium)
124. MP Grant, LM Epure, M Alaqeel, O Salem, OL Huk, **J Antoniou**, F Mwale. *Extracellular calcium-sensing receptor inhibition and not activation enhances stimulation of proteoglycan synthesis in normal and osteoarthritic human chondrocytes*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Podium)
125. A Alaseem, **J Antoniou**, F Mwale. *Implication of mitogen-activated protein kinase in Naproxen induced type X collagen expression in human bone marrow derived mesenchymal stem cells*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
126. P Madiraju, L Haglund, PJ Roughley, **J Antoniou**, F Mwale. *Link N exerts its growth factor like effects through BMP signaling*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
127. H Noorwali, P Madiraju, **J Antoniou**, F Mwale. *Effect of Link N treatment on pain related to intervertebral disc degeneration*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
128. MP Grant, LM Epure, O Salem, M Alaqeel, OL Huk, **J Antoniou**, F Mwale. *TGF- $\beta$ 3 enhances Link-N induced stimulation of proteoglycan synthesis by human chondrocytes*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
129. MP Grant, LM Epure, M Alaqeel, O Salem, OL Huk, **J Antoniou**, F Mwale. *Effect of Link-N on proteoglycan synthesis by chondrocytes from normal and osteoarthritic human cartilage in the presence of IL-1*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
130. S Aldebeyan, LM Epure, MP Grant, A Alaseem, HT Wang, **J Antoniou**, F Mwale. *Link N stimulation of proteoglycan synthesis by bovine intervertebral disc cells is mediated by SMAD1/5 phosphorylation*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
131. R Gawri, **J Antoniou**, J Ouellet, T Steffen, P Roughley, F Mwale, L Haglund. *Link-N stimulates extracellular matrix production by human intervertebral disc cells in the*

- presence of IL-1*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
132. R Gawri, LA Haglund, P Madiraju, L Epure, J Ouellet, **J Antoniou**, F Mwale. *Effect of Intervertech-1 levels on proteoglycan synthesis by intervertebral disc cells*. 19<sup>th</sup> Annual Canadian Connective Tissue Conference. Montreal, QC. May 29-June 1<sup>st</sup>, 2013. (Poster)
133. F Mwale, HT Wang, AM Alaseem, L Haglund, PJ Roughley, **J Antoniou**. *Link N can suppress mineral deposition and stimulate matrix synthesis in human bone marrow-derived mesenchymal stem cells*. 3<sup>rd</sup> Global Spine Congress, Hong Kong, China. April 4-6, 2013. (Poster)
134. F Mwale, HT Wang, P Madiraju, R Gawri, A Almaawi, L Haglund, **J Antoniou**. *Intervertech 1 receptors are present on human disc cells and have a direct role in disc repair*. 3<sup>rd</sup> Global Spine Congress, April 2013, Hong Kong, China. (Poster)
135. R Gawri, **J Antoniou**, J Ouellet, T Steffen, P Roughley, F Mwale, L Haglund. *Link-N stimulates extracellular matrix production by human intervertebral disc cells in the presence of IL-1*. 3<sup>rd</sup> Global Spine Congress, Hong Kong, China. April 4-6, 2013. (Poster)
136. R Gawri, **J Antoniou**, J Ouellet, P Roughley, T Steffen, F Mwale, L Haglund. *Sustained stimulation of aggrecan synthesis in degenerated human intervertebral discs by Link N*. 3<sup>rd</sup> Global Spine Congress, Hong Kong, China. April 4-6, 2013. (Poster)
137. R. Gawri, LA Haglund, P Madiraju, H Wang, L Epure, J Ouellet, J Antoniou, F Mwale. *Intervertech-1: Regeneration of degenerated intervertebral discs by repairing annulus fibrosus*. 3<sup>rd</sup> Global Spine Congress, Hong Kong, China. April 4-6, 2013. (Poster)
138. S Al Rowas, R Gawri, R Haddad, A Almaawi, LE Chalifour, **J Antoniou**, F Mwale. *Effect of in utero exposure to Diethylstilbestrol on intervertebral disc in male and female adult progeny subjected to swimming exercise*. 3<sup>rd</sup> Global Spine Congress, Hong Kong, China. April 4-6, 2013. (Poster)
139. P Madiraju, M Buschmann, R Gawri, **J Antoniou**, F Mwale. *The effect of Fetuin on mineralization of intervertebral disc cells*. 3<sup>rd</sup> Global Spine Congress, Hong Kong, China. April 4-6, 2013. (Poster)
140. R. Gawri, **J. Antoniou**, B. AlKhatib, J. Ouellet, T. Steffen, P. Roughley, L. Haglund, F. Mwale. *Evaluation of the Regenerative Potential of Link-N in Degenerated Human Intervertebral Discs*. 59<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Antonio, TX. January 26-29, 2013. (Podium)
141. AM Alaseem, P. Madiraju, SA Aldebeyan, **J. Antoniou**, F. Mwale. *A Possible Mechanism of Naproxen Induced Type X Collagen Expression in Human Mesenchymal Stem Cells from Osteoarthritis Patients* 59<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Antonio, TX. January 26-29, 2013. (Poster)



142. S. Rampersad, LM Epure, A. St-Georges-Robillard, MR Wertheimer, **J. Antoniou**, F. Mwale. *Distinction between Cells of the Nucleus Pulposus and Annulus Fibrosus Using Amine-Rich Surfaces for Tissue Engineering of Intervertebral Discs*. 59<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Antonio, TX. January 26-29, 2013. (Poster)
143. F. Mwale, H. Tian Wang, AM Alaseem, L. Haglund, PJ Roughley, **J. Antoniou**. *Link N can Affect Dierentiation-Related Gene Expression in Human Bone Marrow-Derived Mesenchymal Stem Cells*. 59<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Antonio, TX. January 26-29, 2013. (Poster)
144. SA Aldebeyan, LM Epure, A. Alaseem, H. Tian Wang, **J. Antoniou**, F. Mwale. *Effect of Bovine Link N on Proteoglycan Synthesis by Intervertebral Disc Cells*. 59<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Antonio, TX. January 26-29, 2013. (Poster)
145. R. Gawri, **J. Antoniou**, B. AlKhatib, J. Ouellet, T. Steffen, P. Roughley, L. Haglund, F. Mwale. *Link-N Stimulates Extracellular Matrix Production by Human Intervertebral Disc Cells in the Presence of IL-1*. 59th Annual Meeting of the Orthopaedic Research Society. San Antonio, TX. January 26-29, 2013. (Poster)
146. P. Madiraju, M. Buschmann, R. Gawri, **J. Antoniou**, F. Mwale. *The Eect of Fetuin on Mineralization of Intervertebral Disc Cells*. 59th Annual Meeting of the Orthopaedic Research Society. San Antonio, TX. January 26-29, 2013. (Poster)
147. R Gawri, **J Antoniou**, J Ouellet, T Steffen, PJ Roughley, F Mwale, LA Haglund. *Link-N stimulates extracellular matrix production by human intervertebral disc cells in the presence of IL-1*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Podium)
148. R Gawri, **J Antoniou**, J Ouellet, T Steffen, PJ Roughley, F Mwale, LA Haglund. *Link-N peptide: A potential agent for biological repair of human intervertebral disc*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Podium)
149. R Gawri, LA Haglund , P Madiraju, L Epure, J Ouellet, **J Antoniou**, F Mwale. *Evaluation of effects of Intervertech-1 levels on proteoglycan synthesis by intervertebral disc cells*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Podium)
150. A Alaseem, P Madiraju, S Aldebeyan, **J Antoniou**, F Mwale. *MAPK mediates the expression of type X collagen induced by Naproxen in human bone marrow derived mesenchymal stem cells*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Podium)
151. S Aldebeyan, LM Epure, A Alaseem, HT Wang, **J Antoniou**, F Mwale. *Effect of bovine Link N on proteoglycan synthesis by intervertebral disc cells*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Podium)

152. F Mwale, HT Wang, P Madiraju, R Gawri, A Almaawi, L Haglund, **J Antoniou**: *The peptide Intervertech 1 (IVT 1) can affect the expression of aggrecan and COL2A1 through its receptor in human intervertebral disc cells*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Poster)
153. F Mwale, HT Wang, AM Alaseem, L Haglund, PJ Roughley, **J Antoniou**. *Effect of Link N on the expression of chondrogenic and osteogenic genes in human bone marrow-derived mesenchymal stem cells*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Podium)
154. LM Epure, S Aldebeyan, **J Antoniou**, F Mwale. *Correlations between quantitative MRI and biochemical parameters of annulus fibrosus of human intervertebral discs with different grades of degeneration*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Poster)
155. F Mwale, LM Epure, AJ Michalek, JC Iatridis, **J Antoniou**. *A quantitative MRI and biomechanical analysis of human disc degeneration*. 7th International Congress of Chinese Orthopaedics Association, Beijing, China, November 14-18, 2012. (Podium)
156. P Madiraju, M Buschmann, R Gawri, **J Antoniou**, F Mwale. *The effect of Fetuin on mineralization of intervertebral disc cells*. Philadelphia Spine Research Society (PSRS): 8th Annual Spine Research Symposium, Philadelphia, PA. November 13, 2012. (Podium)
157. R Gawri, **J Antoniou**, J Ouellet, P Roughley, T Steffen, LA Haglund, F Mwale. *Link-N peptide: Can degenerated human intervertebral discs be repaired?* Philadelphia Spine Research Society (PSRS): 8th Annual Spine Research Symposium, Philadelphia, PA. November 13, 2012. (Podium)
158. S Al Rowas, R Gawri, R Haddad, L Chalifour, **J Antoniou**, F Mwale. *Effect of neonatal mice exposure to Diethylstilbestrol on intervertebral disc in male and female adult progeny subjected to swimming exercise*. Philadelphia Spine Research Society (PSRS): 8th Annual Spine Research Symposium, Philadelphia, PA. November 13, 2012. (Poster)
159. R Gawri, **J Antoniou**, J Ouellet, T Steffen, PJ Roughley, F Mwale, L Haglund. *Link-N stimulates extracellular matrix production by human intervertebral disc cells in the presence of IL-1*. Philadelphia Spine Research Society (PSRS): 8th Annual Spine Research Symposium, Philadelphia, PA. November 13, 2012. (Poster)
160. R Gawri, LA Haglund, P Madiraju, LM Epure, J Ouellet, **J Antoniou**, F Mwale. *Effect of Intervertech-1 levels on proteoglycan synthesis by intervertebral disc cells*. Philadelphia Spine Research Society (PSRS): 8th Annual Spine Research Symposium, Philadelphia, PA. November 13, 2012. (Poster)
161. A Alaseem, P Madiraju, S Aldebeyan, **J Antoniou**, F Mwale. *Implication of Mitogen-Activated Protein Kinase in Naproxen induced type X collagen expression in human bone marrow derived mesenchymal stem cells*. Philadelphia Spine Research Society (PSRS): 8th Annual Spine Research Symposium, Philadelphia, PA. November 13, 2012. (Podium)

162. S Aldebeyan, LM Epure, A Alaseem, HT Wang, **J Antoniou**, F Mwale. *The efficacy of bovine Link N as an enhancer of proteoglycan synthesis by intervertebral disc*. Philadelphia Spine Research Society (PSRS): 8th Annual Spine Research Symposium, Philadelphia, PA. November 13, 2012. (Poster)
163. F Mwale, LM Epure, AJ Michalek, JC Iatridis, **J Antoniou**. *Can quantitative magnetic resonance imaging predict mechanical behavior of human intervertebral discs with different grades of degeneration?* 3<sup>rd</sup> World Forum for Spine Research 2012. Helsinki, Finland. June 18-21, 2012. (Podium)
164. R Gawri, **J Antoniou**, J Ouellet, PJ Roughley, T Steffen, LA Haglund, F Mwale. *Link-N peptide: A stepping stone towards biological repair of intervertebral disc degeneration*. 3<sup>rd</sup> World Forum for Spine Research 2012. Helsinki, Finland. June 18-21, 2012. (Podium)
165. R. Gawri, LA Haglund, P Madiraju, LM. Epure, J Ouellet, **J Antoniou**, F Mwale. *Effect of Intervertech-1 levels on proteoglycan synthesis by intervertebral disc cells*. 3<sup>rd</sup> World Forum for Spine Research 2012. Helsinki, Finland. June 18-21, 2012. (Poster)
166. S Al Rowas, R Gawri, R Haddad, A Almaawi, LE Chalifour, **J Antoniou**, F Mwale. *Effect of in-utero exposure to high dose diethylstilbesterol on intervertebral disc in adult male and female progeny*. 3<sup>rd</sup> World Forum for Spine Research 2012. Helsinki, Finland. June 18-21, 2012. (Poster)
167. P Madiraju, R Gawri, **J Antoniou**, F Mwale. *Effect of Parathyroid Hormone on MAPK signaling and calcification markers in human intervertebral disc cells*. 3<sup>rd</sup> World Forum for Spine Research 2012. Helsinki, Finland. June 18-21, 2012. (Poster)
168. P Madiraju, A St-Georges-Robillard , R Gawri , **J Antoniou** , MR Wertheimer, F Mwale. *Effect of Nitrogen-rich cell culture surfaces on TGF beta and MAPK signaling in intervertebral disc cells*. 3<sup>rd</sup> World Forum for Spine Research 2012. Helsinki, Finland. June 18-21, 2012. (Poster)
169. Rampersad, LM Epure, A St. Georges-Robillard, MR Wertheimer, A Contreras-Garcia, **J Antoniou**, F Mwale. *The potential of amine-rich surfaces to distinguish between cells of the nucleus pulposus and the annulus fibrosus*. 3<sup>rd</sup> World Forum for Spine Research 2012. Helsinki, Finland. June 18-21, 2012. (Poster)
170. F Mwale, HT Wang, AA Alaseem, L Haglund, P J Roughley, **J Antoniou**. *Effect of Link N on differentiation of human bone marrow-derived mesenchymal stem cells*. 3<sup>rd</sup> World Forum for Spine Research 2012. Helsinki, Finland. June 18-21, 2012. (Poster)
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172. R Gawri, LA Haglund, P Madiraju, LM Epure, J Ouellet, J Antoniou, F. Mwale. *Effect of Intervertech-1 levels on proteoglycan synthesis by intervertebral disc cells*. 18<sup>th</sup> Annual

