

**Norma Jean MacIntyre**  
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**e. EDUCATIONAL BACKGROUND**

2001 – 2003	Postdoctorate (Mechanical Engineering – Human Mobility Research Centre), Queen’s University, Kingston, ON Canada
1999-2000	Postdoctorate (Medicine – Rheumatology Division), McMaster University, Hamilton, ON Canada
1999	PhD (Medical Sciences - Cell Biology and Metabolism), McMaster University, Hamilton, ON Canada.
1994	MSc (Anatomy and Cell Biology), University of Western Ontario, London, ON Canada.
1985	BSc (Physical Therapy), University of Toronto, Toronto, ON Canada.

**i) *CONTINUING EDUCATION/PROFESSIONAL DEVELOPMENT (last 5 years)***

2008	SPSS Workshop, Queen’s University (1/2 day, 2008-08-15)
2007-2008	Mentorship Program Series, McMaster University (4 sessions)
2007	3T MRI Certification Course (Accreditation Level 1) St. Joseph’s Hospital, Hamilton, ON (1 day, 2007-11-15)
2007	Course Revision Session, Paola Borin, Centre for Leadership in Learning, McMaster University (3 hours, 2007-11-13)
2007	Learning Lunch Series: Engaging Students in their Learning, Centre for Leadership in Learning, McMaster University
2007	Writing for Publication Workshop (2 Days, 2007-06-11 to 2007-06-12) McMaster University.
2007	Bone Safety Evaluation Training and Certification, IONMed Systems (2 days)
2005	Advancing your Research and Scholarship Career: A Day of Practical Advice. Office of Research Services, Queen’s University. (1 day)
2005	Focus on Foundations: Course Planning, Centre for Teaching and Learning. Queen's University. (2 hr, 2005-01-26)
2005	Focus on Graduate Supervision: Supervision: Expectations and Standards, Centre for Teaching and Learning. Queen's University.
2004	Focus on Foundations: Lecturing. Instructional Development Centre, Queen's University
2004	Resources for the Practice of Evidence-Based Health Care, Faculty Development Program, Queen's University
2004	Evidence Based Medicine Series, Faculty Development Program, Queen’s University
2003	Life-Savers for Large Classes: Jeopardy, Jigsaws, and Jpegs, Instructional Development Centre, Queen’s University
2003	Preparing Teaching Dossiers for Promotion and Professional

Development, Faculty Development Program, Queen's University.

#### **f. CURRENT STATUS**

- 2007 – 2010 Assistant Professor (Initial Tenure-Track) Physiotherapy Program, School of Rehabilitation Science, Faculty of Health Sciences, and School of Graduate Studies, McMaster University, Hamilton, ON Canada
- 2008 – 2010 Assistant Professor (Associate Member), Department of Kinesiology, Faculty of Science, McMaster University, Hamilton, ON Canada
- 2007 - date Assistant Professor (Adjunct), School of Rehabilitation Therapy, Faculty of Health Sciences, Queen's University, Kingston, ON Canada

#### **g. PROFESSIONAL ORGANIZATIONS**

- 2007 – date Networks of Centres of Excellence, Canadian Arthritis Network, Network Investigator
- 2002 – date Association of Rheumatology Health Professionals, Member (Education Committee: Planning Subcommittee 2007-2009; Appointed)
- 1985 – date Canadian Physiotherapy Association (CPA #13350)
- 1985 - date Ontario Physiotherapy Association & Orthopedic Division, Member
- 1985 – date Licensed with College of Physiotherapists of Ontario (#6343)
- 1996 – 2007 American Society for Bone and Mineral Research, Member

#### **h. EMPLOYMENT HISTORY**

##### **i) ACADEMIC**

- 2007 – 2010 **McMaster University** Assistant Professor (Initial Tenure-Track), [School of Rehabilitation Science MSc (Physiotherapy) Program, MSc/PhD (Rehabilitation Science) Graduate Program], Hamilton ON
- 2003 – 2006 **Queen's University**, Assistant Professor (Tenure-Track) [School of Rehabilitation Therapy BSc (PT/OT) Program, MSc (PT/OT) Program], MSc/PhD (RHBS) Graduate Program) Kingston, ON

##### **ii) OTHER – TEACHING**

- 2002 **Queen's University**, Kingston, ON. School of Rehabilitation Therapy. Guest Lecturer, BSc (Physical Therapy) Program
- 2000 – 2001 **McMaster University**, Hamilton, ON. School of Rehabilitation Science. Clinical Lecturer, MSc (Physiotherapy) Program
- 1996 – 2000 **McMaster University**, Hamilton, ON. School of Rehabilitation Science. Sessional Instructor, BHSc (Physiotherapy) Program
- 1994 – 1998 **McMaster University**, Hamilton, ON. School of Rehabilitation Science, Teaching Assistant, BHSc (Physiotherapy) Program Units I, II, III, V, VI
- 1992 – 1994 **University of Western Ontario**, London, ON. Department of

1992 Anatomy. Teaching Assistant, Gross Anatomy  
**University of Western Ontario**, London, ON. Department of Anatomy. Private Tutor, Neuroanatomy

### iii) **OTHER – RESEARCH**

2007 – date **McMaster University**, (School of Rehabilitation Science Musculoskeletal and Mobility Aging and Participation Research Groups), Hamilton, ON. Principal Investigator.

2003 – date **Queen’s University**, (Human Mobility Research Centre), Kingston, ON. Principal Investigator

2001 – 2003 **Queen’s University**, (Human Mobility Research Centre, Department of Mechanical Engineering), Kingston, ON Postdoctoral Fellow.

1999 – 2000 **McMaster University**, (Rheumatology Division, Department of Medicine) Hamilton, ON. Postdoctoral Fellow.

1996 – 1999 **McMaster University**, (Dr. H. Larin’s Motor Teaching Strategies Lab, School of Rehabilitation Science), Hamilton, ON. Research Assistant.

### iv) **CLINICAL**

1992 – 1999 **Community Rehab Services**, Kincardine, ON. Casual Part-time Orthopaedic Physiotherapist

1996 **Work Recovery Centre**, Hamilton, ON Casual Part-time Orthopaedic Physiotherapist

1990 – 1991 **The Physiotherapy Centre of Southwestern Ontario**, London, ON. Associate Physiotherapist

1989 – 1990 **Victoria Hospital**, London, ON. Non-rotating Orthopaedic Physiotherapist

1988 – 1989 **Wingham and District Hospital**, Wingham, ON. Staff Physiotherapist

1987 – 1988 **Palmerston and District Hospital**, Palmerston, ON. Charge Physiotherapist

1985 – 1987 **Listowel Memorial Hospital**, Listowel, ON. Staff Physiotherapist

### i. **SCHOLARLY AND PROFESSIONAL ACTIVITIES**

#### i) **EDITORIAL BOARD**

2007 – date *Physiotherapy Canada*, Associate Editor (13 new/revised manuscripts since 2007-07-01; 2008-02: adjudicator of 9 student-led manuscripts published in 2007 for Silver Quill Award)

#### ii) **GRANT AND PERSONNEL COMMITTEES**

2007 – 2008 Ministry of Training, Colleges and Universities Ontario Graduate Scholarship Program Academic Selection Panel (Therapeutic Sciences), Member (reviewed and ranked 94 applications)

**iii) JOURNAL REFEREE**

- 2003 – 2007 *Physiotherapy Canada* (3 manuscripts)  
 2006 – date *Osteoporosis International* (4 manuscripts)  
 2006 – date *Journal of Orthopaedic Research* (3 manuscripts)  
 2007 – date *Archives of Physical Medicine and Rehabilitation* (3 manuscripts)  
 2007 – date *Physical Therapy* (3 manuscript)  
 2008 – date *Bone* (1 manuscript)  
 2008 – date *Clinical Journal of Sports Medicine* (1 manuscript)

**iv) EXTERNAL GRANT/SPECIAL PROJECT REVIEWS**

- 2008 Beta tester of learning module for the Nurse Practitioner and Physician Assistant Post-Graduate Rheumatology Training Program developed by the Association of Rheumatology Health Professionals – a division of the American College of Rheumatology. Module Title: Imaging of Arthritis and the Approach to the Diagnosis of Inflammatory Disease.
- 2007 External reviewer of CIHR Operating Grants application, Pharmaceutical Sciences Committee (1 grant)
- 2007 External reviewer of NSERC Discovery Grant application (1 grant)
- 2007 External review/evaluation, Report prepared by WorkSafeBC Evidence Based Practice Group submitted to Policy & Research Division (solicited to evaluate rigour of report and relevance to policy) (1 report)

**v) OTHER****Abstract Referee**

- 2006 World Confederation for Physical Therapy [18 abstracts reviewed]

**Planning Committees**

- 2005 8<sup>th</sup> Annual Meeting for Faculty of Health Sciences Research Trainees, Queen's University [reviewed 112 abstracts submitted for presentation]

- 2007-2009 Association of Rheumatology Health Professionals Committee on Education - Program Subcommittee. Develop, implement and evaluate the leadership development workshops and scientific content for the annual scientific meetings [annually review and rank contributed proposals for presentations; review contributed abstracts; develop scientific sessions, moderate sessions at annual meeting]

**Poster Judge**

- 2008 Canadian Arthritis Network Annual Scientific Conference; Adjudicator of trainee poster presentation competition 2008-10-17
- 2005 8<sup>th</sup> Annual Meeting for Faculty of Health Sciences Research Trainees, Queen's University; Adjudicator of trainee poster presentation competition 2005-05-31

**j. AREAS OF INTEREST**

- Research** Optimization of bone and joint competence in order to keep people moving and participating in meaningful activities.

**Education** Problem based physiotherapy education in assessment and management of musculoskeletal conditions; Skeletal health and disease; Rheumatology, Evidence based practice.

