

**Curriculum Vitae  
Susanne Paula Lajoie**

Department of Educational and Counselling Psychology  
Faculty of Education, McGill University

**Personal Information**

**Education**

Ph. D. (Educational Psychology), Stanford University, June 1986

M. A. (Educational Psychology), McGill University, 1980

B. A. (Psychology), McGill University, 1978

**Full-Time Employment Experience**

2000-present Full Professor, Department of Educational and Counselling Psychology  
 2002-present Member, Centre for Medical Education  
 2010-2012 Program Director, Learning Sciences  
 2002-2009 Chair, Department of Educational and Counselling Psychology  
 2001-2002 Chair-Interim, Department of Educational and Counselling Psychology  
 2000-2001 Program Director, Cognition and Instruction  
 2000-2001 Acting Program Director, Educational Technology  
 1997-1999 Director, Applied Cognitive Science Research Group, McGill  
 1993-1995 Associate Director, National Center for Research in Mathematical  
 Sciences Education, University of Wisconsin, Madison  
 1993-2000 Associate Professor, Department of Educational and Counselling  
 Psychology, McGill  
 1991-1993 Assistant Professor, Department of Educational and Counselling  
 Psychology, McGill  
 1991-1996 Associate Member, Centre for Medical Education, McGill  
 1989-1992 Assistant Professor, Educational Psychology, University of Wisconsin,  
 Madison (On leave-of-absence from June 1 1991 to August 12 1992)  
 1989 Research Scientist, Learning Research and Development Center,  
 University of Pittsburgh  
 1987-1989 Research Assistant Professor, University of Pittsburgh, Psychology  
 1986-1988 Research Associate, Learning Research and Development Center,  
 University of Pittsburgh  
 1984-1986 Post-Doctoral Fellow, Assistant Project Director Air Force Cognitive  
 Skills and Training Project, Learning Research and Development Center

**Awards and Distinctions**

2018 Fellow of the Royal Society of Canada  
 2018 Renewed Canadian Research Chair Tier 1 in Advanced Technologies for  
 Learning in Authentic Settings

- 2018 Workshop invitee to NSF funded project on Convergence Human Technology Frontier: Workshop on Convergence Research about Multimodal Human Learning Data during Human-Machine Interactions (CMMI #1744351)
- 2017 Outstanding International Research Collaboration Award from the Technology, Instruction, Cognition, and Learning SIG of the American Educational Research Association
- 2016 Nominated by McGill for the SSHRC Impact Partnership Award
- 2017 Wyng Foundation Distinguished Lecturer
- 2016 Nominated for the Association of Faculties of Medicine in Canada John Ruedy Award for Innovation in Medical Education
- 2016-2017 Advisory Board, University of Mainz-Gutenberg, Advisory Board, University of Mainz-Gutenberg: Cluster of Excellence Consultation: Enablers and inhibitors of 21st century knowledge and skills in a transitional globalized information society - Positive learning in higher education in the Information Age
- 2016-present Advisory Board, Collaborative Research: Big Data from Small Groups: Learning Analytics and Adaptive Support in Game-based Collaborative Learning, National Science Foundation Grant.
- 2015 Association Francophone pour le Savoir (ACFAS) Thérèse Gouin-Décarie Prize for Social Sciences
- 2015-present Advisory Board, Arnold & Blema Steinberg Medical Simulation Centre
- 2013-present Editorial Board, International Artificial Intelligence and Education Journal
- 2013-present Advisory Board Member for MindShare Learning Company.
- 2013 Advisory Board Member to the U.S. Army Research Laboratory Human Research and Engineering Directorate and the Advanced Distributed Learning Centre for Intelligent Tutoring Systems Research and Development in the Institute for Intelligent Systems for Advanced Learning Technologies
- 2013 Featured in McGill's Headway magazine that highlights research at McGill, titled School 3.0
- 2012 Advisory Board for the Handbook on Multimedia (edited by R. Mayer)
- 2011 Canadian Research Chair Tier 1 in Advanced Technologies for Learning in Authentic Settings
- 2011 External Advisory Board member for ImREAL (<http://www.imreal-project.eu>) Technology Enhanced Learning project, funded under the 7th Framework of the European Commission. It involves partners from: University of Leeds (UK); Trinity College Dublin (Ireland); Graz University of Technology (Austria); University of Erlangen-Nuremberg (Germany); Delft University of Technology (Netherlands); Imaginary Srl (Italy); and, EmpowerTheUser Ltd (Ireland).
- 2011 Nominated for the Sylvia Scribner Award, American Educational Research Association
- 2011 Advisory Board for NSF grant by Beverly Woolf and Sergei Nirenburg on Teaching Personal Interactions Skills.
- 2010 Advisory Board for the Handbook on Educational Psychology (2016) edited by L. Corno and E. Anderman
- 2009 Visiting Professor, University of Sydney
- 2009 Fellow, American Educational Research Association
- 2009-present Editorial Board, Educational Measurement: Issues and Practice

- 2009 Editorial Board, Encyclopedia of the Sciences of Learning
- 2007-2008 Co-Chair, International Conference on Intelligent Tutoring Systems
- 2007-2010 Editorial Board, Journal of Educational Psychology
- 2006 Visiting Professor, Stanford University
- 2006-present Editorial Board, Anuario de Psicologia
- 2005 Editorial Board, Research and Practice in Technology Enhanced Learning
- 2004-2011 James McGill Professor Research Chair
- 2002 Fellow, American Psychological Association
- 2002 Program Chair, American Educational Research Association, Division C (Learning and Instruction). This is an appointed position that requires overseeing the scientific program of 7 program sections of approximately 300 proposals.
- 2001 Invited by the editors of the Journal of Educational Psychology, to be an editor of a special issue on Aptitude Research.
- 2001 Jack Austin Lecturer, Tufts University
- 2001 Program Co-Chair, International Conference on Computers and Education, Seoul, Korea. This is an elected position that requires participation in overseeing the quality of the scientific program.
- 2000 International Conference Program Chair and Organizer of a conference on the Multi-Cultural Perspectives on the use Technology in Education (funded as PI by SSHRC conference program)
- 2000 Carrie M. Derick Award for Graduate Teaching and Supervision
- 1999 Program Chair, American Educational Research Association Conference 2000, Division C (Learning and Instruction), Section 7 (Technology Research), New Orleans
- 1999 Featured in the Impact of Researchers on Society, McGill University, Volume II
- 1998 Best Demonstration at the TeleLearning'97 Opening Worlds of Learning Conference, Second Prize
- 1998 Appointed as Program Chair for the International Conference on Artificial Intelligence and Education, 1999, Le Mans, France
- 1996 Visiting Professor, San Diego State University
- 1995 Outstanding Paper Award, International Conference on Computers in Education, Singapore, Association for the Advancement of Computing in Education
- 1992 Social Sciences and Humanities Research Council of Canada, New Researcher Award
- 1987 American Psychological Association, Division 15, Outstanding Dissertation Award
- 1984 American Educational Research Association Division C Graduate Student Representative
- 1981-1984 Stanford University Fellowship

### **Research and Scholarly Activity**

#### **Research and Supervision Interests**

Technology Rich Learning Environments

Cognitive Processes  
 Affect and Emotion  
 Diagnostic Assessment and Technology in Science, Mathematics, and Medicine  
 Individual Differences  
 Applications of Psychology and Education to Training

### **Research Grants**

Principle Investigator (Submitted): 2019-2022

Agency: Social Sciences and Humanities Research Council-TransAtlantic Platform Social Innovation

Title: Social Innovation through Technology-Rich Learning Environments (SITE)

Amount: \$1,449,702.50 Canadian portion \$175,000

Co-Applicants: Reinhard Pekrun (Ludwig-Maximilians Universitat Munchen), Inge Molenaar Radboud University, Sanna Järvelä, University of Oulu

Principle Investigator: 2018-2025

Agency: Canadian Research Chair Program

Title: Advanced Technologies for Learning in Authentic Settings: Supporting Teaching and Learning in Technology Rich Problem Solving Environments

Amount: \$1,603,735

Principal Investigator: 2018-2019

Agency: Social Sciences and Humanities Research Council: Connection Grant

Title: The Role of Emotions in Technology-Rich Learning Environments in the STEM Fields

Amount: \$25,000

Co-Applicants: Reinhard Pekrun (Ludwig-Maximilians Universitat Munchen), Roger Azevedo (North Carolina State University)

Principal Investigator: 2017-2018

Agency: CAE

Title: Supporting multimodal assessment of pilots' performance

Amount: \$88,200

Principal Investigator: 2014-2016

Agency: CAE/MITAC

Title: Understanding of key cognitive components of aviation training in the context of an e-learning environment

Amount: \$110,000

Principal Investigator: 2014-2016

Agency: MedU

Title: Using learning analytics to assess clinical reasoning in an online learning environment

Amount: \$25,000US

Co-Applicants: Eric Poitras (University of Utah), Laura Naismith (University Health Network – Toronto Western Hospital)

McGill Travel Grant for International travel to Munich: 2013  
Total: \$1500

Principle Investigator: 2012-2019

Agency: Social Sciences and Humanities Research Council:  
Partnership Grant

Title: Learning Across the Disciplines: Supporting Technology Rich Learning Across  
Disciplines

Amount: \$2,500,000; Letter of Intent was funded in 2011-2012 for preparatory work-\$20,000

Co-Applicants: Roger Azevedo, Kevin Lachapelle, Krista Muis, Jeffrey Wiseman (McGill),  
Cindy Hmelo-Silver (State University of New Jersey, Rutgers), Jacqueline Leighton (University  
of Alberta), Val Shute (Florida State), Reinhold Pekrun (Ludwig-Maximilians Universitat  
Munchen), Claude Frasson (University of Montreal), Rafael Calvos (University of Sydney)  
James Lester (North Carolina State), Eunice Jang (University of Toronto), Robert Stupnisky  
(University of North Dakota), Peter Molenaar (Pennsylvania State University), Kevin Kee  
(Brock University), Ricki Goldman (NYU)

Collaborators: Alan Lesgold (University of Pittsburgh), Gerhard Fischer (University of  
Colorado, Boulder), Kellogg Booth (University of British Columbia), François Labonté  
(Computer Research Institute of Montreal); Nathan Hall (McGill)

Partners: Arnold and Blema Steinberg Medical Simulation Centre; Commission Scolaire de la  
Pointe de l'Île; Commission Scolaire de Montréal, Commission Scolaire Marguerite Bourgeois,  
English Montreal School Board, Groupe de Recherche Inter-universitaire en Tutoriels  
Intelligents, LearnLab Pittsburgh Science of Learning Center, Lester B Pearson School Board,  
Ministère de l'Éducation, du Loisir et du Sport, University of Alberta Office of Surgical  
Education, Consortium for Research and Evaluation of Advanced Technologies in Education  
@NYU Steinhardt School of Culture, Education and Human Development, Rocky View Schools  
Alberta, The University of Alberta's Health Sciences Education and Research Commons  
(HSERC), Réseau Reussité Montreal, The McGill Centre for Medical Education, Group on  
Education Medialogy (GEM)Aalborg University, Denmark; Graphics, Animation and New  
Media (GRAND) NCE; Computer Research Institute of Montreal; Institute of Medical and  
Health Sciences-The University of Hong Kong

Principle Investigator: 2011-2018

Agency: Canadian Research Chair Program

Title: Advanced Technologies for Learning in Authentic Settings: Supporting Teaching and  
Learning in Technology Rich Problem Solving Environments

Amount: \$1,603,735

Principle Investigator: 2011-2018

Agency: Social Sciences and Humanities Research Council:

Major Collaborative Research Initiative

Title: Technology Rich Learning Environments: Supporting Learning Across the Disciplines

Amount: \$20,000 Letter of intent funded

Co-Applicants: Roger Azevedo, Kevin Lachapelle, Krista Muis, Jeffrey Wiseman (McGill),  
Cindy Hmelo-Silver (State University of New Jersey, Rutgers), Jacqueline Leighton (University

of Alberta), Micheline Chi, Kurt van Lehn (Arizona State), Val Shute (Florida State), Reinhold Pekrun (Ludwig-Maximilians Universität München), Roxana Moreno (University of New Mexico), Claude Frasson (University of Montreal), Rafael Calvos (University of Sydney) James Lester (North Carolina State), Eunice Jang (University of Toronto), Robert Stupnisky (University of North Dakota)

Collaborators: Robert Bracewell (McGill), Peter Molenaar, Pennsylvania State University  
Partners: Arnold and Blema Steinberg Medical Simulation Centre; CAE; Commission Scolaire de la Pointe de l'Île; Commission Scolaire de Montréal, Commission Scolaire Marguerite Bourgeoys, English Montreal School Board, Groupe de Recherche Inter-universitaire en Tutoriels Intelligents, Learner Assessment Alberta Education, LearnLab Pittsburgh Science of Learning Center, Lester B Pearson School Board, Ministère de l'Éducation, du Loisir et du Sport, University of Alberta Office of Surgical Education

Principle Investigator: 2012-2017

Agency: Canadian Fund for Innovation-Leadership Opportunities Fund  
Title: Advanced Technologies for Learning in Authentic Settings Facility  
Amount: \$1,000,000

Co-Investigator: 2019-2022

Agency: New Frontiers in Research-Explorations  
Title: Using machine learning techniques and physiological data to enhance educational outcomes across domains  
Co-Applicants: J. Harley (PI, University of Alberta), C. Conati, (UBC)  
Amount: \$182,635

Co-Investigator: 2017-2020

Agency: National Sciences and Engineering Research Council  
Title: Biometric Approaches to Inferring Pilot Trainee's Affective and Cognitive States  
Co-Applicants: Yong Zeng (Principal Investigator, Concordia), Jocelyn Faubert (Co-Investigator, University of Montreal), Collaborators: W. Zhu, A. Akgunduz, Concordia, Supporting Organizations: A. Houssam, CAE, P. Cole, Marinvent Corporation, A. Garabedian, GlobVision Inc, D. Faubert CRIAQ, CARIC  
Amount: \$597,900

Co-Investigator: 2017-2019

Agency: Royal College of Canada  
Title: Does Neurosurgical Virtual Reality Training Improve Operative Performance?  
Co-Applicants: Alexander Winkler-Schwartz (Principal Investigator, McGill University), Rolando Del Maestro (McGill University)  
Amount: \$40,000

Co-Investigator: 2016-2018

Agency: Social Science and Humanities Research Council of Canada (SSHRC), Partnership Development Grant  
Title: Fostering Historical Reasoning, Hope, Empathy, Emotional Engagement and Queer History Awareness with a Mobile Augmented Reality App

Amount: \$75,000

Co-Applicants: Jason Harley (Principal Investigator, University of Alberta), Andre Grace (Co-Applicant, University of Alberta), Eric Poitras (Collaborator-University of Salt Lake City))

Co-Investigator: 2015-2016

Agency: Coopera

Title: Supporting Learners' Regulation based on Visualization of Emotional Information

Co-Applicants: Elise Lavoué (Principal Investigator, University of Lyon 3), Gaëlle Molinari (University of Geneva), Aurélien Tabard (University of Lyon 1)

Amount: \$ 66,978 (\$20,000Euros)

Collaborator 2015-2016

Agency: FQRSC

Title: PÉRISCOPE : Plateforme d'Échange, de Recherche et d'Intervention sur la SColarité : Persévérance et Réussite

Co-Applicants: Thérèse Laferrière (Principal Investigator) Amount: \$712,500

Non-funded participant: 2014-2015

Agency: CANARIE

Title: VidEo : système de traitement des annotations (VESTA)

Co-Applicants: Francoys Labonté (Principal Investigator, Center for Research in Informatics Montreal)

Amount: \$200,000

Non-funded participant: 2016-2017

Agency: CANARIE

Title: VidEo: système de traitement des annotations (VESTA)

Co-Applicants: Francoys Labonte (Principal Investigator, Center for Research in Informatics Montreal)

Amount: \$200,000

Co-Investigator: 2013-2018

Agency: Canada Foundation for Innovation, Leader Opportunity Fund

Title: NeuroLab

Amount: \$830 308

Co-Applicants: Julien Mercier (Principal Investigator), Patrick Charland, Dave Saint-Amour  
Collaborators: Phil Abrami, Roger Azevedo, Armando Bertone, Isabelle Gauvin, Roland Grabner, Catherine Herba, Susanne Lajoie, Line Laplante, Pierre-Majorique Léger, Françoise Maheu, Steve Masson, Hélène Poissant, Patrice Potvin, Martin Riopel, Rushen Shi, Isabelle Soulières, Sylvain Sénécal

Co-Investigator, 2013-2018

Agency: FQRSC – MELS

Title: Environnements d'apprentissage technologiques: augmenter la motivation, l'auto-régulation et la réussite scolaire des étudiants à l'aide de l'apprentissage par l'enseignement

Amount: \$150,000

Co-Principal Investigators: Krista Muis (Principal Investigator)

Co- Investigator, 2013-2016

Agency: SSHRC Partnership Development Grant

Title: The First-Year Experience: An International Motivational Perspective

Amount: \$192,660

Co-applicant(s): Nathan Hall (Principal Investigator), Thomas Goetz, Carsten Wrosch, Anne Frenzel, Reinhard Pekrun, James Fryer, Genevieve Dunton, Lisa Linnenbrink-Garcia

Co- Investigator, 2013-2018

Agency: Partnership Development Grant—Social Sciences and Humanities Research Council of Canada (SSHRC)

Title: *Transforming Teacher Training and Improving Students' Academic Achievement with Advanced Digital Technologies*

Amount: \$190,123

Co-applicants: Roger Azevedo (Principal Investigator), Nathan Hall, and Anila Asghar (McGill University), Vivek Venkatesh (Concordia University), and collaborators Elizabeth Charles (Dawson College), François Labonté and Claude Chapdelaine (Centre de recherche informatique de Montréal), Renne Marqui (EXO U), Philip Winne (Simon Fraser University), and Thérèse Laferrière (Université de Laval)

Co-Investigator: 2016-2022 (LOI accepted)

Agency: FQRSC Emerging Cluster

Title: Centre for Brain to Society Decision & Behavior Research

Amount: \$ 1,380,000

Co-Applicants: Laurette Dube (Principal Investigator)

Co-Investigator: 2016-2018 submitted

Agency: Social Sciences and Humanities Research Council

Title: The development of a teachable agent learning environment: Fostering learning during complex mathematics problem solving.

Amount: \$74,899

Co-Applicants: Krista Muis (Principal Investigator)

Co-Investigator: 2018-2022 (not funded)

Agency: Canadian Institutes of Health Research

Title: It takes a team: Exploring collective competence of Interprofessional teams using authentic simulation in Pediatric acute health care settings.

Co-Applicants: Maryam Wagner (Principal Investigator, McGill University), Dube, T., Gomez Garibello, C., Bank, I., Lajoie, S., Nguyen, L., & Young, M.

Collaborators: Leone, M., Ruddy, M., Vastel, V.

Amount: \$340,000

Co-Investigator: 2015-2017 (not funded)

Agency: MicroSoft

Title: HoloLens Tour Guide Applications in Informal Learning Settings : Reviving the Past through Holographic Technology. Microsoft Research.



Amount: \$99,498.00 US.

Co-Applicants: Eric Poitras (Principal Investigator), Butcher, Kirsten.(University of Utah), Lajoie, Susanne.

Co-Investigator: 2015-2017 (not funded)

Agency: Law School Admission Council

Title: Online Skills Training: Assessing the Effectiveness of Online Training for Improving Case Reading Skills.

Amount: \$199,979.00 US.

Co-Applicants: Debora Threedy (Principal Investigator) Eric Poitras University of Utah

Co-Investigator: 2015-2016 (not funded)

Agency: William K. and Katherine W. Estes Fund & Association for Psychological Science and the Psychonomic Society

Title: Learning Environments Across Disciplines Workshop on Educational Data Mining and Learning Analytics: Recent Advances in Machine Learning for Psychological Modeling Within Adaptive Instructional Technologies

Co-Applicant: Eric Poitras

Amount: \$20,000

Co-Investigator: 2014-2017 Letter of Intent Submitted (not funded)

Agency: Spencer Foundation

Title: Developing adaptive virtual support for connecting global communities of inquiry learning

Co-Applicants: Cindy Hmelo-Silver (Principal Investigator, Indiana University), James Lester (North Carolina State University)

Amount: \$750,000

Co- Investigator, 2013-2018 (submitted, not funded)

Agency: Canadian Fund for Innovation

Title: The Virtual Health System: Real-time Learning from Big Data to Improve Health

Amount: \$15,000,000

Co-Principal Investigators: David Buckeridge (Principal Investigator), John Brownstein, Robyn Tamblyn, Erica Moodie, David Stephens, Joelle Pineau, Doina Precup, Alain Pinsonneault, Claude Sicotte, Guy Pare

Co- Investigator, 2013-2018 (LOI submitted, not funded)

Agency: Network Centre for Excellence, CIHR

Title: Canadian Network for Population Health and Information Technology (CANPHIT)

Amount: \$25,000,000

Co-Principal Investigators: Jacek Kopec (Principal Investigator, UFT)

Co-investigator: 2011-2013

Agency: Social Sciences and Humanities Research Council- Insight Development Grant

Title: The Meta-Prof: A self-regulated learning approach to teaching development in higher education

Amount: \$69,850

Co-Applicants: Alenoush Saroyan (Principal Investigator), Roger Azevedo

Co-investigator: 2011-2013

Agency: Social Sciences and Humanities Research Council- Insight Development Grant  
Title: Examining the Impact of Pedagogical Agents' Scaffolding on Students' Affect During Learning with Interactive Learning Environments

Amount: \$75,000

Co-Applicants: Roger Azevedo (Principal Investigator), Alenoush Saroyan (McGill University), Cristina Conati (University of British Columbia)

Co-Investigator: 2010-2011

Agency: McGill Internal-Social Sciences and Humanities Research Council

Title: Technology-Enhanced Teaching and Learning In Higher Education

Amount: \$2,000

Co-Applicants: Robert Bracewell (Principal Investigator), Tara Flanagan, Krista Muis, Alenoush Saroyan

Principle Investigator: 2010-2011

Agency: Social Sciences and Humanities Research Council International Opportunities Fund

Title: Designing Technology-Rich Environments for Case-Based Instruction: A Model for Life-Long Learning

Amount: \$75,000

Co-Applicants: Cindy Hmelo-Silver (State University of New Jersey, Rutgers), Jeffrey Wiseman (McGill), Lap Ki Chan (University of Hong Kong), Jingyan Lu (University of Hong Kong)  
Collaborator: Roxana Moreno (University of New Mexico),

Principle Investigator: 2008-2011

Agency: Social Sciences and Humanities Research Council

Title: Cognitive Tools for Supporting Teaching and Learning in Technology Rich Problem Solving Environments

Amount: \$165,250

Principle Investigator: 2008-present

Agency: McGill University Unrestricted Research Funds

Title: Computers as Cognitive Tools

Amount: \$10K/annum

Principle Investigator: 2004-2011

Agency: James McGill Research Fund

Title: Computers as Cognitive Tools

Amount: \$105,000

Principal Investigator: 2003-2006

Agency: Social Sciences and Humanities Research Council

Title: Cognitive Tools for the Mind: The Promises of Technology- Cognitive Amplifiers or Bionic Prosthetics?

Amount: \$172,261

Co-Investigator: 2006-2010

Agency: Fonds québécois de la recherche sur la société et la culture

Title: Intelligence Emotionnelle dans L'Apprentissage,

Amount: \$456,000

Co-investigators: Claude Frasson (Principal Investigator), Roger Nkymbou, Esma Aimeur

Co-Investigator: 2005-2006

Agency Fonds Québécois de Recherche en Sciences et Culture

Title: Intelligence Emotionnelle dans L'Apprentissage,

Amount: \$72,500

Co-investigators: Claude Frasson (Principal Investigator), Roger Nkambou, Esma Aimeur

Co-investigator: 2003-2008

Agency: Social Sciences and Humanities Research Council, INE Collaborative Research Initiative

Title: The Learning Kit

Amount: \$2,998,983

Co-investigators: Phil Winne (Principal Investigator), John Nesbitt, Deborah Butler, Roger Azevedo, Nancy Perry, Allyson Hadwin, Vive Kumar

Co-investigator: 2003

Agency: McConnell Foundation

Title: Sac d'École Électronique

Co-investigators: Jesus Vazquez-Abad (Principal Investigator), Jacques Raynauld, Isabelle Montesinos Gelet, France Caron, Pascale Lefrancois, Laura Winer, Jean-Jules Brault, Olivier Gerbe, Michel Trudeau, S. Carrier, Jean-Marc Robert

Amount: \$100,000

Co-Investigator: 2003-2004

Agency: Colegio de México

Title: Construcción de un Modelo para la

Colaboración Internacional en la Enseñanza en Educación Superior a través del Uso de Nuevas Tecnologías"

Co-Investigators: Benilde Garcia (Principal Investigator), Susanne Lajoie, Dan Schwartz

Amount: \$40,000

Co-Investigator: 2001-2005

Agency: Valorisation Recherche Quebec

Title: Développement, Intégration et Evaluation des Technologies de Formation et Apprentissage

Co-Investigators: Claude Frasson (Principal Investigator), GRITI research group (inter-university group of researchers in Quebec)

Amount: \$2,000,000

Co-Investigator: 2003-2005

Agency: Human Resources Development Agency

Title: Leveraging Business and Knowledge Management Skills for Visible Minorities  
Co-Investigators: Arshad Ahmad (Principal Investigator), Mei Chen, Clarence Bayne, Raafat Saade, Econcordia, A. Media  
Amount: \$646,690

Principal Investigator: 2001-2005  
Agency: Program for North American Mobility in Higher Education, HRDC  
Title: Multi-Cultural Perspectives in Education  
Co-Investigators: Canada: Ian Andrews (SFU), Jane Gaskell (UBC), US: Carlos Torres (UCLA), Josué Gonzalez (ASU), Guillermina Engelbrecht (UNM), Mexico: Aurora Elizondo Huerta (UPN), Benilde Garcia (UNAM), Dr. Omar García Ponce de León (UAEM)  
Amount: \$160,000 for Canadian portion. (\$480,000 overall)

Principal Investigator: 2000-2001  
Agency: Royal Bank Teaching and Learning Improvement Fund  
Title: Building a Model for International Collaboration of Teaching in Higher Education  
Amount: \$1500

Principal Investigator: 2000-2001  
Agency: McGill Internal Grants  
Title: Multi-Cultural Perspectives on the Uses of Technology in Education  
Amount: \$1000

Principal Investigator: 2000-2001  
Agency: Social Sciences and Humanities Research Council  
Title: Multi-Cultural Perspectives on the Uses of Technology in Education  
Amount: \$10,000

Principal Investigator: 2000-2001  
Agency: Association of Universities and Colleges of Canada, International Development Research Centre, Canada-Latin America and the Caribbean Research Exchange Grants (LAC-REG)  
Title: Building a Model for International Collaboration of Teaching in Higher Education  
Amount: \$5,000

Principal Investigator: 1999-2002  
Agency: Social Sciences and Humanities Research Council  
Title: Cognitive Tools for Extending Learning in Science  
Amount: \$133,500

Principal Investigator: 1996-1999  
Agency: Social Sciences and Humanities Research Council  
Title: Technologies for Extending Learning in Mathematics and Science  
Amount: \$75,000

Co-Investigator: 1998-2001

Agency: Office of Learning Technologies  
Title: Computer Tutors to Support Collaborative Learning  
Amount: \$70,000  
Co-investigators: Carl Frederiksen (Principal Investigator), Janet Donin, Alenoush Saroyan, Robert Bracewell

Co-Investigator: 1996-1999  
Agency: Les Fonds pour la Formation de Chercheurs et l'Aide à la Recherche  
Title: Effective Cognitive Functioning in Complex Educational Domains: The Nature and Development of Transferable Expertise  
Co-Investigators: C.H. Frederiksen (Principal Investigator), A. Breuleux, J. Donin, M. Hoover & B. Bracewell).  
Amount: \$226,718

Co-Investigator: 1995-1998  
Agency: Network for Centres of Excellence  
Title: Telelearning  
Co-Investigator(s): Carl Frederiksen, (Principal Investigator), Janet Donin, Alain Breuleux, Denis Bedard, Marion Barforth, Bruno Emond  
Amount: \$180,000

Principal Investigator: 1994-1995  
Agency: National Center for Research in Mathematical Sciences  
Education, Office of Educational Research, University of Wisconsin, Madison  
Title: Statistics Assessment  
Amount: \$92,720US

Co-Investigator: 1994-1995  
Agency: Le Ministère de l'Enseignement Supérieur de la Science, FDT  
Title: Multimedia Telecommunications Based Medical Clinical Education Research and Development Program  
Co-Investigator(s): CAE Electronics, Principal Investigator, D. Fleischer, V. Patel, A. Breuleux, Z. Bencsath-Makkai, C. Granja, R. Funnell  
Amount: \$100,000

McGill Travel Grant for International travel to Kiev, Ukraine: 1994  
Total: \$1,000

Co-Investigator: 1993-1998  
Agency: Synergy Program, Quebec Ministry of Industry, Commerce, Science and Technology  
Title: Project SAFARI  
Co-Investigator(s): Claude Frasson (Principal Investigator), Gilles Gauthier, Marc Kaltenbach, Bernard LeFebvre, Gilles Imbeau, Jan Gecsei  
Amount for my project: \$279,000  
Total amount for Group: \$3,200,000

Co-Investigator: 1993-1996

Agency: FCAR Team Grant

Title: Effective Cognitive Functioning in Complex Educational Domains:

The Nature and Development of Transferable Expertise

Co-Investigator(s): Carl Frederiksen (Principal Investigator), Robert Bracewell, Janet Donin, Michael Hoover, Alain Breuleux

Amount: \$333,245

Co-Investigator: 1993-present

Agency: Gouvernement du Quebec: Le Ministère de l'Enseignement Supérieur de la Science et de la Technologie

Title: Technologies Dérivées des Sciences Cognitives Pour L'instruction et le Développement des Compétences Professionnelles Basées Sur L'utilisation Des Micro-Ordinateurs

Co-Investigator(s): R. Bracewell, A. Breuleux, J. Donin, C. Frederiksen, M. Hoover

Amount: \$50,000

Principal Investigator: 1993-1994

Agency: National Center for Research in Mathematical Sciences

Education, Office of Educational Research, University of Wisconsin, Madison

Title: Statistics Assessment

Amount: \$92,720US

Principal Investigator: 1992-1995

Agency: Social Sciences and Humanities Research Council

Title: A Computer-Based Learning Environment to Promote Scientific Reasoning

Amount: \$83,550

Principal Investigator: 1992-1993

Agency: Office of Educational Research and Improvement,  
National Center for Research in Mathematical Sciences Education.