- Meeting of Canadian Connective Tissue Conference. Toronto, ON. June 8-10, 2012. (Poster)
173. R Gawri, J Antoniou, J Ouellet J, T Steffen, PJ Roughley, L Haglund, F Mwale. *Link-N peptide: can degenerated human intervertebral discs be repaired?* 18<sup>th</sup> Annual Meeting of Canadian Connective Tissue Conference. Toronto, ON. June 8-10, 2012. (Poster)
  174. F Mwale, HT Wang, AA Alaseem, L Haglund, P J Roughley, **J Antoniou**. *Effect of Link N on differentiation of human bone marrow-derived mesenchymal stem cells.* 18<sup>th</sup> Annual Meeting of Canadian Connective Tissue Conference. Toronto, ON. June 8-10, 2012. (Poster)
  175. HT Wang; P Madiraju; R Gawri; A Almaawi; L Haglund, **J Antoniou**, F Mwale. *Intervertech 1 can affect gene expression in human intervertebral disc cells.* 18<sup>th</sup> Annual Meeting of Canadian Connective Tissue Conference. Toronto, ON. June 8-10, 2012. (Poster)
  176. N Papadopoulos, S Abatzoglou, GN Manoudis, LM Epure, DJ Zukor, OL Huk, **J Antoniou**. *Clinical outcome, metal ions and oxidative stress markers comparison of 36, 40 and 44mm metal-on-metal total hip arthroplasty.* 46<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Ottawa, ON. June 8-10, 2012. (Podium)
  177. A Reuven, LM Epure, PF Zaharia, OL Huk, DJ Zukor, **J Antoniou**. *Clinical outcome and metal ion level in patients with ceramic on ceramic versus metal on metal bearings.* 46<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Ottawa, ON. June 8-10, 2012. (Poster)
  178. Z Sardar, K Alsheikh, A Algarni, O Huk, DJ Zukor, **J Antoniou**. *Analysis of MRI MARS studies, metal ion levels and radiographic parameters in patients with the ASR prosthesis.* 46<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Ottawa, ON. June 8-10, 2012. (Poster)
  179. R Gawri, F Mwale, J Ouellet, T Steffen, P Roughley, L Haglund, **J Antoniou**. *Link-N peptide: Biological repair of intervertebral disc made possible.* 46<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Ottawa, ON. June 8-10, 2012. (Podium)
  180. S Al Rowas, R Haddad, R Gawri, LE Chalifour, **J Antoniou**, F Mwale. *Effect of neonatal mice exposure to Diethylstilbesterol on lumbar and femoral bone and articular cartilage in male and female adult progeny subjected to swimming exercise.* 46<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Ottawa, ON. June 8-10, 2012. (Podium)
  181. S Al Rowas, R Haddad, R Gawri, LE Chalifour, **J Antoniou**, F Mwale. *Effect of neonatal mice exposure to Diethylstilbesterol on intervertebral disc in male and female adult progeny subjected to swimming exercise.* 46<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Ottawa, ON. June 8-10, 2012. (Podium)

182. P Madiraju, **J Antoniou**, F Mwale. *Potential of Parathyroid Hormone for suppressing calcification in human intervertebral discs and promoting repair.* 46<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Ottawa, ON. June 8-10, 2012. (Podium)
183. **J Antoniou**, LM Epure, AJ Michalek, JC Iatridis, F Mwale. *Correlations between quantitative MRI and mechanical parameters of human intervertebral discs with different grades of degeneration.* 46<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Ottawa, ON. June 8-10, 2012. (Podium)
184. M Mont, F Mwale; AJ Johnson, **J Antoniou**. Abnormal VEGF expression in mesenchymal stem cells from osteonecrotic hips. Annual Meeting of the American Academy of Orthopedic Surgeons. San Francisco, CA. February 7-11, 2012. (Poster)
185. M Bernstein, NM Desy, OL Huk, A Petit, DJ Zukor, **J Antoniou**. The nine to 14-year follow-up and metal ion trend in patients with metal-on-metal hip arthroplasty. Annual Meeting of the American Academy of Orthopedic Surgeons. San Francisco, CA. February 7-11, 2012. (Poster)
186. N Papadopoulos, S Abatzoglou, GN Manoudis, LM Epure, DJ Zukor, OL Huk , **J Antoniou** Clinical outcome, metal ions and oxidative stress markers comparison of 36mm, 40mm and 44mm metal-on-metal total hip arthroplasty. Annual Meeting of the American Academy of Orthopedic Surgeons. San Francisco, CA. February 7-11, 2012. (Poster)
187. **J Antoniou**, LM Epure, AJ Michalek, J Iatridis, F Mwale. Correlations between quantitative MRI and mechanical parameters of human intervertebral discs with different grades of degeneration. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Podium)
188. F Mwale, P Madiraju, **J Antoniou**. Potential of parathyroid hormone for suppressing calcification in human intervertebral discs and promoting repair. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Podium)
189. S Al Rowas, R Gawri, A Almaawi, **J Antoniou**, LE Chalifour, F Mwale. Neonatal exposure to high dose diethylstilbesterol affects bone and articular cartilage in adult male and female progeny. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Poster)
190. A Almaawi, HT Wang, **J Antoniou**, F Mwale. Origin of anomalous gene expression in mesenchymal stem cells from osteoarthritic patients. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Poster)
191. R Gawri, F Mwale, J Ouellet, T Steffen, PJ Roughley, L Haglund, **J Antoniou**. Link-N peptide: A potential agent for biological repair of human intervertebral disc. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Poster)

192. S Al Rowas, R Gawri, A Almaawi, **J Antoniou**, LE Chalifour, F Mwale. Neonatal exposure to high dose diethylstilbesterol affects intervertebral disc in male and female adult progeny. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Poster)
193. N Papadopoulos, S Abatzoglou, GN Manoudis, LM Epure, DJ Zukor, OL Huk , **J Antoniou**. Clinical outcome, metal ions and oxidative stress markers comparison of 36mm, 40mm and 44mm metal-on-metal total hip arthroplasty. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Poster)
194. **J Antoniou**, LM Epure; PF Zaharia; A Reuven; OL Huk; DJ Zukor. Clinical outcome and metal ion levels in patients with ceramic on metal versus metal on metal bearings. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Poster)
195. A Husseini, LM Epure, A Petit, OL Huk, DJ Zukor, **J Antoniou**. Metal ion levels and oxidative stress markers in blood of patients following articular surface replacement (ASR™): three to five years of follow-up. 58th Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. February 4-7, 2012. (Poster)
196. S Rampersad, A Petit, J-C Ruiz, M Wertheimer, **J Antoniou**, F Mwale. *Type X collagen expression in mesenchymal stem cells from osteoarthritic patients: Suppression in pellet culture after pre-culture on nitrogen rich plasma polymers*. 45<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. St-John's, NL. July 7-9, 2011. (Podium)
197. F Mwale, LM Epure, AJ Michalek, JC Iatridis, **J Antoniou**. *Assessment of human intervertebral disc degeneration using quantitative magnetic resonance imaging parameters and biomechanical properties of degeneration*. 45<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. St-John's, NL. July 7-9, 2011. (Poster)
198. A Almaawi, S Rampersad, A Petit, F Mwale, **J Antoniou**. *Effect of Naproxen on human mesenchymal stem cell differentiation*. 45<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. St-John's, NL. July 7-9, 2011. (Poster)
199. S Al Rowas, LE Chalifour, A Petit, R Haddad, **J Antoniou**, F Mwale. *High dose neonatal exposure to Diethylstilbesterol affects the musculoskeletal system of mice progeny at adulthood*. 45<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. St-John's, NL. July 7-9, 2011. (Podium)
200. R Gawri, F Mwale, JA Ouellet, T Steffen, PJ Roughley, L Haglund, **J Antoniou**. *Potential of Link-N peptide as therapeutic agent in biological repair of intervertebral disc degeneration*. 45<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. St-John's, NL. July 7-9, 2011. (Podium)
201. F Mwale, G Yao, A Petit, **J Antoniou**. *Are levels of antioxidant enzymes and cyclooxygenase-1 in mesenchymal stem cells from osteoarthritic patients related to stem cell hypertrophy?* 45<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. St-John's, NL. July 7-9, 2011. (Podium)

202. R Gawri, F Mwale, JA Ouellet, T Steffen, PJ Roughley, **J Antoniou**, L Haglund. *Long term human intervertebral disc organ culture: From impossible to I'm possible*. 45<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. St-John's, NL. July 7-9, 2011. (Podium)
203. M Bernstein, NM Desy, OL Huk, DJ Zukor, A Petit, **J Antoniou**. *Long-term Follow-up of Patients with Metal-on-metal Total Hip Arthroplasty*. 66<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. St-John's, NL. July 7-9, 2011. (Podium)
204. R Gawri, F Mwale, J Ouellet, T Steffen, P J Roughley, L Haglund, **J Antoniou**. *Link-N peptide: A potential candidate for biological repair of the human intervertebral disc*. 17<sup>th</sup> Annual Meeting of Canadian Connective Tissue Conference. Montreal, QC. May 27-29, 2011. (Poster)
205. S Rampersad, A Petit, J-C Ruiz, M Wertheimer, **J Antoniou**, F Mwale. *Using a novel nitrogen rich plasma polymer, the suppression of type X collagen in mesenchymal stem cells from osteoarthritic patients is maintained in pellet cultures*. 17<sup>th</sup> Annual Meeting of Canadian Connective Tissue Conference. Montreal, QC. May 27-29, 2011. (Podium)
206. S Al Rowas, LE Chalifour, R Haddad, A Petit, R Gawri, A Aziz Al Ma'awil, **J Antoniou**, F Mwale. *The intervertebral disc, articular cartilage and femur of adult mice exposed to DES*. 17<sup>th</sup> Annual Meeting of Canadian Connective Tissue Conference. Montreal, QC. May 27-29, 2011. (Podium)
207. J. Powell, PE Beaulé, EH Schemitsch, PA Venditoli, RB Bourne, **J Antoniou**, J Werle, E Belzile, F Smith. *A survey of Canadian resurfacing Working Group Experience: Rates of conversion from RSA to THR*. 77<sup>th</sup> Annual Meeting of the American Academy of Orthopedic Surgeons. San Diego, CA. February 15-19, 2011.
208. V. Nikolaou, A Petit, DJ Zukor, OL Huk, **J Antoniou**. *Are metal ions from metal-on-metal hip arthroplasty detrimental to spermatozoa in young patients?* 77<sup>th</sup> Annual Meeting of the American Academy of Orthopedic Surgeons. San Diego, CA. February 15-19, 2011.
209. **J Antoniou**, DJ Zukor, A Petit, OL Huk. *Clinical Outcome and Metal Ion Levels in the Blood of Patients with Surface Replacement Head with Conventional Femoral Stem Hybrid Total Hip Arthroplasty*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
210. M Bernstein, NM Desy, OL Huk, DJ Zukor, A Petit, **J Antoniou**. *Long-term follow-up of patients with metal-on-metal total hip arthroplasty*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
211. VS Nikolaou, V Khoury, OL Huk, DJ Zukor, A Petit, **J Antoniou**. *Magnetic resonance imaging of painful metal-on-metal total hip replacement*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.

212. R Gawri,, F Mwale, JA Ouellet, T Steffen, PJ Roughley, **J Antoniou**, L Haglund. *Development of a human intervertebral disc organ culture system to study biological repair*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
213. F Mwale, LM Epure, AJ Michalek, JC Iatridis, **J Antoniou**. *Changes in quantitative magnetic resonance imaging parameters and biomechanical properties in human intervertebral discs with different grades of degeneration*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
214. F Mwale, A Petit, G Yao, LM Epure, S Al Rowas, R Gawri, **J Antoniou**. *Effect of Link N peptide on the expression of type I and type II collagens in human intervertebral disc cells*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
215. R Gawri, F Mwale, JA Ouellet, T Steffen, PJ Roughley, L Haglund, **J Antoniou**. *Potential of Link-N peptide for biological repair of the human intervertebral disc*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
216. A Petit, G Yao, **J Antoniou**, F Mwale. *The expression of type X collagen correlates with anti-oxidant enzymes and cyclooxygenase-1 levels in mesenchymal stem cells from osteoarthritic patients*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
217. S Rampersad, A Petit, JC Ruiz, MR Wertheimer, **J Antoniou**, F Mwale. *The suppression of type X collagen expression is maintained when mesenchymal stem cells from osteoarthritis patients are pre-cultured on nitrogen rich polymers and then transferred to pellet cultures*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
218. F Mwale, LM Epure, T Yoshikawa, A Hemmed, M Bokar, K Masuda, PJ Roughley, **J Antoniou**. *Stimulation of aggrecan synthesis and suppression of proteinase synthesis by Link N peptide in a rabbit model of intervertebral disc degeneration*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
219. F Mwale, S Rampershad, H Richard, G Yao, S Al Rowas, A Petit, **J Antoniou**, S Lavery. *The constitutive expression of type X cCollagen in mesenchymal stem cells from osteoarthritis patients is reproduced in a rabbit model of osteoarthritis*. 57<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Long Beach, CA. January 13-16, 2011.
220. F Mwale, R Gawri, JA Ouellet, T Steffen, PJ Roughley, **J Antoniou**, L Haglund. *Long term human intervertebral disc organ culture: From myth to reality*. 7<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies. Kyoto, Japan. October 16-20, 2010.
221. F Mwale, LM Epure AJ Michalek, JC Iatridis, **J Antoniou**. *Analysis of quantitative magnetic resonance imaging and biomechanical parameters on human discs with*



- different grades of degeneration.* 7<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies. Kyoto, Japan. October 16-20, 2010.
- F Mwale, LM Epure, T Yoshikawa, A Hemmad, M Bokar, K Masuda, PJ Roughley, **J Antoniou**. *Link-N can promote aggrecan synthesis and suppress proteinase synthesis in a rabbit model of intervertebral disc degeneration.* 7<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies. Kyoto, Japan. October 16-20, 2010.
223. F. Mwale, J.C. Ruiz, H.T. Wang, A. Petit, **J. Antoniou**, M.R. Wertheimer. *Stem Cell-Mediated Tissue Repair Enabled Through Plasma-Generated Culture Surfaces.* 3<sup>rd</sup> International Conference on Plasma Medicine (ICPM-3). Greifswald, Germany. September 19-24, 2010 (Podium, invited)
224. F Mwale, LM Epure, T Yoshikawa, A Hemmad, M Bokar, K Masuda, PJ Roughly, **J Antoniou**. *Link N-mediated repair in a rabbit model of intervertebral disc degeneration.* World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
225. F Mwale, R Pichika, LM Epure, T Yoshikawa, A Hemmad, M Bokar, K Masuda, PJ Roughley, **J Antoniou**. *Link N can promote aggrecan synthesis and suppress proteinase synthesis in a rabbit model of intervertebral disc degeneration.* World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
226. R Gawri, F Mwale, JA, Ouellet, T Steffen, P Roughley, **J Antoniou**, L Haglund. *Development of a whole disc organ culture system to study human intervertebral disc metabolism.* World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
227. F Mwale, A Petit, G Yao, LM Epure, S Al-Rowas, R Gawri, **J Antoniou**. *Link N peptide stimulates the expression of type II collagen through mitogen activated protein kinases and AKT in human intervertebral disc cells.* World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
228. N Bullett, A Petit, **J Antoniou**, S Lerouge, MR Wertheimer, F Mwale. *Micropatterning on nitrogen and ammonia plasma-treated surfaces as a means of distinguishing between the nucleus pulposus and cartilage phenotypes.* World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
229. I Ciobanu, D Giannitsios, P Roughley, T Steffen, **J Antoniou**, F Mwale. *The influence of oxygen on proteoglycan synthesis by intervertebral disc cells.* World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
230. GI Hristova, P Roughley, P Jarzem, JA Ouellet, **J Antoniou**, F Mwale. *Intervertebral disc calcification in degeneration and scoliosis.* World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
231. K Debiparshad, PJ Roughley, LE Chalifour, **J Antoniou**, F Mwale. *Skeletal changes in mice deficient in early growth response protein-1 (Egr-1).* World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.