**k. HONOURS AND AWARDS**

2001 – 2003	The Arthritis Society/CIHR Health Research Partnership Fund Postdoctoral Fellowship
1999	Alice L. Jee Memorial Award for Junior Investigators (University of Utah)
1999	The Anne Hall Memorial Prize (McMaster University)
1996 – 1999	Father Sean O'Sullivan Research Centre Studentship Award
1997	The Anne Hall Memorial Prize (McMaster University)
1997 – 1998	Ontario Graduate Scholarship (declined)
1994 – 1995	McMaster University Centennial Entrance Scholarship
1994 – 1995	Ontario Graduate Scholarship
1991 – 1993	University of Western Ontario Special University Scholarship

**I. COURSES TAUGHT (last 5 years)**

**i) UNDERGRADUATE LEVEL**

2004	Bachelor of Science (Physical Therapy and Occupational Therapy) Program, Queen's University RHBS 322* Fundamentals of Motor Performance II. Role: Course Coordinator and Instructor (76 students; 27 contact hours)
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**ii) GRADUATE LEVEL**

**a) McMaster University**

2008	Masters of Science (Physiotherapy) Program, Unit VI – Integrated Practice and Professional Transition. Role: Unit Chair (54 students; overall student rating for Unit: 8.1/10; overall student rating for instructor 9/10)
2008	Masters of Science (Physiotherapy) Program, PT *731 Integrated Physiotherapy Practice – Problem-Based Tutorials Course VI. Role: Course Coordinator (54 students; overall student rating for course: 8.3/10; overall tutor rating for course coordinator role: 9.8/10)
2008	Masters of Science (Physiotherapy) Program, PT *732 Integrated Physiotherapy Practice – Laboratory Course VI. Role: Course Coordinator and Instructor (54 students; 150 contact hours; overall student rating for course: 8.1/10; overall student rating for instructor 8.8/10)
2007-date	Masters of Science (Physiotherapy) Program, Rheumatology/Chronic Diseases Stream Coordinator
2007	Masters of Science (Physiotherapy) Program, PT *732 Integrated Physiotherapy Practice – Laboratory Course VI. Role: Course Coordinator and Instructor (56 students; 150 contact hours; overall student rating for

course: 8.2/10; overall student rating for instructor 8.4/10)

**b) Queen's University**

- 2006 Masters of Science (Rehabilitation Therapy), PT 864\* Multifactor Dysfunction. Role: Coordinator of Rheumatology Module; Instructor (*Classification of Rheumatologic Diseases and Pathogenesis and Clinical Manifestations of Rheumatoid Arthritis*); Coordinator of Objective Structured Clinical Examination (48 students; 27 contact hours)
- 2005/06 Masters of Science (Rehabilitation Therapy), OT/PT 892\* Evidence Based Practice. Role: Course Coordinator and Instructor (95 students; 27 contact hours)
- 2005 Masters of Science (Rehabilitation Therapy), PT 851\* Muscle Dysfunction. Role: Course Coordinator and Instructor (48 students; 40 contact hours)
- 2005 Masters of Science (Rehabilitation Therapy), OT/PT 892\* Evidence Based Practice. Role: Course Coordinator and Instructor (9 students; 27 contact hours)
- 2004 Masters of Science (Rehabilitation Therapy), PT 851\* Muscle Dysfunction. Role: Course Coordinator and Instructor (46 students; 63 contact hours)
- 2004 Masters of Science (Rehabilitation Therapy), OT/PT 892\* Evidence Based Practice. Role: Course Coordinator and Instructor (27 students; 27 contact hours)

**iii) POSTGRADUATE LEVEL**

- 2007 Continuing Health Sciences Education Course, McMaster University "Managing Vertebral Fractures". 2007-11-07 Role: Lecturer (Performance-based assessment of functional risk for vertebral fracture. Hamilton, ON (overall rating (by 108 participants) for lecture 4.12/5)

**iv) OTHER****a) Undergraduate Level**

- Fall 2005 Bachelor of Science (Mechanical Engineering), Queen's University MECH 212; Role: Supervisor of Design Project (4 students; 12 contact hours)
- Fall 2005 Bachelor of Science (Physical Therapy), Queen's University PT 419\* Role: Examiner in Objective Structured Clinical Examination (48 students; 6 contact hours)
- Spring 2005 Bachelor of Science (Physical Therapy), Queen's University PT 314/316/317\* Role: Examiner in Objective Structured Clinical Examination (48 students; 6 contact hours)
- Fall 2004 Bachelor of Science (Physical Therapy), Queen's University PT 417\* Research Methods. Role: Research Project Supervisor (8 students – 2 projects)
- Winter 2003 Bachelor of Science (Physical Therapy), Queen's University PT 211\* Introduction to Patient Evaluation Role: Examiner in Objective Structured Clinical Examination (48 students; 4 contact hours)
- Fall 2003 Bachelor of Science (Physical Therapy), Queen's University PT 417\* Research Methods. Role: Research Project Supervisor (4 students – 1 project)

**b) Graduate Level**

- Summer 2008 Masters of Science (Physiotherapy) Program, McMaster University PT \*622 Laboratory Course II. Role: Second Examiner in remedial Objective Structured Clinical Examination (1 student; 1 contact hour)
- Spring 2008 Masters of Science (Physiotherapy) Program, McMaster University PT \*632 Laboratory Course III. Role: Examiner in Objective Structured Clinical Examination (35 students; 4 contact hours)
- 2007/08 Masters of Science (Rehabilitation Science) McMaster University On-line Course-Based Option RS 730 Scholarly Paper. Supervisor of Clementine Wu's scholarly paper entitled: "Real-time ultrasound imaging in physiotherapy assessment and treatment of transverses abdominus and multifidus muscles in individuals with low back pain." (1 student; 40 hours)
- Fall 2007 Masters of Science (Physiotherapy) Program, McMaster University PT \*712 Laboratory Course IV. Examiner in Objective Structured Clinical Examination (27 students; 4 contact hours)
- Spring 2007 Masters of Science (Physiotherapy) Program, McMaster University PT \*613 Professional Issues Course III. Lecture: *Biomechanics of Gait in the Elderly*. (1.5 hours)

- Winter 2007 Masters of Science (Rehabilitation Science), McMaster University On-line Course-Based Option RS 730 Scholarly Paper. Second reader of Janet Law's scholarly paper entitled: "Hand function in people with rheumatoid arthritis: its impact on employment and strategies to remain in workforce." (1 student; 4 hours)
- Winter 2007 Masters of Science (Physiotherapy) Program, McMaster University PT \*722 Laboratory Course V. Role: Examiner in Objective Structured Clinical Examination (22 students; 4 contact hours)
- Winter 2006 Masters of Science (Rehabilitation Science), Queen's University RHBS 874\* Issues in Aging. Lecture/Seminar: *Bone Adaptations to Metabolic Perturbations and Physical Loading*. (3 hours)
- Fall 2005 Masters of Science (Rehabilitation Science), Queen's University RHBS 801/901 Motor Performance. Lecture and Lab session: *Tools for Assessing Bone Quality*. (3 hours)
- Spring 2005 Masters of Science (Physical Therapy), Queen's University PT 856/857/858/859\* Role: Examiner in Objective Structured Clinical Examination (44 students; 8 contact hours)
- Winter 2004 Masters of Science (Rehabilitation Therapy), Queen's University PT 862\* Decision Making in Clinical Practice. Seminar: *Interpreting Bone Density Results in the Diagnosis of Osteoporosis*. (3 contact hours; also set and evaluated case-based examination questions related to this content)
- Winter 2004 *Bone Biomechanics*. Lecture and Lab session (3 hours) Masters of Science (Rehabilitation Science), RHBS 801/901 Motor Performance.
- Spring 2003 Bachelor of Science (Physical Therapy), Queen's University PT 419\* Tutor in lab sessions: *Manual Therapy Workshop*. (14 hours).
- Spring 2002 Bachelor of Science (Physical Therapy) Program, PT 215 Musculoskeletal Management I, Queen's University Lecture and lab sessions: *Physiotherapeutic Assessment and Management of Knee Conditions*. Lecture (14 contact hours)

**c) Service On Examination Committees  
McMaster University**

<b>Student</b>	<b>Committee</b>	<b>Date</b>
Annie Doan	MSc Defense (Medical Sciences)	2007-06-18
Examiner (internal/external); Thesis Title: Validating the use of magnetic resonance imaging as a clinical tool in knee osteoarthritis.		

Heather Colquhoun PhD Transfer Meeting (Rehabilitation Science) 2007-07-25  
Examiner (internal/external); Proposed PhD Thesis Title: Routine administration of the Canadian Occupational Performance Measure: Effect on functional outcomes and patient centred care

Nisha Sivagurunathan MSc Defense (Medical Sciences) 2007-09-24  
Examiner (internal/external); Thesis Title: Bone health in obese children during weight management

Jacqueline Minezes MSc Defence (Rehabilitation Science) 2007-12-05  
Examiner (internal/external); Thesis Title: Predictors of accessibility problems and adaptations in the homes of older adults

Prajyot Kumta MSc Defence (Rehabilitation Science) 2008-07-08  
Chair; Thesis Title: Reliability and validity of the Fit-HaNSA in patients with shoulder pathology

Elena Bamm PhD Transfer Meeting (Rehabilitation Science) 2008-07-10  
Examiner (internal/external); Proposed PhD Thesis Title: Validation of the Measure of Processes of Care for Adults (MPOC-A): A measure of family-centeredness of healthcare services

Sarah Wojkowski PhD Transfer Meeting (Rehabilitation Science) 2008-11-25  
Examiner (internal/external); Proposed PhD Thesis Title: Utilization of physiotherapy services by people with chronic health conditions.

### Queen's University

<b>Student</b>	<b>Committee</b>	<b>Date</b>
Mei Wang	MSc Defense (Mechanical Engineering) Examiner (internal/external); Thesis Title: Prediction of back strength using anthropometric and strength measurements.	2003-09-25
Ying Jiang	MSc Defense (Rehabilitation Therapy) Examiner (internal); Thesis Title: The role of external sensory cues in gait initiation of subjects with Parkinson's Disease.	2003-10-24
Matthew T. Davis	MSc Defense (Nursing) Chair; Thesis Title: Iron mediated oxygen free radical damage and the cardioprotective effects of ebselen in the mouse.	2004-04-20
Elizabeth Sled	PhD Comprehensive Examination Examiner (Research-Specific Topic Area).	2004-08-16
Antonella Gilmour	MSc Defense (Nursing) Chair; Thesis Title: Fetal behaviour in normal weight and overweight pregnant	2004-11-10

women.