Title: Statistics is for Kids: Empowering Students in the Use of Mathematics

Amount: \$34,398 US

Principal Investigator: 1991-1992

Agency: Office of Educational Research and Improvement,  
National Center for Research in Mathematical Sciences Education

Title: Statistics is for Kids: Empowering students in the use of Mathematics

Amount: \$34,398 US

Principal Investigator: 1991

Agency: Office of Educational Research and Improvement,  
National Center for Research in Mathematical Sciences Education

Title: Models of Authentic Assessment

Amount: \$22,950 US

Co-Investigator: 1990-1991

Agency: Center for Biology Education, University of Wisconsin-Madison

Title: Development of Interactive Computer Software to Enhance Understanding of Biological Diversity

Amount: \$13,659 US

Principal Investigator: 1989-1991

Agency: Wisconsin Alumni Research Fund

Title: The Use of Technology to Promote Biological Reasoning

Amount: \$39,098 US

Co-Investigator: 1986-1989

Agency: Air Force Human Resources Laboratory

Title: Cognitive Skills and Intelligent Tutoring Project

Co-investigators: Alan Lesgold (Principal Investigator)

Amount: \$350,000 US

## RESEARCH AND SCHOLARLY PRODUCTIVITY

### Book Series

Spector, M. J. & Lajoie, S. P. (in progress). *Explorations in the learning sciences, instructional systems and performance technologies*. NY, NY: Springer.

Lajoie, S. P. & Steinert, Y. (in progress). *Advances in Medical Education*. NY, NY: Springer.

### Books

Woolf, B., Aimeur, E., Nkambou, R. & Lajoie, S. P. (Eds.) (2008). *Intelligent Tutoring Systems: 9th International Conference on Intelligent Tutoring Systems, ITS 2008*. New York, NY: Springer-Verlag.

Lajoie, S. P. (Ed.). (2000). *Computers as cognitive tools (vol. 2): No more walls* (pp. 1-430). Mahwah, NJ: Erlbaum.

Lajoie, S. P., & Vivet, M. (1999). *Artificial intelligence in education '99. Open learning environments: New computational technologies to support learning, exploration, and collaboration* (pp.1-804). Amsterdam: IOS Press.

Lajoie, S. P. (Ed.). (1998). *Reflections on statistics: Learning, teaching, and assessment in grades K-12* (pp. 1-336). Mahwah, NJ: Erlbaum.

Lajoie, S. P., & Derry, S. J. (Eds.). (1993). *Computers as cognitive tools* (pp. 1-401). Hillsdale, NJ: Erlbaum.

### Journal Articles: Peer reviewed

Chaouachi, M., Jraidi, I., Lajoie, S. P., & Frasson, C. (accepted). Enhancing the learning experience using real-time cognitive evaluation. *International Journal of Information and Education Technology*.

- Chen, Y., Phonethibsavads, A., Hmelo-Silver, C. E., Zhang, J., Huang, L., Bodnar, S., Lajoie, S. P. (rejected). Evaluating online PBL groups: Using a learning analytics dashboard to support facilitation. *Interdisciplinary Journal of Problem-Based Learning*
- Doleck, T., Lajoie, S. P., & Bazelais, P. (2019). Social networking and academic performance: A net benefits perspective. *Journal of Computers in Education*.
- Doleck, T., Lajoie, S. P., & Bazelais, P. (in press). Social networking and academic performance: A longitudinal perspective. *Education and Information Technologies*. DOI: 10.1007/s10639-018-9843-y.
- Jarrell, A., Lajoie, S.P. & Hall, N.(submitted). Habitual Emotion Regulation and Emotions in Achievement Situations: A Two-Wave Longitudinal Investigation in First-Year Undergraduate STEM Students.
- Harley, J.M., Jarrell, A., & Lajoie, S.P. (2019). Emotion regulation tendencies, achievement emotions, and physiological arousal in a medical diagnostic reasoning simulation. *Instructional Science*. DOI: 10.1007/s11251-018-09480-z
- Harley, J.M., Liu, Y., Ahn, T.B., Lajoie, S.P., Grace, A.P., Haldane, C., Whittaker, A., & McLaughlin, B. (in press). I've got this: Fostering topic and technology-related emotional engagement and queer history knowledge with a mobile app. *Contemporary Educational Psychology*.
- Kazemitabar, M. A., Lajoie, S. P., & Doleck, T. (in press). Examining Changes in Medical Students' Emotion Regulation in an Online PBL Session. *Knowledge Management & E-Learning*.
- Lavoué, E., Kazimitabar, M., Doleck, T., Lajoie, S.P., Carrillo, R., Molinari, G. (in press). An ecological study of students' emotion awareness in academic contexts. *Educational Research on Technology and Development*. (), 1-24, 10.1007/s11423-019-09688-x
- Lajoie, S. P., Zheng, J., Li, S., Jarrell, A. & Gube, M. (accepted). Examining the temporal nature of affect and self regulation in the context of clinical reasoning. *Special Issue of Journal of Learning and Instruction*.
- Poitras, E., Huang, L., Udy, L., Lajoie, S. P. (accepted). Scaffolding student teachers' information-seeking behaviors with a network-based tutoring system. *Journal of Computer Assisted Learning*.
- Zheng, J., Huang, F., Li, S., Lajoie, S. P., Chen, Y., Hmelo-Silver, C., E. (submitted). Exploring instructors' self-regulation and emotions: A case study of instructor interactions with a learning analytics dashboard. *Computers in Human Behavior*
- Lajoie, S. P. & Gube, M. (2018). Adaptive expertise in medical education: Accelerating learning trajectories by fostering self-regulated learning. *Medical Teacher*. <https://doi.org/10.1080/0142159X.2018.1485886>
- Lajoie, S. P., Zheng, J. & Li, S. (2018). Examining the role of self-regulation and emotion in clinical reasoning: Implications for developing expertise. *Medical Teacher*. <https://doi.org/10.1080/0142159X.2018.1484084>
- Duffy, M. C., Lajoie, S. P., Pekrun, R., & Lachapelle, K. (2018). Emotions in medical education: Examining the validity of the Medical Emotion Scale (MES) across authentic medical learning environments. *Journal of Learning and Instruction*. Advance online publication. <https://doi.org/10.1016/j.learninstruc.2018.07.001>



- Harley, J.M., Lajoie, S.P., Tressel, T., & Jarrell, A. (2018 / online first). Fostering positive emotions and history learning with location-based augmented reality and tour-guide prompts. *Learning & Instruction*. DOI: 10.1016/j.learninstruc.2018.09.001
- Harley, J.M., Liu, Y., Haldane, C., Ahn, B.T., Grace, A.P., & Lajoie, S.P. (revise and resubmit). Using a mobile app to foster LGBTQ+ empathy: A multimodal analyses. *Contemporary Educational Psychology*.
- Garcia, B., Hoover, M., Lajoie, S. Quevedo, O., Andrade, N., & Wong, J. (2018). Design of a learning-centered online environment: A cognitive apprenticeship approach. *Educational Technology Research and Development*, <https://doi.org/10.1007/s11423-018-9582-1>
- Choi, W., Dyens, O., Chan, T., Schijven, M., Lajoie, S., & Mancini, M. E. et al. (2017). Engagement and learning in simulation: Recommendations of the simnovate engaged learning domain group. *BMJ Simulation & Technology Enhanced Learning*. Advance online publication. <http://dx.doi.org/10.1136/bmjstel-2016-000177>
- Doleck, T., & Lajoie, S. P. (2017). Social networking and academic performance: A review. *Education & Information Technologies*, 23(1), 435-465. <http://dx.doi.org/10.1007/s10639-017-9612-3>
- Jarrell, A., Harley, J.M., Lajoie, S. P., & Naismith, L. (2017). Success, failure and emotions: Examining the relationship between performance feedback and emotions in diagnostic reasoning. *Educational Technology Research and Development*, 65(5), 1263-1284. <http://dx.doi.org/10.1007/s11423-017-9521-6>
- Jarrell, A., & Lajoie, S.P. (2017). The regulation of achievements emotions: Implications for Research and Practice. *Journal of Canadian Psychology*, 58(3), 276-287. <http://dx.doi.org/10.1037/cap0000119>
- Lajoie, S. P., & Poitras, E. (2017). Crossing disciplinary boundaries to improve technology rich learning. *Teachers College Record*, 119(3), 1-30
- Poitras, E.G., Doleck, T., & Lajoie, S. P. (2017). Towards detection of learner distractions in a medical learning environment: A subgroup discovery approach. *Educational Technology Research and Development*. Advance online publication. <http://dx.doi.org/10.1007/s11423-017-9555-9>
- Poitras, E., Doleck, T., Huang, L., Shan, L., & Lajoie, S. (2017). Advancing teacher technology education using open-ended learning environments as research and training platforms. *Australasian Journal of Educational Technology*, 33(3), 32-45. <https://doi.org/10.14742/ajet.3498>
- Naismith, L. M., & Lajoie, S. P. (2017). Motivation and emotion predict medical students' attention to computer-based feedback. *Advances in Health Sciences Education*. Advance online publication. <https://doi.org/10.1007/s10459-017-9806-x>
- Ranellucci, J., Hall, N. C., Muis, K. R., & Lajoie, S. P. (2017). Mastery, maladaptive learning behavior, and academic achievement: An intervention approach. *Canadian Journal of Education*, 40(4), 705-738.
- Doleck, T., Jarrell, A., Poitras, E. G., Chaouachi, M., & Lajoie, S. P. (2016). A tale of three cases: Examining accuracy, efficiency, and process differences in diagnosing virtual patient cases. *Australasian Journal of Educational Technology*, 32(5), 61-76.
- Harley, J.M., Lajoie, S.P., Frasson, C. & Hall, N.C. (2016). Developing emotion-aware, advanced learning technologies: A taxonomy of approaches and features. *International Journal of Artificial Intelligence in Education*. DOI10.1007/s40593-016-0126-8

- Hogaboam, P. T., Chen, X., Hmelo-Silver, C. E., Lajoie, S. P., Bodnar, S., Kazemitabar, M., Wiseman, J., & Chan, L. K. (2016). Data dashboards to support facilitating online problem-based learning. *Quarterly Review of Distance Education, 17*(3), 75-91.
- Jarrell, A. & Lajoie, S. P. (revise and resubmit). Emotions and emotion regulation: Redefining teaching practices in 21<sup>st</sup> century classrooms. *Teaching and Teacher Education*.
- Jang, E., Lajoie, S., Wagner, M., Xu, Z., Poitras, E., Naismith, L. (2016). Building an ecological learner model through person-oriented approaches to profiling learners in technology-rich learning environments. *Journal of Educational Computing Research, 55*(4), 552-597. doi.org/10.1177/0735633116678995.
- Tressel, T., Lajoie, S.P. & Duffy, M. (revise and resubmit). A guide for study terminology: Reviewing a fragmented domain. *Journal of Canadian Psychology*.
- Harley, J.M., Poitras, E. G., Jarrell, A., Duffy, M. C., & Lajoie, S. P. (2016). Comparing virtual and location-based augmented reality mobile learning: Emotions and learning outcomes. *Educational Technology Research and Development, 64*(3), 359-388. DOI: 10.1007/s11423-015-9420-7.
- Jarrell, A., Harley, J. M. & Lajoie, S. P. (2016). The link between achievement emotions, appraisals and task performance: Pedagogical considerations for emotions in CBLEs. *Journal of Computers in Education, 3*(3), 289-307.
- Lee, L., Lajoie, S. P., Poitras, E. G., Nkangu, M., & Doleck, T. (2016). Co-regulation and knowledge construction in an online synchronous problem based learning setting. *Education & Information Technologies*. doi:10.1007/s10639-016-9509-6
- Muis, K., Psaradellis, C., Chevrier, M., Di Leo, I., & Lajoie, S. P. (2016). Learning by preparing to teach: Fostering self-regulatory processes and achievement during complex mathematics problem solving. *Journal of Educational Psychology, 108*(4), 474-492. <http://dx.doi.org/10.1037/edu0000071>
- Poitras, E. G., Lajoie, S. P., Doleck, T., & Jarrell, A. (2016). Subgroup discovery with user interaction data: An empirically guided approach to improving intelligent tutoring systems. *Educational Technology & Society, 19*(2), 204–214. DOI: 10.1007/s11423-015-9420-7 [\[link\]](#)
- Poitras, E., Naismith, L., Doleck, T., & Lajoie, S. P. (2016). Using learning analytics to identify medical student misconceptions in an online virtual patient environment. *Online Learning, 20* (2), 183–194.
- AlZhrani, G., Alotaibi, F., Azarnoush, H. M., Winkler-Schwartz, A., Sabbagh, A., Lajoie, S. P., & Del Maestro, R. F. (2015). Proficiency performance benchmarks for removal of simulated brain tumors using 'NeuroTouch' a virtual reality simulator. *Journal of Surgical Education, 72*(4), 685-696.
- Chaput, G., Lajoie, S. P., Naismith, L. & Lavigne, G. (2015). Pain catastrophizing correlates with early mild traumatic brain injury outcome. *Pain Research and Management, 20* (X), 1-5.
- Doleck, T., Basnet, R.B., Poitras, E. G., & Lajoie, S. P. (2015). Mining learner-system interaction data: Implications for modeling learner behaviors and improving overlay models. *Journal of Computers in Education, 2* (4), 421-447. doi: 10.1007/s40692-015-0040-3
- Lajoie, S. P., Lee, L., Bassiri, M., Cruz-Panesso, I., Kazemitabar, M., Poitras, E., Hmelo-Silver, C., Wiseman, J., Chan, L., Lu, J. (2015). The role of regulation in medical student learning in small groups: Regulating oneself and others' learning and emotions. In Järvelä, S. &

- Hadwin, A. (Eds.) Special issue *Examining the emergence and outcomes of regulation in CSCL. Journal of Computer and Human Behavior*, 52, 601-616.  
doi:10.1016/j.chb.2014.11.073
- Muis, K., Psaradellis, C., Lajoie, S. P., Di Leo, I., & Chevrier, M., (2015). The role of epistemic emotions in mathematics problem solving. *Contemporary Educational Psychology*, 42, 172-185.
- Gauthier, G., & Lajoie, S.P. (2014). Do expert clinical teachers have a shared understanding of what constitutes a competent reasoning performance in case-based teaching? *Instructional Science*, 42 (4), 579-594.
- Lajoie, S. P., Hmelo-Silver, C., Wiseman, J., Chan, L. K., Lu, J., Khurana, C., Cruz-Panesso, I., Poitras, E., & Kazemitabar, M. (2014). Using online digital tools and video to support international problem-based learning. *Interdisciplinary Journal of Problem Based Learning*, 8(2). Available at: <http://dx.doi.org/10.7771/1541-5015.1412>
- Poitras, E., & Lajoie, S. (2014). Developing an agent-based adaptive system for scaffolding self-regulated inquiry learning in history education. *Educational Technology, Research, & Development*, 62, 335-366.
- Poitras, E., & Lajoie, S. (2013). A domain-specific account of self-regulated learning: The cognitive and metacognitive activities involved in learning through historical inquiry. *Metacognition and Learning*, 8(3), 213-234.
- Lajoie, S. P., & Lu, J. (2012). Supporting collaboration with technology: Does shared cognition lead to co-regulation in medicine? *Metacognition and Learning*, 7, 45-62.
- Poitras, E., Lajoie, S., & Hong, Y.-J. (2012). The design of technology-rich learning environments as metacognitive tools in history education. *Instructional Science*, 40(6), 1033-1061.
- Thomas, A., Saroyan, A., & Lajoie, S. P. (2012). Creation of an evidence-based practice reference model in falls prevention: Findings from occupational therapy. *Disability and Rehabilitation*, 34, 311-328.
- Lajoie, S. P. (2010). Cognitive tools for facilitating meaningful interactions in complex domains. *Technology, Instruction, Cognition and Learning*, 8, 103-118.
- Lu, J., Lajoie, S.P., & Wiseman, J. (2010). Scaffolding problem based learning with CSCL Tools. *International Journal of Computer supported collaborative learning*, 5, 283-299.
- Lajoie, S. P., Gauthier, G, & Lu, J. (2009). Convergence of data sources in the analysis of complex learning environments. *Research and Practice in Technology Enhanced Learning*, 4, 195-219.
- Lajoie, S. P. (2008). Metacognition, self regulation, and self-regulated learning: A rose by any other name? *Educational Psychology Review*, 20 (4), 469-475.
- Lu, J., & Lajoie, S. P. (2008). Supporting medical decision making with argumentation tools. *Contemporary Educational Psychology*. 33, 425-442.
- Lajoie, S. P. (2007). Aligning theories with technology innovations in education. *British Journal of Educational Psychology - Monograph Series II (5), Learning through digital technologies*, 27-38.
- Lajoie, S. P., Gauthier, G. & Nakamura, C. (2007). Cognitive models and cognitive tools in educational applications. *Technology Instruction Cognition and Learning*, 5, 339-352.
- Lavigne, N., & Lajoie, S. P. (2007). Statistical reasoning of middle school children engaged in survey inquiry. *Contemporary Educational Psychology*, 32, 630-666.

- Lajoie, S. P., Faremo, S., Wiseman, J. & Gauthier, G (2006). Promoting self-regulation in medical students through the use of technology. *Technology Instruction Cognition and Learning*, 3, 81-87.
- Lajoie, S. P., Garcia, B. C., Berdugo, G. C., Marquez, L., Espíndola, S. & Nakamura, C. (2006). The creation of virtual and face-to-face learning communities: An international collaborative experience. *Journal of Educational Computing Research*, 35, 163-180.
- Winne, P. H., Nesbitt, J. C., Kumar, V., Hadwin, A. F., Lajoie, S. P., Azevedo, R., Perry, N.E. (2006). Supporting self-regulated learning with gStudy software: The learning kit project, *Technology Instruction Cognition and Learning*, 3, 105-113.
- Lajoie, S. P. (2005). Extending the scaffolding metaphor. *Instructional Science*, 33, 541-557.
- Kyllonen, P. C. & Lajoie, S. P. (2003). Reassessing aptitude: Introduction to a special issue in honor of Richard E. Snow. *Educational Psychologist*, 38, 79-83.
- Lajoie, S. P. (2003). Transitions and trajectories for studies of expertise. *Educational Researcher*, 32, 21-25.
- Lajoie, S. P. (2003). Individual differences in spatial ability: Developing technologies to increase strategy awareness and skills. *Educational Psychologist*, 38, 115-125.
- Lajoie, S. P., & Kyllonen, P. C. (2003). Aptitude [Special issue]. *Educational Psychologist*, 38 *Special issue on Aptitude*.
- Lajoie, S. P., Faremo, S., & Wiseman, J. (2001). Identifying human tutoring strategies for effective instruction in internal medicine. *International Journal of Artificial Intelligence and Education*, 12, 293-309.
- Lajoie, S. P., Lavigne, N. C., Guerrero, C. & Munsie, S. (2001). Constructing knowledge in the context of BioWorld. *Instructional Science*, 29, 155-186.
- Azevedo, R., & Lajoie, S. P. (1998). The cognitive basis for the design of a mammography interpretation tutor. *International Journal of Artificial Intelligence in Education*, 9, 32-44.
- Lajoie, S. P., Azevedo, R. & Fleischer, D. (1998). Cognitive tools for assessment and learning in a high information flow environment. *Journal of Educational Computing Research*, 18, 205-235.
- Lillehaug, S. I., & Lajoie, S. P. (1998). AI in medical education: Another grand challenge for medical informatics. *Journal of Artificial Intelligence in Medicine*, 12, 1-29.
- Lavigne, N. C., & Lajoie, S. P. (1996). Communicating performance criteria to students through technology. *The Mathematics Teacher*, 89, 66-69.
- Lajoie, S. P., Jacobs, V. R., & Lavigne, N. C. (1995). Empowering children in the use of statistics. *Journal of Mathematical Behavior*, 14, 401-425.
- Lajoie, S. P., & Lesgold, A. (1992). Dynamic assessment of proficiency for solving procedural knowledge tasks. *Educational Psychologist*, 27, 365-384.
- Lajoie, S. P. (1991). Reality testing for cognitive strategy research. *Educational Researcher*, 20, 30-33.
- Lajoie, S. P., & Lesgold, A. (1989). Apprenticeship training in the workplace: A computer-coached practice environment as a new form of apprenticeship. *Machine-Mediated Learning*, 3, 7-28.
- Lesgold, A., Lajoie, S. P., Bunzo, M., & Eggan, G. (1988). Sherlock: A coached practice environment for an electronics troubleshooting job. *Technology and Learning*, 2, 1-3.
- Lajoie, S. P., & Shore, B. M. (1987). Impulsivity, reflectivity and high IQ. *Gifted Education International*, 4, 139-141.

- Lajoie, S. P., & Shore B. M. (1986). Intelligence: The speed and accuracy tradeoff in high aptitude individuals. *Journal for the Education of the Gifted*, 9, 85-104.
- Shore, B. M., Hymovitch, J., & Lajoie, S. P. (1982). Processing differences in relations between ability and field independence. *Psychological Reports*, 50, 391-395.
- Lajoie, S. P., & Shore, B. M. (1981). Three myths? The over-representation of the gifted among dropouts, delinquents, and suicides. *Gifted Child Quarterly*, 25, 138-143.

### **Journal Articles: Peer-reviewed Under Review**

- AlZhrani, G., Alarifi, N., Alotaibi, F., Azarnoush, H., Winkler-Schwartz, A., Sabbagh, A., Lajoie, S. P., Del Maestro, R. F. (in prep). Effects of repetition of technical skills independent of external instruction on surgical performance using virtual reality surgical simulator NeuroTouch. *Journal of Surgical Education*.
- Bodnar, S., Huang, L., Chen Y., Kazemitabar, M., Birk, G., Zheng, J., Sarmiento, J.P., Hogaboam, P., Lajoie, S., Hmelo-Silver, C., Wiseman, J., & Chan L.K. (in prep). Learning Analytics dashboard designs using a mock data approach to inform an on-line problem-based learning environment. *Interaction Design & Architecture(s)*.
- Ponzoni, N., Arnaert, A., & Lajoie, S. (under review). Nurses' perspectives of the contextual reality of practice in northern Quebec. *Journal of Community Health Nursing*.
- Gube, M., Tressel, T., Jarrell, A., Lajoie, S. P. (in prep). For shame: Gender disparity in academic emotions and achievement goals in STEM students.
- Hmelo-Silver, C. E., Jung, J. & Lajoie, S. P. (in prep). Design principles for technology-rich learning environments (TREs): Building on foundations and advances in the learning sciences. *Education Research Review*.
- Jarrell, A., Tressel, A., Lajoie, S.P., & Kazemitabar, M. (in prep). Emotion regulation during studying and exams in undergraduates: Antecedents, achievement emotions and outcomes.

### **Journal Special Issue Editor**

- Lajoie, S.P., Azevedo, R., Pekrun, R., Leighton, J. (Eds.) (accepted). Learning and emotions studied within technology rich learning environments across disciplines. *Learning and Instruction*.

### **Journal Articles: In Prep**

- Cruz-Panesso, I., Lajoie, S. P., Lachapelle, K. (in prep.). Using team task analysis to identify indices of team coordination. *Journal of Applied Psychology*.
- Kazemitabar, M., & Lajoie, S. P. (in prep.). Emotions in in Medical Settings: Towards a non-verbal detection of Emotion Regulation. *Journal of Emotion & Cognition*.
- Poitras, E., Doleck, T., Huang, L., Udy, L., Lajoie, S. P. (in prep). Modeling and tracking student profiles of self-regulated learning with network-based tutors. *Journal of Computers in Human Behavior*.

### **Journal Articles: Non-Peer reviewed**

- Lajoie, S. P. (2017). Technology tools for supporting and assessing learning within the context of clinical reasoning. *Canadian Association for Educational Psychology Dialogic*, 24.