232. F Mwale, LM Epure, A Petit, **J Antoniou**. *Assesment of chondroitinase ABC-treated intervertebral discussing quantitative magnetic resonance imaging*. World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
233. F Mwale, LM Epure, AJ Michalek, JC Iatridis, **J Antoniou**. *Analysis of quantitative magnetic resonance imaging and biomechanical parameters on human discs with different grades of degeneration*. World Forum for Spine Research 2010. Montreal, QC. July 5-8, 2010.
234. F Mwale, LM Epure, T Yoshikawa, A Hemmed, M Bokar, K Masuda, PJ Roughley, **J Antoniou**. *Effect of Link-N on disc repair in a rabbit model of intervertebral disc degeneration*. 44<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Edmonton, AB. June 17-20, 2010.- **Winner of the Founders' Award**
235. R Gawri, J Moir, JA Ouellet, PJ Roughley, F Mwale, **J Antoniou**, T Steffen, L Haglund. *Whole IVD organ culture systems to study the potential of biological repair*. eCM XI: Cartilage & Disc: Repair and Regeneration. Davos, Switzerland. June 28-30, 2010. (poster)
236. F Mwale, G Yao, A Petit, **J Antoniou**. *Effect of PTH on type X collagen expression in mesenchymal stem cells from osteoarthritis patients*. 44<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Edmonton, AB. June 17-20, 2010.
237. F Mwale, G Yao, A Petit, **J Antoniou**. *Increased phosphorylation of ERK and p38 signal transduction proteins in mesenchymal stem cells from osteoarthritic patients*. 44<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Edmonton, AB. June 17-20, 2010.
238. S Rampersad, A Petit, G Yao, A St-Georges-Robillard, J-C Ruiz, MR Wertheimer, **J Antoniou**, F Mwale. *Differentiation of mesenchymal stem cells from osteoarthritis patients on nitrogen-rich cell culture coatings*. 44<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Research Society. Edmonton, AB. June 17-20, 2010.
239. **J Antoniou**, A Petit, V Nikolaou, F Mwale, C Papanastasiou, DJ Zukor, OL Huk. *Cobalt and chromium ions have no detrimental effect on semen parameters in young patients with metal-on-metal total hip replacement*. 65<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Edmonton, AB. June 17-20, 2010.
240. **J Antoniou**, A Petit, F Mwale, DJ Zukor, Huk, OL. *Metal ion levels in patients with large head metal-on-metal total hip prosthesis*. 65<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Edmonton, AB. June 17-20, 2010.
241. OL Huk, A Petit, SG Bergeron, V Nikolaou, F Mwale, DJ Zukor, **J Antoniou**. *Can outliers cobalt and chromium levels in patients with metal-on-metal hip implants be explained?* 65<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Edmonton, AB. June 17-20, 2010.
242. **J Antoniou**, A Petit, F Mwale, DJ Zukor, OL Huk. *Cobalt and chromium ions in the*

- blood of patients with surface replacement head with conventional femoral stem hybrid total hip arthroplasty.* 65<sup>th</sup> Annual Meeting of the Canadian Orthopaedic Association. Edmonton, AB. June 17-20, 2010.
243. R Gawri, JA Ouellet, F Mwale, **J Antoniou**, L Haglund. *Development of whole organ culture system for human intervertebral disc repair and regeneration studies.* 16<sup>th</sup> Canadian Connective Tissue Conference. Toronto, ON. June 3-5, 2010.
244. S Al Rowas, A Petit, G Yao, **J Antoniou**, F Mwale. *Parathyroid hormone decreases type X collagen expression in mesenchymal stem cells from osteoarthritis patients via the P38 and AKT pathways.* 16<sup>th</sup> Canadian Connective Tissue Conference. Toronto, ON. June 3-5, 2010.
245. S Rampersad, A Petit, G Yao, LM Epure, JC Ruiz, MR Wertheimer, **J Antoniou**, F Mwale. *Can we maintain the suppression of type X collagen expression induced by nitrogen-rich surfaces in mesenchymal stem cells from osteoarthritis patients in pellet culture?* 16<sup>th</sup> Canadian Connective Tissue Conference. Toronto, ON. June 3-5, 2010.
246. S Al Rowas, A Petit, LE Chalifour, **J Antoniou**, F Mwale. *Neonatal exposure to high dose diethylstilbesterol decreased lumbar bone mineral content in female mice at adulthood.* 16<sup>th</sup> Canadian Connective Tissue Conference. Toronto, ON. June 3-5, 2010.
247. M Bernstein, S Gupta, SB Bergeron, A Petit, OL Huk, J Antoniou. *The effect of operative factors on outlier ion levels in patients with metal on metal hip implants.* 11<sup>th</sup> European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress. Madrid, Spain. June 2-5, 2010.
248. VS Nikolaou, A Petit, OL Huk, DJ Zukor, SG Bergeron, **J Antoniou**. *Semen metal ion levels and sperm quality in patients with metal on metal total hip replacement.* 11<sup>th</sup> European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress. Madrid, Spain. June 2-5, 2010.
249. VS Nikolaou, V Khoury, OL Huk, A Petit, SG Bergeron, DJ Zukor, **J Antoniou**. *MRI evaluation of painful hip after metal-on-metal total hip arthroplasty.* European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress. Madrid, Spain. June 2-5, 2010.
250. VS Nikolaou, OL Huk, A Petit, SG Bergeron, **J Antoniou**. *Metal-on-metal total hip arthroplasty: Five to eleven years follow-up.* European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress. Madrid, Spain. June 2-5, 2010.
251. VS Nikolaou, OL Huk, A Petit, DJ Zukor, **J Antoniou**. *Large head metal on metal versus resurfacing total hip arthroplasty in young, active patients.* European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress. Madrid, Spain. June 2-5, 2010.

252. M. Parolin, R. Gawri, F. Mwale, T. Steffen, P. Roughley, **J. Antoniou**, L. Haglund, J. Ouellet. *Development of a Whole Disc Organ Culture System to Study Human Intervertebral Disc*. 8th Annual AOSpine North America Fellows Forum. April 2010, Banff, Alberta. April 2010 (Poster)
253. P.-L. Girard-Lauriault, F. Truica-Marasescu, A. Petit, H.T. Wang, **J. Antoniou**, F. Mwale, M.R. Wertheimer. *Adhesion of Human U937 Monocytes to Nitrogen-rich Organic Films: Novel Insights into the Mechanism of Cellular Adhesion*. 5<sup>th</sup> International Conference on Microtechnologies in Medicine and Biology (MMB'09). Québec, QC. April 1-3, 2010. (Podium)
254. SG Bergeron, A Petit, F Mwale, V Nikolaou, D Zukor, O Huk, **J Antoniou**. *Clinical Follow-up and Metal Ions in Blood of Patients with Hip resurfacing*. 76<sup>th</sup> American Academy of Orthopaedic Surgeons Meeting. New Orleans. March 2010 (Poster)
255. SG Bergeron, A Petit, N Desy, F Mwale, V Nikolaou, D Zukor, O Huk, **J Antoniou**. *Rise of Chromium Ion Levels in Patients Undergoing staged Bilateral Hip resurfacing*. 76<sup>th</sup> American Academy of Orthopaedic Surgeons Meeting. New Orleans. March 2010 (Podium)
256. PE Beaulé, FC Smith, JN Powell, **J Antoniou**, RB Bourne, M Lavigne, E Belzile, EH Schemitsch, DS Garbuz. *A survey on the Incidence of Pseudotumours with MOM Hip resurfacings in Canadian academic Centres*. 76<sup>th</sup> American Academy of Orthopaedic Surgeons Meeting. New Orleans. March 2010 (Podium)
257. A Petit, V Nikolaou, F Mwale, D Zukor, O Huk, **J Antoniou**. *Semen Parameters In Young Patients With Metal-on-Metal Total Hip Replacement*. 56th Meeting of the Orthopaedic Research Society. New Orleans. March 2010 (Poster)
258. M Bernstein, SG Bergeron, A Petit, NM Desy, F Mwale, OL Huk, DJ Zukor, **J Antoniou**. *Rise of Cobalt and Chromium Ion Levels in Patients Undergoing Bilateral Hip Resurfacings*. 56th Meeting of the Orthopaedic Research Society. New Orleans. March 2010 (Poster)
259. F Mwale, L Epure, T Yoshikawa, A Hemmad, M Bokar, K Masuda, P Roughley, **J Antoniou**. *The Efficacy of Link-N as a Mediator of Repair in a Rabbit Model of Intervertebral Disc Degeneration*. 56th Meeting of the Orthopaedic Research Society. New Orleans. March 2010 (Poster)
260. G Hristova, F Mwale, P Jarzem, J Ouellet, P Roughley, **J Antoniou**. *Calcification in Intervertebral Disc Degeneration and Scoliosis*. 56th Meeting of the Orthopaedic Research Society. New Orleans. March 2010 (Poster)
261. S Rampersad, A Petit, G Yao, L Epure, Mi Wertheimer, **J Antoniou**, F Mwale. *Type X Collagen Expression in Mesenchymal Stem Cells from Osteoarthritis Patients in Pellet Culture*. 56th Meeting of the Orthopaedic Research Society. New Orleans. March 2010 (Poster)

262. F Mwale, G Yao, L Epure, A Petit, **J Antoniou**. *Effect of PTH on Type X Collagen Expression in Mesenchymal Stem Cells from Osteoarthritis Patients*. 56th Meeting of the Orthopaedic Research Society. New Orleans. March 2010 (Poster)
263. **J Antoniou**, A Petit, F Mwale, D Zukor, O Huk. *Clinical Outcome and Metal Ion Levels in Patients with Large Head Metal-on-Metal Total Hip Arthroplasty*. 56th Meeting of the Orthopaedic Research Society. New Orleans. March 2010 (Podium)
264. NM Desy, SG Bergeron, A Petit, M Bernstein, F Mwale, OL Huk, DJ Zukor, **J Antoniou**. *Metal Ions and Oxidative Stress Markers in Patients Following Metal-on-Metal Hip Resurfacings*. 56th Meeting of the Orthopaedic Research Society. New Orleans. March 2010. (Poster/Short talk)
265. R Gawri, JA Ouellet, F Mwale, **J Antoniou**, L Haglund. *Development of whole organ culture system for human intervertebral disc repair and regeneration studies*. 15th Canadian Connective Tissue Conference. Calgary, AB. July 17-18, 2009. Podium
266. G Hristova, R Gawri, F Mwale, P Jarzem, JA Ouellet, P Roughley, **J Antoniou**. *Intervertebral disc degeneration and scoliosis are characterized by extracellular matrix calcification*. 15th Canadian Connective Tissue Conference. Calgary, AB. July 17-18, 2009. Poster
267. **J Antoniou**, A Petit, F Mwale, DJ Zukor, OL Huk. *Metal ions in the blood of patients with Articular Surface Replacement*. 64th Annual Meeting of the Canadian Orthopaedic Association. Whistler, BC. July 3-6, 2009. Poster
268. V Nikolaou, A Petit, OL Huk, DJ Zukor, **J Antoniou**. *Large head metal-on-metal total hip arthroplasty versus hip resurfacing surgery in patients under 60 years of age. Is there a difference to the clinical outcome?* 64th Annual Meeting of the Canadian Orthopaedic Association. Whistler, BC. July 3-6, 2009. Poster
269. V Nikolaou, A Petit, OL Huk, DJ Zukor, **J Antoniou**. *Metal-on-metal total hip arthroplasty: Five to eleven years follow-up*. 64th Annual Meeting of the Canadian Orthopaedic Association. Whistler, BC. July 3-6, 2009. Poster
270. **J Antoniou**, A Petit, F Mwale, DJ Zukor, OL Huk. *Surgical variables affect metal ion levels in the blood of patients with hip surface arthroplasty*. 64th Annual Meeting of the Canadian Orthopaedic Association. Whistler, BC. July 3-6, 2009. Poster
271. F Mwale, HT Wang, P-L Girard-Lauriault, MR Wertheimer, **J Antoniou**, A Petit. *Mechanism of decreased expression of type X collagen in human mesenchymal stem cells cultured on citrogen-rich plasma polymers: Implication of cyclooxygenase-1*. 43rd Annual Meeting of the Canadian Orthopaedic Research Society. Whistler, BC. July 3-4, 2009. Podium
272. YS Brin, I Livshetz, **J Antoniou**, DJ Zukor. *Don't just point anywhere. Precise landmarking in computer-assisted TKA is critical to final alignment*. 43rd Annual Meeting of the Canadian Orthopaedic Research Society. Whistler, BC. July 3-4, 2009.