Martin Héroux Examiner (Rehabilitation Science Topic Area)	PhD Comprehensive Examination	2005-03-22
Fabiola Gonçalves Examiner (internal); Thesis Title: Abdominal and pelvic floor muscle activation patterns during coughing in women with and without stress urinary incontinence.	MSc Defense (Rehabilitation Therapy)	2005-08-10
Stephanie Madill Examiner (Research-Specific Topic Area).	PhD Comprehensive Examination	2005-08-26
Kristina Calder Examiner (Motor Performance Topic Area).	PhD Comprehensive Examination	2006-03-09
Theodorus Potma Examiner (internal/external); Thesis Title: Explorations of the motion and geometry of the human knee.	MSc Defense (Computing)	2007-03-27

#### m. SUPERVISORSHIPS

	In Progress	Completed
<b>Masters Theses</b>	<b>1</b>	<b>2</b>
<b>Masters REBP/Critical Enquiry Projects/ Scholarly Papers</b>	<b>2</b>	<b>8</b>
<b>Doctoral Theses</b>	<b>0</b>	<b>0</b>
<b>Postdoctoral Training</b>	<b>1</b>	<b>0</b>
<b>Supervisory Committees</b>	<b>2</b>	<b>3</b>
<b>Others</b>	<b>5</b>	<b>9</b>

#### i) **MASTER**

##### a) **Research Theses**

##### **In Progress**

Beto Loyola, MSc (Rehabilitation Science) student, McMaster University, 2008 – date.  
Role: Co-supervisor (with Dr. J. Richardson) Thesis: “Effect of therapeutic ultrasound on cartilage volume in persons with knee osteoarthritis.”

##### **Completed**

Meghan Crookshank, MSc (Mechanical Engineering/MECH 899) student, Queen’s University, 2005 – 2008. Role: Co-supervisor (with Dr. R. Sellens – on sabbatical 2005-07-01 to 2006-06-30) Thesis: “Optimizing Fracture Management: Correlating the physical and mechanical properties of bone to computed tomography to generate an estimate of bone quality.”

Brooke McKnight: MSc (Rehabilitation Science/RHBS 899), Queen’s University, 2003 – 2005. Role: Primary co-supervisor (with Dr. E. Culham) Thesis: “A longitudinal study of

normative patterns of patellar tracking assessed in vivo using magnetic resonance imaging”

### **b) Course-based Masters REBP/Critical Enquiry Projects and Scholarly Papers In Progress**

Christina Hallet, Nalin Fernando, Maggie Szelagowska, Jake Tumber MSc (PT) REBP6 students, McMaster University. Role: Co-supervisor (with Sydney Lineker). Project Title: Evaluation of knowledge acquired in the pre-licensure physiotherapy problem-based curriculum regarding best practice for management of clients with rheumatoid arthritis and osteoarthritis 2008-12-03 to 2009-07-17.

Jennifer Coombs, Diana Horobetz, Alexis Petric, Mara Pimm MSc(PT) REBP6 students, McMaster University. Role: Co-supervisor (with Dr. Karen Beattie) Project Title: Agreement between MScPT students and rheumatologists in scoring a musculoskeletal screening tool for arthritis case finding. 2008-11-28 to 2009-07-17.

### **Completed**

Clementine Wu, MSc (Rehabilitation Science) RS 730 student. McMaster University, Role: Supervisor. Scholarly Paper Title: “Merit of using real-time ultrasound imaging in physiotherapy treatment of transverses abdominus and multifidus muscles in individuals with low back pain.” 2007-07 to 2008-03

France Belisle-Leclerc & Brooke McKnight: MSc (Physical Therapy/PT 898) students, Queen’s University, 2006 - 2007. Role: Supervisor. Critical Enquiry Project Title: “Normal knee joint kinematics in physically active young males.” 2006-06 to 2007-08

Crista Stanley & Caitlin Williams: MSc (Physical Therapy/PT 898) students, Queen’s University, Role: Supervisor. Critical Enquiry Project Title: “Assessment of patellofemoral joint kinematics pre and post ACL reconstruction.” 2006-06 to 2007-08

Aaron Hunt & Jessa Eng: MSc (Physical Therapy/PT 898) students, Queen’s University, 2006-2007. Role: Supervisor. Critical Enquiry Project Title: “Reliability of clinical tests used to assess patellar alignment.” 2006-06 to 2007-08

Jennifer Baur & Vanita Chandra: MSc (Physical Therapy/PT 898), Queen’s University, Role: Supervisor. Critical Enquiry Project Title: “Responsiveness of a novel magnetic resonance imaging method of assessing patellar tracking.” 2005-11 to 2006-08

Nathan Doherty & Jason Gallant: MSc (Physical Therapy/PT 898), Queen's University, Role: Supervisor. Critical Enquiry Project Title: “Comparing the effects of two different strategies of applying external loads on kinematics of the patellofemoral joint.” 2005-11 to 2006-08

Erik Schmidt & Mike Postic: MSc (Physical Therapy/ PT 898), Queen’s University, Role: Supervisor. Critical Enquiry Project Title: “Assessment of patellofemoral joint kinematics pre and post ACL reconstruction.” 2005-11 to 2006-08

Frances Hoy: MSc (Physical Therapy/ PT 898), Queen's University, Role: Supervisor. Critical Enquiry Project Title: "Medial hamstring strength changes after anterior cruciate ligament reconstruction using semitendinosus tendon autografts." 2003-09 to 2004-08

## ii) **DOCTORAL**

### **Withdrawn**

Jafar Sadiq Abdulkareem: PhD (Rehabilitation Science/RHBS 999) student, Queen's University, Role: Supervisor. Thesis: "Identification of key architectural and compositional features of cortical and trabecular bone that best reflect bone strength." 2005-09-02 to 2006-08-31. (During my medical leave in 2006, Jafar elected to withdraw from the PhD program.)

## iii) **POST-DOCTORAL**

### **In Progress**

Katarzyna Gdela. Postdoctoral Fellow, McMaster University. Role: Co-supervisor (with Dr. C. Webber, Professor Emeritus) Project Title: "Numerical simulation of osteoporotic distal radius fracture." 2008-07—01 to 2010-06-30.

## iv) **SUPERVISORY COMMITTEES**

### **In Progress**

Michelle Marcinow. MSc (Medical Sciences) student, McMaster University, Thesis: "Effectiveness of a nutritional intervention on bone health in children with long-term anti-epileptic medication use." 2007-09-01 to date.

Rosemarie Rombough, PhD (Rehabilitation Science/RHBS 999), Queen's University, Thesis: "Effect of exercise on the bone and muscle in stroke survivors" 2007-09-01 to date.

### **Completed**

Prajyot Kumta, MSc (Rehabilitation Science), McMaster University, 2007 – 2008. Thesis: "A study design for examining the test retest reliability and concurrent construct validity of a new functional performance test for the shoulder – the FIT-HaNSA."

Ted Potma MSc (Computing/CISC 899), Queen's University, 2004-2007. Thesis: "Explorations of the motion and geometry of the human knee."

Fabiola Gonçalves, MSc (Rehabilitation Science/RHBS 899), Queen's University, 2003 – 2005. Thesis: "Abdominal and pelvic floor muscle activation patterns during coughing in women with and without stress urinary incontinence."

## v) **OTHERS**

### **a) Undergraduate**

#### **In Progress**

In Young (Jennifer) Shin, HTH SCI 4A09 Thesis Project. Role: Supervisor. Project Title: "Feasibility of a magnetic resonance imaging (MRI)-based method to evaluate severity of hand osteoarthritis." 2008-09-01 to 2009-05-31

Celine Yeung, BHSc student (Yr2), McMaster University, Role: Supervisor of volunteer work 2008-12-01 to 2009-04-07

### **Completed**

Valerie Leuty, BHSc (Yr3) NSERC Undergraduate Summer Research Award (USRA) recipient, McMaster University, Role: Supervisor. Project Title: "Segmentation of radius bone surfaces in computed tomography images of cadaveric forearms" Summer 2008

Yao Wang, BHSc (Yr2), McMaster University, Role: Supervisor of summer research work. Summer 2008

Jessica Lydiate, BHSc (Yr2), McMaster University, Role: Supervisor of volunteer work Fall/Winter terms 2007/08

Blake Sedore, BSc (Mechanical Engineering) NSERC USRA recipient, Queen's University. Role: Supervisor. Project Title: "Development of protocols for mechanical testing and ash weight determination of the radius bone" Summer 2006

Katie Higgins, BSc (Physical Therapy) CIHR Health Professional Research Studentship recipient, Queen's University. Role: Co-supervisor (with Dr. L. Pelland) Project Title: "Development of a protocol for evaluating dynamic stability pre- and post reconstruction of the anterior cruciate ligament" Summer 2005

Naheed Janmohamed BA (Health Studies) student, Queen's University. Role: Supervisor of research assistant funded by work study program. 2005 – 2006

### **b) Postgraduate In Progress**

Carrie Stavness, MSc(OT, McMaster University), Research Assistant, Role: Supervisor of work related to study of reliability and validity of the Bone Safety Evaluation tool for determining risk for osteoporotic fracture. 2007-06-01 to date

### **Completed**

Judith Seary, BSc (Mech Eng & Biology, Queen's University), Research Assistant (0.5 FTE) Queen's University. Role: Supervisor of construction of virtual models from CT scans and laser scans for a research project aiming to estimate bone quality from calibration of CT hounfield units. 2006-01-02 to 2006-04-30

Degen Southmayd, BScE (Biological Engineering, University of Guelph), Research Assistant (0.5 FTE) Queen's University. Role: supervisor of research project work on calibration of CT hounsfield units to estimate bone quality. 2004-09-01 to 2005-06-30

### **vi) HONOURS AND AWARDS RECEIVED BY TRAINEES SUPERVISED**

Valerie Leuty, BHSc, McMaster University, Recipient of NSERC Undergraduate Student Research Award. Summer Term 2008

Katarzyna Gdela, Postdoctoral Fellow, McMaster University. Recipient of H.G. Thode