- Tressel, T., & Lajoie, S. P. (2017). Using a Self-Regulation Framework to Design a Mobile App that Improves Study Skills. *Canadian Association for Educational Psychology Dialogic*, 28.
- Lajoie, S. P. (2001). Validating statistical education: A response to Batanero, Garfield, Ottaviani, & Truran. *Statistical Research Education Newsletter* 2(1), 15-16.
- Lajoie, S. P. (1991). A framework for authentic assessment in mathematics. *National Center for Research in Mathematical Sciences Education Research Review*, 1(1), 6-12.

### Proceedings: Peer Reviewed

- Doleck, T., Poitras, E. G., & Lajoie, S. P. (2019). Assessing the utility of deep learning: Using learner-system interaction data from BioWorld. In J. Theo Bastiaens (Ed.), *Proceedings of EdMedia + Innovate Learning* (pp. 588-592). Amsterdam, Netherlands: Association for the Advancement of Computing in Education (AACE).
- Assessing the utility of deep learning: Using learner-system interaction data from BioWorld. *Proceedings of EdMedia: World Conference on Educational Media and Technology 2019*. (pp. 588-592). Amsterdam, Netherlands: AACE.
- Li S., Zheng J., Poitras E., Lajoie S.P. (2018) The allocation of time matters to students' performance in clinical reasoning. In R. Nkambou, R. Azevedo & J. Vassileva (Eds.), *Proceedings of the 14th International Conference on Intelligent Tutoring Systems, LNCS 10858* (pp. 110-119). Berlin/Heidelberg: Springer.
- Psaradellis, C., Muis, K.R., Smith, A.P., & Lajoie, S.P. (2018, July). *Enhancing complex mathematics problem solving through learning by teaching with a teachable agent*. Paper presented at the Education and Information Systems, Technologies and Applications: EISTA 2018 and paper published in the conference's proceedings, The 12<sup>th</sup> International Multi-Conference on Society, Cybernetics and Informatics: IMSCI 2018, Orlando, Florida.
- Chen, Y., Birk, G., Hmelo-Silver, C. E., Kazemitabar, M. A., Bodnar, S., & Lajoie, S. P. (2017). Visualizations to support facilitation: the instructor's view. In B. K. Smith, M., Borge, E., Mercier & K. Y. Lim (Eds.), *Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017, Volume 2* (pp. 857-858). Philadelphia, PA: International Society of the Learning Sciences.
- Doleck, T., Poitras, E., & Lajoie, S.P. (2017). Exploring case specificity in medical students' clinical reasoning. In J. Dron & S. Mishra (Eds.), *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 572-577). Vancouver, British Columbia, Canada: Association for the Advancement of Computing in Education (AACE).
- Huang, L., Bodnar, S., Kazemitabar, M., Zheng, J., Chen Y., & Birk, G. et al. (2017) Visualizing Dominant Behaviours in Problem-Based Learning Environments: A Case Study Analysis of the HOWARD Platform. In J. Dron & S. Mishra (Eds.), *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 359-364). Vancouver, British Columbia, Canada: Association for the Advancement of Computing in Education (AACE).
- Kazemitabar M. A., & Lajoie, S. P. (2017). Role of socio-emotional interactions on mutual trust and shared mental models in a case study of programming teams. In B. K. Smith, M., Borge, E., Mercier, and K. Y. Lim (Eds.), *Making a Difference: Prioritizing Equity and*

- Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017, Volume 2* (pp. 688-691). Philadelphia, PA: International Society of the Learning Sciences
- Lawrynczyk, A., Chaouachi, M., & Lajoie, S. (2017). Multimodal Assessment of Pilots' Affective States using Psycho Physiological Sensor Signals and Facial Recognition Analysis . *Proceedings of the Interservice/Industry Training, Simulation, and Education Conference (IITSEC)*, Orlando, FL. 2017.
- Chen, Y., Hogaboam, P., Hmelo-Silver, C. Lajoie, S. P., Wiseman, J., Bodnar, S., Kazemitabar M & Chan, L. (2016). Instructional dashboards to support deep learning in an online problem-based learning environment. In M. Wang, P. Kirschner & S. M. Bridges (Eds.) *Proceedings of the Workshop on Computer-Based Learning Environments for Deep Learning in Inquiry and Problem-Solving Contexts at the 12<sup>th</sup> International Conference of the Learning Sciences* (pp. 6-12). Singapore.
- Doleck, T., Jarrell, A., Poitras, E. G., Chaouachi, M., & Lajoie, S. P. (2016). Examining Diagnosis Paths: A Process Mining Approach. In *Proceedings of the IEEE International Conference on Computational Intelligence and Communication Technology (IEEE ICICT)*, (pp. 664-668), Los Alamitos, CA: Conference Publishing Services, IEEE. doi: 10.1109/CICT.2016.137
- Doleck, T., Poitras, E., Naismith, L. & Lajoie, S. (2016). Detecting Dummy Learner Submitted Annotations in an Online Case Learning Environment. In *Proceedings of EdMedia: World Conference on Educational Media and Technology 2016* (pp. 498-503). Association for the Advancement of Computing in Education (AACE).
- Kazemitabar, M. A., Bodnar, S., Hogaboam, P., Chen, Y., Sarmiento, J. P., Lajoie, S. P., ... & Chan, L. (2016, July). Creating Instructor Dashboards to Foster Collaborative Learning in On-Line Medical Problem-Based Learning Situations. In proceedings of the *International Conference on Learning and Collaboration Technologies* (pp. 36-47). Springer International Publishing.
- Chaput, G., Lavigne, R. & Lajoie, S. P. (2015). Assessing the relationship between pain catastrophizing and early mild traumatic brain injury outcome. *Proceedings of the Traumatic Brain Injury Conference*.
- Doleck, T., Basnet, R. B., Poitras, E., & Lajoie, S. (2015). Investigating Learner Behaviors in a Medical Intelligent Tutoring System: Using Hidden Markov Models. In *Proceedings of the IEEE International Advance Computing Conference, (IEEE IACC)*, (pp. 329-332), India: IEEE. doi: 10.1109/IADCC.2015.7154724
- Doleck, T., Jarrell, A., Poitras, E., & Lajoie, S. (2015). Diagnosing Virtual Patient Cases: Gender Differences in Novice Physicians in a Computer Based Learning Environment. In S. Carliner, C. Fulford, & N. Ostaszewski (Eds.), *Proceedings of EdMedia: World Conference on Educational Media and Technology 2015* (pp. 666-670). Association for the Advancement of Computing in Education (AACE). Montreal, Canada.
- Doleck, T., Jarrell, A., Poitras, E., & Lajoie, S. (2015). Towards investigating performance differences in clinical reasoning in a technology rich learning environment. *Proceedings of the 17<sup>th</sup> International Conference on Artificial Intelligence in Education (AIED)* (pp. 566-569). Madrid, Spain.
- Duffy, M., Lajoie, S., Azevedo, R., Pekrun, R., & Lachapelle, K. (2015). Examining emotional states and technical skills performance in medical education. *Proceedings of the Junior*

*Researchers Pre-conference of the European Association of Research on Learning and Instruction.* Limassol, Cyprus.

- Harley, J. M., Lajoie, S. P., Frasson, C., & Hall, N.C. (2015). Examining the predictive relationship between personality and emotion traits and learners' agent-directed emotions. In C. Conati & N. Heffernan (Eds.), *Lectures Notes in Artificial Intelligence: Vol. 9112. Artificial Intelligence in Education* (pp. 620-624). Switzerland: Springer.
- Jarrell, A., Doleck, T., Poitras, E., Lajoie, S., & Tressel, T. (2015). Learning to diagnose a virtual patient: An investigation of cognitive errors in medical problem solving. In C. Conati & N. Heffernan (Eds.), *Lectures Notes in Artificial Intelligence: Vol. 9112. Artificial Intelligence in Education* (pp.176-184). Switzerland: Springer.
- Jarrell, A., Harley, J.M., Lajoie, S.P., & Naismith, L. (2015). Examining the relationship between performance feedback and emotions in diagnostic reasoning: Toward a predictive framework for emotional support. In C. Conati & N. Heffernan (Eds.), *Lectures Notes in Artificial Intelligence: Vol. 9112. Artificial Intelligence in Education* (pp. 657-660). Switzerland: Springer.
- Kazemitabar, M. A. & Lajoie, S. P. (2015). A multimodal methodology for the detection of emotion regulation. To appear in *Proceedings of the Junior Researchers Pre-conference of the European Association of Research on Learning and Instruction.* Limassol, Cyprus.
- Lajoie, S. P., Lee, L., Poitras, E., Hmelo-Silver, C., Hogaboam, P. (2015). Computer supported tools for coregulation: supporting teachers and learners in problem based learning activities. regulated learning in cscl – theoretical progress for learning success. In O. Lindwall, P. Häkkinen, T. Koschmann, P. Tchounikine, & S. Ludvigsen (Eds.), *Exploring the Material Conditions of Learning: The Computer Supported Collaborative Learning (CSCL) Conference 2015, Volume 1* (pp. 11-18). Gothenburg
- AlZhrani1, G., AlOtaibi1, F., Azarnoush, H., Winkler-Schwartz, A., Sabbagh, A., Lajoie, S. & Del Maestro, R. (2014). Utilizing a virtual reality simulator, Neurotouch, to determine proficiency performance benchmarks for resection of simulated brain tumors. *Neuro Oncology, 16 (suppl 5):* v127-v128. doi: 10.1093/neuonc/nou260.4 This article appears in: Abstracts from the 19th Annual Scientific Meeting of the Society for Neuro-Oncology.
- Doleck, T., Basnet, R. B., Poitras, E., & Lajoie, S. (2014). Exploring the link between initial and final diagnosis in a medical intelligent tutoring system. *Proceedings of IEEE International Conference on MOOCs, Innovation & Technology in Education (MITE)*, (pp. 13-16). India: IEEE.
- Doleck, T., Basnet, R. B., Poitras, E., & Lajoie, S. (2014). BioWorldParser: a suite of parsers for leveraging educational data mining techniques. *Proceedings of IEEE International Conference on MOOCs, Innovation & Technology in Education (MITE)*, (pp. 32-35). India: IEEE.
- Doleck, T., Basnet, R. B., Poitras, E., & Lajoie, S. (2014). Augmenting the novice-expert overlay model in an intelligent tutoring system: using confidence-weighted linear classifiers. *Proceedings of IEEE International Conference on Computational Intelligence & Computing Research (ICCIC)*, (pp. 87-90). India: IEEE.
- Doleck, T. & Lajoie, S. (2014). NgageCollab: A gamified platform to foster engagement and collaboration amongst researchers. *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2014* (pp. 610-614). Chesapeake, VA: AACE.



- Poitras, E., Doleck, T., & Lajoie, S. P. (2014). Mining Case Summaries in BioWorld. In *Proceedings of 9<sup>th</sup> International Conference on Computer Science & Education (ICCSE)*, (pp. 6-9), Vancouver, BC, Canada. doi:10.1109/iccse.2014.6926422
- Poitras, E., Jarrell, A., Doleck, T., & Lajoie, S. (2014). Supporting Diagnostic Reasoning by Modeling Help-Seeking. In *Proceedings of 9<sup>th</sup> International Conference on Computer Science & Education (ICCSE)*, (pp. 10-14), Vancouver, BC, Canada. doi:10.1109/iccse.2014.6926422
- Lajoie, S. P., Poitras, E., Naismith, L., Gauthier, G., Summerside, C., Kazemitabar, M., Tressel, T., Lee, L., & Wiseman, J. (2013). Modelling domain-specific self-regulatory activities in clinical reasoning. In K. Yacef et al. (Eds). *International Artificial Intelligence and Education Proceedings*, (pp. 632-635). IOS Press: Amsterdam.
- Poitras, E., Kee, K., Lajoie, S. P. & Cataldo, D. (2013). Towards evaluating and modelling the impacts of mobile-based augmented reality applications on learning and engagement. In K. Yacef et al. (Eds). *International Artificial Intelligence and Education Proceedings*, (pp. 868-871). IOS Press: Amsterdam.
- Lajoie, S. P., Cruz-Panesso, I., Poitras, E., Kazemitabar, M., Wiseman, J., Chan, L. K., & Hmelo-Silver, C. (2012). Can technology foster emotional regulation in medical students? An international case study approach. In M. Cantoia, B. Colombo, A. Gaggioli, B. Girani De Marco (Eds.). *Proceedings of the 5th Biennial Meeting of the EARLI Special Interest Group 16 Metacognition*, (pp. 148). Milano, Italy.
- Lajoie, S. P., Naismith, L., & Poitras, E. (2012). Supporting metacognitive processes in medical reasoning using technology. In M. Cantoia, B. Colombo, A. Gaggioli, B. Girani De Marco (Eds.). *Proceedings of the 5th Biennial Meeting of the EARLI Special Interest Group 16 Metacognition*, (pp. 47-48). Milano, Italy.
- Poitras, E., Duffy, M., Azevedo, R., & Lajoie, S. (2012). Issues and challenges in the measurement of self-regulatory processes across disciplines in the context of advanced learning technologies. In *Proceedings of the 40<sup>th</sup> Annual Meeting of the Canadian Society for the Study of Education*. Waterloo, Canada.
- Poitras, E., & Lajoie, S. (2012). The MetaHistoReasoning Tool: A metacognitive tool for fostering domain-specific metacognitive activities in learning through historical inquiry. In A. Weerasinghe, R. Azevedo, I. Roll, & B. du Boulay (Eds.), *Proceedings of the Workshop on Self-Regulated Learning in Educational Technologies: Supporting, Modelling, Evaluating, and Fostering Metacognition with Computer-Based Learning Environments* (pp. 41-44). Crete, Greece.
- Poitras, E., & Lajoie, S. (2012). The MetaHistoReasoning Tool: An overview of the training and inquiry modules. In A. Weerasinghe, R. Azevedo, I. Roll, & B. du Boulay (Eds.), *Proceedings of the Workshop on Self-Regulated Learning in Educational Technologies: Supporting, Modelling, Evaluating, and Fostering Metacognition with Computer-Based Learning Environments* (pp. 45-47). Crete, Greece.
- Poitras, E., Lajoie, S. P., & Hong, Y. J. (2012). Using the MetaHistoReasoning tool training module to facilitate the acquisition of domain-specific metacognitive strategies. In S.A. Cerri, W.J. Clancey, G. Papadourakis, K. Panourgia (Eds.), *Proceedings of the 11th International Conference on Intelligent Tutoring Systems* (pp. 511-517). Crete, Greece.
- Poitras, E., Lajoie, S., & Hong, Y. J. (2012). Learning through historical inquiry with the MetaHistoReasoning tool. *Proceedings of the 40<sup>th</sup> Annual Meeting of the Canadian Society for the Study of Education*. Waterloo, Canada.

- Poitras, E., Lajoie, S., Nokes, J., & Hong, Y. J. (2011). The MetaHistoReasoning Tool: Fostering domain-specific metacognitive processes while learning through historical inquiry. In G. Biswas, S. Bull, J. Kay, & A. Mitrovic (Eds.), *Proceedings of the 2011 Artificial Intelligence in Education Society Conference* (pp. 609-611). Auckland, New Zealand.
- Blanchard, E.G., Wiseman, J., Naismith, L., Hong, Y. J., & Lajoie, S.P. (2010). The online deteriorating patient: An adaptive simulation to foster expertise in emergency decision-making. In V. Aleven, J. Kay, & J. Mostow (Eds.). *Proceedings of the 10th International Conference On Intelligent Tutoring Systems, LNCS 6095* (pp. 269-271). Berlin/Heidelberg: Springer.
- Chiarella, A. & Lajoie, S. (2010). Social annotation: emergent text signals through self-organization. *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010* (pp. 1456-1462). Chesapeake, VA: AACE.
- McCurdy, N., Naismith, L., & Lajoie, S. P. (2010). Using metacognitive tools to scaffold medical students developing clinical reasoning skills. *Proceedings of the 2010 AAAI Fall Symposium on Cognitive and Metacognitive Educational Systems* (pp. 52-56). Menlo Park, CA: AAAI Press.
- Naismith, L., & Lajoie, S.P. (2010). Using expert models to provide feedback on clinical reasoning skills. In V. Aleven, J. Kay, & J. Mostow (Eds.) *Proceedings of the 10th International Conference on Intelligent Tutoring Systems, LNCS 6095* (pp. 242-244). Berlin/Heidelberg: Springer.
- Poitras, E., Lajoie, S., Hong, Y. J. (2010). Using a bottom-up approach to design computers as metacognitive tools to enhance learning of history. *Proceedings of the 2010 AAAI Fall Symposium on Cognitive and Metacognitive Educational Systems* (pp.81-86). Menlo Park, CA: AAAI Press.
- Blanchard, E. G., Mizoguchi, R., Lajoie, S. P. (2009). Addressing the interplay of culture and affect in HCI: An Ontological Approach. *Proceedings of the 13th International Conference on Human-Computer Interaction LNCS/LNAI series 5612*, (pp. 575-584), Heidelberg: Springer.
- Blanchard, E. G., Roy, M., Lajoie, S. P., & Frasson, C. (2009). An evaluation of sociocultural data for predicting attitudinal tendencies. In V. Dimitrova, R. Mizoguchi, B. du Boulay, A. Graesser (Eds.) *Artificial Intelligence in Education Building Learning systems that Care: from Knowledge Representation to Affective Modeling* (pp. 399-408). Amsterdam: IOS Press.
- Blanchard, E. G., Volfson, B., Hong, Y. J., Lajoie, S. P. (2009). Affective AIED: From detection to adaptation. In V. Dimitrova, R. Mizoguchi, B. du Boulay, A. Graesser (Eds.) *Artificial Intelligence in Education Building Learning systems that Care: from Knowledge Representation to Affective Modeling* (pp. 81-90). Amsterdam: IOS Press.
- Gauthier, G., & Lajoie, S. P. (2009, July). Validating and representing case based knowledge. In V. Dimitrova, R. Mizoguchi, B. du Boulay, A. Graesser (Eds.) *Artificial Intelligence in Education Building Learning systems that Care: from Knowledge Representation to Affective Modeling* (pp. 779-780). Amsterdam: IOS Press.
- Lajoie, S. P. (2009). Can computers teach you to think and care? Revisiting the modeling debates with an eye to the future. In V. Dimitrova, R. Mizoguchi, B. du Boulay, A. Graesser (Eds.) *Artificial Intelligence in Education Building Learning systems that Care: from Knowledge Representation to Affective Modeling* (p. 3). Amsterdam: IOS Press.

- Lu, J., Lajoie, S. P., Wiseman, J. (2009). Scaffolding collaboration in simulated medical emergencies. In S.C. Kong, H. Ogata, H.C. Arnseth, C.K.K. Chan, T. Hirashima, F. Klett, J.H.M. Lee, C.C. Liu, C.K. Looi, M. Milrad, A. Mitrovic, K. Nakabayashi, S. L. Wong, S.J.H. Yang (Eds.). *Proceedings of the 17th International Conference on Computers in Education [CDROM]*. Hong Kong: Asia-Pacific Society for Computers in Education.
- Naismith, L., Blanchard, E. G., Ranellucci, J., & Lajoie, S. P. (2009, July). EAGLE: An intelligent tutoring system to support experiential learning through video games (Poster). In V. Dimitrova, R. Mizoguchi, B. du Boulay, A. Graesser (Eds.) *Artificial Intelligence in Education Building Learning systems that Care: from Knowledge Representation to Affective Modeling* (pp. 719-721). Amsterdam: IOS Press.
- Naismith, L., & Lajoie, S. P. (2009, July). Learning from feedback in BioWorld. In V. Dimitrova, R. Mizoguchi, B. du Boulay, A. Graesser (Eds.) *Artificial Intelligence in Education Building Learning systems that Care: from Knowledge Representation to Affective Modeling* (pp. 781-782). Amsterdam: IOS Press.
- Ranellucci, J. & Lajoie, S. P. (2009, July). The effect of mood on medical students' diagnostic performance: Is one patient's bad news another patient's worse news? In V. Dimitrova, R. Mizoguchi, B. du Boulay, A. Graesser (Eds.) *Artificial Intelligence in Education Building Learning systems that Care: from Knowledge Representation to Affective Modeling* (pp. 773-774). Amsterdam: IOS Press.
- Azevedo, R., Faremo, S., & Lajoie, S.P. (2007). Expert-novice differences in mammogram interpretation. In D. S. McNamara & J. G. Trafton (Eds.), *Proceedings of the 29th Annual Cognitive Science Society* (pp. 65-70). Austin, TX: Cognitive Science Society.
- Chiarella, A. & Lajoie, S.P (2006). Enabling the collective to assist the individual: CoREAD, a self-organising reading environment. In T. C. Reeves & S. F. Yamashita (Eds.), *Proceedings of E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education* (pp. 2753-2757). Norfolk, VA: Association for the Advancement of Computing in Education. Honolulu, Hawaii.
- Faremo, S., Lajoie, S., Gauthier, G., & Wiseman, J. (2006). Supporting diagnostic problem solving in medical education using an integrated classroom - E-Learning model. *Proceedings of E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education* (pp. 2788-2793). Norfolk, VA: Association for the Advancement of Computing in Education.
- Nakamura, C., & Lajoie, S. P. (2006). Can clinical reference tools support medical students during hypothesis generation? In T. C. Reeves & S. F. Yamashita (Eds.), *Proceedings of E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education* (pp. 2240-2244). Chesapeake, VA: Association for the Advancement of Computing in Education (ACE).
- Winne, P. H., & The Learning Kit Project Team. (2006). The Learning Kit Project: Advancing research on learning as learners learn in everyday settings. *Proceedings of the 6th IEEE International Conference on Advanced Learning Technologies* (pp. 975-979). Kerkrade, The Netherlands.
- Lu, J. & Lajoie, S. P. (2005). Facilitating medical decision making with collaborative tools. *Proceedings the World Conference on Education Multimedia, Hypermedia & Telecommunications* (pp. 2062-2066). ACE Press.

- Nakamura, C., Lajoie, S. P., & Berdugo, G. (2005). Do information systems actually improve problem-solving and decision-making performance? An analysis of 3 different approaches to the design of information systems. In G. Richards (Ed.), *Proceedings of E-Learn 2005: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education* (pp. 2251-2257). Norfolk, VA: Association for the Advancement of Computing in Education.
- Nakamura, C., & Lajoie, S. P. (2004). The overlaying roles of cognitive and information theories in the design of information access systems. In J. C. Lester, R. M. Vicari, & F. Paraguacu (Eds.), *Proceedings of the 7th International Conference on Intelligent Tutoring Systems, ITS 2004* (pp. 839-841). New York: Springer-Verlag.
- Lu, J., & Lajoie, S. P. (2003). Fostering medical problem solving in a collaborative web-based learning environment. In Y. S. Chee, N. Law, K. Lee, & D. Suthers (Eds.), *Proceedings of the International Conference on Computer in Education. The "Second Wave of ICT in Education": From Facilitating Teaching and Learning to Engendering Education Reform* (pp. 337-340). Amsterdam: IOS Press.
- Nakamura, C., & Lajoie, S. P. (2003). Using information architecture to support problem-based learning environments. In D. Lassner & C. McNaught (Eds.), *Proceedings of ED-MEDIA 2003: World Conference on Educational Multimedia, Hypermedia & Telecommunications* (pp. 3001-3004). Norfolk, VA: Association for the Advancement of Computing in Education.
- Ahmad, A., & Lajoie, S. P. (2001). The integrated learning model: A design experiment in web-based instruction. In J. D. Moore, C. Redfield, & L. W. Johnson (Eds.), *Artificial intelligence in education: AI-ED in the wired and wireless future* (pp.354-364). Amsterdam: IOS Press.
- Lajoie, S. P., Faremo, S., & Wiseman, J. (2001). A knowledge-based approach to designing authoring tools: From tutor to author. In J. D. Moore, C. Redfield, & L. W. Johnson (Eds.), *Artificial intelligence in education: AI-ED in the Wired and Wireless future* (pp.77-86). Amsterdam: IOS Press.
- Azevedo, R., & Lajoie, S. P. (1998). The cognitive basis for the design of a mammography interpretation tutor. In M. A. Gernsbacher & S. J. Derry (Eds.), *Proceedings of the 20th Annual Conference of the Cognitive Science Society* (pp.78-83), Mahwah, NJ: Erlbaum.
- Lajoie, S. P. (1998). Promoting argumentation in face to face and in distributed computer-based learning situations: Constructing knowledge in the context of BioWorld . In M. A. Gernsbacher & S. J. Derry (Eds.), *Proceedings of the 20th Annual Conference of the Cognitive Science Society* (p. 5), Mahwah, NJ: Erlbaum.
- Lillehaug, S. I., & Lajoie, S. P. (1998). Health care workers and their needs: The forgotten shadow of AIM research. In B. Cesnik et al. (Eds.), *MEDINFO98* (pp. 1232-1236). Amsterdam: IOS Press.
- Azevedo, R., Lajoie, S. P., Desaulniers, M., Fleiszer, D. M., & Bret, P. M. (1997). Radiological expertise and the effects of perceptual scaffolding on the diagnosis of mammograms. In M. G. Shafto & P. Langley (Eds.), *Proceedings of the 19th Annual Conference of the Cognitive Science Society* (pp.855), Mahwah, NJ: Erlbaum.
- Azevedo, R., Lajoie, S. P., Desaulniers, M., Fleiszer, D. M., & Bret, P. M. (1997). RadTutor: The theoretical and empirical basis for the design of a mammography interpretation tutor. In B. Du Boulay & R. Mizoguchi (Eds.), *Frontiers in artificial intelligence and*

- applications: Vol. 39. Artificial intelligence in education* (pp. 386-393.), Amsterdam: IOS Press.
- Lajoie, S. P. (1997). The use of technology for modeling performance standards in statistics. In J. B. Garfield & G. Burrill (Eds.), *Proceedings of the International Association for Statistical Education. Round Table on Research on the Role of Technology in Teaching and Learning Statistics* (pp. 57-70), Vooburg, Netherlands: International Statistical Institute.
- Lajoie, S. P. (1996). The use of technology for modeling performance standards in statistics. *Proceedings of The International Association for Statistical Education. Roundtable on Research on the Role of Technology in Teaching and Learning Statistics* (pp. 69-83). Granada, Spain: International Statistical Institute.
- Lefebvre, B., Nkambou R., Gauthier G., Lajoie, S. P. (1996). The student model in the SAFARI environment for the development of intelligent tutoring systems. *Proceedings of 1er Congresso Internacional de Ingenieria Electromecanica Y de Sistemas* (pp. 1-8). Mexico City.
- Rahilly, T. J., Saroyan, A., Greer, J., Lajoie, S. P., Breuleux, A., Azevedo, R., & Fleiszer, D. (1996). The InforMed professor: Clinical instruction of breast disease diagnosis and management. In A. Diaz and I. Fernandez (Eds.), *Proceedings of the Third International Conference on Computer-Aided Learning and Instruction in Science and Engineering* (pp. 390-398). New York: Springer-Verlag.
- Bouchard, R. M., Lajoie, S. P., & Fleiszer, D. (1995). Constructing knowledge within the medical domain: A cognitive perspective. In K. Cox & J. Marsh (Eds.), *Proceedings of the First International Cognitive Technology Conference* (pp. 45-56). Hong Kong: City University.
- Lajoie, S. P. (1995). The authentic statistics project: Authentic for whom? *American Statistical Association 1995 Proceedings of the Section on Statistical Education* (pp. 257-261). Alexandria, VA: American Statistical Association.
- Lajoie, S. P., Greer, J. E., Munsie, S. D., Wilkie, T. V., Guerrero, C., & Aleong, P. (1995). Establishing an argumentation environment to foster scientific reasoning with BioWorld. In D. Jonassen & G. McCalla (Eds.), *Proceedings of the International Conference on Computers in Education* (pp. 89-96). Charlottesville, VA: Association for the Advancement of Computing in Education.
- Lavigne, N. C., & Lajoie, S. P. (1995). Learning statistics through exemplars. In J. D. Moore & J. F. Lehman (Eds.), *Proceedings of the Seventeenth Annual Conference of the Cognitive Science Society* (pp. 643-647). Mahwah, NJ: Erlbaum.
- Lajoie, S. P. (1994). Technologies for extending learning. In P. Brusilovsky, S. Dikareva, J. Greer, & V. Petrushin (Eds.), *Proceedings for the East-West Conference on Computer Technologies in Education, Part 1* (pp. 16-21). Yalta, Crimea: EW-ED.
- Munsie, S. D., Lajoie, S. P., Fleiszer, D., & Bencsath-Makkai, Z. (1994). A "touch" of learning: Pressing beyond the traditional classroom lecture. In A. G. Konrad & K. M. Grieve (Eds.), *Shifting with the Winds of Change* (pp. 103-107). Calgary, Alberta: The Canadian Society for the Study of Higher Education.
- Lajoie, S. P., Coffin, L. E., & Rahilly, T. (1993). The use of electronic conferences for extending learning. *Program and transactions of the Canadian Society for the Study of Higher Education* (pp. 146-150). Ottawa, Ontario: The Canadian Society for the Study of Higher Education.