Poster

273. I Livshetz, YS Brin, **J Antoniou**, DJ Zukor. *Does navigation tell the truth? Deviations between navigation data and postop X-rays in TKA*. 43rd Annual Meeting of the Canadian Orthopaedic Research Society. Whistler, BC. July 3-4, 2009. Poster
274. **J Antoniou**, F Mwale, DJ Zukor, OL Huk, A Petit. *Oxidative stress markers in the blood of patients with Articular Surface Replacement*. 43rd Annual Meeting of the Canadian Orthopaedic Research Society. Whistler, BC. July 3-4, 2009. Podium
275. GI Hristova, F Mwale, P Jarzem, JA Ouellet, PJ Roughley, **J Antoniou**. *Calcification in intervertebral disc degeneration and scoliosis*. 43rd Annual Meeting of the Canadian Orthopaedic Research Society. Whistler, BC. July 3-4, 2009. Poster
276. F Mwale, LM Epure, T Goswami, G Beaudoin, L Beckman, A Petit, **J Antoniou**. *Quantitative magnetic resonance imaging and biochemical analysis of chondroitinase ABC treated intervertebral discs under physiological compressive loading*. 43rd Annual Meeting of the Canadian Orthopaedic Research Society. Whistler, BC. July 3-4, 2009. Poster
277. S.G. Bergeron, K. Debiparshad K, D.J. Zukor D, **J. Antoniou**. *A Prospective Cohort of Hip Resurface Arthroplasty*. European Federation of National Associations of Orthopaedics and Traumatology (EFORT), 10<sup>th</sup> Annual Meeting, Vienna, 2009. (Poster)
278. S.G. Bergeron, **J. Antoniou**, B. Ma, R. Chakraverty, J. Rudan. *Classification of Femoral Head Deformity in Hip Resurfacing*. European Federation of National Associations of Orthopaedics and Traumatology (EFORT), 10<sup>th</sup> Annual Meeting, Vienna, 2009. (Podium)
279. RS Lima, S Dimitrievska, MN Bureau, BR Marple, A Petit, F Mwale, **J Antoniou**. *Enhanced proliferation of human stem cells on the surftec of HVOF-sprayed nano TiO<sub>2</sub>-HA coatings*. 2009 International Thermal Spray Conference. Las Vegas, NV. May 4-7, 2009. Podium
280. S Dimitrievska, A Petit, RS Lima, BR Marple, **J Antoniou**, MN Bureau. *Novel nanostructured coatings induce osteogenic differentiation of human mesenchymal stem cells*. 2009 Meeting of the Society of Biomaterials. San Antonio, TX. April 22-25, 2009. Podium
281. M.R. Wertheimer, P.-L. Girard-Lauriault, F. Truica-Marasescu, J.-C. Ruiz, A. Gigout, M. Jolicoeur, A. Petit, **J. Antoniou**, F. Mwale, S. Lerouge. *Thin Organic Coatings deposited by Plasma- and Photochemistry for Bio-medical Applications*. 2<sup>nd</sup> International Conference on Plasma Medicine (ICPM-2). San Antonio, TX. March 16-20, 2009 (Podium, invited).
282. **J. Antoniou**, C. Tkaczyk, A. Petit, F. Mwale, D.J. Zukor, M. Tabrizian, O.L. Huk. *Oxidative stress markers are not elevated in blood of patients with metal-on-metal hip prosthesis*. 75<sup>th</sup> Annual Meeting of the American Academy of Orthopaedic Surgeons. Las

- Vegas, NV. February 25-28, 2009. (Podium)
283. **J. Antoniou**, F. Mwale, D.J. Zukor, O.L. Huk, A. Petit. *Metal ion levels in blood of patients with articular surface replacement*. 55<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009. (Podium)
  284. **J. Antoniou**, A. Petit, F. Mwale, D.J. Zukor, O.L. Huk. *Surgical variables affect metal ion levels in blood of patients with articular surface replacement*. 55<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009. (Poster)
  285. S. Dimitrievska, A. Petit, R. Lima, B. Marple, **J. Antoniou**, M. Bureau. *Novel Nanostructured Coatings Induce Osteogenic Differentiation of Human Mesenchymal Stem Cells*. 55<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009. (Poster)
  286. F. Mwale, P.-L. Girard-Lauriault, A. Petit, **J. Antoniou**, M.R. Wertheimer. *Adhesion of human U937 monocytes to nitrogen-rich plasma polymers: Novel insights into the mechanism of cellular adhesion*. 55<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009. (Poster)
  287. F. Mwale, H.T. Wanf, P.-L. Girard-Lauriault, M.R. Wertheimer, **J. Antoniou**, A. Petit. *Mechanism of decreased expression of type X collagen in human mesenchymal stem cells from osteoarthritis patients cultured on nitrogen-rich plasma polymers: Implication of cyclooxygenase-1*. 55<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009. (Poster)
  288. K. Debiparshad, F. Mwale, P. Roughley, L.E. Chalifour, **J. Antoniou**. *Musculoskeletal phenotype in mice deficient in early growth response protein-1 (EGR-1)*. 55<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009. (Podium)
  289. C. Tkaczyk, A. Petit A, F. Mwale, **J. Antoniou**, D.J. Zukor, M. Tabrizian, O.L. Huk OL. *Antioxidant enzymes and oxidative stress markers in the blood of patients with metal-on-metal total hip arthroplasty*. 55<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009. (Poster)
  290. E. Logan, O.L. Huk, **J. Antoniou**, F. Mwale, A. Petit, M. Tabrizian. *Effect of Co<sup>2+</sup>, Cr<sup>3+</sup>, Cr<sup>6+</sup> ions on the expression of bone markers in MG-63 pre-osteoblast cells in vitro*. 55<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009. (Poster)
  291. G. Hristova, F. Mwale, P. Jarzem, J. Ouellet, P. Roughley, **J. Antoniou**. *Calcification in intervertebral disc degeneration and scoliosis*. 38<sup>th</sup> Annual Meeting of the Quebec Scoliosis Society. Québec QC. November 7, 2008. (Podium)
  292. S Dimitrievska, A Petit, R Lima, BR Marple, **J Antoniou**, MN Bureau. *Novel nanostructured coatings induce osteogenic differentiation of human mesenchymal stem cells*. 3rd Congress on Regenerative Biology and Medicine – 3rd Congress of the

- German Society for Stem Cell Research. Stuttgart, Germany. October 9-11, 2008. Poster
293. F Mwale, HT Wang, P-L Girard-Lauriault, MR Wertheimer, **J Antoniou**, A Petit. Mechanism of decreased expression of type X collagen in human mesenchymal stem cells from osteoarthritis patients cultured on nitrogen-rich plasma polymers: Implication of cyclooxygenase-1. 2nd International Symposium on Biotechnology in Musculoskeletal repair. Lausanne, Switzerland. October 2-4, 2008. Podium
294. F. Mwale, A. Rioux, H.T. Wang, A. Petit, L.M. Epure, **J. Antoniou**, J.A. Ouellet. *Calcification in apical and non apical adolescent idiopathic scoliotic intervertebral discs*. 2nd Combined Meeting of the AOA-COA/CORS. Quebec, QC. June 4-7, 2008. (Poster)
295. K. Debiparshad, F. Mwale, P. Roughley, L.E. Chalifour, **J. Antoniou**. *Intervertebral disc and articular cartilage degeneration in mice lacking early growth response protein-1 (EGR-1)*. 2nd Combined Meeting of the AOA-COA/CORS. Quebec, QC. June 4-7, 2008. (Podium)
296. K. Debiparshad, F. Mwale, P. Roughley, L.E. Chalifour, **J. Antoniou**. *Effect of estrogen deficiency on articular cartilage and intervertebral disc of mice*. 2nd Combined Meeting of the AOA-COA/CORS. Quebec, QC. June 4-7, 2008. (Podium)
297. N. Bullett, A. Petit, **J. Antoniou**, S. Lerouge, M.R. Wertheimer, F. Mwale. *Micropatterning on nitrogen and ammonia treated surfaces as a means of distinguishing between the nucleus pulposus and cartilage phenotypes*. 2nd Combined Meeting of the AOA-COA/CORS. Quebec, QC. June 4-7, 2008. (Poster)
298. F. Mwale, C.N. Demers, A.J. Michalek, J.C. Iatridis, T. Goswami, G. Beaudoin, L. Beckman, M. Alini, **J. Antoniou**. *Evaluation of quantitative magnetic resonance imaging, biochemical and mechanical properties of trypsin treated intervertebral discs under physiological compressive loading*. 2nd Combined Meeting of the AOA-COA/CORS. Quebec, QC. June 4-7, 2008. (Podium)
299. C. Tkaczyk, A. Petit, I. Semova, F. Mwale, D.J. Zukor, **J. Antoniou**, M. Tabrizian, O.L. Huk. *Oxidative stress markers in the blood of patients with metal-on-metal total hip arthroplasty*. 2nd Combined Meeting of the AOA-COA/CORS. Quebec, QC. June 4-7, 2008. (Podium)
300. K. Debiparshad, O.L. Huk, D.J. Zukor, A. Petit, F. Mwale, **J. Antoniou**. *Metal-on-metal total hip arthroplasty: four to ten - year results*. 2nd Combined Meeting of the AOA-COA/CORS. Quebec, QC. June 4-7, 2008. (Podium)
301. F. Mwale, N. Bullett, A. Petit, **J. Antoniou**, S. Lerouge, M. R. Wertheimer *Micropatterning on nitrogen and ammonia plasma-treated surfaces as a means of distinguishing between the nucleus pulposus and cartilage phenotypes*. 54<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. March 2-5, 2008. (Poster)



302. F. Mwale, C. N. Demers, A.J. Michalek, J.C. Iatridis, T. Goswami, G. Beaudoin, L. Beckman, M. Alini, **J. Antoniou** *Effect of Cyclic Loading and Trypsin Treatment on the MRI Properties of the Annulus Fibrosus in Relation to its Biochemical Content and Compressive Properties*. 54<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. March 2-5, 2008. (Poster)
303. K. Debiparshad, F. Mwale, P. Roughley, L. Chalifour, **J. Antoniou**. *Articular Cartilage and Intervertebral Disc Degeneration in Ovariectomized Mice*. 54<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. March 2-5, 2008. (Poster)
304. K. Debiparshad, F. Mwale, P. Roughley, L. Chalifour, **J. Antoniou**. *Articular Cartilage and Intervertebral Disc Degeneration in Mice Lacking Early Growth Response Protein-1 (EGR-1)* 54<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. March 2-5, 2008. (Podium)
305. N. Bullett, A. Petit, **J. Antoniou**, S. Lerouge, M.R. Wertheimer, F. Mwale. *Micropatterning on nitrogen and ammonia plasma-treated surfaces as a means of distinguishing between the nucleus pulposus and articular cartilage phenotypes*. 54<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. San Francisco, CA. March 2-5, 2008. (Poster)
306. F. Mwale, C.N. Demers, A.J. Michalek, J.C. Iatridis, T. Goswami, G. Beaudoin, L. Beckman, M. Alini, **J. Antoniou**. *Evaluation of quantitative magnetic resonance imaging, biochemical, and mechanical properties of trypsin-treated intervertebral discs under physiological compressive loading*. World Forum for Spine Research – The intervertebral disc. Kyoto, Japan. January 23-26, 2008. (Poster)
307. **J. Antoniou**, C.N. Demers, A.J. Michalek, T. Goswami, G. Beaudoin, L. Beckman, J.C. Iatridis, F. Mwale. *Effect of cyclic loading on the MR properties, compressive properties and biochemical content of collagenase treated nucleus pulposus*. 6<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies. Honolulu, HI. October 20-24, 2007. (Podium)
308. C. Richards, **J. Antoniou**, D. Giannitsios, O. Huk, T. Steffen, D. Zukor. *Risk Factors for Periprosthetic Femoral Neck Following Hip Resurfacing. A Biochemical Analysis*. . 62<sup>nd</sup> Annual Meeting of Canadian Orthopaedic Association. Halifax, NS. June 1-3, 2007. (Poster)
309. F. Mwale, **J. Antoniou**, L.E. Chalifour, O.L. Huk, G. Marguier, D.J. Zukor. *Effect of Anticancer Drug Doxorubicin and the protective Agents Amifostine and Dexrazoxane on Bone Mass in Male Rats*. 62<sup>nd</sup> Annual Meeting of Canadian Orthopaedic Association. Halifax, NS. June 1-3, 2007. (Poster)
310. **J. Antoniou**, O.L. Huk, F. Mwale, A. Petit, D.J. Zukor. *Metal Ion and Oxidative Stress Marker Levels In Blood Of Patients After Hip Resurfacing: a Comparison With 28 Mm, and 36 Mm-Head Metal-On-Metal Hip Prostheses*. 62<sup>nd</sup> Annual Meeting of Canadian

- Orthopaedic Association. Halifax, NS. June 1-3, 2007. (Podium)
311. F. Mwale, **J. Antoniou**, O.L. Huk, G. Marguier, A. Petit, D.J. Zukor. *Characterization of Intervertebral Disc Cells Behavior in a Mouse Subcutaneous Model*. 62<sup>nd</sup> Annual Meeting of Canadian Orthopaedic Association. Halifax, NS. June 1-3, 2007. (Podium)
312. **J. Antoniou**, G. Beaudoin, C.N. Demers, T. Goswami, F. Mwale, J.C. Iatridis. *Evaluation of Quantitative MRI, Biochemical, and Mechanical Properties of Trypsin-Treated Intervertebral Discs Under Physiological Compression Loading*. 62<sup>nd</sup> Annual Meeting of Canadian Orthopaedic Association. Halifax, NS. June 1-3, 2007. (Podium)
313. C. Richards, P. Navarre, D. Giannitsios, T. Steffen, **J. Antoniou**. *Periprosthetic Femoral Neck Fractures In Hip Resurfacing Arthroplasty: Valgus Versus Anatomic Alignment A Biomechanical And Clinical Analysis*. 53<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. February 11-14, 2007. (Poster)
314. C. Richards, P. Navarre, D. Giannitsios, D. Zukor, O. Huk, T. Steffen, **J. Antoniou**. *Periprosthetic Fracture in Hip Resurfacing: Valgus vs Neutral: A Biochemical and Clinical Analysis*. 53<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. February 11-14, 2007. (Poster)
315. **J. Antoniou**, A. Petit, F. Mwale, D.J. Zukor, O.L. Huk. *Metal Ion Levels In Blood Of Patients After Hip Resurfacing: A Comparison With 28 Mm- And 36 Mm-Head Metal-On-Metal Hip Prostheses*. 53<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. February 11-14, 2007. (Poster)
316. F. Mwale, G. Marguier, **J. Antoniou**, O.L. Huk, D.J. Zukor, L.E. Chalifour, L. E. *The Bone Quality Of Doxorubicin-Treated Male Rats Is Less Severely Affected By Amifostine And Dexrazoxane Treatments Than Female Rats* 53<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. February 11-14, 2007. (Poster)
317. C.N. Demers, A.J. Michalek, J.C. Iatridis, T. Goswami, G. Beaudoin, L. Beckman, M. Alini, F. Mwale, **J. Antoniou**. *Assessing T1rho-Weighted MR Imaging In Relation To The Biochemical And Mechanical Properties Of Trypsin-Treated Intervertebral Discs* 53<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. February 11-14, 2007. (Poster)
318. F. Mwale, I. Ciobanu, D. Giannitsios, P. Roughley, T. Steffen, **J. Antoniou**. *Effect Of Oxygen Levels On Proteoglycan Synthesis By Ivd Cells*. 53<sup>rd</sup> Annual Meeting of the Orthopaedic Research Society. San Diego, CA. February 11-14, 2007. (Poster)
319. **J. Antoniou**, A. Petit, F. Mwale, D.J. Zukor, O.L. Huk. *Metal Ions and Oxidative Stress Markers in Patients with Metal-Metal Hip Bearings*. 73<sup>rd</sup> Annual Meeting of the American Academy of Orthopaedic Surgeons. San Diego, CA. February 14-18, 2007.