Postdoctoral Fellowship (2008-07-01 to 2010-06-30)  
 Meghan Crookshank, MSc (Mech Eng), Queen's University, Recipient of CIHR Canada Graduate Scholarships Master's Award (2006-07-01 to 2007-06-30)  
 Blake Sedore, BSc (Mech Eng), Queen's University. Recipient of NSERC Undergraduate Student Research Award. Summer Term 2006  
 Brooke McKnight, MSc (Physical Therapy), Queen's University, Recipient of Faculty of Health Sciences Award for Excellence in Research – Poster Presentation 2005  
 Katie Higgins, BSc (Physical Therapy), Queen's University. Recipient of CIHR Health Professional Student Research Award. Summer Term 2005  
 Francis Hoy, MSc (Physical Therapy), Queen's University. Recipient of School of Rehabilitation Therapy book prize for best poster 2004

**n. RESEARCH FUNDING (current and held in last 5 years)**

1. Title: The sensitivity of the GALS (Gait, Arms, Legs, Spine) examination for detecting inflammatory arthritis in primary care.  
 Agency: Canadian Initiative for Outcomes in Rheumatology Care (CIORA) – unrestricted educational grant through Abbott Laboratories Ltd.  
 Amount awarded: \$50,705.74  
 Period: 2009-2010  
 Investigators (Roles): K Beattie (PI), JD Adachi, R Bobba, A Cividino, M Larche, NJ MacIntyre, I Schabert (Co-Investigators)
2. Title: Hand impairments, dexterity, and function of persons with osteoarthritis or rheumatoid arthritis of the hand – a model of disability  
 Agency: American Society for Hand Therapists (ASHT) – Evelyn Mackin Grant for Research in Hand Therapy  
 Amount awarded: \$5,000  
 Period: 2007 – 2008  
 Investigators (Roles): NJ MacIntyre (PI), J Wessel, V Galea (Co-Investigators)
3. Title: Novel methods to assess bone quality in vivo and determine critical factors associated with bone and joint health  
 Agency: Canadian Foundation for Innovation (CFI): Infrastructure Operating Funds (CFI IOF #10097)  
 Amount awarded: \$16,320  
 Period: 2006 – 2011  
 Investigators (Roles): NJ MacIntyre (PI)
4. Title: Client-centred 'tune-ups': do they enhance community reintegration and mobility in stroke survivors?  
 Agency: Heart and Stroke Foundation-ON (HSFO), Stroke Rehabilitation Special Competition Amount awarded: \$680,734  
 Period: 2006 – 2009  
 Investigators (Roles): B Brouwer & J Garland (Co-PIs), D Bryant, D Connelly, NJ MacIntyre, M Maly, P Minnes, L Pelland (Co-Investigators)

5. Title: Identification of noninvasive measures of apparent bone quality that predict risk of fracture  
Agency: Natural Sciences and Engineering Research Council (NSERC): Individual Discovery Grant. (NSERC RGPIN 311896-05)  
Amount awarded: \$111,000  
Period: 2005 – 2011  
Investigators (Roles): NJ MacIntyre (PI)
6. Title: Optimizing fracture management with information technology: Planning, treatment and assessment outcomes.  
Agency: Canadian Institutes of Health Research: New Emerging Team (CIHR-NET; QNT-68721)  
Amount awarded: \$1,477,945  
Period: 2004 – 2009  
Investigators (Roles): D Pichora & RE Ellis (Co-PIs), P Abolmaesumi, TJ Bryant, P Fenton, NJ MacIntyre, Y Petit, J Rudan, R Sellens, J Stewart, J Yach (Co-Investigators)
7. Title: Psychometric properties of a performance based assessment tool, Bone Safety Evaluation, designed for assessment of individuals with osteoporosis.  
Agency: MECK Family Trust  
Amount awarded: \$20,000  
Period: 2007 – 2009  
Investigators (Roles): NJ MacIntyre (PI)
8. Title: Assessment of knee motion pre- and post-anterior cruciate ligament reconstruction using a novel MRI based method: A pilot study.  
Agency: Queen's University Advisory Research Committee  
Amount awarded: \$5,000  
Period: 2005 – 2006  
Investigators (Roles): NJ MacIntyre (PI)
9. Title: Novel methods to assess bone quality in vivo and determine critical factors associated with bone and joint health.  
Agency: Ministry of Economic Development & Trade (MEDT) Ontario Research Fund (10097)  
Amount awarded: \$54,400  
Period: 2005 – 2006  
Investigators (Roles): NJ MacIntyre (PI)
10. Title: Contrasting stair descent performance in healthy young and older adults: A task dynamic approach to study age-related changes in adaptive coordination of movement.  
Agency: FRSQ (Fonds de la Recherche en Sante du Quebec) - REPAR  
Amount awarded: \$20,000  
Period: 2005 – 2006

Investigators (Roles): A Leroux, L Pelland (Co-PIs); NJ MacIntyre, P McKinley (Co-Investigators)

11. Title: Novel methods to assess bone quality in vivo and determine critical factors associated with bone and joint health.  
Agency: Canadian Foundation for Innovation (CFI): New Opportunities Fund  
Amount awarded: \$54,400  
Period: 2004 – 2005  
Investigators (Roles): NJ MacIntyre (PI)
12. Title: Development of an independent research program to better understand bone and joint competence.  
Agency: Queen's University Research Initiation Grant  
Amount awarded: \$30,000  
Period: 2003 – 2004  
Investigators (Roles): NJ MacIntyre (PI)
13. Title: Diagnosis of Patellofemoral Pain Syndrome due to patellar maltracking using a cluster of clinical tests.  
Agency: Physiotherapy Foundation of Canada (PFC): Alun Morgan Memorial Research Fund in Orthopaedic Physiotherapy  
Amount awarded: \$5,000  
Period: 2003 – 2004  
Investigators (Roles): NJ MacIntyre (PI), E Culham, DR Wilson (Co-investigators)

#### **o. LIFETIME PUBLICATIONS**

##### **i) PEER REVIEWED**

##### **a) Journal Articles (\* trainee)**

1. **MacIntyre NJ**, \*McKnight EKB, Day AG, Wilson DR. Consistency of patellar spin, tilt and lateral translation side-to-side and over a 1 year period in healthy young males. Journal of Biomechanics. 2008;41:3094-3096 (Funded by CIHR CHRP; CFI-New Opportunities/Ontario Research Fund Award)
2. McWalter EJ, Cibere J, **MacIntyre NJ**, Nicolaou S, Schulzer M, Wilson DR. Relationship between varus/valgus alignment and patellar kinematics in individuals with knee osteoarthritis. Journal of Bone and Joint Surgery [American]. 2007;89:2723-2731 (Funded by CIHR MOP43883, Canadian Arthritis Network)
3. **MacIntyre NJ**, \*Hill NA, \*Fellows RA, Ellis RE, Wilson DR. Patellofemoral joint kinematics in individuals with and without Patellofemoral Pain Syndrome. Journal of Bone and Joint Surgery [American]. 2006;88(12):2596-2606. (Funded by CIHR MOP43883, NSERC- strategic grant; Ontario Centres of Excellence, Ontario Research Fund; Physiotherapy Foundation of Canada, The Arthritis Society/ CIHR HRPF- TAS01/0108, Canadian Arthritis Network)

4. \*Fellows RA, \*Hill NA, **MacIntyre NJ**, Harrison MM, Ellis RE, Wilson DR. Repeatability of a novel technique for *in vivo* measurement of three-dimensional patellar tracking using magnetic resonance imaging. Journal of Magnetic Resonance Imaging. 2005;22:145-153. (Funded by *CIHR MOP43883, NSERC-strategic grant; NSERC GSA; The Arthritis Society/ CIHR HRPF- TAS01/0108; Canadian Arthritis Network*)
5. \*Fellows RA, \*Hill NA, Gill HS, **MacIntyre NJ**, Harrison MM, Ellis, RE, Wilson DR. Magnetic resonance imaging for *in vivo* assessment of three-dimensional patellar tracking. Journal of Biomechanics. 2005;38:1643-1652. (Funded by *CIHR MOP43883; NSERC- strategic grant; NSERC PGS; The Arthritis Society/ CIHR HRPF- TAS01/0108, Canadian Arthritis Network*)
6. \*Tang TSY, **MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Accurate assessment of patellar tracking using fiducial and intensity-based fluoroscopic techniques. Medical Image Analysis. 2004;8:343-351. (Funded by *CIHR; NSERC; The Arthritis Society/ CIHR HRPF- TAS01/0108*)
7. \*Tang TSY, **MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Accuracy of a fluoroscopy technique for assessing patellar tracking. Lecture Notes in Computer Science. 2003;2878:319-326. (Funded by *NSERC; CIHR; The Arthritis Society/ CIHR HRPF- TAS01/0108*)
8. \***MacIntyre NJ**, Adachi JD, Webber CE. *In vivo* measurement of apparent trabecular bone structure of the radius in women with low bone density discriminates patients with recent wrist fracture from those without fracture. Journal of Clinical Densitometry. 2003;6(1):35-43. (Funded by *MRC*)
9. \***MacIntyre NJ**, Bhandari M, Blimkie CJ, Adachi JD, Webber CE. Effect of altered physical loading on bone and muscle in the forearm. Canadian Journal of Physiology and Pharmacology. 2001;79(12):1015-1022. (Funded by *MRC*)
10. \***MacIntyre NJ**, Adachi JD, Webber CE. Trabecular structure in normal aging. Bone Depeche 2000;6(2):39-41.
11. \***MacIntyre NJ**, Adachi JD, Webber CE. *In vivo* detection of structural differences between dominant and nondominant radii using peripheral quantitative computed tomography. Journal of Clinical Densitometry. 1999;2(4):409-418. (Funded by *MRC*)
12. \***MacIntyre NJ**, Adachi JD, Webber CE. Gender differences in normal age-dependent patterns of radial bone structure and density: A cross-sectional study using peripheral quantitative computed tomography. Journal of Clinical Densitometry. 1999;2(2):163-173. (Funded by *MRC*)
13. \***MacIntyre NJ**, Muller ME, Adachi JD, Webber CE. The non-invasive

measurement of trabecular bone structure. Current Topics in Radiology. 1998;1:19-33.