- Lajoie, S. P. (1992). Technologies for instruction and assessment: BioWorld a computer-based learning environment to promote scientific reasoning. C. Frasson, G. Gauthier, & G. I. McCalla (Eds.), *Proceedings for the Second International Conference on Intelligent Tutoring Systems, System Demonstrations* (pp. 38-44). Montreal, Quebec: ITS.
- Lajoie, S. P., & Lesgold, A. (1991). The SHERLOCK experience: An evaluation of a computer-based supported practice environment for electronics troubleshooting training. *Proceedings for the International Conference on Cognitive Science: Tools for the Development of Organizations* (pp. 56-62). Montreal, Quebec: GIRICO.
- Lajoie, S. P., Eggan, G. M., & Lesgold, A. M., (1988). Instructional strategies for a coached practice environment. In V. L. Patel & G. J. Groen (Eds.), *Proceedings of The Tenth Annual Conference of the Cognitive Science Society* (pp. 332-339). Hillsdale, NJ: Erlbaum.

### Book Chapters

- Lajoie, S. P., Bodnar, S. Hmelo-Silver, C., Chen, Y., Zheng, J., Huang, L. & Kazemitabar M. (in press). Towards quality on-line problem-based learning. In S. Bridges & R. Imafuku (Eds.). *Interactional research into problem-based learning*. Purdue University Press.
- Lajoie, S. P. (2017). Learning science applications for research in medicine. In L. Lin & J. M. Spector (Eds.). *Constructive articulation between the learning sciences and the instructional design and technology communities*, (pp. 109-119). New York: Taylor-Francis/Routledge.
- Poitras, E., Mayne, Z., Huang, L., Doleck, T., Udy, L., Lajoie, S. (accepted with revision). Simulated Student Behaviors with Intelligent Tutoring Systems: Applications for Authoring and Evaluating Network-Based Tutors. In S. Craig (Ed.), *Tutoring and Intelligent Tutoring Systems*. New York, NY: Nova Science Publishers, Inc.
- Poitras, E. G., Lajoie, S. P., Doleck, T., Fazeli, N., Li, S., & Huang, L. (accepted). nBrowser: An intelligent web browser for studying self-regulated learning in teachers' use of technology. In R. Zheng (Ed.). *Strategies for Deep learning with Digital Technology: Theories and Practices in Education*. Hauppauge, NY: Nova Publishing.
- Poitras, E. G., Harley, J. M., Compeasu, T., Kee, K., & Lajoie, S.P. (2017). Immersive technologies or: How I learned to stop worrying and love history. In R. Zheng & G. Michael (Eds.). *Handbook of Research on Serious Games for Educational Applications*, (pp. 272-293). Hershey PA: IGA Global.
- Poitras, E. G. & Lajoie, S. P. (2017). Using technology-rich environments to foster self-regulated learning in the social studies. In D. H. Schunk & J. A. Greene (Eds.). *Handbook of self-regulation of learning and performance* (2<sup>nd</sup> ed.), (pp. 166-180). New York: Routledge.
- Duffy, M., Lajoie, S.P. & Lachapelle, K. (2016). Measuring emotions in medicine: Methodological and technological advances within authentic medical learning environments. In S. Bridges, L. K. Chan, & C. E. Hmelo-Silver (Eds.) *Educational technologies in contextual learning: Research in health professions education*, (pp.181-214). Springer.
- Hmelo-Silver, C., Lajoie, S. P., Lu, J., Wiseman, J., & Chan, L. (2016). Video as context and conduit for problem-based learning. In S. Bridges, L. K. Chan, & C. E. Hmelo-Silver (Eds.) *Educational technologies in contextual learning: Research in health professions education*, (pp. 57-78). Springer.

- Poitras, E., Lajoie, S. P., Naismith, L., Doleck, T., & Jarrell, A. (2016). Intelligent Tutoring Systems in the Medical Domain: Fostering Self-Regulatory Skills in Problem-Solving. In R. Atkinson (Ed.). *Intelligent Tutoring Systems Structure, Applications, and Challenges*. Nova Science Publishers, Education in a Globalizing World.
- Ranellucci, J., Poitras, E. G., Bouchet, F., Lajoie, S. P., & Hall, N. C. (2016). Emotions, technology, and social media through educational data mining. In S. Tettegah & R. E. Ferdig (pp. 85-104). *Emotions, Technology, and Social Media*. Elsevier.
- Wiseman, J., Blanchard, E. & Lajoie, S. P. (2016). The deteriorating patient smartphone App: Towards serious game design. In S. Bridges, L. K. Chan, & C. E. Hmelo-Silver (Eds.) *Educational technologies in contextual learning: Research in health professions education*, (pp.215-234). Springer.
- Lajoie, S. P., Cruz-Panesso, I., Lachapelle, K. (2015). Learning in the health sector with simulated systems. In M. Spector (Ed.), *Encyclopedia of Educational Technology*. pp. 470-472. Thousand Oaks: Sage. <http://dx.doi.org/10.4135/9781483346397.n195>
- Lajoie, S.P., & Poitras, E. (2015). Problem/task centered approaches. In M. Spector (Ed.), *Encyclopedia of Educational Technology*, pp. 588-591. Thousand Oaks: Sage. <http://dx.doi.org/10.4135/9781483346397.n245><sup>[SEP]</sup>
- Lajoie, S. P., Poitras, E. G., Doleck, T., & Jarrell, A. (2015). Modeling Metacognitive Activities in Medical Problem-Solving with BioWorld. In A. Peña-Ayala (Ed.), *Metacognition: Fundamentals, Applications, and Trends* (pp. 323-343). Springer Series: Intelligent Systems Reference Library. doi:10.1007/978-3-319-11062-2\_13
- Lajoie, S. P. (2014). Multimedia learning of cognitive processes. In R. E. Mayer (Ed.) *The Cambridge Handbook of Multimedia Learning: Second Edition*, pp. 623-646. New York: Cambridge University Press.
- Lajoie, S. P. & Poitras, E. (2014). Macro and micro strategies for metacognition and socially-shared regulation in the medical tutoring domain. In R. Sottolare, X. Hu, and A. Graesser (Eds.) *Design Recommendations for Adaptive Intelligent Tutoring Systems: Instructional Strategies Volume II*, pp.151-168. Orlando, FL: U.S. Army Research Laboratory.
- Lajoie, S. P., Naismith, L., Hong, Y. J., Poitras, E., Cruz-Panesso, I., Ranellucci, J., Mamane, S., & Wiseman, J. (2013). Technology rich tools to support self-regulated learning and performance in medicine. In R. Azevedo & V. Aleven (Eds.). *International Handbook of Metacognition and Learning Technologies*, pp. 229-242. New York, NY: Springer.
- Poitras, E., & Lajoie, S. P. (2013). A three-pronged approach to the design of technology-rich learning environments. In R. Atkinson (Ed.), *Learning Environments: Technologies, Challenges and Impact Assessment*. NY: Nova Science Publishers.
- Blanchard, E., Frasson, C., Lajoie, S.P. (2012). Learning with games. In N. Seel (Ed.). *Encyclopedia of the Sciences of Learning*, pp. 2019-2024. Heidelberg: Springer-Verlag.
- Lajoie, S. P. & Naismith, L. (2012). Computer-enhanced learning environments. *Encyclopedia of the Sciences of Learning*, pp.717-718. Heidelberg: Springer-Verlag.
- Lajoie, S.P. (2011). Is the whole greater than the sum of its parts? Explaining the role of individual learning and group processes in CSCL. In S. Puntambekar, C. Hmelo-Silver & G. Erkens (Eds.). *Analyzing Interactions in CSCL: Methodology, Approaches and Issues* (pp. 235-246). New York, NY: Springer.
- Blanchard, E. G., Mizoguchi, R. & Lajoie S. P. (2010). Structuring the cultural domain with an upper ontology of culture. In E. G. Blanchard & D. Allard (Eds.), *Handbook of Research*

- on Culturally-Aware Information Technology: Perspectives and Models*, pp. 179-212. Hershey, PA: IGI Global.
- Chiarella, A. & Lajoie, S. P. (2010). A self-organizing systems approach to history-enriched digital objects. In D. Ifenthaler, P. Pirnay-Dummer, & N. M. Seel (Eds.), *Computer-Based Diagnostics and Systematic Analysis of Knowledge* (pp. 131-158). New York: Springer.
- Lajoie, S. P. (2009). Developing professional expertise with a cognitive apprenticeship model: Examples from Avionics and Medicine. In K. A. Ericsson (Ed.), *Development of Professional Expertise: Toward Measurement of Expert Performance and Design of Optimal Learning Environments* (pp.61-83). New York: Cambridge University Press.
- Bracewell, R., Le Maistre, C., Lajoie, S. P., & Breuleux, A. (2008). The role of the teacher in opening worlds of inquiry-driven learning with information technologies. In B. M. Shore, M. W. Aulls, & M. A. B Delcourt, (Eds.), *Inquiry in education: Overcoming barriers to successful implementation* (pp.287-300). NY, NY: Erlbaum.
- Lavigne, N. C., & Lajoie, S. P. (2008). Communicating performance standards to students through technology. In P. C. Elliot and C. M. Elliot Garner (Eds.), *Getting into the mathematics conversation: Valuing communication in mathematics classrooms. Readings from NCTM's school-based journals* (pp. 363-367). National Council of Teachers of Mathematics: Reston, VA. [Reprint of a previously published article, see Lavigne & Lajoie, 1996]
- Lajoie, S. P. (2007). Developing computer based learning environments based on complex performance models. In B. Shuart, W. Spaulding and J. Poland (Eds.), *Nebraska Symposium on Motivation. Modeling complex systems: Vol. 52* (pp. 123-144). Lincoln: University of Nebraska Press.
- Lajoie, S. P. & Azevedo, R. (2006). Teaching and learning in technology-rich environments. In P. Alexander and P. Winne (Eds.), *Handbook of Educational Psychology (2nd ed.)* (pp. 803-821). Mahwah, NJ: Erlbaum.
- Lajoie, S. P. & Berdugo, G. (2006). Ampliación de nuestras comunidades educativas disciplinares por medio de las culturas. In G. Mota (Ed.), *Educación Cívica Y Ciudadana: Una Visión Global* (pp.193-208). Mexico D.F.: Santillana.
- Lajoie, S. P., Faremo, S, Wiseman, J. & Gauthier, G (2005). Technology tools for promoting self regulation in medical students. S. Pierre (Ed.). *Développement, Intégration et Évaluation des Technologies de Formation et d'apprentissage* (pp. 621-640). Montreal, QC: Presses Internationales Polytechnique.
- Lajoie, S. P., & Nakamura, C. (2005). Multimedia learning of cognitive skills. In R. Mayer (Ed.), *Cambridge Handbook of Multimedia Learning* (pp. 489-504). Cambridge University Press.
- Lajoie, S. P. (2005). Cognitive tools for the mind: The promises of technology: Cognitive amplifiers or bionic prosthetics? In R. J. Sternberg & D. Preiss (Eds.), *Intelligence and technology: Impact of tools on the nature and development of human skills* (pp. 87-102). Mahwah, NJ: Erlbaum.
- Lajoie, S. P., & Lavigne, N. C. (2003). Mathematics learning: Learning tools. *Encyclopedia of education: Vol. 5* (2nd ed., pp.1550-1552). New York: Macmillan.
- Lajoie, S. P. (2000). Breaking camp to find new summits. In S. P. Lajoie (Ed.), *Computers as cognitive tools (Vol.2): No more walls* (pp. xv-xxxii). Mahwah, NJ: Erlbaum.



- Lajoie, S. P., & Azevedo, R. (2000). Cognitive tools for medical informatics. In S. P. Lajoie (Ed.), *Computers as cognitive tools (Vol.2): No more walls* (pp. 247-271). Mahwah, NJ: Erlbaum.
- Shute, V. J., Lajoie, S. P., & Gluck, K. (2000). Individualized and group approaches to training. In S. Tobias & H. O'Neill (Eds.), *Handbook on Training* (pp. 171-207). Washington, DC: American Psychological Association.
- Lajoie, S. P. (1999). Understanding of statistics. In E. Fennema & T. A. Romberg (Eds.), *Mathematics classrooms that promote understanding* (pp. 109-132). Mahwah, NJ: Erlbaum.
- Lajoie, S. P. (1998). Reflections on statistics education and assessment. In S. P. Lajoie (Ed.), *Reflections on statistics: Learning, teaching, and assessment in grades K-12* (pp. 299-316). Mahwah, NJ: Erlbaum.
- Lajoie, S. P., Lavigne, N. C., Munsie, S. D., & Wilkie, T. V. (1998). Monitoring student progress in statistics. In S. P. Lajoie (Ed.), *Reflections on statistics: Learning, teaching, and assessment in grades K-12* (pp. 199-231). Mahwah, NJ: Erlbaum.
- Lajoie, S. P., & Romberg, T. A. (1998). Identifying an agenda for statistics education and assessment in K-12. In S. P. Lajoie (Ed.), *Reflections on statistics: Learning, teaching, and assessment in grades K-12* (pp.xi-xxi). Mahwah, NJ: Erlbaum.
- Lajoie, S. P. (1997). Technologies for extending statistical learning. In I. Gal and J. B. Garfield (Eds.), *Handbook on assessment in statistics education* (pp.179-190). Amsterdam: IOS Press and the International Statistical Institute.
- Lajoie, S. P. (1995). A framework for authentic assessment in mathematics. In T. A. Romberg (Ed.), *Reform in school mathematics and authentic assessment* (pp. 19-37). New York: SUNY Press.
- Derry, S. J., & Lajoie, S. P. (1993). A middle camp for (un)intelligent computing. In S. P. Lajoie & S. J. Derry (Eds.), *Computers as cognitive tools* (pp.1 -11). Hillsdale, NJ: Erlbaum.
- Lajoie, S. P. (1993). Computer environments as cognitive tools for enhancing learning. In S. P. Lajoie & S. J. Derry (Eds.), *Computers as cognitive tools* (pp. 261-288). Hillsdale, NJ: Erlbaum.
- Lajoie, S. P., & Lesgold, A. (1992). Apprenticeship training in the workplace: A computer-coached practice environment as a new form of apprenticeship. In M. Farr & J. Psotka (Eds.), *Intelligent instruction by computer: Theory and practice* (pp. 15-36). New York: Taylor & Francis.
- Lesgold, A., Lajoie, S. P., Bunzo, M., & Eggan, G. (1992). SHERLOCK: A coached practice environment for an electronics troubleshooting job. In J. H. Larkin & R. W. Chabay (Eds.), *Computer assisted instruction and intelligent tutoring systems: Shared goals and complementary approaches* (pp. 201-238). Hillsdale, NJ: Erlbaum.
- Gott, S. P., Lajoie, S. P., & Lesgold, A. (1991). Problem solving in technical domains: How mental models and metacognition affect performance. In R. Dillon & J. W. Pellegrino (Eds.), *Innovations in training and testing* (pp. 107-117). New York: Praeger.
- Lesgold, A., & Lajoie, S. P. (1991). Complex problem solving in electronics. In R. J. Sternberg & P. A. Frensch (Eds.), *Complex problem solving: Principles and mechanisms* (pp. 287-316). Hillsdale, NJ: Erlbaum.
- Lesgold, A., Lajoie, S. P., Logan, D., & Eggan, G. M. (1990). Cognitive task analysis approaches to testing. In N. Frederiksen, R. Glaser, A. Lesgold, & M. Shafto (Eds.),

*Diagnostic monitoring of skill and knowledge acquisition* (pp. 325-350). Hillsdale, NJ: Erlbaum.

Glaser, R., Lesgold, A., & Lajoie, S. P. (1987). Toward a cognitive theory for the measurement of achievement. In R. Ronning, J. Glover, J. C. Conoley, & J. C. Witt (Eds.), *Nebraska Symposium on Measurement: Vol. 3. The Influence of Cognitive Psychology on Testing* (pp. 41-85). Hillsdale, NJ: Erlbaum.

### **Keynotes and Invitational Addresses**

Lajoie, S. P. (2019, July). *Advanced technologies for supporting learning in medicine*. Society for Design and Process Science. Taichung, Taiwan.

Lajoie, S. P. (2018, May). *Challenges in measuring and analyzing SRL processes in specific application areas*. Presented at the NSF Workshop on Interdisciplinary Research about Multimodal Human Learning Data during Human Machine Interactions. Vanderbilt University, Nashville.

Lajoie, S.P. (2017, December). *Interdisciplinary approaches to the study of learning using advanced technologies*. Distinguished Wyng Lecture, Hong Kong.

Lajoie, S.P. (2017, December). *Situating learning in meaningful activities: Digital tools for engaging learning*. Distinguished Wyng Lecture, Hong Kong.

Lajoie, S.P. (2017, November). *Simulation and innovation*. Panel on simulation and innovation in health systems, care and quality. Simulation Summit Meeting, Montreal.

Lajoie, S.P. (2017, October). *Informatics systems and adaptive expertise in clinical reasoning*. American Medical Association Accelerating Change in Medical Education Consortium to support the development and application of expertise in clinical practice through the Master Adaptive Learner model. NY, NY.

Lajoie, S.P. (2017, June). *Examining the determinants of positive learning in higher education in the Information Age*. PLATO Summer Conference, University of Mainz-Gutenberg.

Lajoie, S.P. (2017, May). *Regulating oneself and others' learning and emotions*. Swiss National Center of Competence in Research (NCCR) for Affective Sciences at the University of Geneva, Switzerland.

Lajoie, S.P. (2016, November). *Interdisciplinary approaches to the study of learning using advanced technologies*. Presented to Department of Computer Science, University of Lyon.

Lajoie, S.P. (2016, June). *Interdisciplinary approaches to the study of learning using advanced technologies*. Presented to the Summer School on Reasoning, Institut des sciences cognitives, Université du Québec à Montréal.

Lajoie, S.P. (2016, May). *Interdisciplinary approaches to the design of technology rich learning environments*. Presented to the Imagining Canada's Future: Emerging Technologies Workshop. Ottawa.

Lajoie, S.P. (2016, February). *Advanced Technologies for Supporting Learning in Medicine*. Presented at the Center for Research on Learning and Technology & Jacobs Chair Speaker Series. University of Indiana.

Lajoie, S.P. (2015, November). *Advanced Technologies for Supporting Learning in Medicine*. Presented at the opening address for the Steinberg Center for Simulation and Interactive Learning.

Lajoie, S.P. (2015, November). *Rethinking Medical Education: Advanced Technologies for Supporting Learning*. Presented at the International Simulation Summit, Montreal.

- Lajoie, S.P. (2015, June). *Reflections on Assessment in Relation to Self-Regulated Learning. Understanding and Supporting Self-Regulated Learning*. A Special Panel Event Co-Sponsored by Canadian Association for Educational Psychology and the Canadian Consortium on Self-Regulated Learning
- Lajoie, S. P. (2014, November). Presidential Panel presentation on *Constructive Articulation between the Sciences of Learning and the Instructional Design and Technologies Communities*. Accepted to the Association for Educational and Communication Technologies, Jacksonville (had to decline due to illness).
- Lajoie, S. P. (2014, October). *Advanced Technologies to Support Medical Students in Clinical reasoning, communication and performance*. Presented at the Second International Conference on Clinical Reasoning, Montreal.
- Lajoie, S. P. (2014, June). *Interdisciplinary Approaches to the Improvement of Authentic Learning Environments*. Intelligent Tutoring Conference, Honolulu, Hawaii.
- Lajoie, S. P. (2014, March). *Rethinking Education using Technology Rich Learning Environments*. Presented at Knowledge Mobilization SSHRC regional institutional event on Emerging Technologies, UQAM, Montreal.
- Lajoie, S. P. (2013, November). *Technology Rich Learning Environments: Engaging, Exercising and Evaluating Thinking*, EdTech Summit, Toronto.
- Lajoie, S. P. (2013, June). *Teaching and learning through technology rich learning environments*. Presented at the SALTISE (supporting active learning through technological innovation in science education) conference. Montreal.
- Lajoie, S. P. (2013, July). *A briefing on instructional strategies*. Presented to the Army Research Laboratory Human Research and Engineering Directorate and the Advanced Distributed Learning Centre for Intelligent Tutoring Systems Research and Development in the Institute for Intelligent Systems for Advanced Learning Technologies, Memphis.
- Lajoie, S. P. (2012, December). Invited Panel on *Driving Innovation through Successful Multi-Sector Partnerships*. Presented at the ACCT Innovation conference. Ottawa
- Lajoie, S. P. (2012, December). *Advanced Technologies for Learning in Authentic Settings*. Presented at the CRC Secretariat, SSHRC. Ottawa.
- Lajoie, S. P. (2012, October). SSHRC Leaders Roundtable on Imagining Canada's Future. Presented at the University of Montreal.
- Lajoie, S. P. (2012, August). *Advanced Technologies for Learning in Authentic Settings*. Presented at the XXIV Coloquio de la Residencia en psicología escolar. Mexico City.
- Lajoie, S. P. (2012, August). Invited Seminar: *Diseno y Evaluation de entonos virtuales de Aprendizaje*. Presented at the Facultad de Psicología and Centro de Ciencias Aplicadas y Desarrollo Tecnológico. Mexico City.
- Lajoie, S. P. (2012, May). *Advanced Technologies to Support Medical Students in Authentic Learning Contexts*. Paper presented at The Canadian Society for the Study of Education/Canadian Association for Educational Psychology meeting. Waterloo, CA.
- Lajoie, S. P. (2010, November). *Plenary on Metacognition* at the AAAI Fall Symposium on Cognitive and Metacognitive Educational Systems (MCES 2010), Arlington, VA.
- Lajoie, S. P. (2010, November). Panel Member on *Measurement Issues in Self-Regulated Learning* at the AAAI Fall Symposium on Cognitive and Metacognitive Educational Systems (MCES 2010), Arlington, VA.
- Lajoie, S. P. (2010, October). *Computers that care*. University of Hong Kong.

- Lajoie, S. P. (2010, May). *Aptitude Treatment Interactions revisited: Implications for designing technologies to increase strategy awareness and spatial skills*. National Science Foundation Conference on Sources of Individual Differences in Spatial Skills: The Interaction between the Learner and the Learning Environment. Harvard University, Cambridge, MA.
- Lajoie, S. P. (2009, November). *Can Computers Teach You To Think And Care?* CoCo and CHAI research seminar, Faculties of Education and Information Technology. University of Sydney.
- Lajoie, S. P. (2009, November). *Assessing Professional Competence*. Faculty of Education, University of Wollongong.
- Lajoie, S. P. (2009, November). *Can Computers Teach You To Think And Care?* Technology and Education Design and Development, Faculty of Engineering and IT. University of Technology Sydney.
- Lajoie, S. P. (2009, July). *Can Computers Teach You To Think And Care? Revisiting The Modeling Debates With An Eye To The Future*. International Artificial Intelligence and Education Conference. Brighton, UK.
- Lajoie, S. P. (2009, March). *Supporting Teaching and Learning with Theory Driven Technology Rich Learning Environments*. Presented at the Department of Kinesiology and Physical Education.
- Lajoie, S. P. (2008, October). *Technology Enriched Learning: Developing Competence across Domains*. Presented at the National Taiwan Normal University conference sponsored by the Taiwan National Science Council, Taipei, Taiwan.
- Lajoie, S. P. (2008, April). *Expertise development: Masters of your own domain*. McGill Mini-EdPsych Series. Montreal.
- Lajoie, S. P. (2007, March). *Technology enriched environments for supporting diagnostic reasoning*. Presented at University of Memphis.
- Lajoie, S. P. (2007). *Supporting teaching and learning with technology rich environments*. Presented at Arizona State University.
- Lajoie, S. P. (2007, March). *Assessing professional competence: Cognitive apprenticeship models in Avionics and Medicine*. Presented at the Office of Naval Research Conference, The Development of Professional Performance: Approaches to Objective Measurement and Design of Optimal Learning Environments, Orlando, Florida
- Lajoie, S. P., Gauthier, G., Lu, J., Nakamura, C. & Wiseman, J. (2006, May). *Cognitive tools to support teaching and learning in medicine*, Presented to the Centre for Medical Education, McGill University.
- Lajoie, S. P. (2006, September). *Technology enriched environments for supporting diagnostic reasoning*. Presented at the McGill Clinical Informatics Rounds.
- Lajoie, S. P. (2006, June). *Aligning theories with the practice of technology innovations in education*. Presented at the Psychological Insights into the Use of New Technologies in Education. British Journal of Educational Psychology, Psychological Aspects of Education Current Trends Conference, Nottingham, UK.
- Lajoie, S. P. (2006, February). *Cognitive tools: Some examples and initiatives*. Presented at Stanford University.
- Lajoie, S. P. (2006, March). *Applying cognitive theories to the design of computers as cognitive tools*. Presented at Stanford University.