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320. C. Richards, P. Navarre, D. Giannitsios, D. Zukor, O. Huk, T. Steffen, **J. Antoniou**. *Periprosthetic Fracture in Hip Resurfacing: Valgus vs Neutral: A Biochemical and Clinical Analysis*. 73<sup>rd</sup> Annual Meeting of the American Academy of Orthopaedic Surgeons. San Diego, CA. February 14-18, 2007. (Podium)
321. C.N. Demers, A. Michalek, J. Iatridis, T. Goswami, G. Beaudoin, L. Beckman, M. Alini, F. Mwale, **J. Antoniou**. *Effect of trypsin and cyclic compression on the MRI, biochemical and mechanical properties of bovine intervertebral disc tissues*. 12th Annual Canadian Connective Tissue Conference. Ottawa, ON. May 25-26, 2006. Poster.
322. I. Ciobanu, F. Mwale, D. Giannitsios, P. Roughley, T. Steffen, **J. Antoniou**. *Differences in the behaviour of disc cells to different oxygen tensions*. 12th Annual Canadian Connective Tissue Conference. Ottawa, ON. May 25-26, 2006. Poster.
323. F. Mwale, G. Marguier, H.T. Wang, A. Petit, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Cells from the intervertebral disc maintain their phenotypes in a mouse subcutaneous injection model*. 12th Annual Canadian Connective Tissue Conference. Ottawa, ON. May 25-26, 2006. Poster.
324. F. Mwale, H.T. Wang, P.-L. Girard-Lauriault, A. Petit, C. Hunter, **J. Antoniou**, M.R. Wertheimer. *The potential of plasma deposited N-rich plasma-polymerized ethylene (PPE:N) films for regulating the phenotype of the nucleus pulposus*. 12th Annual Canadian Connective Tissue Conference. Ottawa, ON. May 25-26, 2006. Poster.
325. F. Mwale, H.T. Wang, G. Marguier, D.J. Zukor, O.L. Huk, A. Petit, **J. Antoniou**. *Effect of a type II collagen fragment on cells of the intervertebral disc: gene expression of proteinases, collagen, and aggrecan*. 12th Annual Canadian Connective Tissue Conference. Ottawa, ON. May 25-26, 2006. Poster.
326. F. Mwale, G. Marguier, **J. Antoniou**, O.L. Huk, D.J. Zukor, L.E. Chalifour. *Effect of drugs used for treatment of child hematologic cancers on bone mass of male rats*. 12th Annual Canadian Connective Tissue Conference. Ottawa, ON. May 25-26, 2006. Poster.
327. F. Mwale, G. Marguier, H.T. Wang, A. Petit, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Neo-intervertebral disc formation by subcutaneous injection of bovine disc cells in mice*. 40th Annual Meeting of the Canadian Orthopaedic Research Society. Toronto, ON. June 2-4, 2006. (Oral)
328. F. Mwale, H.T. Wang, G. Marguier, A. Petit, D.J. Zukor, O.L. Huk, **J. Antoniou**. *Effect of a type II collagen fragment on cells of the intervertebral disc*. 40th Annual Meeting of the Canadian Orthopaedic Research Society. Toronto, ON. June 2-4, 2006. (Oral)

329. F. Mwale, G. Marguier, **J. Antoniou**, O.L. Huk, D.J. Zukor, L. Chalifour. *Effect of amifostine and dexrazoxane on bone mass of doxorubicin treated male rats*. 40th Annual Meeting of the Canadian Orthopaedic Research Society. Toronto, ON. June 2-4, 2006. (Oral)
330. C.N. Demers, A. Michalek, J. Iatridis, T. Goswami, G. Beaudoin, L. Beckman, M. Alini, F. Mwale, **J. Antoniou**. *Assessment of trypsin-digested and dynamically loaded intervertebral discs using quantitative MRI*. 40th Annual Meeting of the Canadian Orthopaedic Research Society. Toronto, ON. June 2-4, 2006. (Oral)
331. I. Ciobanu, F. Mwale, D. Giannitos, P. Roughley, T. Steffen, **J. Antoniou**. *Effect of oxygen levels on proteoglycan synthesis by IVD cells*. 40th Annual Meeting of the Canadian Orthopaedic Research Society. Toronto, ON. June 2-4, 2006. (Oral)
332. C. Richards, D. Giannitsios, D. Zukor, O. Huk, T. Steffen, **J. Antoniou**. *Biomechanical analysis of femoral neck fractures in hip resurfacing: Valgus vs. Neutral alignment*. 61st Annual Meeting of the Canadian Orthopaedic Association. Toronto, ON. June 2-4, 2006. (Poster)
333. **J. Antoniou**, *How to avoid notching in hip resurfacing*. Tips and Tricks session. 61st Annual Meeting of the Canadian Orthopaedic Association. Toronto, ON. June 2-4, 2006. (Oral) Invited speaker.
334. **J. Antoniou**, *Surface arthroplasty for the young patient: an update of results*. COA Specialty Day. 61st Annual Meeting of the Canadian Orthopaedic Association. Toronto, ON. June 2-4, 2006. (Oral) Invited speaker.
335. **J. Antoniou**, A. Petit, D.J. Zukor, O.L. Huk. *Concentration of metal ions in blood of patients with metal-on-metal hip bearings*. 61st Annual Meeting of the Canadian Orthopaedic Association. Toronto, ON. June 2-4, 2006. (Oral)
336. C. Tkaczyk, A. Petit, F. Mwale, **J. Antoniou**, D.J. Zukor, O.L. Huk, M. Tabrizian. *Albumin and transferrin bind to chromium ions in vitro*. 40th Annual Meeting of the Canadian Orthopaedic Research Society. Toronto, ON. June 2-4, 2006. (Oral)
337. **J. Antoniou**, A. Petit, F. Mwale, D.J. Zukor, O.L. Huk. *Metal ion concentrations in blood of patients with articular surface replacements: a comparison with metal-on-metal hip prostheses*. 52nd Annual Meeting of the Orthopaedic Research Society. Chicago, IL. March 19-22, 2006. (Poster)
338. O.L. Huk, A. Petit, F. Mwale, D.J. Zukor, **J. Antoniou**. *Serum levels of oxidative stress markers in patients with articular surface replacements and metal-on-metal hip prostheses*. 52nd Annual Meeting of the Orthopaedic Research Society. Chicago, IL.

March 19-22, 2006. (Poster)

339. C. Tkaczyk, A. Petit, F. Mwale, **J. Antoniou**, D.J. Zukor, O.L. Huk, M. Tabrizian. *Formation of chromium nanostructures in vitro: effect of cell culture media composition*. 52nd Annual Meeting of the Orthopaedic Research Society. Chicago, IL. March 19-22, 2006. (Poster)
340. C. Tkaczyk, A. Petit, F. Mwale, **J. Antoniou**, D.J. Zukor, M. Tabrizian, O.L. Huk. *Interaction of chromium ions with human serum proteins*. 52nd Annual Meeting of the Orthopaedic Research Society. Chicago, IL. March 19-22, 2006. (Poster)
341. C.N. Demers, A.J. Michalek, J.C. Iatridis, T. Goswami, G. Beaudoin, L. Beckman, M. Alini, F. Mwale, **J. Antoniou**. *Effect of cyclic loading and trypsin-treatment on the MR properties of the nucleus pulposus in relation to its compressive properties and biochemical content*. 52nd Annual Meeting of the Orthopaedic Research Society. Chicago, Illinois. March 19-22, 2006. (Oral)
342. C Tkaczyk, A Petit, **J Antoniou**, DJ Zukor, M Tabrizian, OL Huk. *Interaction of human proteins with chromium nanostructures*. Workshop on Chromium and Human Health. Maine Center for Toxicology and Environmental Health, University of Southern Maine. Portland, ME. August 17-19, 2005. Poster.
343. **J. Antoniou**, F Mwale, CN Demers, G Beaudoin, T Goswami, L. Beckman, M Alini. *MRI and biochemical properties in dynamic loading studies of bovine intervertebral discs: Effect of loading conditions*. European Cells & Materials Conference, Spinal Motion Segment: From Basic Science to Clinical Application. Davos, Switzerland. July 4-7, 2005- Poster.
344. F Mwale, CN Demers, T Goswami, G Beaudoin, M Alini, **J Antoniou**. *MRI and biochemical properties in dynamic loading studies of bovine intervertebral discs: Effect of loading conditions*. 2005 Gordon Conference on Cartilage Biology & Pathology. Barga, Italy, June 5-9, 2005- Poster.
345. F Moola, OL Huk, DJ Zukor, **J Antoniou**. *Acetabular revision: Outcomes and complications of reconstruction rings*. 60th Annual Meeting of the Canadian Orthopaedic Association. Montreal, QC. June 3-5, 2005- Poster.
346. C Fleury, A Petit, F Mwale, DJ Zukor, **J Antoniou**, M Tabrizian, OL Huk. *Cytotoxicity of cobalt and chromium ions in human MG-63 osteoblasts in vitro*. 39th Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 3-5, 2005- Poster.

347. F Mwale, L Luo, DJ Zukor, OL Huk, **J Antoniou**, FM Winnik, A Petit. *Tyrosine kinases regulate activation of matrix metalloproteinase-1 expression in cobalt and chromium ions-stimulated human U937 macrophages*. 39th Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 3-5, 2005- Podium.
348. C Tkaczyk, A Petit, F Mwale, DJ Zukor, **J Antoniou**, M Tabrizian, OL Huk. *Induction of heme oxygenase-1 protein expression by cobalt ions in human U937 macrophages*. 39th Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 3-5, 2005- Poster.
349. V Nelea, L Luo, **J Antoniou**, CN Demers, S Lerouge, M Wertheimer, F Mwale. *Selective Inhibition of Type X Collagen Expression in Human Mesenchymal Stem Cell Differentiation on Polymer Substrates Surface-Modified by Glow Discharge Plasma*. 39th Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 3-5, 2005- Poster.
350. D Perie, CN Demers, JC Iatridis, T Goswami, G Beaudoin, F Mwale, **J Antoniou**. *Assessment of mechanical properties of trypsin denatured nucleus pulposus using quantitative MRI*. 39th Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 3-5, 2005- Poster.
351. F Mwale, KL Ayuen, I Ciobanu, CN Demers, A Petit, OL Huk, DJ Zukor, **J Antoniou**. *Mesenchymal stem cells response to cobalt and chromium ions*. 39th Annual Meeting of the Canadian Orthopaedic Research Society. Montreal, QC. June 3-5, 2005- Poster.
352. CN Demers, F Mwale, T Goswami, G Beaudoin, M Alini, **J Antoniou**. *MRI and biochemical properties in dynamic loading studies of bovine intervertebral discs: Effect of loading conditions*. 11th Canadian Connective Tissue Conference. Montreal, QC, May 26-28, 2005- Poster.
353. L Luo, A Petit, **J Antoniou**, DJ Zukor, OL Huk, RCW Liu, FM Winnik, F Mwale. *Effect of cobalt and chromium ions on MMP-1, TIMP-1, and TNF-a gene expression in human U937 macrophages: a role for tyrosine kinases*. 11th Canadian Connective Tissue Conference. Montreal, QC, May 26-28, 2005- Podium.
354. V Neale, L Luo, CN Demers, **J Antoniou**, A Petit, S Lerouge, MR Wertheimer, F Mwale. *Differentiation of human mesenchymal stem cells on polymer substrates modified by glow discharge plasma*. 11th Canadian Connective Tissue Conference. Montreal, QC, May 26-28, 2005- Poster.