14. \***MacIntyre NJ**, McComas AJ. Non-conscious choice in cutaneous backward masking. Neuroreport. 1995;7:1513-1516.

**b) Journal Abstracts** (\* *trainee*)

1. \*Garcia-Redrigez S, \*Crookshank MCM, **MacIntyre NJ**, Harrison MM, Smith EL, Sellens R, Ploeg H. Structural properties of trabecular cores from femoral heads. Proceedings of the North America Conference on Biomechanics 2008;455. ([www.x-cdtech.com/nacob/Abstracts/455.pdf](http://www.x-cdtech.com/nacob/Abstracts/455.pdf)) (*oral*)
2. **MacIntyre NJ**, Inglis D. Comparison of pQCT-based measures of radial bone geometry and apparent trabecular structure using different algorithms. Journal of Bone and Mineral Research 2007;22(Suppl 1):S301. (*poster*)
3. \*Abdulkareem JS, Muller ME, Inglis D, Gordon CL, Adachi JD, Webber CE, **MacIntyre NJ**. Measures of distal radial bone geometry predict fracture load. Osteoporosis International 2006;17(Suppl 2):S155. (*poster*)
4. \*McWalter EJ, **MacIntyre NJ**, Cibere J, Wilson DR. Does patellar alignment predict patellar kinematics? ORS Transactions 2006;31:0165. ([www.ors.org/web/Transactions.asp](http://www.ors.org/web/Transactions.asp)) (*oral*)
5. \*McKnight B, Wilson DR, **MacIntyre NJ**. Two normative patterns of patellar tilt and lateral translation are observed in physically active young males. ORS Transactions. 2006;31:0534. ([www.ors.org/web/Transactions.asp](http://www.ors.org/web/Transactions.asp)) (*poster*)
6. **MacIntyre NJ**, Inglis D, Adachi JD, Webber CE. Is there a relationship between apparent trabecular bone structure as measured by peripheral quantitative computed tomography and disease severity in patients recently diagnosed with rheumatoid arthritis? Clinical and Experimental Rheumatology 2005;23(Suppl 6):745. (*poster*)
7. **MacIntyre NJ**, Pardy S, Ade L, Culham E, Wilson DR. Clinical assessments of patellar alignment in the relaxed extended knee do not reflect patellar kinematics during loaded knee flexion. ORS Transactions 2005;30:0486. ([www.ors.org/web/Transactions.asp](http://www.ors.org/web/Transactions.asp)) (*poster*)
8. \*Hill NA, \*Fellows RA, **MacIntyre NJ**, Harrison MM, Ellis RE, Wilson DR. The effect of high tibial osteotomy on three-dimensional patellar tracking: An *in vivo* study using magnetic resonance imaging. ORS Transactions 2005;30: 0481. ([www.ors.org/web/Transactions.asp](http://www.ors.org/web/Transactions.asp)) (*poster*)
9. \*McWalter EJ, **MacIntyre NJ**, Cibere J, Wilson DR. Can patterns of patellar kinematics be determined from one angle of knee flexion? Osteoarthritis and

Cartilage 2005;13(Suppl A):S114. (*poster*)

10. \*Tang TSY, **MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Hardware-assisted 2D/3D intensity-based registration for assessing patellar tracking. Medical Image Computing and Computer-Assisted Intervention – MICCAI PT 2, Proceedings 2004;3217:1095-1096.
11. **MacIntyre NJ**, \*Hill NA, \*Fellows RA, Ellis RE, Wilson DR. A noninvasive MRI based method for assessing patellofemoral joint kinematics detects differences between healthy and symptomatic knees. Arthritis Research and Therapy. 2004;6(Suppl 3):100. (*poster*)
12. **MacIntyre NJ**, \*Hill NA, \*Fellows RA, \*Orchard S, \*Tang TSY, Ellis RE, Culham E, Wilson DR. Abnormal patellar tracking in individuals with patellofemoral pain syndrome. ORS Transactions 2004;29:0081. (www.ors.org/web/Transactions.asp) (*oral*)
13. \*Fellows RA, \*Hill NA, **MacIntyre NJ**, Harrison MM, Ellis RE, Wilson DR. Repeatability of a magnetic resonance imaging-based method for measuring three-dimensional patellar kinematics in loaded flexion. ORS Transactions 2005;30: 0083. Washington, DC, USA (www.ors.org/web/Transactions.asp) (*oral*)
14. \***MacIntyre NJ**, Radcliffe T, Ellis RE. Validation of a new x-ray based method of detecting osteoporosis. ORS Transactions 2003;28:1056. (www.ors.org/web/Transactions.asp) (*poster*)
15. \***MacIntyre NJ**, \*Tang TSY, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Accuracy of a fluoroscopy imaging technique for assessing patellar tracking. ORS Transactions 2003;28:1251. (www.ors.org/web/Transactions.asp) (*poster*)
16. \*Fellows RA, \*Hill NA, Gill HS, \***MacIntyre NJ**, Leclaire SC, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. Accuracy of a magnetic resonance imaging based method for assessing three-dimensional patellar tracking *in vivo*. ORS Transactions 2003;28:0121. (www.ors.org/web/Transactions.asp) (*oral*)
17. \***MacIntyre NJ**, CE Webber, JD Adachi. Relation between disease activity and apparent trabecular texture at the wrist in individuals with Rheumatoid Arthritis. Journal of Bone and Mineral Research 2002;17(Suppl 1):232. (*poster*)
18. Larin HL, **MacIntyre NJ**, Webber CE, Beaumont L. Estimates of muscle strength in healthy preschool children and the relation with regional bone mineral density. Developmental Medicine and Child Neurology. 2001;34(Suppl 88):35. (*poster*)
19. \***MacIntyre NJ**, Adachi JD, Webber CE. Assessment of apparent trabecular bone porosity at the distal radius in women matched for bone density discriminates individuals with recent wrist fractures from those without fracture.

- Journal of Bone and Mineral Research. 2000;15(Suppl 1):184. (*oral*)
20. \***MacIntyre NJ**, Adachi JD, Webber CE. An evaluation of *in vivo* distal radius bone structure measurements. Journal of Bone and Mineral Research 1999;14(Suppl 1):431. (*poster*)
  21. Larin HL, **MacIntyre NJ**, Webber CE. Measurement of Bone Mineral Density in Preschool Children with Spastic Diplegia: A Reliability Study. Developmental Medicine and Child Neurology. 1998;40(Suppl 78):33. (*poster*)
  22. \***MacIntyre NJ**, Adachi JD, Webber CE. Peripheral quantitative computed tomography measurements of normal human bone mass and structure. Journal of Bone and Mineral Research. 1997;12(Suppl 1):262. (*poster*)
  23. \*Gordon CL, Webber CE, \***MacIntyre NJ**, \*Muller ME, Christoforou N. *In vivo* assessment of trabecular bone structure. Journal of Bone and Mineral Research. 1996;11(Suppl 1):473. (*poster*)
  24. \*Gordon CL, \***MacIntyre NJ**, Webber CE. Bone mass and structure deficits in the non-fractured radius of patients with colles' fracture. Current Research in Osteoporosis and Bone Mineral Measurement IV. 1996:28. (*poster*)
  25. Merrifield PA, \***MacIntyre NJ**, Hanington A. Myogenic potential of mouse myoblast cell lines *in vitro* and *in vivo*. Journal of Molecular Biology and Cell. 1992;3:255. (*poster*)

### c) Other

#### **Proceedings of Meetings** (available to members/attendees only; \* trainee)

1. Wessel J, MacDermid J, **MacIntyre NJ**, Galea V. The relationship between impairment, dexterity, and self-reported disability of persons with osteoarthritis of the hand. 31<sup>st</sup> annual meeting of the American Society of Hand Therapists. Boston, MA 2008-10-24 (*oral*)
2. **MacIntyre NJ**, \*Rombough R, Brouwer B. Muscle cross-sectional area at the tibial 66% site is not a surrogate measure of gastrocnemius muscle force production. 2008 pQCT User's Meeting, Montreal Qc 2008-09-16 (*oral*)
3. \*McKnight B, **MacIntyre NJ**, Wilson DR. Between limb differences are observed in normal patterns of patellar motion in young physically active males. Proceedings of the 8<sup>th</sup> Annual Meeting for Health Sciences Research Trainees, Kingston, ON 2005-05-31 (*poster*)
4. **MacIntyre NJ**, \*McKnight, B. Hill NA, Culham E, Ellis RE, Wilson DR. Abnormal patellar kinematics are detected in a subgroup of individuals with Patellofemoral Pain Syndrome using a novel MRI-based method. Proceedings of the 11<sup>th</sup> Meeting of the Combined Orthopaedic Associations, Sydney, Australia. 2004-10-

25 (poster)

5. \*Hill NA, \*Fellows RA, **MacIntyre NJ**, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. The effect of closing wedge high tibial osteotomy on three-dimensional patellar tracking. Proceedings of the 11<sup>th</sup> Meeting of the Combined Orthopaedic Associations, Sydney, Australia. 2004-10-28 (oral)
6. \*Tang TSY, Bethune C, **MacIntyre NJ**, Stewart AJ, Ellis RE. Hardware-assisted 2D/3D intensity-based registration. Proceedings of the 4<sup>th</sup> Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery. Chicago, IL 2004-06-17 (poster)
7. \*Hoy F, Bardana D, Birchard J, **MacIntyre NJ**. Medial hamstring muscle strength decrease after anterior cruciate ligament reconstruction using semitendinosus autografts. Proceedings of the 7<sup>th</sup> Annual Meeting for Health Sciences Research Trainees, Kingston, ON 2004-06-08 (poster)
8. \*Hill NA, \*Fellows RA, **MacIntyre NJ**, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. The effect of high tibial osteotomy on three-dimensional patellar tracking. Proceedings of the International Society for Magnetic Resonance in Medicine (Proc Intl Soc Magn Reson Med), 2004:11:2591 (e-poster)
9. \*Fellows RA, \*Hill NA, **MacIntyre NJ**, Harrison MM, Ellis RE, Wilson DR. Repeatability of a magnetic resonance imaging-based method for measuring three-dimensional patellar kinematics in loaded flexion. Proc Intl Soc Magn Reson Med, 2004:11:416 (poster)
10. \*Tang TSY, **MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Fluoroscopy-based method accurately assesses three-dimensional kinematics of the patellofemoral joint. Proceedings of the Canadian Orthopaedic Association Annual Meeting, Winnipeg, MB 2003-10-03 (oral)
11. \*Hill NA, \*Fellows RA, Gill HS, **MacIntyre NJ**, Leclaire SC, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. Magnetic resonance imaging based method accurately assesses three-dimensional patellar tracking *in vivo*. Proceedings of the Canadian Orthopaedic Association Annual Meeting, Winnipeg, MB 2003-10-03 (oral)
12. \*Hill NA, \*Fellows RA, Gill HS, **MacIntyre NJ**, Leclaire SC, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. A novel magnetic resonance imaging based method accurately assesses three-dimensional joint motion *in vivo*. (Proc Intl Soc Magn Reson Med), 2003:11:1527 (poster)
13. \*Tang TSY, **MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson, DR, Ellis RE. Comparison of a fluoroscopy-based method with RSA for the assessment of patellar tracking. Proceedings of 3<sup>rd</sup> Annual Meeting of the International Society