- Lajoie, S. P. (2006, March). *Supporting diagnostic reasoning with computers as cognitive tools*. Presented at the Stanford University Medical Media and Information Technology seminar series.
- Lajoie, S. P. (2005, November). *Technology and learning*. University of Delaware.
- Lajoie, S. P. (2005, October). *Computer tools for enhancing learning and instruction*. University of Amsterdam.
- Lajoie, S. P. (2005, July). *Supporting student-centered learning with cognitive tools*. Keynote Speaker, International Kaleidoscope Symposium on Technology-Enhanced Learning, Oberhausen, Germany.
- Lajoie, S. P. (2005, February). *Social and professional basis of change: Technology as a change agent*. Keynote Speaker, International Congress in Psychology and Education in Times of Change. Barcelona, Spain.
- Lajoie, S. P. (2005, February). *The cognitive tools approach: A theoretical and research perspective*. University of Barcelona, Spain.
- Lajoie, S. P. (2005, February). *Cognitive tools and instructional processes: Some examples of educational innovation in higher education*. University of Barcelona, Spain.
- Lajoie, S. P. (2005, February). *Technology as change agent*. Universitat Oberta de Catalunya, Spain.
- Lajoie, S.P. (2005, March). *Computers as tools for learning*. McGill/Dawson Speaker Series in Education. Montreal.
- Lajoie, S. P. (2003, December). *Cognitive tools for the mind: The promises of technology-cognitive amplifiers or bionic prosthetics?* Keynote Speaker, International Conference on Computers in Education, Hong Kong.
- Lajoie, S. P. (2003, November). *Computers as Tools for Learning: Riding the Wave of Educational Change*. University of Maryland.
- Lajoie, S. P. (2003, August). *Technology and education: The tail that wags the dog*. Invited Address Division 15, American Psychological Association, Toronto, Ontario.
- Lajoie, S. P. (2003, June). *Enhancing learning with emergent technologies*. Keynote Speaker, ED-Media 2003: World Conference on Educational Multimedia, Hypermedia & Telecommunications, Honolulu, HI.
- Lajoie, S. P. (2003, May). *Computers as tools for learning: Riding the wave of educational change, currents or undertows?* Keynote Speaker, Riding the Wave of Change, National Education and Technology Conference, 10th Annual conference, Gimli, Manitoba.
- Lajoie, S. P. (2003, May). *Enhancing learning communities through technology*. Keynote Speaker, Riding the Wave of Change, National Education and Technology Conference, 10th Annual conference, Gimli, Manitoba.
- Lajoie, S. P. (2003, April). *Supporting Medical problem solving activities through computer based learning environments*. Centre for Medical Education, McGill University.
- Lajoie, S. P. & Chiarella, A. (2002, July). *Statistics assessment in multidisciplinary contexts*. Accepted at the 6th International Conference on Teaching Statistics (ICOTS 6), Durban, South Africa.
- Lajoie, S. P. & Garcia, B. (2002, July). *Instructional models for teaching statistics across the curriculum*. Accepted at the 6th International Conference on Teaching Statistics (ICOTS 6), Durban, South Africa.

- Lavigne, N. C. & Lajoie, S. P. (2002, July). *Investigation questions and the path to statistical understanding*. Accepted at the 6th International Conference on Teaching Statistics (ICOTS 6), Durban, South Africa.
- Lajoie, S. P. (2002, May). *International Conference on Qualitative Classroom research: What in the world happens in classrooms?*, Mexico City, Mexico.
- Lajoie, S. P. (2002, April). Discussant, *Advances in technology and assessment*. Invited AERA session, The impact of technology on assessment: New opportunities for knowing what students know. Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Lajoie, S. P. (2001, November). *Designing theory based computer learning environments*. Presented at the International Conference on Computers and Education, Seoul, Korea.
- Lajoie, S. P. & Berdugo, G. (2001, July). *Expanding our educational communities of practice across cultures*. Presented at the International Society of Political Psychology, Cuernavaca, Mexico.
- Lajoie, S. P. (2001, March). *Computers as cognitive tools for instructional purposes*. Presented at Tufts University, Jack Austin Lecture Series, Boston, MA.
- Lajoie, S. P. (2000, November). *Computers as cognitive tools: Expanding our communities of practice*. Presented at the Coloquio Internacional, La Evaluacion de la Docencia. Oaxaca, Mexico.
- Lajoie, S. P. (2000, November). *Computers as cognitive tools: Expanding our communities of educational practice*. Presented at the Teaching and Learning Technologies Best Practices Conference, Concordia University, Montreal, Quebec.
- Lajoie, S. P. (2000, August). *Computers as cognitive tools: Breaking camp to find new summits*. Presented at the Annual meeting of the American Psychological Association, Washington, DC.
- Lajoie, S. P. (1999, November). *Cognitive tools for medical informatics*. Presented at the Universidad Nacional Autonoma de Mexico, Coloquio Universidad, Comunidad Formacion Profesional.
- Lajoie, S. P. (1999, August). *Constructing knowledge with Bioworld: A computer based learning environment to promote scientific reasoning*. Presented at the University of Wollongong, Australia, RILE Seminar.
- Lajoie, S. P. (1999, July). *Authentic Statistics for high school students*. Presented at a researchers meeting at the Educational Testing Service, Princeton, NJ.
- Lajoie, S. P. (1999, April). *Constructing knowledge in the context of a computer-based learning environment: What aspects of the design promote learning?* Presented at the Annual meeting of the American Educational Research Association Conference, Montreal, Quebec.
- Lajoie, S. P. (1999, April). Discussant for session on *Learning in virtual environments*. Presented at the Annual meeting of the American Educational Research Association Conference, Montreal, Quebec.
- Lajoie, S. P. (1999, April). Discussant for session on *Learning environments for exploring hypothesis generation, reasoning, and argumentation*. Presented at the Annual meeting of the American Educational Research Association Conference, Montreal, Quebec.
- Lajoie, S. P. (1998, February). *Computers as cognitive tools: Tools for extending learning*. Presented at the Universidad Nacional Autonoma de Mexico, Conference on Learning Communities: A Challenge for the University of the 21st Century.

- Lajoie, S. P. (1997, April). *Performance Assessment in Mathematics: The Canadian Perspective*. Center for Learning, Evaluation, and Research 2nd Annual Midwestern Conference on Performance Standards and Assessment, Kansas City, MO.
- Lajoie, S. P. (1996, August). *An integrated approach to teaching, learning and assessing statistics in K-12*. The American Statistical Association, Chicago, IL.
- Lajoie, S. P. (1996, July). *The use of technology for modeling performance standards in statistics*. The International Association for Statistical Education Roundtable on Research on the Role of Technology in Teaching and Learning Statistics. Granada, Spain.
- Lajoie, S. P. (1996, March). *The authentic statistics project*. University of Linköping, Department of Computer Science, Workshop on Advanced Technologies and Training, Linköping, Sweden.
- Lajoie, S. P. (1996, March). *Scientific reasoning with BioWorld*. University of Linköping, Department of Computer Science, Workshop on Advanced Technologies and Training, Linköping, Sweden.
- Lajoie, S. P. (1996, March). *SAFARI: System d'aide et de formation par l'analyse de raisonnements interactif*. University of Linköping, Department of Computer Science, Workshop on Advanced Technologies and Training, Linköping, Sweden.
- Lajoie, S. P. (1996, March). *The breast disease project: The InfoMed Professor*. University of Linköping, Department of Computer Science, Workshop on Advanced Technologies and Training, Linköping, Sweden.
- Lajoie, S. P. (1996, March). *Sherlock: An electronics troubleshooting tutor*. University of Linköping, Department of Computer Science, Workshop on Advanced Technologies and Training, Linköping, Sweden.
- Lajoie, S. P. (1996, March). *Computers as Cognitive tools*. University of Linköping, Department of Computer Science, Workshop on Advanced Technologies and Training, Linköping, Sweden.
- Lajoie, S. P. (1996, March). *The use of technology in medicine*. University of Linköping, Faculty of Medicine, Workshop on Advanced Technologies and Training, Linköping, Sweden.
- Lajoie, S. P. (1995, October). *Assessment standards for mathematics*. Presented at the annual meeting of the Canadian Association of Teachers of Mathematics, St. John's, Newfoundland.
- Lajoie, S. P. (1994, May). *NCTM's Assessment standards for school mathematics: Presentation and dialogue*. International Reading Association, Toronto, Ontario.
- Lajoie, S. P. (1994, May). *NCTM's Assessment*. Ontario Association for Mathematics Education, Kingston, Ontario.
- Lajoie, S. P. (1993). *Technologies for extending learning*. East-West Conference on Computer Technologies in Education, Yalta, Crimea.
- Lajoie, S. P. (1992, October). *Forging a common research agenda between industry and academics*. Presented at the Conseil Interinstitutionnel pour le Progrès de la Technologie Educative, Montreal, Quebec.
- Lajoie, S. P. (1990) Invited to attend a NATO Advanced Study Institute conference on the "Synthesis of Instructional Science and Computing Science for Effective Instructional Computing Systems", Calgary, Alberta
- Lajoie, S. P. (1990, August). *Dynamic assessment of proficiency for solving procedural knowledge tasks*. Presented at the annual meeting of the American Psychological Association, Boston, MA.

- Lajoie, S. P. (1989, March). Invited to the *Army Research Institute Contractors Meeting, Basic Skills and Technology Division*, Fort Gordon, Augusta, GA. (Presented a demonstration of the Sherlock Computer Coached Practice Environment).
- Lajoie, S. P. (1988, April). Invited to the *National Science Foundation Grantees Meeting for Applications of Advanced Technologies Program, Learning Research and Development ePractice Environment*).
- Lajoie, S. P. (1988, November). *A Cognitive Task Analysis approach to tutor development*. Bolt, Beranek, and Newman, Cambridge, MA.

### Peer Reviewed Conference Presentations and Posters

- Jarrell, A., Lajoie, S.P., Zheng, J., & Ruiz Segura, A. (2019, August). *The relationship between achievement emotion profiles, learning strategies, and performance in STEM*. Paper presented to the Annual Meeting of the European Association for Research on Learning and Instruction, Aachen, DE.
- Kazemitabar, M., Lavoué, E., Lajoie, S., Doleck, T., Carrillo, R. (June, 2019). *Examining the role of emotion awareness and sharing emotions during collaborative learning*. Poster to be presented at the Computer Supported Collaborative Learning, Lyon, France.
- Lajoie, S. (2019). *Emotional regulation in collaborative learning environments*. Discussant. the 18th Biennial conference of the European Association for Research on Learning and Instruction (EARLI). Aachen, Germany.
- Li, S., Zheng, J., Lajoie, S. P. (2019, August). *The Role of Cognitive Engagement on Clinical Reasoning Performance*. Paper presented to the 18th Biennial conference of the European Association for Research on Learning and Instruction (EARLI). Aachen, Germany.
- Zheng, J., Li, S., Jarrell, A., Lajoie, S. P. (2019, August). *Efficiency matters: Revealing clinical reasoning patterns using sequential mining techniques*. Paper presented to the 18th Biennial conference of the European Association for Research on Learning and Instruction (EARLI). Aachen, Germany.
- Chen, Y., Phonethibsavads, A., Hmelo-Silver, C. E., Zheng, J., Huang, L., Lajoie, S. P. (2019, April). *Using learning analytics to support problem-based learning facilitation*. Paper presented at the American Educational Research Association (AERA), Toronto, Canada.
- Harley, J.M., Liu, Y., Ahn, B.T., Lajoie, S.P., Grace, A.P., Haldane, C., & Whittaker, A. (2019, April). *Examining physiological and self-report indicators of empathy during learners' interaction with a queer history app*. Paper presented at the American Educational Research Association (AERA), Toronto, Canada.
- Harley, J.M., Liu, Y., Ahn, B.T., Lajoie, S.P., Poitras, E.G., Grace, A.P., Haldane, C., Whittaker, A., McLaughlin, B., & Lucas, K. (2019, April). *I've got this: The influence of usability ratings of a queer history app on emotions*. Poster presented at the American Educational Research Association (AERA), Toronto, Canada.
- Harley, J.M., Liu, Y., Ahn, B.T., Lajoie, S.P., Poitras, E.G., Grace, A.P., Haldane, C., Whittaker, A., McLaughlin, B., & Lucas, K. (2019, April). *Caring comes first: Task value, emotions, and empathy with a mobile queer history app*. Poster presented at the American Educational Research Association (AERA), Toronto, Canada.
- Jarrell, A., Lajoie, S. P. & Gube, M. (2019, April). *How and why undergraduate students regulate emotion in achievement situations*. Poster presented at the Annual Meeting of the American Educational Research Association, Toronto, Canada.



- Kazemitabar, M. A. Lajoie, S. P. (2019, April). *Effect of emotion regulation on team coordination in a challenging academic hackathon: A multimodal analysis*. Poster presented at the American Educational Research Association Conference. Toronto, Canada.
- Lajoie, S. P., Li, S. & Zheng, J. (2019, April). *The functional roles of cognition and emotion in predicting clinical reasoning performance*. Paper presented at the Annual Meeting of the American Educational Research Association, Toronto, Canada.
- Lajoie, S. P. & Poitras, E. (2019, April). *Learning analytics as a tool for understanding clinical reasoning*. Paper presented at the Annual Meeting of the American Educational Research Association, Toronto, Canada.
- Li, S., Huang, L., Poitras, E., & Lajoie, S.P. (2019, April). *Examining the Relationship between pre-service teachers' performance and cognitive engagement in designing lesson plans*. Roundtable presented at the American Educational Research Association Annual Conference. Toronto, Canada.
- Li, S., Zheng, J., Lajoie, S.P. & Wiseman, J. (2019, April). *Students' performance and emotion entropy in the context of clinical reasoning*. Paper presented at the American Educational Research Association Annual Conference. Toronto, Canada.
- Poitras, E. G., Udy, L., Huang, L., Li, S., & Lajoie, S. P. (2019, April). *Semi-supervised machine learning for domain modeling in network-based tutoring systems : Implications for fostering self-regulated learning*. Paper presented at the 2019 Annual Meeting of the American Educational Research Association. Toronto, Canada.
- Poitras, E. G., Udy, L., Huang, L., & Lajoie, S. P. (2019, April). *Adaptive content and process scaffolding with network-based tutors: Implications for promoting self-regulated learning*. Roundtable presented at the Annual Meeting of the American Educational Research Association. Toronto, Canada.
- Zheng, J., Huang, L., Kazemitabar M., Lajoie, S., Chen Y., Hmelo-Silver, C. (2019, April). *Exploring Instructors' Emotions and Metacognition: A Case Study of Instructor Interactions with a Learning Analytics Dashboard*. Paper presented at the American Educational Research Association Annual Conference. Toronto, Canada.
- Zheng, J., Li, S., Lajoie, S.P. & Wiseman, J. (2019, April). *Profiling Control and Value Appraisals to Predict Medical Emotions*. Poster presented at the American Educational Research Association Annual Conference. Toronto, Canada.
- Harley, J.M., Haldane, C., McLaughlin, B., Grace, A.P., Poitras, E.G., Lajoie, S.P., Whittaker, A., Ahn, B.T., Boucher, K., Wells, K., Lavoie, M., Langford, C., & Lucas, K. (2018, June). *Fostering empathy with a Queer History Education App*. Poster accepted for presentation at the International Congress of Applied Psychology (ICAP), Montreal, Canada.
- Harley, J.M., Haldane, C., McLaughlin, B., Poitras, E.G., Lajoie, S.P., Tressel., T., Pipe, L., Li, T., & Whittaker, A. (2018, April). *Beyond books, names, and dates: Using mobile augmented reality and prompts to foster historical reasoning*. Poster presented at the American Educational Research Association (AERA), New York, NY.
- Harley, J.M., Liu, Y., Ahn, B.T., Haldane, C., Grace, A.P., Lajoie, S.P., Poitras, E.G., Whittaker, A., McLaughlin, B., & Lucas, K. (2018, June). *Learning about culturally-sensitive subjects: Using a mobile app to learn about queer history*. Poster presented at the Intelligent Tutoring Conference, Montreal, Canada.
- Huang, L, Bodnar, S., Zheng, J., Kazemitabar, M., Lajoie, S., Chen ,Y., Birk,G. & Hmelo-Silver,

- C. (2018, June). The Design of a Learning Analytics Pedagogical Dashboard to Enhance Instructors' Facilitation in an Online Asynchronous Problem-based Learning Environment. Poster to be presented at Intelligent Tutoring Systems Conference, Montreal
- Jarrell, A., Tressel, T., & Lajoie, S. P. (2018, April). *The emotional and academic consequences of emotion regulation during studying and exams*. Paper presented at the American Educational Research Association Annual Meeting. New York, NY.
- Li, S., Duffy, M., Lajoie, S. P., & Lachapelle, K. (2018, April). *Eye tracking as a measure of expertise in surgical simulation*. Paper presented at the American Educational Research Association Annual Conference, New York, NY.
- Li, S., Zheng, J., Poitras, E. & Lajoie, S. (2018, June) The allocation of time matters to students' performance in clinical reasoning. Paper presented at Intelligent Tutoring Systems Conference, Montreal.
- Poitras, E. G., Doleck, T., & Lajoie, S. P. (2018, April). *Modeling student teachers' information seeking behaviors: Implications for adaptive scaffolding of lesson planning*. Paper presented at the American Educational Research Association Annual Meeting. New York, NY.
- Poitras, E. G., Doleck, T., Huang, L., Li, S., & Lajoie, S. P. (2018, April). *Assessing the disengaged behaviors of student teachers with network-based tutors*. Paper presented at the American Educational Research Association Annual Meeting. New York, NY.
- Poitras, E. G., Doleck, T., Huang, L., Li, S., & Lajoie, S. P. (2018, April). *Modeling student teachers' self-regulated learning profiles with network-based tutors*. Paper presented at the American Educational Research Association Annual Meeting. New York, NY.
- Poitras, E. G., Huang, L., Doleck, T., Li, S., & Lajoie, S. P. (2018, April). *Student teachers' information-seeking and acquisition behaviors in designing lesson plans with network-based tutors*. Paper presented at the American Educational Research Association Annual Meeting. New York, NY.
- Psaradellis, C., Muis, K. R., Smith, A., & Lajoie, S. P. (2018, July). *Enhancing complex mathematics problem solving through learning by teaching with a teachable agent*. Paper to be presented at the 16<sup>th</sup> International Conference on Education and Information Systems, Technologies and Applications, Orlando, FL.
- Zheng, J., Jarrell, A., Lajoie, S.P. & Li, S. (2018, June). *What electrodermal activity features can tell us in authentic learning context?* Poster presented at 29th International Congress of Applied Psychology, Montreal, Canada.
- Zheng, J., Li, S., & Lajoie, S.P. (2018, April). *The effects of achievement goals and self-regulated learning behaviors on clinical reasoning in computer-based learning environments*. Paper presented to the American Educational Research Association Annual Conference. New York, NY.
- Chen, Y., Hogaboam, P.T., Kazemitabar, M., Bodnar, S., Sarmiento, J. P, Sherman, R.K., Hmelo-Silver, C.E.,Lajoie, S.P., Goldman, R. (2017, June). *Analysis of an instructor dashboard to support learning and facilitation in an online PBL environment*. Poster presented at the American Educational Research Association Annual Conference. San Antonio, TX.
- Doleck, T., Poitras, E., & Lajoie, S.P. (2017, April). *Towards detection of learner distractions in a medical learning environment: A subgroup discovery approach*. Paper presented at the American Educational Research Association Annual Conference. San Antonio, TX.

- Duffy, M., Tressel, T., Lajoie, S., Gube, M., Zhao, J., Pipe, L., Labelle, M., & Wiseman, J. (2017, April). *Learning to manage a deteriorating patients: Examining the utility and learning processes of an emergency response simulation*. Paper presented at the American Educational Research Association Annual Conference. San Antonio, TX.
- Garcia, B., Hoover, M. L., & Lajoie, S. P. (2017, April). A theory driven approach to design a learning-centered online environment. Paper presented at the American Educational Research Association Annual Conference. San Antonio, TX.
- Gube, M., Tressel, T., Jarrell, A., & Lajoie, S. P. (2017, November). *Exploring antecedents of gendered attrition from STEM fields*. Poster presented at Gender Summit 11 North America, Montreal, Canada.
- Gube, M., Tressel, T., Jarrell, A., & Lajoie, S. P. (2017, August). *Gendered stereotype threat in STEM programs: the emotional fallout*. Roundtable presented at the 17<sup>th</sup> Biennial conference of the European Association for Research on Learning and Instruction (EARLI).
- Harley, J.M., Jarrell, A., & Lajoie, S. P. (2017, April). *Examining emotion regulation and phasic vs. tonic physiological activation in a medical diagnostic reasoning simulation*. Paper presented at the American Educational Research Association Annual Conference, San Antonio, TX.
- Harley, M.H., Tressel, T., Jarrell, A., Lajoie, S.P., & Pipe, L. (2017). *Fostering Historical Reasoning and Positive Emotions With Location-Based Augmented Reality and Tour Guide Prompts*. Paper presented at the American Educational Research Association, San Antonio, TX.
- Harley, J.M., Jarrell, A., Lajoie, S.P., Tressel, T., Pipe, L., Haldane, C., & Poitras, E. (2017, August). *Examining learners' physiological activation during an interaction with a mobile AR app for learning*. Poster to be presented at the 17<sup>th</sup> Biennial conference of the European Association for Research on Learning and Instruction (EARLI).
- Harley, J.M., Jarrell, A., Tressel, T., Lajoie, S.P., Pipe, L., & Poitras, E. (2017, August). *Evaluating usability dimensions of a mobile augmented reality app for history learning*. Poster to be presented at the 17<sup>th</sup> Biennial conference of the European Association for Research on Learning and Instruction (EARLI).
- Harley, J.M., Tressel, T., Jarrell, A., Lajoie, S. P. & Pipe, L. (2017, April). *Fostering historical reasoning and positive emotions with location-based augmented reality and tour-guide prompts*. Poster to be presented at the American Educational Research Association Annual Conference, San Antonio, TX.
- Jarrell, A., Lajoie, P., Tressel, T., & M, Kazemitabar (2017, April). *Emotion regulation during studying and exams in undergraduates: Antecedents, achievement emotions and outcomes*. Poster presented at the American Educational Research Association, San Antonio, TX.
- Lajoie, S. P., Gube, M., Jarrell, A., Li, S., & Zheng, J. (2017, August). *Examining the interplay of affect and self regulation in the context of clinical reasoning*. Paper presented at the 17<sup>th</sup> Biennial conference of the European Association for Research on Learning and Instruction (EARLI).
- Lajoie, S. P., Kazemitabar, M. , & Buonamici, E. (2017, August). *Investigating the antecedents to productive collaboration in physics teams*. Paper to be presented at the 17<sup>th</sup> Biennial conference of the European Association for Research on Learning and Instruction (EARLI).

- Lajoie, S.P. (2017, August). Discussant for Symposium on Understanding the learning mind through the body: Biophysiology, emotions and motivation in classroom contexts. European Association for Research on Learning and Instruction (EARLI).
- Psaradellis, C., Muis, K., Di Leo, I., & Lajoie, S.P. (2017). The benefits of learning by actually teaching during complex mathematics problem solving. Paper to be presented at the American Educational Research Association Annual Conference. San Antonio, TX.
- Sarmiento, J. P., Sherman, R., Chen, Y., Kazemitabar, M., Bodnar, S., Hmelo-Silver, Cindy E. Lajoie, S. P., Wiseman, J., & Goldman, R. (2017). A case study on navigating an ethnographically-inspired video study within a mixed methods collaborative research project for engaging medical students empathetically. Presented at the *29th Annual Ethnographic and Qualitative Research Conference*.
- Tressel, T., Lajoie, S.P., Jarrell, A., Duffy, M. (2017). *A longitudinal investigation of study habits, goals, and emotions in first-year students*. Poster to be presented at the American Educational Research Association Annual Conference. San Antonio, TX.
- Doleck, T., Poitras, E. G., Naismith, L., & Lajoie, S. P. (2016, June). Detecting Dummy Learner Submitted Annotations in an Online Case Learning Environment. *EdMedia: World Conference on Educational Media and Technology*.
- Duffy, M., Lajoie, S., Pekrun, R., Lachapelle, K. (2016, April). Mapping emotions to appraisals and performance in authentic medical learning environments. Paper presented at the American Educational Research Association.
- Harley, J.M., Jarrell, A., Lajoie, S.P., & Pipe, L. (2016, April). *Examining emotion regulation and physiological arousal in a computer-based learning environment for medical diagnostic reasoning*. Paper presented at the American Educational Research Association.
- Jarrell, A., Harley, J.M., & Lajoie, S.P. (2016, April). *How do Emotions Experienced during Problem Solving relate to Students' Perceived and Actual Performance?* Paper presented at the American Educational Research Association.
- Jarrell, A., & Lajoie, S.P. (2016, April). *A comprehensive multicomponential examination of learners' emotional responses to critical problem solving events*. Paper presented at the American Educational Research Association.
- Jarrell, A., Lajoie, S.P., & Tressel, T. (2016, August). *Keep Calm and Learn On: The Effect of Emotion Regulation and Achievement Emotions on Performance*. Presented at the 124th American Psychological Association Annual Convention, Denver, United States.
- Kazemitabar, M. & Lajoie, S. P. (2016, April). *A multimodal methodology to the detection of emotion regulation*. Paper presented at the American Educational Research Association Conference.
- Lajoie, S.P., Jarrell, A., Harley, J.M., Duffy, M.C., Chaouachi, M., Tressel, T., Doleck, T., Kazemitabar, M., & Wiseman, J. (2016, April). Exploring the Relationship between Achievement Goals and Emotions Experienced within a Technology-Rich Medical Learning Environment. Paper presented at the American Educational Research Association.
- Poitras, E. G., Naismith, L., Doleck, T., & Lajoie, S. P. (2016, April). *Using educational data mining techniques to identify medical student misconceptions in a virtual patient environment*. Paper presented at the 2016 American Educational Research Association Annual Meeting. Washington, DC.
- Tressel, T., Lajoie, S.P., & Jarrell, A. (2016, August). *Emotions Mediate STEM Students' Achievement Goal Orientation and Study Strategies*. Paper presented at the

- 124th American Psychological Association Annual Convention, Denver, United States.
- Doleck, T., Jarrell, A., Poitras, E., & Lajoie, S. (2015, June). *Towards investigating performance differences in clinical reasoning in a technology rich learning environment*. Paper presented for poster presentation at the 7th International Conference on Artificial Intelligence in Education, Madrid, Spain.
- Doleck, T., Jarrell, A., Poitras, E., & Lajoie, S. (2015, June). *Diagnosing virtual patient cases: Gender differences in novice physicians in a computer based learning environment*. Paper presented at Educational Media, Montréal, QC, Canada.
- Duffy, M., Lajoie, S. P., Jarrell, A., Pekrun, R., Azevedo, R., Lachapelle, K. (2015, April). *Emotions in medical education: Developing and testing a self-report emotions scale across medical learning environments*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Duffy, M., Lajoie, S., Pekrun, R., Ibrahim, M., & Lachapelle, K. (2015, March). *Simulation versus operating room: Examining relations between emotional states, learning processes, and technical skills performance across training environments*. Consortium of American College of Surgeons Accredited Education Institutes. Chicago, Illinois.
- Harley, J.M., Poitras, E. G., Jarrell, A., Lajoie, S. P., Duffy, M., Cataldo, D., & Kee, K. (2015, April). *Augmented reality with mobile technologies: Can it lead to learning and engagement with historical settings?* Poster presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Harley, J.M., Poitras, E. G., Jarrell, A., Pipe, L., Gonzalez, E., Duffy, M., Lajoie, S. P., Li, K., Morton, M., Tissera, H., & Kee, K. (2015, June). *Augmented reality with mobile learning technologies: Comparing emotions and learning outcomes from outdoor and lab-based studies*. Paper presented at Educational Media, Montréal, QC, Canada.
- Jarrell, A., Doleck, T., Poitras, E., Lajoie, S., & Tressel, T. (2015, June). *Learning to diagnose a virtual patient: An investigation of cognitive errors in medical problem solving*. Presented at the 7th International Conference on Artificial Intelligence in Education, Madrid, Spain.
- Jarrell, A., Doleck, T., Tressel, T., Poitras, E., & Lajoie, S. (2015). *Towards adaptive help-seeking: Asking for help while problem solving in a computer based learning environment*. *Junior Researchers Pre-conference of the European Association for Research in Learning and Instruction, Limassol, Cyprus*. [Best Round Table Paper Award]
- Kazemitabar, M. & Lajoie, S. P. (2015, June). *A multimodal methodology to the detection of emotion regulation*. Accepted but not presented at the 16th Biennial Meeting of EARLI, *Towards a reflective society: Synergies between learning, teaching and research*. Limassol, Cyprus.
- Lajoie, S. P., Lee, L., Poitras, Hmelo-Silver, C., & Hogaboam, P. (2015, June). *Computer supported tools for coregulation: Supporting teachers and learners in problem based activities*. Presented at the Computers as Collaborative Tools Conference, Gothenburg, Sweden.
- Lee, L., Lajoie, S. P., Poitras, E. G., Bassiri, M. (2015, April). *Metacognition and co-regulation in an on-line synchronous problem-based learning setting: Regulating one's own and others' learning?* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Muis, K. R., Psaradellis, C., Lajoie, S. P., Di Leo, I., Chevrier, M. (June, 2015). *The role of emotions in self-regulated learning during complex mathematics problem solving*. Paper presented at the Annual conference of the Society for Applied Research in Memory and