355. L Luo, CN Demers, KL Ayuen, OL Huk, DJ Zukor, **J Antoniou**, A Petit, F Mwale. *Effect of cobalt and chromium ions on human mesenchymal stem cells*. 11th Canadian Connective Tissue Conference. Montreal, QC, May 26-28, 2005- Poster.
356. C Fleury, A Petit, F Mwale, **J Antoniou**, DJ Zukor, M Tabrizian, OL Huk. *Cobalt and chromium ions induce an oxidative stress in MG-63 osteoblasts in vitro*. 24th Annual Meeting of the Canadian Biomaterials Society. Waterloo, ON. May 26-28, 2005-Podium.
357. V. Nelea, L. Luo, C.N. Demers, **J. Antoniou**, S. Lerouge, M.R. Wertheimer, F. Mwale. *Human mesenchymal stem cells cultured on polymer substrates surface-modified by glow discharge plasma: Selective inhibition of type X collagen*. 3rd International Symposium on Advanced Biomaterials and Biomechanics (ISAB2), Montreal, QC, April 3-6, 2005-Podium.
358. D Perie, JC Iatridis, T Goswami, G Beaudoin, C Demers, M Iordanova, F Mwale, **J Antoniou**. *Assessment of compressive modulus, hydraulic permeability and matrix content of enzyme-treated nucleus pulposus using quantitative MRI*. 51<sup>st</sup> Annual Meeting of the Orthopaedic Research Society. Feb 20-23, 2005. Washington, DC- Poster.
359. L Luo, A Petit, **J Antoniou**, DJ Zukor, FM Winnik, OL Huk, F Mwale. *Effect of tyrosine kinase inhibitors on the induction of MMP-1, TIMP-1, and TNF-alpha gene expression by cobalt and chromium ions in human U937 macrophages*. 51<sup>st</sup> Annual Meeting of the Orthopaedic Research Society. Feb 20-23, 2005. Washington, DC - Poster.
360. F Mwale, I Ciobanu, **J Antoniou**, S Heon, N Servant, LE Chalifour. *Amifostine and dexrazoxane enhances the rapid loss of bone mass and further deterioration of vertebrae architecture in doxorubicin treated female rats*. 51<sup>st</sup> Annual Meeting of the Orthopaedic Research Society. Feb 20-23, 2005. Washington, DC - Poster.
361. CM Tkaczyk, A Petit, F Mwale, **J Antoniou**, DJ Zukor, M Tabrizian, OL Huk. *Effects of cobalt and chromium ions on antioxidant enzymes expression in human U937 macrophages*. 51<sup>st</sup> Annual Meeting of the Orthopaedic Research Society. Feb 20-23, 2005. Washington, DC - Poster.
362. D Stachura, F Mwale, P Roughley, **J Antoniou**. *Limitations of using aggrecan and type X collagen as markers of chondrogenesis in mesenchymal stem cell differentiation*. 51<sup>st</sup> Annual Meeting of the Orthopaedic Research Society. Feb 20-23, 2005. Washington, DC - Poster.
363. F Mwale, Y-K Gong, L Luo, OL Huk, **J Antoniou**, DJ Zukor, A Petit, FM Winnik. *Adhesion and proliferation of non-adherent human U937 macrophages to cell culture dishes coated with a phosphorylcholine-based polymer*. 5<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies. Banff, Alberta. October 10-13, 2004 - Podium

364. A Petit, F Mwale, **J Antoniou**, DJ Zukor, C Tkaczyk, OL Huk. *Cobalt and chromium ions induce protein oxidative damage in human U937 macrophages*. 5<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies. Banff, Alberta. October 10-13, 2004 – Podium.
365. C Tkaczyk, A Petit, F Mwale, **J Antoniou**, DJ Zukor, M Tabrizian, OL Huk. *Heme oxygenase-1 protein expression is stimulated by cobalt ions in human U937 macrophages*. 5<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies. Banff, Alberta. October 10-13, 2004 – Poster.
366. C Fleury, A Petit, F Mwale, **J Antoniou**, DJ Zukor, M Tabrizian, OL Huk. *Effect of cobalt and chromium ions on osteoblasts in vitro*. 5<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies. Banff, Alberta. October 10-13, 2004 – Poster.
367. F. Mwale, C.N. Demers, A. Petit, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Link N stimulates proliferation of young bovine disc cells but are impaired in their ability to increase matrix production*. 5<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies, Banff, Alberta, October 10-13, 2004.
368. C.N. Demers, F. Mwale, A. Petit, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Effect of the amino terminal peptide of link protein on human mesenchymal stem cells*. 5<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies, Banff, Alberta, October 10-13, 2004.
369. F. Mwale, M. Iordanova, C.N. Demers, T. Steffen, P. Roughley, **J. Antoniou**. *Analysis of Proteoglycan Retention by a Cell-Seeded Chitosan-Genipin Scaffold for Engineering an Intervertebral Disc-Like Matrix*. 5<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies, Banff, Alberta, October 10-13, 2004.
370. **J. Antoniou**, F. Mwale, G. Beaudoin, T. Goswami, C.N. Demers, M. Alini. *Differences between Hyaluronidase- and Collagenase-Treated Intervertebral Disc on Quantitative MR Imaging and Disc Matrix Content*. 5<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies, Banff, Alberta, October 10-13, 2004.
371. **J. Antoniou**, F. Mwale, M. Iordanova, T. Goswami, G. Beaudoin, J.C. Iatridis, D. Perie. *Assessment of biomechanical properties of intervertebral nucleus pulposus using quantitative MRI*. 18th European Conference on Biomaterials. October 1-4, 2003. Stuttgart, Germany.
372. **J. Antoniou**, F. Mwale, G. Beaudoin, T. Goswami, C.N. Demers, M. Alini. *Differences between Hyaluronidase- and Collagenase-Treated Intervertebral Disc on Quantitative MR*



- Imaging and Disc Matrix Content*. 2004 Gordon Conference on Musculoskeletal Biology & Bioengineering, Andover, New Hampshire, July 25-30, 2004. (Poster)
373. N.A. Bullett, F. Mwale, D.P. Bullett, D. Stachura, F.-E. Truica-Marasescu, Y.-K. Gong, **J. Antoniou**, F.M. Winnik, S. Lerouge, M.R. Wertheimer. *Polymer surface micropatterning by plasma and VUV-photochemical modification for controlled cell culture of chondrocytes*. 2004 Gordon Conference on Musculoskeletal Biology & Bioengineering, Andover, New Hampshire, July 25-30, 2004. (Poster)
374. F. Mwale, C.N. Demers, D. Stachura, P.-L. Girard-Lauriault, **J. Antoniou**, S. Lerouge, M.R. Wertheimer. *Growth Plate Chondrocytes Adhesion to Nitrogen-Enriched Surfaces: Effect on Sox-9, Aggrecan and Cyclin-B2 Expression*. 2004 Gordon Conference on Musculoskeletal Biology & Bioengineering, Andover, New Hampshire, July 25-30, 2004. (Poster)
375. F. Mwale, M. Iordanova, T. Steffen, P. Roughley, **J. Antoniou**. *Analysis of Proteoglycan Retention by a Cell-Seeded Chitosan-Genipin Scaffold for Engineering an Intervertebral Disc-Like Matrix*. 2004 Gordon Conference on Musculoskeletal Biology & Bioengineering, Andover, New Hampshire, July 25-30, 2004. (Poster)
376. C.N. Demers, F. Mwale, D. Stachura, R. Segal, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Characterization of mesenchymal stem cells from osteoarthritis patients*. 2004 Gordon Conference on Musculoskeletal Biology & Bioengineering, Andover, New Hampshire, July 25-30, 2004. (Poster)
377. C.N. Demers, W. Douglas, V. Lim, A. Petit, T. Steffen, O.L. Huk, D.J. Zukor, **J. Antoniou**, F. Mwale. *Is bovine coccygeal intervertebral disc a suitable model to study human lumbar disc?* 2004 Gordon Conference on Musculoskeletal Biology & Bioengineering, Andover, New Hampshire, July 25-30, 2004. (Poster)
378. **J. Antoniou**, C.N. Demers, R.L. Segal, D. Stachura, A. Petit, O.L. Huk, D.J. Zukor, F. Mwale. *Cell Surface Marker Expression of Mesenchymal Stem Cells from Osteoarthritis Patients*, 38th Canadian Orthopaedic Research Society, June 18-21, 2004. Calgary, AB. (Poster)
379. F. Mwale, M. Iordanova, G. Beaudoin, T. Goswami, M. Alini, **J. Antoniou**. *Effect of Dynamic Loading and Disc Matrix Integrity Monitored by Quantitative Magnetic Resonance Imaging*. 38th Canadian Orthopaedic Research Society, June 18-21, 2004. Calgary, AB. (Poster)
380. C.N. Demers, **J. Antoniou**, A. Petit, O.L. Huk, D.J. Zukor, F. Mwale. *Value and Limitations in Using the Bovine Coccygeal Disc as a Model for the Human Lumbar Disc*. 38th Canadian Orthopaedic Research Society, June 18-21, 2004. Calgary, AB. (Poster)
381. C.N. Demers, **J. Antoniou**, A. Petit, O.L. Huk, D.J. Zukor, F. Mwale. *Link N Cannot Stimulate Matrix Production but Increases Cell Division of Young Bovine Disc Cells*. 38th Canadian Orthopaedic Research Society, June 18-21, 2004. Calgary, AB. (Oral)

382. A Petit, F Mwale, DJ Zukor, **J Antoniou**, OL Huk. *Induction of protein oxidation by cobalt and chromium ions in human U937 macrophages in vitro*. 38th Annual Meeting of the Canadian Orthopaedic Research Society. Calgary, Alberta. June 18-21, 2004. (Poster)
383. A Petit, F Mwale, DJ Zukor, **J Antoniou**, OL Huk. *Cobalt and chromium ions induce nitration of proteins in human U937 macrophages in vitro*. 38th Annual Meeting of the Canadian Orthopaedic Research Society. Calgary, Alberta. June 18-21, 2004. (Poster)
384. A Petit, Y-K Gong, Françoise Winnik, DJ Zukor, **J Antoniou**, OL Huk, F Mwale. *Attachment of non-adherent human U937 macrophages to cell culture dishes coated with a phosphorylcholine polymer*. 38th Annual Meeting of the Canadian Orthopaedic Research Society. Calgary, Alberta. June 18-21, 2004. (Poster)
385. L Luo, A Petit, DJ Zukor, OL Huk, **J Antoniou**, F Mwale. *Effect of cobalt and chromium ions on the expression of matrix metalloproteinase-1 (MMP-1) and tissue inhibitor of metalloproteinase-1 (TIMP-1) in human U937 macrophages in vitro*. 38th Annual Meeting of the Canadian Orthopaedic Research Society. Calgary, Alberta. June 18-21, 2004. (Podium)
386. F. Mwale, M. Iordanova, P. Roughley, **J. Antoniou**. *Study of Chitosan Crosslinked to Genipin as a Cell Scaffold for Disc Tissue Engineering: Retention of Proteoglycan*. 38th Annual Meeting of the Canadian Orthopaedic Research Society. Calgary, Alberta. June 18-21, 2004. (Poster)
387. P.A. Martineau, K.B. Fillion, O. Huk, D. Zukor, L. Pilote, M. J. Eisenberg, **J. Antoniou**. *Impact of Hospital Volume on Cost of Total Hip Arthroplasty in Canada*. 60th Annual Meeting of the Canadian Orthopaedic Association. Calgary, Alberta. June 18-20, 2004. (Poster)
388. **J. Antoniou**, F. Mwale, G. Beaudoin, T. Goswami, C.N. Demers, M. Alini. *Differences Between Hyaluronidase- and Collagenase-Treated Intervertebral Disc on Quantitative MR Imaging and Disc Matrix Content*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Poster)
389. F. Mwale, M. Iordanova, G. Beaudoin, T. Goswami, M. Alini, **J. Antoniou**. *Effect of Dynamic Loading and Disc Matrix Integrity Monitored by Quantitative Magnetic Resonance Imaging*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Poster)
390. N.A. Bullett, F. Mwale, D.P. Bullett, D. Stachura, F.-E. Truica-Marasescu, Y.-K. Gong, **J. Antoniou**, F.M. Winnik, S. Lerouge, M.R. Wertheimer. *Polymer surface micropatterning by plasma and VUV-photochemical modification for controlled cell culture of chondrocytes*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Poster)
391. F. Mwale, C.N. Demers, D. Stachura, P.-L. Girard-Lauriault, **J. Antoniou**, S. Lerouge, M.R. Wertheimer. *Growth Plate Chondrocytes Adhesion to Nitrogen-Enriched Surfaces: Effect*

- on Sox-9, Aggrecan and Cyclin-B2 Expression*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Poster)
392. Y.-K. Gong, L. Luo, A. Petit, O.L. Huk, D.J. Zukor, **J. Antoniou**, F.M. Winnik, F. Mwale. *Stimulation of TNF- $\alpha$  gene expression by cobalt and chromium ions in human U937 macrophages cultured on phosphorylcholine coated surfaces: a comparison with macrophages in suspension*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Oral)
393. F. Mwale, M. Iordanova, T. Steffen, P. Roughley, **J. Antoniou**. *Analysis of Proteoglycan Retention by a Cell-Seeded Chitosan-Genipin Scaffold for Engineering an Intervertebral Disc-Like Matrix*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Poster)
394. C.N. Demers, F. Mwale, D. Stachura, R. Segal, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Characterization of mesenchymal stem cells from osteoarthritis patients*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Poster)
395. C.N. Demers, F. Mwale, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Link N treatment of human mesenchymal stem cells induces chondrogenesis while inhibiting hypertrophy, dedifferentiation and matrix metalloproteinase expression*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Oral)
396. D. Stachura, F. Mwale, C. Demers, P. Roughley, **J. Antoniou**. *Factors influencing chondrogenic differentiation of human mesenchymal stem cells*. IX Annual Canadian Connective Tissue Conference, May 28-30, 2004, Toronto, Ontario. (Poster)
397. A. Petit, F. Mwale, **J. Antoniou**, D.J. Zukor, O.L. Huk. *Wear Products from Total Hip Arthroplasty Induce Protein Oxidation in Human U937 Macrophages*. 50th Annual Meeting of the Orthopaedic Research Society. March 7-10, 2004. San Francisco, CA - Poster.
398. C.N. Demers, W. Douglas, V. Lim, A. Petit, O.L. Huk, D.J. Zukor, **J. Antoniou**, F. Mwale. *Is Bovine Coccygeal Intervertebral Disc a Suitable Model to Study Human Lumbar Disc?* 50th Annual Meeting of the Orthopaedic Research Society. March 7-10, 2004. San Francisco, CA - Poster.
399. F. Mwale, M. Iordanova, C.N. Demers, T. Steffen, P. Roughley, **J. Antoniou**. *Biological Evaluation of Chitosan Salts Cross-linked to Genipin as a Cell Scaffold for disc Tissue Engineering*. 50th Annual Meeting of the Orthopaedic Research Society. March 7-10, 2004. San Francisco, CA - Poster.
400. F. Mwale, **J. Antoniou**, C.N. Demers, S. Heon, N. Servant, G. Kirby, L. Chalifour. *Gender-Dependent Reductions in Vertebrae Length, Bone Mineral Density and Content by Doxorubicin are not reduced by Dexrazoxane in Young Rats: Effects on Growth Plate*. 50th Annual Meeting of the Orthopaedic Research Society. March 7-10, 2004. San Francisco, CA - Poster.