- for Computer Assisted Orthopaedic Surgery. Marbella, Spain 2003-06-21 (*poster*)
14. Elias JJ, Wilson DR, Adamson R, \***MacIntyre NJ**, Cosgarea AJ. Experimental validation of a computational model of the patellofemoral joint. Proceedings of IV World Congress of Biomechanics. Calgary, AB 2002-08-05 (*award oral*)
  15. Larin H, **MacIntyre NJ**, Webber CE, Beaumont L. Estimating muscle strength and the relation with bone mineral density in preschool children. Proceedings of Pre-American Society for Bone and Mineral Research Meeting on Pediatric Bone, Hamilton, ON 2000-09-21 (*poster*)
  16. Larin H, **MacIntyre NJ**, L. Beaumont, Sternin Y, Webber CE. Normative values of regional bone mineral density and whole body composition in preschool children. Proceedings of Pre-American Society for Bone and Mineral Research Meeting on Pediatric Bone, Hamilton, ON 2000-09-21 (*poster*)
  17. \***MacIntyre NJ**, Adachi JD, Webber CE. *In vivo* distal radius bone structure measurements. Proceedings of Sun Valley Workshop pQCT User Meeting. Sun Valley, ID 1999-08-07 (*oral*)
  18. \***MacIntyre NJ**, Adachi JD, Webber CE. *In vivo* distal radius bone structure measurements. Proceedings of the 29<sup>th</sup> Hard Tissue Workshop. Sun Valley, ID 1999-08 (*poster presentation, August 9<sup>th</sup> selected for podium presentation, August 11<sup>th</sup>*)
  19. \***MacIntyre NJ**, Bhandari M, Blimkie JB, Adachi JD, Webber CE. Response of healthy nonweightbearing bone to alterations in mechanical loading. Proceedings of the Sun Valley pQCT User Meeting. Sun Valley, ID 1999-08-07 (*poster*)
  20. \***MacIntyre NJ**, Bhandari M, Blimkie JB, Adachi JD, Webber CE. Response of healthy nonweightbearing bone to alterations in mechanical loading. Proceedings of the 29<sup>th</sup> Hard Tissue Workshop. Sun Valley, ID 1999-08 (*poster presentation, August 9<sup>th</sup> selected for podium presentation, August 11<sup>th</sup>*.)
  21. Larin H, **MacIntyre NJ**, Webber CE. Measurement of bone mineral density in preschool children with spastic diplegia: a reliability study. Proceedings of the 13<sup>th</sup> World Confederation for Physical Therapy Congress. Yokohama, Japan. 1999-05-26 (*poster*)
  22. \***MacIntyre NJ**, Bhandari M, Adachi JD, Webber CE. *In vivo* measurements of bone mass and structure in individuals with recent wrist fractures. Proceedings of the Sun Valley Workshop on QCT and Absorptiometry. Sun Valley, ID 1997-08-09 (*oral*)
  23. \***MacIntyre NJ**, Bhandari M, Adachi JD, Webber CE. *In vivo* measurements of

bone mass and structure in individuals with recent wrist fractures. Proceedings of the Hard Tissue Workshop. Sun Valley, ID 1997-08-13 (*poster*)

24. \***MacIntyre NJ**, Webber CE, Adachi JD. Peripheral quantitative computed tomography measurements of normal bone mass. 2nd Regional Symposium on Skeletal Biology and Metabolic Bone Disease. London, ON 1997-04-12 (*poster*)
25. Larin H, **MacIntyre NJ**. Construct validity of the motor teaching strategies coding instrument: Studies of NDT experience. Proceedings of the 1997 Ontario Physiotherapy Association Conference, Mississauga, ON 1997-03-07 (*oral*)

## ii) **NOT PEER REVIEWED**

### a) **Journal Articles** (\* trainee)

1. **MacIntyre NJ**. Assessment of bone density and risk for osteoporotic fracture in postmenopausal women. Canadian Physiotherapy Association Women's Health Division Newsletter. Winter 2008.

## iii) **ACCEPTED FOR PUBLICATION (in final form)**

### a) **Journal Articles** (\* trainee)

1. MacDermid JC, Grewal R, **MacIntyre NJ**. Using an evidence-based approach to measure outcomes in clinical practice. Hand Clinics doi: 10.1016/j.hcl.2008.11.001
2. **MacIntyre NJ**, Wessel J. Confirmatory factor analysis of the items from the Arthritis Impact Measurement Scales-2 Hand and Finger Function and Arm Function scales for individuals with osteoarthritis of the hand. Clinical Rheumatology. doi: 10.1007/s10067-009-1103-5

### b) **Other**

#### **Proceedings of Meetings** (\* trainee)

1. **MacIntyre NJ**, Stavness C, Adachi JD. The modified Safe Functional Motion Test-Short Form is reliable for assessment of movement patterns in individuals with low bone mass. Canadian Physiotherapy Association Congress 2009 Calgary, AL 2009-05-28. (*oral*)

## iv) **SUBMITTED FOR PUBLICATION** (\* trainee)

1. \*Ho KCT, \*McWalter EJ, \*Fellows RA, \*Hill NA, **MacIntyre NJ**, Gill HS, Wilson DR. Validation of an in vivo three-dimensional magnetic resonance imaging based technique for tibiofemoral kinematics. Journal of Magnetic Resonance Imaging. 2008.

## p. **PRESENTATIONS AT MEETINGS/WORKSHOPS**

(\* trainee; presenting author underlined)

### i) **INVITED**

1. **MacIntyre NJ**. Novel medical imaging-based methods of assessing 3D patellofemoral joint kinematics. Bone Scholar Meeting, Hamilton, ON 2003-03-17

(oral)

2. **MacIntyre NJ.** *In vivo* assessment of the relation between trabecular bone structure in the radius and gender, aging, mechanical loading and fracture. Rehabilitation Science Seminar Series, Queen's University, Kingston, ON 2001-03-23 (oral)
3. **MacIntyre NJ.** The role of exercise in the management of osteoporosis. National Fundraising Program of the Osteoporosis Society of Canada. Kincardine, ON 1999-03-01 (oral)
4. **MacIntyre NJ.** Osteoporosis update: The role of physical activity in the management of postmenopausal osteoporosis. Lecturer at an educational course offered by the Ontario Physiotherapy Association. Hamilton, ON 1999-01-24 (oral)
5. **MacIntyre NJ.** Proposed mechanisms for the regulation of bone strength by mechanical loading. Regional Bone Research Group. Hamilton, ON 1997-11-27 (oral)
6. **MacIntyre NJ.** Developmental potential of murine myoblast cell lines. Departmental Seminar, Department of Physiotherapy, University of Western Ontario, London, ON 1994-09-26 (oral)

## ii) CONTRIBUTED

### a) Peer Reviewed

(\*trainee; \*\*abstracts published in Meeting Proceedings; presenting author underlined)

1. **MacIntyre NJ**, Stavness C, Adachi JD. The modified Safe Functional Motion Test-Short Form is reliable for assessment of movement patterns in individuals with low bone mass. Canadian Physiotherapy Association Congress 2009 Calgary, AL 2009-05-28. (accepted for oral)
2. **Wessel J**, **MacDermid J**, **MacIntyre NJ**, Galea V. The relationship between impairment, dexterity, and self-reported disability of persons with osteoarthritis of the hand. 31<sup>st</sup> annual meeting of the American Society of Hand Therapists. Boston, MA 2008-10-24 (oral)
3. **MacIntyre NJ**, **Rombough R**, **Brouwer B**. Muscle cross-sectional area at the tibial 66% site is not a surrogate measure of gastrocnemius muscle force production. 2008 pQCT User's Meeting, Montreal Qc 2008-09-16 (oral)
4. **García-Redríguez S**, **Crookshank MCM**, **MacIntyre NJ**, Harrison M, Smith EL, Sellens R, Ploeg H. Structural properties of trabecular cores from femoral heads. North American Conference on Biomechanics 2008, Ann Arbor MI 2008-08-06 (oral)