## Cognition.

- Poitras, E. Fazeli, N., Naismith, L., Lajoie, S. P. (2015, February). *Training medical students to solve complex diagnostic problems using web-based learning environments*. Paper presented at the Symposium on Emerging Technology Trends in Higher Education. Salt Lake City, UT.
- Poitras, E. G., Lajoie, S. P., Doleck, T., & Jarrell, A. (2015, April). *Assessing regulatory patterns in diagnostic reasoning: A precursor to adaptive scaffolding*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Poitras, E., Naismith, L., Doleck, T., & Lajoie, S. (2016, April). *Using educational data mining techniques to identify medical student misconceptions in a virtual patient environment*. Paper to be presented at the Annual Meeting of the American Educational Research Association. Washington, DC.
- Ponzoni, N., Arnaert, A., & Lajoie, S. (2015, June). *Distance Education for Nurses working in Remote Regions of Northern Quebec: Does it influence their Sense of Workplace Empowerment?* 16th International Congress on Circumpolar Health, Oulu, Finland.
- Ponzoni, N. & Lajoie, S. (2015, June). *The Impact of Professional Development on Nurses' Sense of Workplace Empowerment*. Paper to be presented at the 16th Biennial Meeting of EARLI, Towards a reflective society: Synergies between learning, teaching and research. Limassol, Cyprus.
- Tressel, T. & Lajoie, S.P. (2015, June). *Using a self-regulated learning framework to design a mobile app that improves study skills*. Poster presented at special event co-sponsored by the Canadian Association for Educational Psychology and the Canadian Consortium on Self-Regulated Learning.
- Tressel, T. & Lajoie, S.P. (2015, April). *Enhancing teachers' self-efficacy in technology literacy through social media*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Tressel, T., Derian-Toth, M. & Lajoie, S.P. (2014, May). *Bridging the gap between research and practice: using a blog to communicate educational research to teachers*. Presented at the Saltise Conference, Montreal.
- Al Zhrani, G. Azarnoush, H., Winkler-Schwartz, A. Alotaibi, F. Lajoie, S. P., Del Maestro, R. F. (2014, July). *Determination of Proficiency Performance Benchmarks for Removal of Simulated Brain Tumor using NeuroTouch*. 20th International Conference on Brain Tumor Research and Therapy, Lake Tahoe, CA.
- Cruz-Panesso, I., Lachapelle, K., Lajoie, P.S. (2014, September). *Understanding shared mental models across multiple dimensions in simulation-based learning environments: A network analysis approach*. Paper presented at the Royal College's 2014 Simulation Summit. The Art of Simulation – Reflection, Research and Representation Toronto, Canada.
- Duffy, M., Azevedo, R., Griscom, S., Lajoie, S., & Lachapelle, K. (2014, September). *Measuring emotions in medical simulations: Methods, applications, and challenges of a process data approach*. Paper presented at the Simulation Summit, Toronto, Canada.
- Lajoie, S. P. & Poitras, E. (2014, June). *Assessment and Instruction of Self- and Co- Regulation of Medical Diagnostic Processes in Technology-Rich Learning Environments*. International Conference of the Learning Sciences. Boulder, CO.
- Lajoie, S. P. & Poitras, E. (2014, April). *Using Technology-Rich Learning Environments as a Platform for Assessment and Instruction in the Medical Tutoring Domain*. Presented at the American Educational Research Association. Philadelphia, PA.

- Naismith, L. & Lajoie, S. P. (2014, April). *Motivation, Emotion, and Attention to Feedback in a Computer-Based Learning Environment for Clinical Reasoning*. Presented at the American Educational Research Association. Philadelphia, PA.
- Postras, E. & Lajoie, S. P. (2014, April). *Automated Assessment of Writing Proficiency: Can Text Mining of Argumentative Texts Lead to More Nuanced Assessments?* Presented at the American Educational Research Association. Philadelphia, PA.
- Postras, E. & Lajoie, S. P. (2014, April). *Using Computer-Based Learning Environments to Study the Role of Self-Regulation While Performing Inquiries Into the Causes of Historical Events*. Presented at the American Educational Research Association. Philadelphia, PA.
- Postras, E., Naismith, L., & Lajoie, S. P. (2014, April). *Automated Assessment of Writing Proficiency: Can Text Mining of Argumentative Texts Lead to More Nuanced Assessments?* Presented at the American Educational Research Association. Philadelphia, PA.
- Psaradellis, C., Muis, K., Lajoie, S.P., Chevrier, M., Derian-Toth, M. (2014, April). *Comparing Motivation, Emotions, Self-Regulated Learning, and Achievement When Learning for Learning Versus Learning by Teaching*. Presented at the American Educational Research Association. Philadelphia, PA.
- Psaradellis, C., Muis, K., Lajoie, S.P., Chevrier, M., Derian-Toth, M. (2014, April). *The role of epistemic beliefs in mathematics problem solving*. Presented at the American Educational Research Association. Philadelphia, PA.
- Ranellucci, J., Bouchet, F., Postras, E., Lajoie, S. P., & Azevedo, R. (2014). *An Analysis of Emotions in Educationally Relevant Tweets*. Presented at the American Educational Research Association. Philadelphia, PA.
- Cruz-Panesso, I., Lajoie, S. P., Lachapelle, K. (2013, November). *Team cognitive task analysis: The hidden layers of team coordination*. Royal College's 2013 Simulation Summit, Promoting Professional Proficiencies, Vancouver.
- Escalona, S., Lajoie, S., Postras, E. (2013, March). *Text mining techniques to assess proficiency differences in diagnostic reasoning in medicine*. Poster presented at the 2013 Graduate Symposium in the Department of Education (GSDE 2013), Concordia University. Montreal, Canada.
- Hmelo-Silver, C. E., Khurana, C., Lajoie, S. P., Wiseman, J., Lu, J., Chan, L. K., Cruz-Panesso, I. (2013, January). *Using Online Digital Tools and Video to Support International Problem-based Learning*. Presented at the 46<sup>th</sup> Hawaii International Conference on System Sciences (HICSS), Maui.
- Hmelo-Silver, C., Lajoie, S. P., Khurana, C., Lu, J., Wiseman, J., Chan, L.K., Cruz-Panesso, I. (2013, August). *Supporting international Problem-based learning using CSCL tools*. Presented at the European Association for Research in Learning and Instruction. Munich.
- Lajoie, S. P., Cruz-Panesso, I., Summerside, C., Kazemitabar, M., Postras, E., Wiseman, J., Hmelo-Silver, C., Lu, J., Chan, L. K. (2013, April). *Technology rich learning environments to support emotional regulation: A case study of the relationship between physician regulation and patient coping*. Presented at the American Educational Research Association Annual Meeting, San Francisco.
- Lajoie, S. P., Cruz-Panesso, I., Summerside, C., Postras, E., Hmelo-Silver, C., Wiseman, J., Lu, J., & Chan, L., Kazemitabar, M., (2013, August). *The role of interpersonal interactions in emotional regulation in medical student learning*. Presented at the European Association for Research in Learning and Instruction. Munich.

- Lajoie, S. P., Poitras, E., Naismith, L., Gauthier, G., Summerside, C., Kazemitabar, M., Tressel, T., Lee, L., & Wiseman, J. (2013, July). *Modelling domain-specific self-regulatory activities in clinical Reasoning*. Presented at the International Artificial Intelligence and Education Conference, Memphis.
- Lajoie, S. P., Poitras, E., Naismith, L., Summerside, C., Kazemitabar, M., Tressel, T., Lee, L., & Wiseman, J. (2013, August). *Using process data to examine self-regulation during clinical problem solving with technology*. Presented at the European Association for Research in Learning and Instruction.
- Naismith, L. & Lajoie, S. P. (2013, April). *Modelling medical students' attention to feedback in a computer-based learning environment for clinical reasoning*. Presented at the Canadian Conference on Medical Education, Quebec.
- Naismith, L. & Lajoie, S. P. (2013, April). *Medical students' achievement goals, emotions, and attention to feedback in a computer-based learning environment*. Presented at the American Educational Research Association Annual Meeting, San Francisco.
- Poitras, E., Lajoie, S. P., Naismith, L., Summerside, C., Kazemitabar, M., Tressel, T., Lee, L., Bassiri, M., Farmanara, N., Alvo, S., Escalona, S., Wu, C.-H., Virone, A., & Wiseman, J. (2013, March). *Modelling Self-Regulatory Activities in Diagnostic Reasoning with BioWorld*. McGill Graduate Student Panel at the 12<sup>th</sup> Annual Education Graduate Student Society Conference (EGSS 2013), Meeting in the Middle:(de)Constructing Knowledge. Montreal, Canada.
- Blanchard, E.G., Wiseman, J., Naismith, L., Lajoie, S.P. (2012, August). *A Realistic Digital Deteriorating Patient to Foster Emergency Decision-Making Skills in Medical Students*. Presented at the 12th IEEE International Conference on Advanced Learning Technologies (ICALT2012), IEEE publishing, Roma, Italy.
- Blanchard E.G., Wiseman, J., Naismith L., Lajoie, S.P. (2012, July). *A realistic digital deteriorating patient to foster emergency decision-making skills in medical students*. Presented at the IEEE International Conference on Advanced Learning Technologies.
- Chan, L. K., Lu, J., Lajoie, S. P., Wiseman, J., Hmelo-Silver C. (2012, October). *Enhancing cultural diversity through e-PBL*. Presented at the 2<sup>nd</sup> Asian Pacific Joint Conference on PBL. Shanghai.
- Gauthier, G., Lajoie, S. P., & Wiseman, J. (2012, October). *Est-ce que les enseignants cliniciens partagent un concept commun de performance compétente de raisonnement clinique?* Paper presented at the Conférence internationale sur le raisonnement clinique. Montréal, Québec.
- Lajoie, S. P., Cruz-Panesso, I., Poitras, E., Kazemitabar, M., Wiseman, J., Chan, L. K., Hmelo-Silver, C. (2012, September). *Can technology foster emotional regulation in medical students? An international case study approach*. Paper presented at the 5th Biennial Meeting of the EARLI Special Interest Group 16 METACognition, European Association for Research on Learning and Instruction. Milano, Italy.
- Lajoie, S., Cruz-Panesso, I., Poitras, E., Ranellucci, J., Kazemitabar, M., Hong, Y.J., Wiseman, J., Chan, L. K., Hmelo-Silver, C., & Lu, J. (2012, April). *Technology Triggers for Caring: Examining Affect while Learning to Communicate Bad News to Patients*. Paper presented at the Annual Meeting of the American Educational Research Conference, Vancouver, Canada.
- Lajoie, S. P., Naismith, L., Poitras, E. (2012, September). *Supporting metacognitive processes in medical reasoning using technology*. Paper presented at the 5th Biennial Meeting of the



- EARLI Special Interest Group 16 METACognition, European Association for Research on Learning and Instruction. Milano, Italy.
- Lajoie, S.P., Naismith, L., Poitras, E., & Wiseman, J. (2012, October). *Supporting metacognitive processes in medical reasoning using technology*. Poster session presented at the First Montreal International Conference on Clinical Reasoning, Montreal, QC.
- Lu J., Chan L.K., Lajoie S.P., Wiseman J., Hmelo-Silver C. (2012, June). *Helping medical students deal with emotions in patient communication: Challenges and opportunities of E-learning in multicultural learning communities*. Centre for Information Technology in Education (CITE) Research Symposium, Hong Kong.
- Naismith, L., & Lajoie, S. P. (2012, October). *Exploring emotional responses to feedback in a computer-based learning environment for clinical reasoning*. Presented at the First Montreal International Conference on Clinical Reasoning, Montreal, QC.
- Naismith, L., & Lajoie, S. P. (2012, April). *Achievement goals as predictors of feedback emotions in a computer-based learning environment*. Poster session presented at the American Educational Research Association Annual Meeting, Vancouver, BC.
- Poitras, E., Duffy, M., Azevedo, R., & Lajoie, S. (2012, May). *Issues and challenges in the measurement of self-regulatory processes across disciplines in the context of advanced learning technologies*. Poster presented at the 40th Annual Meeting of the Canadian Society for the Study of Education, Waterloo, Canada.
- Poitras, E., Lajoie, S. (2012, June). *The MetaHistoReasoning Tool: A Metacognitive Tool for Fostering Domain-Specific Metacognitive Activities in Learning through Historical Inquiry*. Paper presented at the Workshop on Self-Regulated Learning in Educational Technologies: Supporting, Modelling, Evaluating, and Fostering Metacognition with Computer-Based Learning Environments, 11th International Conference on Intelligent Tutoring Systems. Crete, Greece.
- Poitras, E., Lajoie, S. P., & Hong, Y.J. (2012, June). *Using the metahistoreasoning training module to facilitate the acquisition of domain-specific metacognitive strategies*. Presented at the International Intelligent Tutoring Conference, Greece..
- Poitras, E., Lajoie, S., Hong, Y. J. (2012, May). *Learning through historical inquiry with the MetaHistoReasoning tool*. Paper presented at the 40th Annual Meeting of the Canadian Society for the Study of Education, Waterloo, Canada.
- Poitras, E., Lajoie, S., & Hong, Y.-J. (2012, April). *Using the MetaHistoReasoning Tool Training Module to Facilitate the Acquisition of Domain-Specific Metacognitive Strategies*. Paper presented at the 11th International Conference on Intelligent Tutoring Systems, Crete, Greece.
- Poitras, E., Lajoie, S., & Hong, Y.-J. (2012, March). *Designing an artificial pedagogical agent that provides instructional feedback in the context of learning with the MetaHistoReasoning tool*. Paper presented at the 12th Annual Education Graduate Student Society Conference: (e)Merging Knowledges: Classroom, Community, and Culture, Montreal, Canada.
- Ranellucci, J., Poitras, E., Bouchet, F., Lajoie, S. P., & Azevedo, R. (2012, May). *Using social networking to guide research on emotions in education*. Round table presentation at the Canadian Society for the Study of Education (CSSE) in Waterloo, ON.
- Wiseman, J. Lajoie, S.P., Cruz-Panesso, I., Poitras, E., Ranellucci, J., Chan, L.K. Hmelo-Silver, C., Lu, J. (2012, June). *Using technology to build an international medical community of*

- practice: Teaching students to care.* Presented to the Society for Teaching and Learning in Higher Education, Montreal, CA
- Conway, J. M., Gauthier, G., George, A. K., Brown, R. W., Richard, S., & Lajoie, P. S. (2011). *Are we hitting the target? A pilot study exploring differences in perceptions of case difficulty.* Paper presented at the American Association of Colleges of Pharmacy (AACP). San Antonio, Tx.
- Cruz-Panesso, I., Lachapelle, K., & Lajoie, S. (2011, November). *The role of leadership in establishing mutual trust and team coordination.* Poster presented at the Royal College's 2011 Simulation Summit. Montreal.
- Cruz-Panesso, I., Lajoie, S. P., & Lachapelle, K. (2011, November). *The link between shared mental models and team effectiveness in a simulated team-based course.* Presented at the Royal College's 2011 Simulation Summit, Montreal.
- Gauthier, G., Conway, J., Brown, R., Lajoie, S., Richard, S., & Wiseman, J. (2011). *Toward and Integrated Model of Case Based Learning in Health Education.* Paper presented at the American Educational Research Association (AERA). New Orleans.
- Gauthier, G., & Lajoie, S. (2011). *How to Measure Performance in Case Based Learning When the "Right Answer" Doesn't Exist?* Paper presented at the American Educational Research Association (AERA). New Orleans, LA.
- Lajoie, S. P., Lu, J., Hmelo-Silver, C., Wiseman, J., Chan, L. K., Cruz-Panesso, I., Poitras, E., Ranellucci, J., Hong, Y., Kazemi, M., & Summerside, C. (2011, November). *A case-study exploring the role of affect and culture in communicating bad news: Technology triggers for problem based learning and practice.* Poster presented at the Royal College's 2011 Simulation Summit, Montreal.
- Lajoie, S.P., Naismith, L., Poitras, E., Cruz-Panesso, I., Hong, Y.J., Ranellucci, J., & Wiseman, J. (2011, April). *Using Bioworld to enhance learning while performing an authentic inquiry-based task in medicine.* Paper presented at the Annual meeting of the American Educational Research Conference, New Orleans.
- Poitras, E., Lajoie, S., & Hong, Y. (2011, April). *Theory-Driven Design of Metacognitive Tools : A Top-Down and Bottom-Up Approach.* Poster presented at the Annual meeting of the American Educational Research Conference, New Orleans.
- Blanchard, E., Wiseman, J., Naismith, L., Hong, Y. & Lajoie, S. P. (2010, June). *The Online Deteriorating Patient: An Adaptive Simulation to Foster Expertise in Emergency Decision-Making.* Presented at the International Intelligent Tutoring Systems Conference, Pittsburgh, PA.
- Cruz-Panesso, I., Lachapelle, K., & Lajoie, S. (2010, September). *Practice makes perfect: The learning curve on a simulation-based trauma team course.* Poster presented at The Royal College's International Conference on Residency Education, Ottawa, Canada.
- Cruz-Panesso, I., Lachapelle, K., & Lajoie, S. (2010, September). *The fundamental role of coordination in effective teamwork: Empirical evidence in a simulation-based trauma team course.* Paper presented at the Royal College's 2010 Simulation Summit. Advancing knowledge: Enhancing Practice. Toronto, Canada.
- Lajoie, S.P. (2010, April). *Factors that impact student engagement and learning behaviors in interactive learning environments* (Discussant). Presented at the Annual meeting of the American Educational Research Conference, Denver.

- Lu, J., Lajoie, S.P., & Wiseman, J. (2010, April). *Scaffolding medical problem solving with simulation-based PBL*. Presented at the Annual meeting of the American Educational Research Conference, Denver.
- McCurdy, N., Naismith, L., & Lajoie, S. P. (2010). *Using metacognitive tools to scaffold medical students developing clinical reasoning skills*. Paper presented at the 2010 AAAI Fall Symposium on Cognitive and Metacognitive Educational Systems (MCES 2010), Arlington, VA.
- Naismith, L. & Lajoie, S.P. (2010, June). *Using expert models to provide feedback on clinical reasoning skills*. Presented at the International Intelligent Tutoring Systems Conference, Pittsburgh, PA.
- Poitras, E., Lajoie, S., & Hong, Y.J. (2010, January). *The MetaHistoReasoning Tool: A computer-based learning environment designed as a metacognitive tool to facilitate inquiry-based learning in history education*. Public lecture presented at the Research Exchange Forum at McGill University, Montreal, Canada.
- Poitras, E., Hong, Y., & Lajoie, S. (2010, March). *A bottom-up approach to design technology-rich learning environments that foster metacomprehension to enhance learning*. Poster presented at the 7<sup>th</sup> Interdisciplinary Graduate Student Research Symposium. Montreal, Canada.
- Poitras, E., Hong, Y., & Lajoie, S. (2010, March). *Agent technologies as a means to foster metacomprehension in learning history*. Paper presented at the 9<sup>th</sup> Annual Education Graduate Student Society Conference Interdisciplinarity: Reality, Imagination & Diversity. Montreal, Canada.
- Poitras, E., Lajoie, S., & Hong, Y. (2010). *Using a bottom-up approach to design computers as metacognitive tools to enhance learning of history*. Paper presented at the 2010 AAAI Fall Symposium on Cognitive and Metacognitive Educational Systems (MCES 2010), Arlington, VA.
- Blanchard, E., G. Lajoie, S. P., Roy, M., & Frasson, C. (2009, June). *Critères socioculturels pour la modélisation d'apprenants : Une analyse de pertinence*. Poster session presented at the Environnements Informatiques pour l'Apprentissage Humain, Le Mans, France.
- Blanchard, E., G. Lajoie, S. P., Roy, M., & Frasson, C. (2009, June). *EAGLE: Un système pour réguler l'apprentissage interne à un jeu vidéo*. Poster session presented at the Environnements Informatiques pour l'Apprentissage Humain, Le Mans, France.
- Blanchard, E. G., Roy, M., Lajoie, S. P., & Frasson, C. (2009, July). *An evaluation of sociocultural data for predicting attitudinal tendencies*. Paper presented at the 14th International Conference on Artificial Intelligence in Education, Brighton, UK.
- Blanchard, E. G., Volfson, B., Hong, Y.J., & Lajoie, S. P. (2009, July). *Affective AIED: From detection to adaptation*. Paper presented at the 14th International Conference on Artificial Intelligence in Education, Brighton, UK.
- Chiarella, A. & Lajoie, S. P. (2009, April). *Dynamically modifying text signals: A self-organising systems approach to collaboration*. Presented at the American Educational Research Association (AERA). San Diego, CA.
- Cruz-Panesso, I., Lajoie, S.P., Lachapelle, K., & Ramadori, F. (2009, November). *Cognitive task analysis of Effective Teams: Methodologies to support the design, development and assessment of team simulation-based tasks*. Paper presented at the 2nd Annual Conference on What really Works in Technology-Enhanced Health Education: Effective Use of

- Simulations and e-Education Strategies to Improve Teaching and Learning, Oshawa – Ontario, Canada.
- Gauthier, G., & Lajoie, S. P. (2009, April). *Capturing and representing case-based knowledge through multiple perspectives*. Presented at the American Educational Research Association (AERA). San Diego, CA.
- Gauthier, G., & Lajoie, S. P. (2009, April). *Representing and validating decision-making processes for clinical cases*. Paper presented at the AIME Medical Education Conference. Ottawa.
- Lajoie, S. P., & Lu, J. (2009, August). *Supporting collaboration with technology: Does shared cognition lead to co-regulation in Medicine?* Presented at the European Association for Research on Learning and Instruction conference. Amsterdam.
- Gauthier, G., & Lajoie, S. P. (2009, July). *Validating and Representing Case Based Knowledge*. Paper presented at the 14th International Conference on Artificial Intelligence in Education, Brighton, UK.
- Lajoie, S. P. (2009, April). *Cognitive tools for facilitating meaningful interactions in complex domains*. Presented at the American Educational Research Association Meeting, San Diego.
- Lajoie, S.P., Wiseman, J., Poitras, E., & Cruz-Panesso, I. (2009, November). *On-line based learning environment for fostering physicians' clinical skills necessary to early recognition of a deteriorating patient*. Paper presented at the 2nd Annual Conference on What really Works in Technology-Enhanced Health Education: Effective Use of Simulations and e-Education Strategies to Improve Teaching and Learning, Oshawa – Ontario, Canada.
- Naismith, L., Blanchard, E. G., Ranellucci, J., & Lajoie, S. P. (2009, July). *EAGLE: An intelligent tutoring system to support experiential learning through video games*. Poster session presented at the 14th International Conference on Artificial Intelligence in Education, Brighton, UK.
- Naismith, L., & Lajoie, S. P. (2009, July). *Learning from feedback in BioWorld*. Young researchers' track presented at the 14th International Conference on Artificial Intelligence in Education, Brighton, UK.
- Ranellucci, J. & Lajoie, S. P. (2009, July). *The effect of mood on medical students' diagnostic performance: Is one patient's bad news another patient's worse news?* Young researchers' track, paper presented at the 14th International Conference on Artificial Intelligence in Education, Brighton, UK.
- Chiarella, A. & Lajoie, S. P. (2008, July). *Collaboratively signaling text with CoREAD*. Presented at the Meeting of the Society for Text & Discourse, Memphis.
- Gauthier, G., Lajoie, P. S., Naismith, L., & Wiseman, J. (2008, October). *Effectiveness of visual expert teachers' solution process on undergraduate students solving clinical cases*. Paper presented at the American Association of Medical Colleges (AAMC). San Antonio, TX.
- Lajoie, S. P., Gauthier, G., & Lu, J. (2008). *Convergence of data sources in the analysis of complex learning environments*. Presented at the American Educational Research Association Meeting, NY.
- Chiarella, A., & Lajoie, S. P. (2007, April). *CoREAD: Social software for collaborative reading*. Poster presented at the annual conference of the American Educational Research Association, Chicago.

- Gauthier, G. & Lajoie, S. P. (2007, April). *Using multi-layered decision trees in the context of diagnostic reasoning*. Paper presented at the annual conference of the American Educational Research Association, Chicago.
- Gauthier, G., Lajoie, P. S., & Richard, S. (2007, July). *Mapping and validating case specific cognitive models*. Paper presented at the International Artificial Intelligence in Education conference workshop on ill-defined problem solving tasks, Los Angeles.
- Gauthier, G., Lajoie, P. S., & Richard, S. (2007, October). *Mapping and validating diagnostic reasoning through interactive case creation*. Paper presented at ELearn, Quebec city, Canada.
- Gauthier, G., Lajoie, S. P., Richard, S., Faremo, S., Wiseman, J., Waschke, K., & MacKenzie-Feder, J. (2007, November). *Visualization and validation of expert teacher's solution processes for clinical cases*. Presented at the American Association of Medical Colleges, Washington, DC.
- Lajoie, S. P., Gauthier, G. & Richard, S. (2007, August). *Computer tools to support medical problem solving*. Presented at the European Association for Research on Learning and Instruction conference. Budapest, Hungary.
- Lu, J. Lajoie, S. P., & Wiseman, J. (2007, April). *Does shared argumentation make a difference in collaborative decision-making?* Paper presented to the annual conference of the American Educational Research Association, Chicago.
- Nakamura, C. & Lajoie, S. P. (2007, April). *The effects of specific support to hypothesis generation on the diagnostic performance of medical students*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Wiseman, J. & Lajoie, S. P. (2007, May). *What clinical tutors need to do: Lessons from the front line: Extending Irby's model of clinical tutoring to Internal Medicine practice with complex patients*. Paper presented at the Canadian Association for Medical Education, Victoria, BC.
- Blatter, J. & Lajoie, S. P. (2006, April). *Beyond the image: Strategic use of drawing-in-discourse in display-based reasoning in an animation studio*. Presented at the American Educational Research Association, San Francisco.
- Chiarella, A., & Lajoie, S. P. (2006, February). *Self-organising systems: Using indirect collaboration to support learners*. Paper presented at the Harvard Graduate School of Education Student Student Research Conference 2006, Harvard University, Cambridge, MA.
- Chiarella, A., & Lajoie, S. P. (2006, May). *Collaborative reading software: Using a self-organising systems approach*. Paper presented at the 2006 CADE/AMTEC Annual Conference, UQAM, Montreal, Quebec.
- Faremo, S., Lajoie, S., Gauthier, G., & Wiseman, J. (2006, October). *Supporting diagnostic problem solving in medical education using an integrated classroom - E-Learning model*. Paper presented at E:Learn: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education, Honolulu.
- Garcia, B., Marquez, L., Lajoie, S. P., & Villasenor, M. (2006, June). *ESACS: Un programa multimedia para la enseñanza de la estadística y la metodología*. Presented at virtualeduca. Bilbao, Spain.
- Lajoie, S. P. (2006, April). *Cognitive models and cognitive tools in educational applications*. Presented at the American Educational Research Association, San Francisco.