401. F. Mwale, C.N. Demers, M. Aebi, T. Steffen, **J. Antoniou**. *An N-terminal peptide from link protein stimulates collagen synthesis by human bone marrow stromal cells growth in serum-free pellet cultures*. 58th Annual meeting of the Canadian Orthopaedic Association, October 3-5, 2003, Winnipeg, Manitoba. (Poster)
402. F. Mwale, C.N. Demers, P. Roughley, M. Aebi, T. Steffen, **J. Antoniou**. *Transforming growth factor beta 1 stimulates hypertrophic differentiation of human bone marrow stromal cells grown in serum-free pellet cultures*. 58th Annual meeting of the Canadian Orthopaedic Association, October 3-5, 2003, Winnipeg, Manitoba. (Poster)
403. **J. Antoniou**, P. Roughley, M. Aebi, T. Steffen, F. Mwale. *Distinction between normal nucleus pulposus and hyaline cartilage phenotypes for tissue engineering of intervertebral disc*. 58th Annual meeting of the Canadian Orthopaedic Association, October 3-5, 2003, Winnipeg, Manitoba. (Presentation)
404. F. Mwale, M. Iordanova, V. Thernil, J. Chicoine, D. Bullet, M. Aebi, T. Steffen, **J. Antoniou**. *Initial biological evaluation of chitosan cross-linked with genipin as a cell scaffold for disc tissue engineering*. 58th Annual meeting of the Canadian Orthopaedic Association, October 3-5, 2003, Winnipeg, Manitoba. (Poster)
405. **J. Antoniou**, G. Beaudoin, T. Goswami, M. Aebi, F. Mwale, M. Alini, *Matrix content of enzymatically denatured intervertebral discs and corresponding changes in the quantitative MRI signal*. 58th Annual meeting of the Canadian Orthopaedic Association, October 3-5, 2003, Winnipeg, Manitoba. (Poster)
406. O.L. Huk, D.J. Zukor, **J. Antoniou**, F. Mwale, A. Petit. *Effect of cobalt and chromium ions on caspase activity in human macrophages*. 58th Annual meeting of the Canadian Orthopaedic Association, October 3-5, 2003, Winnipeg, Manitoba. (Presentation)
407. O.L. Huk, I. Catelas, D.J. Zukor, **J. Antoniou**, F. Mwale, C. Tkaczyk, A. Petit. *Internalization of metal particles and ions by macrophages in vitro*. 58th Annual meeting of the Canadian Orthopaedic Association, October 3-5, 2003, Winnipeg, Manitoba. (Presentation)
408. D.J. Zukor, O.L. Huk, **J. Antoniou**. *Implications of a manufacturer's recall of acetabular components*. 58th Annual meeting of the Canadian Orthopaedic Association, October 3-5, 2003, Winnipeg, Manitoba. (Poster)
409. N. A. Bullett, D. Bullet, M. Iordanova, **J. Antoniou**, S. elrouge, F. Winnik, M.R. Wertheimer, F. Mwale. *Micropatterning of cells from growth plate, disc or articular cartilage for tissue engineering*. 9<sup>th</sup> Annual Canadian Connective Tissue Conference, July 5<sup>th</sup>-6<sup>th</sup> 2003, Montreal, Quebec – Poster.
410. F. Mwale, P. J. Roughley, **J. Antoniou**. *Distinction between nucleus pulposus and hyaline cartilage: a requisite for tissue engineering*. 9<sup>th</sup> Annual Canadian Connective Tissue Conference, July 5<sup>th</sup>-6<sup>th</sup> 2003, Montreal, Quebec – Poster.

411. F. Mwale, **J. Antoniou**, S. Heon, N. Servant, G.M. Kirby, T. Steffen, M. Aebi, and L. E. Chalifour. *Gender-dependent reductions in vertebral length, bone mineral density and content by doxorubicin are not reduced by dexrazoxane in young rats*. 9<sup>th</sup> Annual Canadian Connective Tissue Conference, July 5<sup>th</sup>-6<sup>th</sup> 2003, Montreal, Quebec – Poster.
412. A. Petit, D.J. Zukor, F. Mwale, **J. Antoniou**, O.L. Huk. *Induction of protein oxidation by wear products from total hip Arthroplasty*. 9<sup>th</sup> Annual Canadian Connective Tissue Conference, July 5<sup>th</sup>-6<sup>th</sup> 2003, Montreal, Quebec – Oral presentation.
413. F. Mwale, M. Iordanova, C.N. Demers, V. Thermil, J.Chicoine, A. Petit, O.L. Huk, D.J. Zukor, T. Steffen, P. Roughley, **J. Antoniou**. *Biological evaluation of chitosan salts cross-linked to genipin as a cell scaffold for disc tissue engineering*. 9<sup>th</sup> Annual Canadian Connective Tissue Conference, July 5<sup>th</sup>-6<sup>th</sup> 2003, Montreal, Quebec – Oral presentation.
414. R. Samadfam, **J. Antoniou**, A.J. De Brum-Fernandes. *Prostaglandin receptors and the expression of OPG in human osteobalsts*. 9<sup>th</sup> Annual Canadian Connective Tissue Conference, July 5<sup>th</sup>-6<sup>th</sup> 2003, Montreal, Quebec – Oral presentation.
415. I. Catelas, H. Vali, A. Petit, D.J. Zukor, **J. Antoniou**, O.L. Huk. *How do Chromium Ions Interact with Macrophages In Vitro*. 29<sup>th</sup> Annual Meeting of the Society for Biomaterials. April 30- May 3<sup>rd</sup>, 2003. Reno,NV – Oral Presentation.
416. P.A. Martineau, K. Filion, X. Zhang, S. Haider, **J. Antoniou**, M. Eisenberg. *In-Hospital Cost Comparison of total hip arthroplasty in Canada and the United States*. 70<sup>th</sup> Annual Meeting of the American Academy of Orhtopaedic Surgeons. February 5-9, 2003. New Orleans, LA – Oral presentation.
417. M. Kobayashi, M. Tanzer, D. Zukor, **J. Antoniou**, U. Feige, A.R. Poole. *Chondrocyte derived IL-1 and TNF are involved in matrix degradation of human osatearthritic cartilage in explant culture*. 49<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. February 2-5, 2003. New Orleans, LA - Poster.
418. F. Mwale, C.N. Demers, A. Petit, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Increased collagen synthesis by human bone marrow stromal cells stimulated with transforming growth factor-beta 1 in serum free pellet cultures*. 49<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. February 2-5, 2003. New Orleans, LA - Poster.
419. F. Mwale, C.N. Demers, T. Moriarty, C. Autexier, A. Petit, O.L. Huk, D.J. Zukor, **J. Antoniou**. *Effect of Triiodothyronine on Human and mouse bone marrow stromal cells*. 49<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. February 2-5, 2003. New Orleans, LA - Poster.
420. I. Catelas, H. Vali, A. Petit, D.J. Zukor, **J. Antoniou**, O.L. Huk. *Internalization of Chromium ions by macrophages in vitro*. 49<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. February 2-5, 2003. New Orleans, LA - Poster.
421. O.L. Huk, A. Petit, I. Catelas, F. Mwale, **J. Antoniou**, D.J. Zukor. *Effect of Cobalt and Chromium Ions on Caspase Activity and on BCL-2/BAX Expression in Human*

- Macrophages*. 49th Annual Meeting of the Orthopaedic Research Society. February 2-5, 2003. New Orleans, LA - Poster.
422. **J. Antoniou**, G. beaudoin, T. Goswani, T. Goswani, F. Mwale, M. Alini. *Quantitative MR imaging and biochemical quantification of enzymatically denatured intervertebral discs*. 49th Annual Meeting of the Orthopaedic Research Society. February 2-5, 2003. New Orleans, LA - Poster.
423. A. Petit, I. Catelas, D.J. Zukor, F. Mwale, **J. Antoniou**, O.L. Huk. *Inhibition de l'expression de Bcl-2 par les ions cobalt et chrome*. 44ième Réunion Annuelle du Club de Recherches Cliniques du Québec. 19-21 septembre 2002. St-Sauveur, Quebec – Oral presentation.
424. O.L. Huk, I. Catelas, D.J. Zukor, F. Mwale, **J. Antoniou**, A. Petit. *Effect des ions cobalt et chrome sur l'activité des caspases*. 44ième Réunion Annuelle du Club de Recherches Cliniques du Québec. 19-21 septembre 2002. St-Sauveur, Quebec- Poster presentation.
425. C. Tkaczyk, A. Petit, I. Catelas, O.L. Huk, **J. Antoniou**, D.J. Zukor, M. Tabrizian. *Macrophage reaction to metal-metal wear particles*. 17th European Conference on Biomaterials. September 11-14, 2002. Barcelona, Spain – Oral presentation.
426. I. Catelas, A. Petit, D.J. Zukor, F. Mwale, **J. Antoniou**, O.L. Huk. *Effect of cobalt and chromium ions on macrophage mortality: apoptosis vs. necrosis*. 57<sup>th</sup> Annual meeting of the Canadian Orthopaedic Association. June 1-4, 2002. Victoria, British Columbia. - Oral presentation
427. **J. Antoniou**, T. Goswani, F. Mwale, G. beaudoin, T. Goswani, M. Alini. *Quantitative MR imaging of enzymatically denatured intervertebral disc*. 57<sup>th</sup> Annual meeting of the Canadian Orthopaedic Association. June 1-4, 2002. Victoria, British Columbia - Oral presentation.
428. A. Petit, I. Catelas, D.J. Zukor, H. Zukor, F. Mwale, **J. Antoniou**, Huk, O.L. *Effect of cobalt and chromium ions on macrophage TNF- $\alpha$  secretion: a kinetic study*. 57<sup>th</sup> Annual meeting of the Canadian Orthopaedic Association. June 1-4, 2002. Victoria, British Columbia. – Poster
429. D.J. Zukor, **J. Antoniou**, O.L. Huk. *Implications of a manufacturer's recall of acetabular components*. 57<sup>th</sup> Annual meeting of the Canadian Orthopaedic Association. June 1-4, 2002. Victoria, British Columbia. – Oral Presentation.
430. O.L. Huk, D.J. Zukor, F. Mwale, **J. Antoniou**, A. Petit. *Inhibition of UHMWPE particle-stimulated TNF- $\alpha$  by pamidronate and clodronate*. 57<sup>th</sup> Annual meeting of the Canadian Orthopaedic Association. June 1-4, 2002. Victoria, British Columbia. - Oral presentation
431. F. Mwale, C.N. Demers, A. Petit, J. Termenoff, V. Lim, J. Fisher, D.J. Zukor, O.L. Huk, A.G. Mikos, P. Roughley, **J. Antoniou**. *Analysis of poly(propylene fumarate-co-ethylene glycol) as a scaffold for use in tissue engineering of intervertebral disc: retention of*

- collagen and proteoglycan*. 57<sup>th</sup> Annual meeting of the Canadian Orthopaedic Association. June 1-4, 2002. Victoria, British Columbia.
432. **J. Antoniou**, C.N. Demers, W. Douglas, A. Petit, Roughley, O.L. Huk, D. J., Zukor, R. Poole, P. F. Mwale. *A synthetic peptide of link protein alters biosynthesis of collagens II, IX and proteoglycan in cultured intervertebral disc cells*. 57<sup>th</sup> Annual meeting of the Canadian Orthopaedic Association. June 1-4, 2002. Victoria, British Columbia.
433. D.J. Zukor, M. Chang, O.L. Huk, **J. Antoniou**. *Modified direct lateral approach in primary THR: comparison of three techniques*. 57<sup>th</sup> Annual meeting of the Canadian Orthopaedic Association. June 1-4, 2002. Victoria, British Columbia. - Poster presentation.
434. F. Mwale, C.N. Demers, A. Petit, O.L. Huk, D.J. Zukor, A.G. Mikos, P. Roughley, A.R. Poole, **J. Antoniou**. *Matrix Assembly by Cells of the Intervertebral Disc Cultured in Poly(Propylene Fumarate-co-Ethylene Glycol) Hydrogels*. VIII Annual Canadian Connective Tissue Conference, May 30-June 1, 2002, Sherbrooke, Quebec – Oral presentation.
435. F. Mwale, C.N. Demers, A. Petit, O.L. Huk, D. Zukor, T. Steffen, P. Rouphey, A.R. Poole, **J. Antoniou**. *Evaluation of biodegradable microporous poly(lactic-co-glycolic acid) for the culture of intervertebral disc cells*. VIII Annual Canadian Connective Tissue Conference, May 30-June 1, 2002, Sherbrooke, Quebec.
436. F. Mwale, C.N. Demers, A. Petit, O.L. Huk, D.J. Zukor, P. Roughley, A.R. Poole, **J. Antoniou**. *Lack of effect of the amino terminal peptide of link protein on the biosynthesis of collagens II, IX, and proteoglycan by cells of the intervertebral disc from young steers*. VIII Annual Canadian Connective Tissue Conference, May 30-June 1, 2002, Sherbrooke, Quebec.
437. C.N. Demers, W. Douglas, V. Lim, O.L. Huk, D.J. Zukor, A.R. Poole, **J. Antoniou**, F. Mwale. *Contents of proteoglycan, and collagens II and IX in bovine intervertebral discs in relation to size and age*. VIII Annual Canadian Connective Tissue Conference, May 30-June 1, 2002, Sherbrooke, Quebec.
438. I. Catelas, A. Petit, C. Fragistakos, F. Mwale, **J. Antoniou**, D.J. Zukor, O.L. Huk. *Quantitative analysis of J774 macrophage death induced by cobalt and chromium ions: apoptosis vs. necrosis*. 28<sup>th</sup> Annual Meeting of the Society for Biomaterials. April 24-27, 2002. Tampa, Florida – Oral presentation.
439. F. Mwale, C.N. Demers, A. Petit, J. Termenoff, V. Lim, J. Fisher, D.J. Zukor, O.L. Huk, A.G. Mikos, P. Roughley, **J. Antoniou**. *Analysis of poly(propylene fumarate-co-ethylene glycol) as a scaffold for use in tissue engineering of intervertebral disc: retention of collagen and proteoglycan*. 28<sup>th</sup> Annual Meeting of the Society for Biomaterials. April 24-27, 2002. Tampa, Florida – Oral presentation.
440. O.L. Huk, D.J. Zukor, **J. Antoniou**, F. Mwale, A. Petit. *Effect of pamidronate and clodronate on UHMWPE particle-stimulated macrophages*. 48<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. February 10-13, 2002, Dallas, TX. – Poster presentation.