5. **\*\*MacIntyre NJ**, Inglis D. Comparison of pQCT-based measures of radial bone geometry and apparent trabecular structure using different algorithms. 29<sup>th</sup> Annual Meeting of the American Society for Bone and Mineral Research. Honolulu Hawaii 2007-09-18 (*poster*)
6. **\*\*\*Abdulkareem JS**, Muller ME, Inglis D, Gordon CL, Adachi JD, Webber CE, **MacIntyre NJ**. Measures of bone geometry at the distal radius predict failure load. International Osteoporosis Foundation World Congress, Toronto, ON 2006-06-04 (*poster*)
7. **\*\*\*McWalter EJ**, **MacIntyre NJ**, Cibere J, Wilson DR. Does patellar alignment predict patellar kinematics? 52<sup>nd</sup> Annual Meeting of the Orthopaedic Research Society. Chicago, IL, 2006-03-20 (*oral*)
8. **\*\*\*McKnight B**, Wilson DR, **MacIntyre NJ**. Two normative patterns of patellar tilt and lateral translation are observed in physically active young males. 52<sup>nd</sup> Annual Meeting of the Orthopaedic Research Society. Chicago, IL, 2006-03-19 (*poster*)
9. **\*\*\*McWalter EJ**, **MacIntyre NJ**, Cibere J, Wilson DR. Can patterns of patellar kinematics be determined from one angle of knee flexion? 10<sup>th</sup> World Congress on Osteoarthritis (OARSI), Boston, MA 2005-12-10 (*poster*)
10. **\*\*\*McKnight B**, **MacIntyre NJ**, Wilson DR. Between limb differences are observed in normal patterns of patellar motion in young physically active males. Poster presentation at the 8<sup>th</sup> Annual Meeting for Health Sciences Research Trainees, Kingston, ON 2005-05-31 (Trainee received the Faculty of Health Sciences Award for Excellence in Research – Poster Presentation Competition) (*poster*)
11. **\*\*MacIntyre NJ**, Pardy S, Ade L, Culham E, Wilson DR. Clinical assessments of patellar alignment in the relaxed extended knee do not reflect patellar kinematics during loaded knee flexion. 51<sup>st</sup> Annual Meeting of the Orthopaedic Research Society, Washington, DC 2005-02-21 (*poster*)
12. **\*\*\*Hill NA**, \*Fellows RA, **MacIntyre NJ**, Harrison MM, Ellis RE, Wilson DR. The effect of high tibial osteotomy on three-dimensional patellar tracking: An *in vivo* study using magnetic resonance imaging. 51<sup>st</sup> Annual Meeting of the Orthopaedic Research Society, Washington, DC. 2005-02-21 (*poster*)
13. **\*\*MacIntyre NJ**, \*McKnight B, \*Hill NA, Culham E, Ellis RE, Wilson DR. Abnormal patellar kinematics are detected in a subgroup of individuals with Patellofemoral Pain Syndrome using a novel MRI-based method. 11<sup>th</sup> Meeting of the Combined Orthopaedic Associations, Sydney, Australia. 2004-10-25 (*poster*)

14. \*\*\*Hill NA, \*Fellows RA, **MacIntyre NJ**, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. The effect of closing wedge high tibial osteotomy on three-dimensional patellar tracking. 11<sup>th</sup> Meeting of the Combined Orthopaedic Associations, Sydney, Australia. 2004-10-28 (*oral*)
15. \*\*\*Tang TSY, **MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Hardware-assisted 2D/3D intensity-based registration for assessing patellar tracking. 7<sup>th</sup> International Conference on Medical Image Computing and Computer Assisted Intervention. Saint-Malo, France 2004-09-27 (*poster*)
16. \*\*\*Tang TSY, Bethune C, **MacIntyre NJ**, Stewart AJ, Ellis RE. Hardware-assisted 2D/3D intensity-based registration. 4<sup>th</sup> Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery. Chicago, IL 2004-06-17 (*poster*)
17. \*\*\*Hoy F, Bardana D, Birchard J, **MacIntyre NJ**. Medial hamstring muscle strength decrease after anterior cruciate ligament reconstruction using semitendinosus autografts. 7<sup>th</sup> Annual Meeting for Health Sciences Research Trainees, Kingston, ON 2004-06-08 (*poster*)
18. \*\*\*Hill NA, \*Fellows RA, **MacIntyre NJ**, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. The effect of high tibial osteotomy on three-dimensional patellar tracking. 12<sup>th</sup> Scientific Meeting of the International Society for Magnetic Resonance in Medicine, Kyoto, Japan 2004-05-15 to 21 (*e-poster*)
19. \*\*\*Fellows RA, \*Hill NA, **MacIntyre NJ**, Harrison MM, Ellis RE, Wilson DR. Repeatability of a magnetic resonance imaging-based method for measuring three-dimensional patellar kinematics in loaded flexion. 12<sup>th</sup> Scientific Meeting of the International Society for Magnetic Resonance in Medicine, Kyoto, Japan. 2004-05-19 (*poster*)
20. \*\***MacIntyre NJ**, \*Hill NA, \*Fellows RA, \*Orchard S, \*Tang TSY, Ellis RE, Culham E, Wilson DR. Abnormal patellar tracking in individuals with patellofemoral pain syndrome. 50<sup>th</sup> Annual Meeting of the Orthopaedic Research Society, San Francisco, CA 2004-03-07 (*oral*)
21. \*\*\*Fellows RA, \*Hill NA, **MacIntyre NJ**, Harrison MM, Ellis RE, Wilson DR. Repeatability of a magnetic resonance imaging-based method for measuring three-dimensional patellar kinematics in loaded flexion. 50<sup>th</sup> Annual Meeting of the Orthopaedic Research Society, San Francisco, CA 2004-03-07 (*oral*)
22. \*\*\*Tang TSY, **MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Accuracy of a fluoroscopy technique for assessing patellar tracking. Medical Image Computing & Computer Assisted Interventions Annual Meeting, Montreal, QC 2003-11-17 (*oral*)

23. \*\*\*Tang TSY, **MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Fluoroscopy-based method accurately assesses three-dimensional kinematics of the patellofemoral joint. Canadian Orthopaedic Association Annual Meeting, Winnipeg, MB 2003-10-03 (*oral*)
24. \*\*\*Hill NA, \*Fellows RA, Gill HS, **MacIntyre NJ**, Leclaire SC, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. Magnetic resonance imaging based method accurately assesses three-dimensional patellar tracking *in vivo*. Canadian Orthopaedic Association Annual Meeting, Winnipeg, MB 2003-10-03 (*oral*)
25. \*\*\*Hill NA, \*Fellows RA, Gill HS, **MacIntyre NJ**, Leclaire SC, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. A novel magnetic resonance imaging based method accurately assesses three-dimensional joint motion *in vivo*. International Society for Magnetic Resonance in Medicine (ISMRM). Toronto, ON 2003-07-12 (*poster*)
26. \*\*\*Tang TSY, \***MacIntyre NJ**, Gill HS, \*Fellows RA, \*Hill NA, Wilson, DR, Ellis RE. Comparison of a fluoroscopy-based method with RSA for the assessment of patellar tracking. 3<sup>rd</sup> Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery. Marbella, Spain. 2003-06-21 (*poster*)
27. \*\*\***MacIntyre NJ**, Radcliffe T, Ellis RE. Validation of a new x-ray based method of detecting osteoporosis. 49<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. New Orleans, LA 2003-02-04 (*poster*)
28. \*\*\***MacIntyre NJ**, \*Tang TSY, Gill HS, \*Fellows RA, \*Hill NA, Wilson DR, Ellis RE. Accuracy of a fluoroscopy imaging technique for assessing patellar tracking. 49<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. New Orleans, LA 2003-02-04 (*poster*)
29. \*\*\*Fellows RA, \*Hill NA, Gill HS, \***MacIntyre NJ**, Leclaire SC, \*Tang TSY, Harrison MM, Ellis RE, Wilson DR. Accuracy of a magnetic resonance imaging based method for assessing three-dimensional patellar tracking *in vivo*. 49<sup>th</sup> Annual Meeting of the Orthopaedic Research Society. New Orleans, LA 2003-02-03 (*oral*)
30. \*\*\***MacIntyre NJ**, Webber CE, Adachi JD. Relation between disease activity and apparent radial bone trabecular texture in individuals with rheumatoid arthritis. 24<sup>th</sup> Annual Meeting of the American Society for Bone and Mineral Research. San Antonio, TX 2002-09-21 (*poster*)
31. \*\*Elias JJ, Wilson DR, Adamson R, \***MacIntyre NJ**, Cosgarea AJ. Experimental validation of a computational model of the patellofemoral joint. IV World Congress of Biomechanics. Calgary, AB 2002-08-05 (award for best paper) (*oral*)

32. \*\*\***MacIntyre NJ**, Adachi JD, Webber CE. Assessment of apparent trabecular bone porosity at the distal radius in women matched for bone density discriminates individuals with recent wrist fractures from those without fracture. 22<sup>nd</sup> Annual Meeting of the American Society for Bone and Mineral Research. Toronto, ON 2000-09-25 (*oral*)
33. \*\***Larin HL**, **MacIntyre NJ**, Webber CE, Beaumont L. Estimating muscle strength and the relation with bone mineral density in preschool children. Poster presentation: Pre-American Society for Bone and Mineral Research Meeting on Pediatric Bone, Hamilton, ON 2000-09-21 (*poster*)
34. \*\***Larin HL**, **MacIntyre NJ**, L. Beaumont, Sternin Y\*\*, Webber CE. Normative values of regional bone mineral density and whole body composition in preschool children. Pre-American Society for Bone and Mineral Research Meeting on Pediatric Bone, Hamilton, ON 2000-09-21 (*poster*)
35. \*\*\***MacIntyre NJ**, Adachi JD, Webber CE. An evaluation of *in vivo* distal radius bone structure measurements. 21<sup>st</sup> Annual Meeting of the American Society for Bone and Mineral Research. St. Louis, MI 1999-10-04 (*poster*)
36. \*\*\***MacIntyre NJ**, Adachi JD, Webber CE. *In vivo* distal radius bone structure measurements. Sun Valley Workshop pQCT User Meeting. Sun Valley, ID 1999-08-07 (*poster*)
37. \*\*\***MacIntyre NJ**, Adachi JD, Webber CE. *In vivo* distal radius bone structure measurements. 29<sup>th</sup> Hard Tissue Workshop. Sun Valley, ID 1999-08-09 (*poster*) 1999-08-11 (*selected for oral presentation*)
38. \*\*\***MacIntyre NJ**, Bhandari M, Blimkie JB, Adachi JD, Webber CE. Response of healthy nonweightbearing bone to alterations in mechanical loading. Sun Valley Workshop pQCT User Meeting. Sun Valley, ID August 7, 1999-08-07 (*poster*)
39. \*\*\***MacIntyre NJ**, Bhandari M, Blimkie JB, Adachi JD, Webber CE. Response of healthy nonweightbearing bone to alterations in mechanical loading. 29<sup>th</sup> Hard Tissue Workshop. Sun Valley, ID 1999-08-09 (*poster*) 1999-08-11 (*selected for oral presentation*)
40. \*\***Larin HL**, **MacIntyre NJ**, Webber CE. Measurement of bone mineral density in preschool children with spastic diplegia: a reliability study. 13<sup>th</sup> International Congress of the World Conference for Physical Therapy. Yokohama, Japan. 1999-05-26 (*poster*)
41. \*\***Larin HL**, **MacIntyre NJ**, Webber CE. Measurement of bone mineral density in preschool children with spastic diplegia: a reliability study. American Academy for Cerebral Palsy and Developmental Medicine Annual Meeting. San Antonio, TX 1998-09-17 (*poster*)