- Nakamura, C. & Lajoie, S. P. (2006, February). *HGT: Technological support for generating diagnostic hypotheses in medical education*. Paper presented at the Harvard Graduate School of Education Student Research Conference and International Forum, Cambridge, MA.
- Nakamura, C., & Lajoie, S. P. (2006, October). *Can clinical reference tools support medical students during hypothesis generation?* Paper presented at the E-Learn 2006: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education, Honolulu, HI.
- Garcia, B., Lajoie, S. P., Marquez, L., Villasenor, M., Jimenez, E., Vega-Perez, L., Avila, J. I., Moran, H., Ortega, E., Pineda, V., Moreno, L. (2005, April). *ESACS: A computer-based learning environment to teach methodology and statistics*. Poster presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Lajoie, S.P. (2005, April). *Trajectories for studies of expertise in the real world*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Lajoie, S. P., Faremo, S., Wiseman, J. & Gauthier, G. (2005, April). *Promoting self-regulation in medical students through the use of technology*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Lajoie, S. P., Garcia, B. C., & Berdugo, G. C. & Marquez, L. (2005, April). *The creation of virtual and face-to-face learning communities: An international collaborative experience*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Lu, J. & Lajoie, S. (2005, June). *Facilitating medical decision making with collaborative tools*. Presented at the Conference on Educational Multimedia, Hypermedia & Telecommunications (ED-MEDIA), Montreal, Canada.
- Lu, J., Patrick, T., Lajoie, S. P., & Wiseman, J. (April, 2005). *Scaffolding medical decision-making with role play*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Nakamura, C., Lajoie, S. P., & Berdugo, G. (2005, October). *Do information systems actually improve problem-solving and decision-making performance? An analysis of 3 different approaches to the design of information systems*. Presented at the E-Learn 2005: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education, Vancouver, BC, Canada.
- Cumyn, L., Amsel, R., & Lajoie, S. P. (2004, June). *Reflective teaching & expertise: Linking diverse approaches, definitions, and content*. Poster session presented at the Society for Teaching and Learning in Higher Education, Ottawa, Ontario.
- Cumyn, L., Amsel, R., & Lajoie, S. P. (2004, June). *Reflective teaching: Relating diverse approaches to the content of reflection*. Poster session presented at the Ontario Conference for Applied Linguistics: Diversity in Learning and Teaching, Kingston, Ontario.
- Cumyn, L., Amsel, R., & Lajoie, S. P. (2004, November). *Pedagogical uses of technology as communication tools*. Poster session presented at the Conference of Professional and Organizational Development (POD), Montreal, Canada.
- Gauthier, G., Wiseman, J., & Lajoie, S. P. (2004, May). *Démonstration du prototype de BioWorld et compte rendu du sous-projet MedIC*. Paper presented at the 72nd ACFAS, Montreal, Quebec.

- Lajoie, S. P. (2004, April). *Research in mathematics education: Examining the rigor and applicability of design experiments*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Lajoie, S. P. (2004, April). *Technology research: Scaffolding self-regulated learning and metacognition: Implications for the design of computer based scaffolds* (Discussant). Presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Lu, J., Patrick, T., Lajoie, S. P., & Wiseman, J. (2004, November). *What students should learn in ER rotation?* Poster session presented at the Conference of Professional and Organizational Development (POD), Montreal, Canada.
- Nakamura, C., & Lajoie, S. P. (2004, August). *The overlaying roles of cognitive and information theories in the design of information access systems*. Poster session presented at the 7th International Conference on Intelligent Tutoring Systems, Maceio, Alagoas, Brazil.
- Nakamura, C., & Lajoie, S. P. (2004, June). *Discursive diversity: The pitfalls of dialogical strategies in the classroom*. Poster session presented at the Ontario Conference on Applied Linguistics: Diversity in Learning and Teaching, Kingston, Ontario.
- Lajoie, S. P., Lu, J., Nakamura, C., Patrick, T., & Wiseman, J. (2003, October). *Problem-based learning environment and medicine*. Poster session presented at the annual DIVA Colloquium, Montreal, Quebec.
- Lavigne, N., & Lajoie, S. P. (2003, April). *Benefits of multiple instructional phases in a project-based environment for learning descriptive statistics*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Lu, J., & Lajoie, S. P. (2003, December) *Fostering medical problem solving in a collaborative web-based learning environment*. Paper presented at the International Conference on Computers in Education, Hong Kong.
- Nakamura, C., & Lajoie, S. P. (2003, June). *Using information architecture to support problem-based learning environments*. Paper presented at the ED-MEDIA 2003: World Conference on Educational Multimedia, Hypermedia & Telecommunications, Honolulu, HI.
- Lajoie, S. P. (2002, April). Chair, Presidential Invited Lecture by Ellen Condliffe Lagemann, *An elusive science: The troubling history of education research*. Presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lajoie, S. P. (2002, April). Chair, Vice-Presidential Invited Lecture by Susan Goldman, Division C, *Learning and instruction research meet the realities of educational systems*, Presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Ahmad, A., & Lajoie, S. P. (2001, May). *The integrated learning model: A design experiment in web-based instruction*. Presented at the International Conference on Artificial Intelligence and Education. San Antonio, TX.
- Azevedo, R., Faremo, S., Lajoie, S. P., & Fleiszer, D. (2001, April). *Understanding the cognitive factors underlying medical expertise*. Presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Faremo, S., Lajoie, S. P., Fleiszer, D., Wiseman, J. & Snell, L. (2001, April). *Examining medical problem solving in a computer-based learning environment*. Presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Garcia, B., & Lajoie, S. P. (2001, February). *Experiencia de colaboracion inter-institucional entre la Facultad de Psicologia de la Universidad Nacional Autonoma de Mexico y la*

- Facultad de Educacion de la Universidad de McGill, Canada.* Presented at the Hispanic Association of Colleges and Universities, 4<sup>th</sup> International Conference, Costa Rica.
- Lajoie, S. P., Faremo, S., & Wiseman, J. (2001, May). *A knowledge-based approach to designing authoring tools: From tutor to author.* Paper presented at the International Conference on Artificial Intelligence and Education. San Antonio, TX.
- Radcliffe-Branch, D., & Lajoie, S. P. (2001, April). *The effectiveness of educational interventions for glaucoma patients.* Presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Faremo, S., Lajoie, S. P., & Fleiszer, D. (2000, June). *Examining medical students' attitudes and learning experiences in BioWorld.* Presented at ED-MEDIA 2000, Montreal, Quebec.
- Lavigne, N. C., & Lajoie, S. P. (2000, April). *Design issues for scaffolded learning environments (SLEs).* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lajoie, S. P., & Lavigne, N. C. (1999, April). *The use of models for enhancing statistical understanding.* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Azevedo, R., & Lajoie, S. P. (1998, August). *The cognitive basis for the design of a mammography interpretation tutor.* Presented at the annual meeting of the Cognitive Science Society, Madison, WI.
- Guerrera, C., & Lajoie, S. P. (1998, April). *Investigating student interactions within a problem-based learning environment in Biology.* Presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Guerrera, C., & Lajoie, S. P. (1998, March). *Using BioWorld with learning disabled high school students.* Presented at the annual meeting of the Learning Disabilities Association of Quebec. Montreal.
- Lajoie, S. P. (1998, April). *Meaningful approaches to performance assessment in statistics.* Paper presented at the National Council of Teachers of Mathematics, Research Presession. Washington, DC.
- Lajoie, S. P., Guerrero, C., & Faremo, S. (1998, August). *Promoting argumentation in face-to-face and in distributed computer-based learning situations: Constructing knowledge in the context of BioWorld.* Paper presented at the annual meeting of the Cognitive Science Society, Madison, WI.
- Lajoie, S. P., Lavigne, N. C., Guerrero, C. & Munsie, S. (1998, April). *Constructing knowledge in the context of BioWorld: What situations produce better opportunities for learning?* Presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Lavigne, N. C., & Lajoie, S. P. (1998, April). *Critiquing statistics: Technology for fostering reasoning about statistical investigation.* Presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Azevedo, R., Lajoie, S. P., Desaulniers, M., Fleiszer, D. M., & Bret, P. M. (1997, August). *Radiological expertise and the effects of perceptual scaffolding on the diagnosis of mammograms.* Paper presented at the 19th Annual Conference of the Cognitive Science Society, Stanford, CA.
- Azevedo, R., Lajoie, S. P., Desaulniers, M., Fleiszer, D. M., & Bret, P. M. (1997, August). *RadTutor: The theoretical and empirical basis for the design of a mammography*



- interpretation tutor*. Presented at the 8th World Conference on Artificial Intelligence and Education, Kobe, Japan.
- Frederiksen, C., Donin, J., Lajoie, S. P., & Decary, M. (1997, November). *Capturing coaching expertise for tutor-building*. Demonstration presented at the second annual Conference of the Telelearning Network Centres of Excellence, Toronto, Ontario.
- Guerrera, C., & Lajoie, S. P. (1997, March). *Testing the effectiveness of problem-based learning with high school biology students*. Presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Lajoie, S. P. (1997, November). *BioWorld: Cooperative learning with and without telelearning*. Paper presented at the second annual Conference of the TeleLearning Network of Centres of Excellence, Toronto, Ontario.
- Lajoie, S. P., Azevedo, R. & Fleiszer, D. (1997, March). *Assessing learning within a high information flow environment*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Lajoie, S. P., Guerrero, C., Lavigne, N., & Meilleur, L. (1997, November). *Distributed cognition using BioWorld*. Demonstration presented at the second annual Conference of the TeleLearning Network Centres of Excellence, Toronto, Ontario.
- Munsie, S., & Lajoie, S. P. (1997, March). *A collaborative approach to cognitive task analysis: Extracting expert knowledge using PARI-RT*. Presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Azevedo, R., Lajoie, S. P., & Bret, P. M. (1996, August). *Instructional scaffolding during medical decision making*. Presented at the 26th International Congress of Psychology, Montreal, Quebec.
- Azevedo, R., Lajoie, S. P., & Bret, P. M. (1996, August). *Tutoring complex visual concepts in radiology*. Presented at the 26th International Congress of Psychology, Montreal, Quebec.
- Azevedo, R., Lajoie, S. P., & Fleiszer, D. M. (1996, August). *Complex clinical decision making in all ill-structured task*. Presented at the 26th International Congress of Psychology, Montreal, Quebec.
- Azevedo, R., Lajoie, S. P., & Fleiszer, D. M. (1996, June). *A computerized training environment to facilitate complex clinical decision-making*. Paper presented at the first International Conference on Telemedicine, Medicine 2001, Montreal, Quebec.
- Azevedo, R., Lajoie, S. P., O'Donovan, & Bret, P. M. (1996, June). *RadTutor: The theoretical and empirical basis for the design of a chest x-ray computerized training environment*. Paper presented at the first International Conference on Telemedicine, Medicine 2001, Montreal, Quebec.
- Lajoie, S. P., Munsie, S. D., & Lavigne, N. C. (1996, April). *Examining the relationship between evidence and argumentation in BioWorld*. Presented at the annual meeting of the American Educational Research Association, New York.
- Lefebvre, B., Nkambou, R., Gauthier, G. Lajoie, S. P. (1996, November). *The student model in the SAFARI environment for the development of intelligent tutoring system*. Presented at the Premier Congres d'electromecanique et Ingenierie des Systemes, Mexico.
- Rahilly, T. J., Saroyan, A., Greer, J., Lajoie, S. P., Breuleux, A., & Fleiszer, D. (1996, July). *The InforMed professor: Clinical instruction of breast disease diagnosis and management*. Presented at the Third International Conference on Computer Aided Learning and Instruction in Science and Engineering, Donostia, San Sebastian, Spain.

- Azevedo, R., Lajoie, S. P., Breuleux, A., & Bret, P. (1995, June). *Radiological expertise and computer-based learning environments: Research and implementation issues*. Presented at the annual meeting of the Canadian Society for Studies in Education, Montreal, QC.
- Lajoie, S. P. (1995, April). (Chair). *Technologies for enhanced learning environments*. Presented at the American Educational Research Association Conference, San Francisco, CA.
- Lajoie, S. P. (1995, April). *Authentic assessment: From theory to practice*. Paper presented at the annual meeting of the National Council on Teachers of Mathematics. Boston, MA.
- Lajoie, S. P. (1995, August). (Chair). *Diverse perspectives on modelling in education*. Presented at the Seventh World Conference on Artificial Intelligence in Education, Washington, DC.
- Lajoie, S. P. (1995, August). (Chair). *Learning Environments and Microworlds*. Presented at the Seventh World Conference on Artificial Intelligence in Education, Washington, DC.
- Lavigne, N. C., & Lajoie, S. P. (1995, July). *Learning statistics through exemplars*. Poster session presented at the seventeenth annual Conference of the Cognitive Science Society, Pittsburgh, PA.
- Azevedo, R., Breuleux, A., & Lajoie, S. P. (1994, July). *The study of radiological expertise and its implications for the design of computer-based radiology teaching environments*. In S. G. Shaw (Chair), *Computer-Based Instructional Applications*. Presented at the Educational Technology conference, Montreal, Quebec.
- Goyette, E., & Lajoie, S. P. (1994, April). *The use of dictionaries to facilitate text comprehension*. Presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Jacobs, V. J., & Lajoie, S. P. (1994, April). *Stochastics in middle school: An exploration of students' informal knowledge*. Presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lajoie, S. P., & Lavigne, N. C. (1994, April). *How does group composition and gender influence the learning of statistics?* Poster session presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lavigne, N. C., Lajoie, S. P., Munsie, S. D., & Wilkie, T. V. (1994, April). *Authentic assessment of statistical reasoning in cooperative learning groups*. Poster session presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Munsie, S. D., Lajoie, S. P., Fleischer, D., & Bencsath-Makkai, Z. (1994, June). *A "touch" of learning: Pressing beyond the traditional classroom lecture*. Presented at The Canadian Society for the Study of Higher Education, Calgary, Alberta.
- Wilkie, T. V., & Lajoie, S. P. (1994, April). *Examining the effectiveness of instructive animation: A computer learning environment for teaching learning disabled student's biology*. Poster session presented at the American Educational Research Association Conference, New Orleans, LA.
- Lajoie, S. P., Coffin, L. E., & Rahilly, T. (1993, April). *The use of electronic conferences for extending learning*. Presented at the annual meeting of the American Educational Research Association, Atlanta, GA.
- Lajoie, S. P., Lavigne, N. C., & Lawless, J. (1993, April). *The use of hypercard for facilitating assessment: A library of exemplars for reifying statistical concepts*. Poster session presented at the annual meeting of the American Educational Research Association, Atlanta, GA.

- Lajoie, S. P., Lawless, J., Lavigne, N. C., & Munsie, S. D. (1993, April). *New ways to measure problem solving, reasoning, connectedness, and communication*. Presented at the annual meeting of the American Educational Research Association, Atlanta, GA.
- Lajoie, S. P. (1992, June). (Chair). *Design Issues*. Presented at the Second International Conference on Intelligent Tutoring Systems, Montreal, Quebec.
- Lajoie, S. P. (1992, April). *Statistics is for kids: Empowering students in the use of mathematics*. Presented at the second meeting on the Authentic Assessment of Mathematical Performance. American Educational Research Association Pre-session, San Francisco, CA.
- Lajoie, S. P., & Hollar, N. (1992, April). *Technologies for instruction and assessment: BioWorld a computer based learning environment to promote scientific reasoning*. Presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Lajoie, S. P. (1991, November). *Computer-based learning environments*. Presentation to the Psychology Department, University of Wisconsin-Madison.
- Lajoie, S. P. (1991, April). (Chair/Discussant). *Designing and studying technology-rich learning environments: Examples from the use of Hypercard*. Presented at the annual meeting of the American Educational Research Association, Boston, MA.
- Lajoie, S. P. (1991, April). *Dynamic forms of assessment using computer coached practice environments*. Presented at the National Council on Measurement and Evaluation, Chicago, IL.
- Lajoie, S. P. (1991, April). *A framework for authentic assessment for mathematics*. Presented at the first meeting on Authentic Assessment of Mathematical Performance. American Educational Research Association Pre-session, Chicago, IL.
- Lajoie, S. P., & Lesgold, A. (1991, April). *The SHERLOCK experience: An evaluation of a computer-based supported practice environment for electronics troubleshooting training*. International Conference on Cognitive Science: Tools for the Development of Organizations, Montreal, Quebec.
- Lajoie, S. P. (1990, November). *BioWorld: A computer-based learning environment*. Presentation to Medical School: Clinical Sciences Division, University of Wisconsin-Madison, Madison, WI.
- Lajoie, S. P. (1990, March). *Computer environments as cognitive tools for enhancing mental models*. Presented at the annual meeting of the American Educational Research Association, Boston, MA.
- Gitomer, D., Lajoie, S. P., & Lesgold, A. (1989, March). *Performance assessment in an intelligent tutoring environment*. Presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Lajoie, S. P. (1989, March). *The cognitive consequences of an electronics troubleshooting tutor on different aptitude groups*. Presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Lajoie, S. P. (1989, March). *Patterns of learning and pedagogical effectiveness in Sherlock*. Presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Lajoie, S. P. (1988, November). *Sherlock: A coached practice environment for an electronics troubleshooting job*. Presented at the BBN Science Development Program, AI Seminar Series Lecture, BBN Labs, Cambridge, MA.

- Lajoie, S. P., Eggan, G. M., & Lesgold, A. M. (1988, August). *Instructional strategies for a coached practice environment*. Presented at the Tenth Annual Conference of the Cognitive Science Society, Montreal, Quebec.
- Lajoie, S. P. (1987, April). *Individual differences in spatial ability: A computerized tutor for orthographic projection tasks*. Presented at the annual meeting of the American Educational Research Association, Washington, DC.
- Lajoie, S. P. (1987, February). *A cognitive task analysis approach to tutor development: Implications for diagnosis and assessment*. Presented at the Educational Testing Services, Princeton, NJ.
- Lesgold, A., Lajoie, S. P., Logan, D., & Eggan, G. M. (1986, June). *Cognitive task analysis approaches to testing*. Presented at the Office of Naval Research Cognitive Psychometrics Conference, Princeton, NJ.
- Lajoie, S. P. (1986, April). *Cognitive task analysis: Implications for intelligent tutor development*. Presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Glaser, R., Lesgold, A., & Lajoie, S. P. (1985, April). *Toward a cognitive theory for the measurement of achievement*. Presented at the Buros- Nebraska Symposium on Measurement and Testing.
- Lajoie, S. P., & Shute, V. J. (1985, August). *Two intelligent tutors: Principles of instructional design*. Presented at the annual meeting for the American Psychological Association, Los Angeles, CA.
- Lajoie, S. P. (1984, April). *Individual differences in strategies and spatial skills involved in solving an engineering task*. Presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lajoie, S. P. (1984, April). (Discussant). *Human intelligence and information processing: A discussion with Robert J. Sternberg*. Presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lajoie, S. P. (1984, April). (Chair). *Teachers work life and professional development*. Presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lajoie, S. P. (1983, April). *Ability differences in visual thinking*. Presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Lajoie, S. P. (1983, April). (Chair). *Teacher development and professional growth*. Presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Lajoie, S. P., & Mandinach, E. B. (1983, April). *The differential effects of reading speed on ambiguity detection in text*. Presented at the annual meeting of the American Educational Research Association, Montreal, Quebec.
- Lajoie, S. P., & Swetnam, L. A. (1983, April). *The trend toward privatization: A comparison of public and private school organizations*. Presented at the annual meeting of American Educational Research Association, Montreal, Quebec.
- Mandinach, E. B., & Lajoie, S. P. (1983, March). *Ability differences in detecting embedded ambiguities in text*. Presented at the annual meeting of the American Educational Research Association, New York.
- Lajoie, S. P., Holloway, S. D., & Hess, R. D. (1982, March). *A comparison of adoptive and non-adoptive mothers' beliefs about children*. Presented at the annual meeting of the American Educational Research Association, New York.

- Lajoie, S. P. (1981, August). *Intelligence and the speed of mental processing*. Presented at the Fourth World Conference on Gifted and Talented Children, Montreal, Quebec.
- Lajoie, S. P., & Shore, B. M. (1980, October). *Three myths? The over-representation of the gifted among dropouts, delinquents, and suicides*. Presented at the Canadian Congress Council for Exceptional Children, Halifax, Nova Scotia.
- Lajoie, S. P., Dauphinee, D., & Scott, H. (1979, October). *The effects of streaming on the Medical Curriculum: McGill, a special case*. Presented at the Canadian Association for Medical Colleges, Ottawa, Ontario.

### Peer Reviewed Workshops

- Azevedo, R. & Lajoie, S. P. (2018, June). *Measuring, analyzing, and modeling multimodal multichannel data about self-regulated learning: Making ITSs more intelligent!* To be presented at the Intelligent Tutoring Systems conference, Montreal.
- Harley, J.M., Jarrell, A. & Lajoie, S.P (2016). *Understanding EDA: What Can (and What Can't) It Tell Us?* Learning Environments Across Disciplines, Learning analytics workshop, Washington DC.
- Poitras, E., Fazeli, N. & Lajoie, S. P. (2016). *A Network-Based Approach to Learner Modeling in Open-Ended Learning Environment*. Learning Environments Across Disciplines, Learning analytics workshop, Washington DC.
- Hogaboam, P., Chen, Y., Bodnar, S, Kazemi, M., Hmelo-Silver, C. (2016) *Supporting Online PBL through Data Visualization: HOWARD (Helping Others with Argumentation and Reasoning Dashboard)*. Learning Environments Across Disciplines, Learning analytics workshop, Washington DC.
- Lajoie, S. P., Cruz-Panesso, I., Naismith, L., Lachapelle, K., & Wiseman, J. (2014). *Examining emotion and performance in high stress medical situations*. Presented at the Second International Clinical Reasoning Conference, Montreal.
- Lajoie, S.P. (2013, June). *Designing for Distributed Regulatory Processes*. Presented at the 10<sup>th</sup> International Conference on Computer Supported Collaborative Learning, Madison.
- Poitras, E., & Lajoie, S. (2012). The MetaHistoReasoning Tool: A Metacognitive Tool for Fostering Domain-Specific Metacognitive Activities in Learning through Historical Inquiry. In A. Weerasinghe, R. Azevedo, I. Roll, & B. du Boulay (Eds.), *Proceedings of the Workshop on Self-Regulated Learning in Educational Technologies: Supporting, Modelling, Evaluating, and Fostering Metacognition with Computer-Based Learning Environments* (pp. 41-44). Crete, Greece.
- Poitras, E., & Lajoie, S. (2012). The MetaHistoReasoning Tool: An Overview of the Training and Inquiry Modules. In A. Weerasinghe, R. Azevedo, I. Roll, & B. du Boulay (Eds.), *Proceedings of the Workshop on Self-Regulated Learning in Educational Technologies: Supporting, Modelling, Evaluating, and Fostering Metacognition with Computer-Based Learning Environments* (pp. 45-47). Crete, Greece.
- Blanchard, E. G. & Lajoie, S. P. (2009). *Learner-Concerned AIED Systems: Affective Implications when Promoting Cultural Awareness*. Presented at the 14<sup>th</sup> International Conference on Artificial Intelligence in Education, 2<sup>nd</sup> Workshop on Culturally-Aware Tutoring Systems (CATS2009). Brighton, UK.
- Blanchard, E. G., Mizoguchi, R., Lajoie, S. P. (2009, June). *Promoting Cultural Awareness in Information Systems*. Paper presented at the poster session of the COGNITIO 2009 workshop - Changing Minds: Cultures and Cognition in Evolution, Montreal, Canada.

- Gauthier, G., Naismith, L., Lajoie, S. P. & Wiseman, J. (2008). *Using Expert Decision Maps to Promote Reflection and Self-Assessment in Medical Case-Based Instruction*. Presented at the International Intelligent Tutoring Conference, Workshop on Ill-defined problem solving, Montreal.
- Bracewell, R. & Lajoie, S. P. (2000). *Examining naturally occurring tutorial dialogues within ill-structured classroom activities*. Workshop presented at the International Conference on Intelligent Tutoring Systems, Montreal, Quebec.
- Lajoie, S. P., Wiseman, J., & Faremo, S. (2000). *Tutoring strategies for effective instruction in internal medicine*. Workshop presented at the International Conference on Intelligent Tutoring Systems, Montreal, Quebec.