441. **J. Antoniou**, G. Beaudoin, T. Goswami, M. Alini, F. Mwale. Quantitative MR imaging of enzymatically denatured intervertebral discs. 48th Annual Meeting of the Orthopaedic Research Society. February 10-13, 2002. Dallas, TX - Poster.
442. **J. Antoniou**, C. Demers, A. Petit, O.L. Huk, D.J. Zukor, R. Poole, F. Mwale. *A synthetic peptide of link protein stimulates synthesis of collagens II and IX, and proteoglycans in intervertebral disc cells.* 48<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. February 10-13, 2002, Dallas, TX. – Poster
443. M. Kobayashi, U. Feige, A.R. Poole, **J. Antoniou**, D.J. Zukor, E. Tchetina, M. Tanzer. *Tumor Necrosis Factor and Interleukin- 1 are involved in matrix degradation of human osteoarthritic articular cartilage.* . 48<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. February 10-13, 2002, Dallas, TX. – Poster
444. A. Petit, D.J. Zukor, F. Mwale, **J. Antoniou**, O.L. Huk. *Bisphosphonates et prothèses totales de la hanche: que disent les études in vitro?* 43<sup>ième</sup> Réunion Annuelle du Club de Recherches Cliniques du Québec. 20-22 septembre 2001. Mont Ste-Anne, Québec. - Oral presentation
445. I. Catelas, A. Petit, **J. Antoniou**, D.J. Zukor, O.L. Huk. *Biochemical pathway of macrophage apoptosis induced by metal ions.* Fourth Combined ORS Meeting. June 1-3, 2001. Rhodes, Greece. - Oral presentation
446. **J. Antoniou**, A. Petit, I. Catelas, D.J. Zukor, O.L. Huk. *Effect of pamidronate on wear particle-stimulated macrophages.* Fourth Combined ORS Meeting. June 1-3, 2001. Rhodes, Greece. - Oral presentation
447. **J. Antoniou**, G. Beaudoin, T. Goswami, M. Alini. *Enzymatic alteration of the quantitative MRI signal in the bovine intervertebral disc.* Fourth Combined ORS Meeting. June 1-3, 2001. Rhodes, Greece – Oral presentation.
448. A. Petit, D.J. Zukor, **J. Antoniou**, O.L. Huk. *Pamidronate modulation of particle-induced TNF- $\alpha$  release.* Canadian Orthopaedic Research Society. June 1-4, 2001. London, Ontario. - Oral presentation
449. A. Petit, I. Catelas, **J. Antoniou**, D.J. Zukor, O.L. Huk. *Implication of caspase-3 in the induction of apoptosis by cobalt and chromium ions.* Canadian Orthopaedic Research Society. June 1-4, 2001. London, Ontario. - Oral presentation
450. **J. Antoniou**, O.L. Huk, A. Petit, D.J. Zukor, F. Mwale. *Human bone marrow stromal cells can differentiate into osteoblasts via a chondrocyte phenotype in pellet cultures.* Canadian Orthopaedic Research Society. June 1-4, 2001. London, Ontario. – Poster
451. **J. Antoniou**, M. Alini, G. Beaudoin, T. Goswami, F. Mwale. *Quantitative MR evaluation of intervertebral disc degeneration induced by trypsin.* Canadian Orthopaedic Research Society. June 1-4, 2001. London, Ontario. – Poster



452. F. Mwale, O. Huk, A. Petit, D. Zukor , **J. Antoniou**. *Human Bone Marrow Stromal Cells Can Differentiate into Osteoblasts Via a Chondrocyte Phenotype in Pellet Culture*. The Canadian Orthopaedic Research Society, London, June 2001 (Poster)
453. F. Mwale, C. Demers, A. Petit, O. Huk, D. Zukor, A.R. Poole, A.G. Mikos., **J. Antoniou**. *Initial Analysis of Injectable Biodegradable Polymers for Applications in Tissue Engineering of the Intervertebral Disc*. Canadian Connective Tissue Conference, Toronto, May 2001 (Presentation)
454. **J. Antoniou**, C. Demers, W. Douglas, D. Ungar, A. Petit, O.L. Huk, D.J. Zukor, R. Poole, F. Mwale. *A synthetic peptide of link protein stimulates biosynthesis of collagens II, IX and proteoglycan in intervertebral disc in vitro*. 7<sup>th</sup> Canadian Connective Tissue Conference. May 25-26, 2001. Toronto, Ontario. – Poster
455. F. Mwale, C. Demers, A. Petit, O.L. Huk, D.J. Zukor, R. Poole, **J. Antoniou**. *Chondrogenic differentiation of human bone marrow mesenchymal stem cells by triiodothyronin*. 7<sup>th</sup> Canadian Connective Tissue Conference. May 25-26, 2001. Toronto, Ontario. - Oral presentation
456. A. Petit, D.J. Zukor, F. Mwale, **J. Antoniou**, O.L. Huk. *Effect of pamidronate on the stimulation of macrophages by alumina ceramic and UHMWPE particles*. 7<sup>th</sup> Canadian Connective Tissue Conference. May 25-26, 2001. Toronto, Ontario. – Poster
457. O.L. Huk, D.J. Zukor, **J. Antoniou**, A. Petit. *Why ceramic particles cause less periprosthetic osteolysis?* 68<sup>th</sup> Annual Meeting of the American Academy of Orthopaedic Surgeons. February 28 - March 4, 2001. San Francisco, CA. – Poster
458. **J. Antoniou**, M. Alini, G. Beaudoin, T. Goswami, F. Mwale. *Quantitative MR assessment of Trypsin-Induced Intervertebral Disc Matrix Degeneration*. The Canadian Orthopaedic Research Society, London, June 2001 (Poster)
459. J.P. Iannotti, **J. Antoniou**, G.R. Williams, M.L. Ramsey. *Iliotibial Graft Reconstruction for Treatment of Glenohumeral Instability (**Winner of the Charles S. Neer Award**)*. American Shoulder and Elbow Surgeons Open Meeting, San Francisco, March 2001(Presentation)
460. S.C. Schiffert, R. Rozencaig, **J. Antoniou**, Thurman Gillespy III, M. Richardson, F. A. Matsen. *Precise Centering of the Humeral Head in the Glenoid In Vivo*. American Academy of Orthopaedic Surgeons, San Francisco, March 2001 (Poster)
461. **J. Antoniou**, S.K. Tae, G.R. Williams, M. L. Ramsey, J.P. Iannotti, MS. Bird. *Suprascapular Neuropathy: Variability in the Diagnosis, Treatment and Outcome*. American Academy of Orthopaedic Surgeons, San Francisco, March 2001 (Poster)
462. **J. Antoniou**, G. Beaudoin, T. Goswami, M. Aebi, M. Alini. *Enzymatic Alteration of the Quantitative Magnetic Resonance Signal in the Bovine Intervertebral Disc*. Orthopaedic Research Society, San Francisco, February 2001 (Poster)

463. **J. Antoniou**, J.P. Iannotti, S.K. Tae, G.R. Williams, S. Bird. *Suprascapular Neuropathy: Variability in the Diagnosis, Treatment and Outcome*. Canadian Orthopaedic Association, Edmonton, June 2000 (Poster)
464. **J. Antoniou** M.D., Ph.D., G. Beaudoin Ph.D., T. Goswami Ph.D., M. Aebi M.D., M. Alini Ph.D. *Controlled Enzymatic Degradation of the Extracellular Matrix in Bovine Intervertebral Discs Induces Changes of Quantitative MR Signals*. Canadian Connective Tissue Conference, Quebec, May 2000 (Presentation)
465. N. Greidanus, **J. Antoniou**, Paprosky M.D. *The Management of Pelvic Discontinuity in Revision Hip Arthroplasty*. American Academy of Orthopaedic Surgeons, Orlando, March 2000 (Presentation)
466. **J. Antoniou**, G. Beaudoin, T. Goswami, M. Aebi, M. Alini. *Use of Apparent Diffusion Coefficient in Disc Degeneration*. Orthopaedic Research Society, Orlando, March 2000 - Finalist New Investigator Research Award
467. **J. Antoniou**, V. Arlet, T. Goswami, M. Aebi, M. Alini. *Matrix Composition and Turnover in Normal versus Scoliotic Intervertebral Discs*. Orthopaedic Research Society, Orlando, March 2000 (Poster)
468. **J. Antoniou**, O. Huk, D. Zukor, D. Eyre, M. Alini. *Cross-linked N-Telopeptides for Evaluating Particulate Osteolysis*. Hospital for Special Surgery Alumni Association, November 1999 (Presentation)
469. **J. Antoniou**, O. Huk, D. Zukor, D. Eyre, M. Alini. *Collagen Cross-linked N-Telopeptides as a Marker for Evaluating Particulate Osteolysis*. International Symposium for Technology in Arthroplasty, Chicago, September 1999 (Presentation)
470. Paprosky , **J. Antoniou**, N. Greidanus. *The Use of Constrained Acetabular Liners in Revision Hip Surgery*. The Hip Society Summer Meeting, San Diego, September 1999 (Presentation)
471. **J. Antoniou**, V. Arlet, T. Goswami, M. Aebi, M. Alini. *Differences in Matrix Turnover in Scoliotic versus Normal Intervertebral Discs*. The Canadian Orthopaedic Research Society, St. John's, July 1999 (Presentation)
472. P. Gill, **J. Antoniou**, N. Greidanus Paprosky. *A Comparison of Hylamer and Enduron Polyethylene Liners Used in Primary Total Hip Arthroplasty*. The Canadian Orthopaedic Association Meeting, St. John's, July 1999 (Poster)
473. **J. Antoniou**, P. Gill, N. Greidanus, Paprosky. *The Use of Constrained Acetabular Liners in Revision Hip Surgery*. The Canadian Orthopaedic Association Meeting, St. John's, July 1999 (Poster)
474. **J. Antoniou**, D. Duckworth, D.T. Harryman. *The Efficacy of Capsulo-Labral Augmentation for Managing Pathologic Findings and Symptoms of Postero-Inferior*

- Instability*. Arthroscopy of North America Annual Meeting, Vancouver, April 1999 (Presentation)
475. **J. Antoniou**, O. Huk, D. Zukor, D. Eyre, M. Alini: Collagen Cross-linked N-Telopeptides as a Marker for Evaluating Particulate Osteolysis. American Academy of Orthopaedic Surgeons. February 1999. Anaheim, CA.
476. **J. Antoniou**, D. Duckworth, D.T. Harryman: The Efficacy of Capsulo-Labral Augmentation for Managing Pathologic Findings and Symptoms of Postero-Inferior Instability. Shoulder and Elbow Specialty Day. February 1999. Anaheim, CA.
477. **J. Antoniou**, O. Huk, D. Zukor, D. Eyre, M. Alini: The Evaluation of Cross-linked N-Telopeptides as Markers of Particulate Osteolysis. Orthopaedic Research Society. February 1999. Anaheim, CA
478. **J. Antoniou**, V. Arlet, T. Goswami, M. Aebi, M. Alini. *Differences in Matrix Composition and Turnover in Scoliotic versus Normal Intervertebral Discs*. Scoliosis Research Society, New York, September 1998 (Presentation)
479. **J. Antoniou**, G. Beaudoin, T. Steffen, M. Aebi, M. Alini. *Assessment of the Intervertebral Disc Matrix through the Use of Apparent Diffusion Coefficient*. Eurospine '98, Innsbruck, June 1998 (Presentation)
480. **J. Antoniou**, G. Beaudoin, T. Goswami, T. Steffen, M. Aebi, M. Alini. *Apparent Diffusion Coefficient in the Assessment of Intervertebral Disc Matrix*. The Canadian Orthopaedic Research Society, Ottawa, June 1998 (Presentation)
481. **J. Antoniou**, O. Huk, D. Zukor, D. Eyre, M. Alini. *Cross-linked N-Telopeptides as Markers for Evaluating Particulate Osteolysis*. The Canadian Orthopaedic Research Society, Ottawa, June 1998 (Presentation)
482. **J. Antoniou**, V. Arlet, T. Goswami, M. Aebi, M. Alini. *Evidence for Differences in Matrix Turnover in Scoliotic versus Normal Intervertebral Discs*. Quebec Scoliosis Society, Montreal, April 1998 (Presentation)
483. **J. Antoniou**, G. Beaudoin, T. Steffen, H.G. Baramki, M. Aebi, M. Alini. *Assessment of the Intervertebral Disc Matrix through the use of Apparent Diffusion Coefficient*. Orthopaedic Research Society, New Orleans, March 1998 (Poster)
484. T. F. Heathfield, N. M. Goudsouzian, **J. Antoniou**, Aebi, M. Alini. *Effect of TGF- $\beta$ 1 on Proteoglycan Synthesis in Isolated Intervertebral Disc Cells*. Orthopaedic Research Society, New Orleans, March 1998 (Poster)
485. E.J. Chiu, D.C. Newitt, M.R. Segal, M. Alini, **J. Antoniou**, S.S. Hu, J.C. Lotz, S. Majumdar. *Correlation of Biochemical and MR Parameters in the Lumbar Intervertebral Disc - In Vitro*. Orthopaedic Research Society, New Orleans, March 1998 (Poster)

486. **J. Antoniou**, G. Beaudoin, T. Steffen, H.G. Baramki, M. Aebi, M. Alini. *Apparent Diffusion Coefficient (ADC) in the Quantitative MR Assessment of Intervertebral Disc Matrix*. The International Society for the Study of the Lumbar Spine, Singapore, June 1997 (Poster)
487. T. F. Heathfield, N. M. Goudsouzian, **J. Antoniou**, Aebi, M. Alini. *Metabolic Studies of Bovine Intervertebral Disc Cells Cultured in Serum-Free Medium: Effect of TGF- $\beta$ 1*. The Canadian Orthopaedic Research Society, Hamilton, May 1997 (Poster)
488. **J. Antoniou**, T. F. Heathfield, N. M. Goudsouzian, Aebi, M. Alini. *Intervertebral Disc Degeneration and Low Back Pain*. Arthritis 2000, Ottawa, April 1997 (Poster)
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