42. \*\*\***MacIntyre NJ**, Adachi JD, Webber CE. Peripheral quantitative computed tomography measurements of normal human bone mass and structure. 19<sup>th</sup> Annual Meeting of the American Society for Bone and Mineral Research. Cincinnati, OH 1997-09-11 (*poster*)
43. \*\*\***MacIntyre NJ**, Bhandari M, Adachi JD, Webber CE. *In vivo* measurements of bone mass and structure in individuals with recent wrist fractures. Sun Valley Workshop on QCT and Absorptiometry. Sun Valley, ID 1997-08-09 (*oral*)
44. \*\*\***MacIntyre NJ**, Bhandari M, Adachi JD, Webber CE. *In vivo* measurements of bone mass and structure in individuals with recent wrist fractures. 1997 Hard Tissue Workshop. Sun Valley, ID 1997-08-13 (*poster*)
45. \*\*\***MacIntyre NJ**, Webber CE, Adachi JD. Peripheral quantitative computed tomography measurements of normal bone mass. Second Regional Symposium on Skeletal Biology and Metabolic Bone Disease. London, ON 1997-04-12 (*poster*)
46. \*\*Larin H, **MacIntyre NJ**. Construct validity of the motor teaching strategies coding instrument: Studies of NDT experience. Annual Ontario Physiotherapy Association Conference, Mississauga, ON March 7, 1997-03-07 (*oral*)
47. \*\*\*Gordon CL, Webber CE, \***MacIntyre NJ**, \*Muller ME, Christoforou N. *In vivo* assessment of trabecular bone structure. 18<sup>th</sup> Annual Meeting of the American Society For Bone and Mineral Research, Seattle, WA 1996-09-10 (*poster*)
48. \*\*\*Gordon CL, \***MacIntyre NJ**, Webber CE. Bone mass and structure deficits in the non-fractured radius of patients with Colles' fracture. Fifth Bath Conference on Osteoporosis and Bone Mineral Measurement, Bath, UK, June 1996-06-04 (*poster*)
49. \*\*Merrifield PA, \***MacIntyre NJ**, Hanington A. Myogenic potential of mouse myoblast cell lines *in vitro* and *in vivo*. American Society for Cell Biology Annual Meeting. Denver, CO 1992-11-09 (*poster*)

**b) Not Peer Reviewed** (\* Abstracts published in Meeting Proceedings available to members only; \*\* trainee, presenting author underlined)

1. \*\*\*McWalter EJ, **MacIntyre NJ**, Cibere J, Wilson DR. Can patterns of patellar kinematics be determined from one angle of knee flexion? Canadian Arthritis Network conference. Ottawa, ON 2005-10-30 (Trainee received poster prize in the Engineering and Imaging category) (*poster*)
2. \*\*\*Hoy F, Bardana D, Birchard J, **MacIntyre NJ**. Medial hamstring muscle strength decreased after anterior cruciate ligament reconstruction using semitendinosus autografts. Rehabilitation Therapy Clinical Education/Fieldwork Workshop, Kingston, ON 2004-06-14 (*poster*-Trainee awarded book prize for

best poster)

3. \***MacIntyre NJ**, Bhandari M, Blimkie JB, Adachi JD, Webber CE. Response of healthy nonweightbearing bone to alterations in mechanical loading: 6 month data. 10<sup>th</sup> Annual Department of Radiology Research Day, Hamilton Health Sciences Corporation, McMaster Site, Hamilton, ON 1998-11-18 (*oral*)
4. \***MacIntyre NJ**, Bhandari M, Adachi JD, Webber CE. Cortical bone mineral content and trabecular bone density are lower in individuals with recent wrist fractures compared to controls. St. Joseph's Health Care System Research Day Poster Symposium. Hamilton, ON 1997-11-13 (*poster*)

### c) Submitted for Peer Review

(\*trainee; \*\*abstracts will be published in Osteoporosis International; presenting author underlined)

1. \*\***MacIntyre NJ**, Stavness C, Adachi JD. Reliability and validity of a modified version of the safe functional motion test-short form for assessing movement patterns in individuals with low bone mass. 8th International Symposium on Osteoporosis: Translating Research into Clinical Practice. Washington DC April 1-5, 2009 (*poster*)
2. \*\*Recknor C, Grant S, **MacIntyre NJ**. Validity of the strength and flexibility domains comprising a novel performance-based measure of functional risk for osteoporotic fracture. 8th International Symposium on Osteoporosis: Translating Research into Clinical Practice. Washington DC April 1-5, 2009 (*poster*)
3. \*\*Recknor C, Grant S, **MacIntyre NJ**. A novel performance-based measure of functional risk for osteoporotic fracture has excellent reliability and good convergent construct validity. 8th International Symposium on Osteoporosis: Translating Research into Clinical Practice. Washington DC April 1-5, 2009\_

### q. ADMINISTRATIVE RESPONSIBILITIES (last 10 years)

#### i) **MCMASTER UNIVERSITY - SCHOOL OF REHABILITATION SCIENCE**

2007 – date	Master of Science (Physiotherapy) Curriculum Committee, Member
2007 – date	Master of Science (Physiotherapy) Faculty Governing Committee, Member
2007 – date	MSc (Physiotherapy) Program Academic Study Committee (PASC), Member
2007 – date	Master of Science (Physiotherapy) Program Interprofessional Education Advisory Committee, Member
2007 - 2009	Master of Science (Physiotherapy) Program Clinical Labs Coordinators <i>Ad Hoc</i> Working Group, Member
2008 – date	Master of Science (Physiotherapy) Program, Evaluator of Yr 1 Portfolio Assignments, Member
2008 – date	Master of Science (Physiotherapy) Program Evidence Based Practice <i>Ad Hoc</i> Working Group, Member

2007 – date	School of Rehabilitation Science Council, Member
2007 – date	MSc (OT & PT) Programs Admission Committee, Member (Vice-Chair 2008-2009)
2007 – 2010	PhD (Rehabilitation Science) Program Admissions Committee, Member
2008 – 2011	MSc (Rehabilitation Science) Program Admissions Committee, Member
2008 – 2011	School of Rehabilitation Science Research Committee, Member
2007 – 2008	Search Committee Member (Anatomy Faculty Position)
2007 – 2009	Search Committee Member (Assistant Dean (Physiotherapy) Faculty Position)
2000 – 2001	Evidence Based Practice <i>Ad Hoc</i> Working Group, Member
2000 – 2001	Academic Committee, Elected Member
2000 – 2001	Awards Committee, Member ( <i>ad hoc</i> member 2008-03-11)

## ii) QUEEN'S UNIVERSITY - SCHOOL OF REHABILITATION THERAPY

2005 – 2006	Appointments Committee, Bargaining Unit Member Representative [Selected and interviewed candidates and filled 1 OT and 2 PT tenure stream faculty positions.]
2003 – 2006	Student Progress and Promotion Committee, Member
2003 – 2006	Physical Therapy (PT) Program Committee, Member [2006 - Participated in preparation of Standards 2 and 6 of self study and on site visit for accreditation purposes.]
2004 – 2006	Physical Therapy (PT) Program Admissions Committee, Member
2003 – 2006	Academic Council, Member [2006 - Participated in external academic review of School of Rehabilitation Therapy]
2003 – 2006	Graduate Program Committee, Member Representing Graduate Faculty. [Annually reviewed and ranked applications for internal and external graduate student awards. Participated in preparation of OCGS Appraisal Brief for internal academic review of MSc(PT) and Rehabilitation Science (MSc and PhD) graduate programs in 2006 (particularly Section 2: The Faculty)]
2003 – 2005	Appointments Committee Physical Therapy (PTAC), Member [Program Faculty Rep (03/04), PRT Committee Rep (04/05)]
2003 – 2005	Appointments Committee Occupational Therapy (OTAC), Member
2004 – 2005	Student Advisor, 1 <sup>st</sup> year MSc(PT) students (24 students)
2004 – 2005	Promotions, Renewal and Tenure Committee, Member
2004 – 2005	Student Progress and Promotion Sub-committee, PT Faculty Rep.
2004 – 2005	Director's Administrative Committee, Member
2003 – 2004	Curriculum Development Subcommittee, Member (Co-Chair 2004) [Launched Stream 2 MSc(PT) and MSc(OT) programs in 2003; launched Stream 1 MSc(PT) and MSc(OT) programs in 2004.]

## iii) QUEEN'S UNIVERSITY- FACULTY OF HEALTH SCIENCES

2004 – 2006	Glaxo Wellcome Clinical Education Centre Advisory Committee, PT Program representative
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2004 – 2006	Glaxo Wellcome Clinical Education Centre Executive Committee, School of Rehabilitation Therapy representative
2005	Hiring Committee for Manager of Glaxo Wellcome Clinical Education Centre
2005	Content Planning and Building Subcommittee, User Group # 5, School of Rehabilitation Therapy Representative
2005	Content Planning New Faculty of Health Sciences Faculty Members and Canadian Research Chairs Subcommittee, School of Rehabilitation Therapy Representative

**iv) QUEEN'S UNIVERSITY- INTERFACULTY (HEALTH SCIENCE, APPLIED SCIENCE, ARTS AND SCIENCE)**

2003 – date	Scientific Committee, Human Mobility Research Centre, Member
2004 – 2006	Resource Committee, Human Mobility Research Centre, Member (2005 – 2006, Space Subcommittee Member)
2005 – 2007	Board of Directors, Human Mobility Research Centre, Representative of Scientific Committee
2005	Search Committee, Computer Assisted Surgery Position, Member

Revised December 2008