## Reports

- Lajoie, S. P. (2008). *Case-Based Pedagogy: Why do cases facilitate learning? A White Paper*. Hoboken, NJ: Wiley.
- Lajoie, S. P., Azevedo, R.A., Zhao, X., Kinnon, J. & Fleiszer, D. M. (1997). *Cognitive tools for assessment and learning in a high information flow environment*. (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Azevedo, R. A., & Lajoie, S. P. (1996). *RADTUTOR: The theoretical and empirical basis for the design of a chest X-ray tutor* (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Azevedo, R. A., Lajoie, S. P., & Fleiszer, D. M. (1996). *Complex clinical decision making in an ill-structured task* (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Munsie, S. D., Lajoie, S. P., & Gu, W. (1996). *Knowledge extraction tools: Dynamically mapping expert problem-solving*. (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Azevedo, R. A., & Lajoie, S. P. (1995). *Learning styles underlying radiological expertise* (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Lajoie, S. P. (1995). *Learning styles* (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Lajoie, S. P., Azevedo, R., Bouchard, R., & Gu, W. (1995). *Report on the activities of the McGill Group* (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Lajoie, S. P., Bouchard, R., & Gu, W. (1995). *Validation report of the surgical intensive care unit learning environment* (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Lajoie, S. P., Bouchard, R., Sandrasegaran, N., & Gu, W. (1994). *Cognitive framework for the intelligent tutoring system in the SAFARI*. (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Lajoie, S. P., Sandrasegaran, N., & Bouchard, R. (1994). *Technician's use of a volume infusion pump: A cognitive task analysis approach* (SAFARI Report, SYNERGIE). Montreal, Quebec: McGill University.
- Lajoie, S. P., Lesgold, A. M., Eggan, G., Bunzo, M., McGinnis, T., Greenberg, L., Weiner, M., & Weiner, A. (1988). *A procedural guide for documenting the avionics troubleshooting tutor development process*. Pittsburgh, PA: University of Pittsburgh, Operational Technologies Corporation, Learning Research and Development Center.
- Lesgold, A., Lajoie, S. P., Bajpayee, J., Bunzo, M., Eastman, R., Eggan, G., Greenberg, L., Logan, D., McGinnis, T., Weiner, A., & Wolf, R. (1988). *A computer coached practice*

- environment for the manual test station shop: Sherlock's influence on trainee job performance* (Contract No. F33615-84-C-0058). Alexandria, VA.: Human Resources Research Organization.
- Bonar, J., Collins, J., Curran, K., Eastman, R., Gitomer, D., Glaser, R., Greenberg, L., Lajoie, S. P., Lesgold, A., Logan, D., Magone, M., Shalin, V., Weiner, A., Wolf, R., & Yengo, L. (1986). *Guide to cognitive task analysis* (Technical Report). Pittsburgh, PA: University of Pittsburgh, Learning Research and Development Center.
- Bonner, J., Collins, A., Eggan, G., Frederiksen, J., Lajoie, S. P., Lesgold, A., Massey, D., Means, B., Mumaw, R., & White, B. (1986). *Development of an integrated system to assess and enhance basic job skills* (Interim Report 86-18, IR(PRD)86-18). Alexandria, VA.: Human Resources Research Organization.
- Lesgold, A., Lajoie, S. P., Eastman, R., Eggan, G., Gitomer, D., Glaser, R., Greenberg, L., Logan, D., Magone, M., Weiner, A., Wolf, R., & Yengo, L. (1986). *Cognitive task analysis to enhance technical skills training and assessment* (Contract No. F41689-83-C-0029). Pittsburgh, PA: University of Pittsburgh, Learning Research and Development Center.
- Lesgold, A., Magone, M., Collins, J., & Lajoie, S. P. (1985). *A training study to test approaches to cognitive task analysis* (Technical Report). Pittsburgh, PA: University of Pittsburgh, Learning Research and Development Center.
- Ballantyne, M., Chambers, J., & Lajoie, S. P. (1984). *A comparative study of public and private schools in the San Francisco Bay Area: A descriptive report* (Project Report No. 84-A17). Stanford, CA: Stanford University, Institute for Research on Educational Finance and Governance.
- Chambers, J. G., & Lajoie, S. P. (1983). *A comparative study of private and public schooling organizations: A descriptive summary* (Report to the National Institute of Education). Stanford, CA: Stanford University, Institute for Research on Educational Finance and Governance.

### Unpublished Manuscripts

- Lajoie, S. P. (1986). *Individual differences in spatial ability: A computerized tutor for orthographic projection tasks*. Unpublished doctoral dissertation, Stanford University, San Francisco, CA.
- Lajoie, S. P. (1980). *Intelligence and the speed of mental processing*. Unpublished master's thesis. McGill University, Montreal, Quebec.

### Teaching and Graduate Supervision

#### Courses Taught

2011	McGill, Learning Sciences Research Seminar
2009-present	McGill, Foundation of the Learning Sciences (Graduate)
1999-2008	McGill, Cognition and Instruction 416-666 (Graduate)
1992- 2008	McGill, Foundations in Educational Psychology 416-600 (Graduate)
1992-1998	McGill, Cognition and Classroom Learning 416-663 (Graduate)
1997	McGill, Uses of Computers in Education 416-641(Graduate)
1991, 1996	McGill, Research Methods 416-602 (Graduate)
1990-1991	University of Wisconsin, Madison Problem solving (Undergraduate) 319

	Individualization of Learning (Undergraduate) 314
	Affective Instruction (Undergraduate) 304
1989-1991	University of Wisconsin, Madison
	Cognition and Classroom Learning (Graduate) 795
1989	Carnegie Mellon University, Cognitive Psychology (Undergraduate)
1999	University of Pittsburgh, Cognitive Psychology Laboratory (Undergraduate)
1984	University of Western Ontario, Cognitive and Affective Theories of Instruction (Graduate)

## Graduate Research Supervision

### Post-Doctoral

Amanda Jarrell	2018-present
Stephen Bodnar	2016-2018
Ilian Cruz-Panesso	2015-2015
Maher Chaouachi	2015-
Jason Harley (Research Associate)	2014-2015
Eric Poitras	2013-2014
Marguerite Roy (Research Associate)	2010-2011
Emmanuel Blanchard	2008-2010
Gloria Berdugo	2005-2007
Sonia Faremo	2004-2005

### Graduated

#### Ph. D.

- 2019 Gube, Maren. *Higher ideation: supporting creative thinking and adaptive expertise in undergraduate STEM*. Funded: FRQSC
- 2018 Doleck, Tenzin. *Social networking and academic performance: A multi-study examination*. Funded: FRQSC
- 2018 Jarrell, Amanda. *The Regulation of Achievement Emotions in Higher Education: An Examination of Emotion Regulation Antecedents and Consequences*. Funded: SSHRC bombardier, Tomlinson
- 2017 Tressel, Tara. *Stick! mobile app: The design and evaluation of a self-regulation study tool*.
- 2016 Duffy, Melissa. *Emotions in medical education: A multi-study examination of relations between appraisals, emotional states, and performance within authentic learning environments*. Funded by FRQSC Fonds de Recherche du Quebec Societe and Culture
- 2014 Cruz-Panesso, Ilian. *Team Learning in Simulated Medical Contexts*. SSHRC-CGS funded.
- 2014 Feyzi Behnagh, Reza. *The role of metacognition in complex learning with computer-based learning environments*. Funded by the Wolfe Fellowship in Technology and Literacy.
- 2013 Poitras, Eric. *The MetaHistoReasoning tool: Fostering domain-specific metacognitive activities in learning through historical inquiry*. Funded by the SSHRC CGS, The History



- Education Network (THEN/HIER) fellowship, the Wolfe Fellowship in Technology and Literacy.
- 2013 Naismith, Laura. *Examining motivational and emotional influences on medical students' attention to feedback in a technology-rich environment for learning clinical reasoning*. Funded by SSHRC and the Thomlinson fellowship.
- 2012 Hong, Yuan Jin. *Examining the role of self-regulation in the context of enhancing critical analysis in a computer-supported collaborative medical journal club*.
- 2009 Gauthier, Genevieve. *Capturing and representing the reasoning processes of expert clinical teachers for case-based teaching*.
- 2009 Mufti, Salmon. *The effect of forward and backward reasoning on managerial decision-making*.
- 2009 Chiarella, Andrew. *Self-organized, collaborative text signaling*. Herschel Fellowship
- 2008 Cumyn, Lucy. *Pedagogical reflection in statistics instruction*.
- 2007 Lu, Jingyan. *Supporting medical decision making with collaborative tools*. SSHRC funded
- 2007 Nakamura, Carlos. *The effects of specific support to hypothesis generation on the diagnostic performance of medical students*.
- 2005 Blatter, Janet. *Drawing inferences: Drawing, discourse, and spatio-motor representation in animation storyboarding activity*.
- 2004 Faremo, Sonia. *Problem Solving and Post-Problem Reflection in BioWorld*.
- 2002 Guerrero, Claudia. *Testing the effectiveness of problem-based learning with learning disabled high school biology students*. Dean's Honour's List. Grants received: McGill Major
- 2001 Ahmad, Arshad, *Validating a theory-based design for online instruction: Implications for research & practice*. George L. Geis Dissertation Award, Canadian Society for the Study of Higher Education. Grants received: FCAR Doctoral Award. *Recently appointed Associate Professor and Director of the Finance Co-op Program at the John Molson School of Business at Concordia University*.
- 2000 Lavigne, Nancy, *Project-based investigations for producing and critiquing statistics*. Grants received: SSHRC Doctoral.
- 1997 Azevedo, Roger, *Expert problem solving in mammogram interpretation: A visual cognitive task*. Grants received: SSHRC Doctoral and Post-Doctoral Awards, McGill Internal.
- 1996 Goyette, Els, *The use of dictionaries to facilitate text comprehension*. Grants received: McGill Major.

### M. A.

- 2018 Toonsi, Fadi. *Radiology expertise in diagnosing frontal and lateral chest radiographs: An eye tracking and think aloud study*.
- 2015 Lee, Lila. *Co-regulation and knowledge construction in an on-line synchronous problem-based learning setting: regulating one's own and others' learning*. FRQSC Award.
- 2015 Jarrell, Amanda. *The emotional twists and turns of problem solving: An examination of learners' behavioral, physiological and experiential emotion responses to unexpected events during problem solving*. SSHRC Bombardier Award.

- 2014 Kazemitabar, Maedeh A. *A Multifaceted Approach to Examining Emotion Regulation in Medical Settings*.
- 2014 Al-Zhrani, Gmaan A. *A validation study of the virtual-reality neurosimulation (NeuroTouch) in neurosurgical training* (co-supervise with Ronaldo del Maestro)
- 2014 Tressel, Tara, *Increasing teacher self-efficacy in technology*.
- 2011 Chaput, Genevieve *Assessing the relationship between pain catastrophizing and clinical outcomes pertaining to mild traumatic brain injuries*.
- 2010 Cruz-Panesso, Ilian, *Medical team learning in simulated settings*.
- 2010 Poitras, Eric, *A Metacognitive Tool to Support Reading Comprehension of Historical Narratives*. SSHRC Bombardier Award.
- 2004 Gauthier, Genevieve (co-supervise), *Effects of Peer Assessment within Web-based Instruction in Physics Laboratories*.
- 2004 Wiseman, Jeffrey, *Tutoring Strategies For Effective Instruction In Internal Medicine*.
- 2002 Chiarella, Andrew, *Statistical Reasoning and scientific inquiry*. Received: The David Stewart McGill University Fellowship 2000.
- 2000 Espinosa, Rowena, *Contextualizing knowledge through BioWorld grand rounds: Does real-world practice improve real-world learning?*
- 2000 Radcliffe-Branch, Deborah, *Determinants of patient behavior in chronic illness: Examining educational interventions for glaucoma patients* (FCAR recipient).
- 1995 Guerrero, Claudia, *Testing the effectiveness of problem-based learning through problem generation and problem solving with high school biology students*. Claudia won the Dunlop Award for best thesis.
- 1994 Lavigne, Nancy, *Authentic Assessment: A Library of Exemplars For Enhancing Statistics Performance*.
- 1994 Sandrasegaran, Nala, Concordia University -Co-supervise with P. Grogono, *Development of simulation-based training environment (SBTE) using the visual applications builder (VAPS)*.
- 1994 Wilkie, Tara, *Examining the effectiveness of instructive animation: A computer learning environment for teaching learning disabled student's biology*. Completed her Ph.D. in another program. Funded by FCAR.
- 1993 Jacobs, Vicki, University of Wisconsin, Madison (1990- 1993), *Stochastics in middle school: An exploration of students' informal knowledge*.
- 1991 Tookey, Keith, University of Wisconsin, Madison (1989-1991), *The use of analogies as effective teaching strategies*.

### **M.Ed.**

- 2013 Andrea M. Petrucci, *Taking it to a virtual level: patient scenarios to teach and assess care of the hernia patient*.
- 2005 Bodanis, Heidi, *A toolbox of strategies: Metacognitive tools for tutors to help adolescents with learning disabilities improve reading*.

### **Undergraduate Research Supervision**

- 1991 Hollar, Nancy (Undergraduate Honors thesis), University of Wisconsin, Madison, *A student model for monitoring scientific reasoning within Bio-World*.

### **Jeanne Sauve Scholar Supervision**

Amruth Bagali Ravindranath.

### **Current Students**

#### **Ph. D**

Huang, Lingyun (Franco) Funded: FRQSC

Li, Shan Funded: FRQSC

Kazemitabar, Maedeh Funded: FRQSC

Ponzoni, Norma

Winkler-Schwartz Alexander (co-supervise with Rolando Del Maestro): Funded: FRQS; [Robert Maudsley Fellowship for Studies in Medical Education](#) from the Royal College of Physicians and Surgeons of Canada. Clinical Investigator program

Zheng, Juan (Jenny) Funded: FRQSC

#### **MA**

Li, Tianshu

Nomura, Osamu (co-supervise with Jeffrey Wiseman) (Funded: Murata Sciene Foundation, Japan)

Ruiz-Segura, Alejandra

Summerside, Christina

Waschke, Kevin

### **Doctoral Committees**

Sabrina Alam, McGill University

Lydia Austin, McGill University

Barbara Bayard, University of Wisconsin, Madison

Paul Bazelais, McGill University

Jacinthe Beauchamp, McGill University

Reza Feyzi Behnagh, McGill University

Stehanie Beck, McGill University

Gloria Berdugo, McGill University

Chiung Fang Chan, McGill University

Mei Chen, McGill University

Toko Chitepo, McGill University

Michel Decary, McGill University

Ivana Di Leo, McGill University

Mary De Remer, McGill University

Denise Deslaurier, McGill University

Adam Finkelstein, McGill University

Helene Fournier, McGill University

Sandra Fulton Behrens, McGill University

Somayeh Ghaderizfreh, McGill University

Jason Harley, McGill University

Kyle Hubbard, McGill University

Kathy Higuchi, McGill University

Carmen Guanipa Ho, McGill University

Ying Ji, McGill University

Gulsah Kacmaz, McGill University  
Choongyoul Kang, University of Wisconsin, Madison  
David Kaufmann, McGill University  
Emily Koerner, McGill University  
Linda Kurtz, McGill University  
Kelsey Losenno, McGill University  
Francesca Luconi, McGill University  
Michael Leccisi, McGill University  
David Lemay, McGill University  
Megan Loef, University of Wisconsin, Madison  
Tony Mark, McGill University  
Rose Martini, McGill University  
Julien Mercier, McGill University  
Kathy Moxness, McGill University  
Tina Newman, McGill University  
Shirley Packer, McGill University  
Jongwai Park, McGill University  
Cynthia Psaradellis, McGill University  
Timothy Rahilly, McGill University  
John Ranellucci, McGill University  
Martin Rosenheck, University of Wisconsin, Madison  
Lenny Sancilio, University of Wisconsin, Madison  
K. Sandrasegaran, McGill University  
Lina Sariff, McGill University  
Aliko Thomas, McGill University  
Gregory Trevors, McGill University  
Vicky Tung, McGill University  
Steve Wakeham, McGill University  
Hui Wang, McGill University  
Kaushilya Weerapura, McGill University  
Yie Yan, University of Delaware  
Zhidong Zang, McGill University  
Yanyu Zhou, McGill University

**Ph. D. Comprehensives and Critiques Committees**

Sabrina Alam (McGill University)  
Abdie Barise, McGill University  
Jacinthe Beauchamp, McGill University  
Stephanie Beck (McGill University)  
Gloria Berdugo, McGill University  
Mei Chan, McGill University  
Chiung-Fang Chang, McGill University  
Revathi Chennabathni, McGill University  
Ivana Di Leo, McGill University  
Denise Deslauriers, McGill University  
Joanne Dillebough, McGill University

Melissa Duffy, McGill University  
Reza Feyzi Behnagh, McGill University  
Helene Fournier, McGill University  
Somayeh Ghaderizefreh, McGill University  
Rina Gupta, McGill University  
Danielle Gyrspeedt, McGill University  
Kyle Hubbard, McGill University  
Grace Iarocci, McGill University  
Vicki Jacobs, University of Wisconsin, Madison  
Ying Ji, McGill University  
Gulsah Kacmaz, McGill University  
David Lemay, McGill University  
Kelsey Losenno, McGill University  
Cao Li, McGill University  
Maureen Lucas, McGill University  
Rose Martini, McGill University  
Julien Mercier, McGill University  
Judy McBride, McGill University  
Lorraine Meilleur, McGill University  
Jong Wei Park, McGill University  
Jaclyn Polansky, McGill University  
John Ranellucci, McGill University  
Cynthia Psaradellis, McGill University  
Rhonda Richard, McGill University  
Margerite Roy, McGill University  
Anoop Saxena, McGill University  
Marcos Silva, McGill University  
Aliko Thomas, McGill University  
Greg Trevors, McGill University  
Vicki Tung, McGill University  
Steve Wakeham, McGill University  
Hui Wang, McGill University  
Megan Webster, McGill University  
Gerry Weintraub, McGill University  
Kaushilya G. Weerapura, McGill University  
Zhidong Zang, McGill University

**Internal Reports Masters: Samira FEIZI**

**Oral Defences**

Sonia Rahimi, 2019-06-26  
Zofia Czajkowska, 2018  
Evgenia Milman 2108  
Amin Madani, 2016 (surgery)  
Megan Webster 2016 (DISE)  
Susan Gamberg 2015  
Greg Trevors, 2015

John Ranelluci 2014  
 Jason Harley 2014  
 Carlos Andres Gomez-Garibello 2014  
 Maria Claudia Orjuela-Laverde 2014  
 Christopher MacKinnon 2014

### **Masters Committees**

Ivan Pagan, University of Wisconsin, Madison  
 Beth Laufenburg, University of Wisconsin, Madison

### **Independent Research Internship Credits**

Rita Bissanonauth, Université du Québec a Montréal  
 Stephen Brain, McGill University  
 Tom Cobb, Concordia University  
 Vicki Jacobs, University of Wisconsin, Madison  
 Keith Tookey, University of Wisconsin, Madison  
 Nancy Hollar, University of Wisconsin, Madison  
 Nina McCurdy, McGill University  
 Glenn Peterson, University of Wisconsin, Madison  
 Liang-Yin Yu, University of Wisconsin, Madison  
 Rob Gaddis, University of Wisconsin, Madison

### **External Examiner Outside of McGill**

2019: External Referee University of Guelph  
 2019: External Referee University of Alberta  
 2018 External Referee for Arizona State promotion file  
 2018 External Referee for University of Memphis promotion file  
 2018 External Referee for Concordia University promotion file  
 2018 External Examiner for PhD thesis, Chungeng Liu University of Sydney, Australia  
 2017 External Examiner for PhD thesis, Ilana Dubovi, University of Haifa, Israel.  
 2016 Jury Habilitation à Diriger des Recherches, University of Lyons-3  
 2015 External Referee for University of Notre Dame promotion file  
 2015 External Referee for University of Western promotion file  
 2015 External Referee for University of Texas promotion file  
 2014 External Referee for University of Wollongong, promotion file  
 2014 External Referee for Rutgers University promotion file  
 2014 External Referee for University of Chicago, Champagne-Urbana promotion file  
 2014 External Examiner for PhD thesis by Deep Khosa, University of Murdoch, Australia.  
 2010 External Referee for University of Pittsburgh promotion file  
 2009 External Referee for University of New Jersey promotion file  
 2009 External Referee for University of Pittsburgh tenure file  
 2009 External Dissertation Committee member University of Delaware  
 2008 External Referee for University of Hong Kong tenure file  
 2006 External Referee for University of Saskatchewan tenure file.  
 2005 External Referee for Simon Fraser tenure file.  
 2005 External Examiner for a Ph.D. thesis by Nadira Saab, University of Amsterdam.

- 2005 External Referee for Stanford tenure file.
- 2005 External Evaluator of OISE School Psychology Program.
- 2004 External Referee for University of Alberta tenure file.
- 2000 External Examiner for a Ph.D. thesis by Lori Lockyer, *Delivering Health Education via the World Wide Web*, University of Wollongong, Australia.
- 1999 External Examiner for a Ph.D. thesis by Xu Songwen, *Transformation-based diagnosis of student programming errors*, Computer Science, at the National University of Singapore.
- 1998 External Examiner for a Ph.D. thesis by Anne Williams, *Students' Understanding of Hypothesis Testing in Introductory Tertiary-Level Statistics*, at Queensland University of Technology, Australia
- 1997 External examiner for Ph.D. thesis by Mr. Jean-Marc Robitaille entitled, *Étude exploratoire des conceptions de la circulation sanguine auprès d'élèves de l'ordre collegial*, at the University of Montreal, Education
- 1994 External examiner for a Ph.D. thesis by David Johnston, *Negative affect, explanation style, and stressful life events in an elementary school population*, at Sir Wilfred Laurier College, Education
- 1992 External examiner for a Ph.D. thesis by at the University of Saskatoon, Computer Science

### **Visiting International Scholars, Post-Doctoral Fellows and Researchers**

Ryan Baker, Carnegie Mellon University  
 Maria Bannert, Wurzburg University  
 David Berliner, Arizona State University  
 Ben du Boulay, University of Sussex, UK  
 Rafael Calvo, University of Sydney, AU  
 Sam Chu, University of Hong Kong, HK  
 Benilde Garcia, Universidad Nacional Autonoma de Mexico  
 Ricki Goldman, University of British Columbia  
 Jim Greer, University of Saskatchewan  
 Boris Handal, The University of Notre Dame Australia  
 Barry Harper, University of Wollongong, Australia  
 Garry Hoban, University of Wollongong, Australia  
 Cindy Hmelo-Silver, Rutgers  
 Eunice Jang, OISE  
 Kristina Loederer, University of Munich  
 W. Lewis Johnson, University of Southern California  
 Wouter Van Joolingen, University of Twente  
 Ton de Jong, University of Twente  
 Elise Lavoue, University of Lyons, France  
 Svein Lillehaug, University of Linköping, Sweden  
 Kristina Loderer, Ludwig-Maximilians-Universität München  
 Rose Luckin, University of Sussex, UK  
 Marc LaFuente Martinez, University of Barcelona, Spain  
 Gord McCalla, University of Saskatchewan

Graciela Mota, Universidad Nacional Autonama de Mexico  
 Riichiro Mizoguchi, Osaka University, Japan  
 Reinhard Pekrun, University of Munich  
 Valery Petrushin, University of Kiev, Ukraine  
 Ann Russell, OISE, Canada  
 Nadira Saab, Universiteit van Amsterdam  
 Gabi Salomon, University of Haifa, Israel  
 Valerie Shute, Brooks Air Force Base, USA  
 Umesh Thakkar, Ohio State, USA  
 Tomas Timpka, University of Linköping, Sweden.  
 Phil Winne, Simon Fraser University  
 Beverly Woolf, University of Massachusetts

## **Service**

### **Administrative Responsibilities**

2010	Program Director, Learning Sciences
2002-2009	Chair, Department of Educational and Counselling Psychology
2001	Chair-Interim, Department of Educational and Counselling Psychology
2000-2001	Program Director, Cognition and Instruction
2000-2001	Acting Program Director, Educational Technology
1997- 1999	Applied Cognitive Science Research Group, Director
1993- 1995	National Center for Research in Mathematical Sciences Education, Madison Wisconsin, Associate Director, Statistics Working Group
1984-1986	Project Director Air Force Cognitive Skills and Training Project, Learning Research and Development Center

### **Department Committees**

2001-2009	All Hiring committees for two Counselling Psychology, one Special Populations, one School Psychology, one Developmental, one Educational Assessment.
2001-2009	Executive Committee
2014-present	Tenure and Promotion Committee
2000-2009	Tenure and Promotion Committee
1997-2000	Student Affairs
1997-2009	Space Allocation
1992-1994	Nominating Committee, Chair
1992-1994	Graduate Program Advisory Committee
1992	Student Orientation Committee
1991-1992	Student/TA Advisory Committee
1991-1992	Chair Selection Committee
1991-1992	Program Review Committee

### **Faculty Committees**



2014, 2000	Advisory committee for Selection of Chair of the Department of Educational and Counselling Psychology
2012-2013	Advisory Selection Committee for Department Chair for Educational and Counselling Psychology
2004	Awards Committee
2000-2009	Administrative Group
2000-2002	Faculty Members Board of Advisors
1997-present	Faculty Council
1996-1999	Committee on Academic Personnel
1994-1995	Faculty Committee on Computing
1993	Educational Technology Review Committee
1993	Merit Policy Committee

### University Service

2018	Pro-Dean, Psychology (S. Rosen)
2017	Pro-Dean Parisitology (Thomas Duguet)
2016-	Advisory Committee for the Possible Reappointment of the Vice-Principal (Health Affairs) and Dean of Medicine
2015-present	Advisory Board for the Arnold and Blema Steinberg Simulation Centre
2015	Canadian Research Excellence Fund - Social sciences and economic impact working group
2015	Pro Dean Art
2013-present	University Statutory Selection Committee
2014-2015	Advisory committee for Selection of Research Director of the Arnold and Blema Steinberg Simulation Centre
2014	Advisory committee for selection of Provost
2014-2016	Wendy MacDonald Chair in Pediatrics Selection Committee
2014-2016	Internal SSHRC-CRC review Committee
2013-present	William Dawson/James McGill and Internal CRC committee
2013	Pro-Dean Engineering
2010	Pro-Dean Biology Department
2010-2011	Advisory Committee member (alternate) for the Reappointment of the Dean of Medicine
2010-2012	Statutory Selection Committee
2010-	University Tenure Committee for Recruitment (UTCR) (Alternate)
2007-2008	James McGill Review Committee
2005	McGill/Dawson Award Selection Committee
2005	University Statutory Selection Committees (2)
2003-2005	Senate
2002	Pro-Dean for the Medical School
2001-present	Research Policy Committee
2001-	Pro-Dean for the Business School
2001-2002	Carrie M. Derick Award Selection Committee
1994-present	Research Policy Committee of the Faculty of Graduate Studies and Research
1993	Academic Policy and Planning Sub-Committee on University Teaching

and Learning

### Committees Outside McGill

2016	CRC committee University of Sherbrooke, Education
2016	CRC committee Interdisciplinary Adjudication Committee
2016	SSHRC Knowledge Synthesis Adjudication Committee
2013-present	Program Committee for International Artificial Intelligence and Education Conference
2010-2011	Royal College of Physicians, 2011 Simulation Summit Conference Program Committee
2009-2011	Program Committee Member European Conference on Technology Enhanced Learning
2009-2010	Organizing Committee, Association for the Advancement of Artificial Intelligence and Education, Cognitive and Metacognitive Educational Systems Conference
2008-present	Executive Committee and Program Committee of the Intelligent Tutoring Systems Conference
2008-2009	Organizing Committee, Association for the Advancement of Artificial Intelligence and Education, Cognitive and Metacognitive Educational Systems Conference
2008-2011	Scientific Advisor to the National Center for Intelligent Tutoring and Games, University of Memphis
2008	Program Committee Member, International Conference on Computers in Education
2006-present	Executive Committee and Program Committee, International Conference on Artificial Intelligence and Education
2008-2009	American Psychological Association, Thorndike Award Committee Chair
2007	International Intelligent Tutoring Systems Conference Co-Chair
2006-2008	American Psychological Association, Publications Committee, Thorndike Award Committee, Division 15
2005	National Science Foundation, Site Team Member for National Science of Learning Centers (National Alliance for Expertise Center)
2004-2008	Kaleidoscope International Scientific Committee advisory board member for the European Commission Network of Excellence
2003	Workshop Organizer for Workshop on Modelling Human Teaching Tactics and Strategies, International Conference on Intelligent Tutoring Systems, Brazil
2003	National Science Foundation, Tools for Learning Assessment Panel, Alexandria, VA
2003	Program Committee Member and Executive Committee Member of the International Conference on Artificial Intelligence and Education
2001-2004	National Library of Medicine, External Advisor for Pittsburgh Project, "An Intelligent Virtual Microscope Tutor on the Internet."
2001	Program Committee Member for Qualitative Reasoning Conference, San Antonio
2001	Program Committee Member for the Intelligent Tutoring Conference,

- Spain
- 2001 Co-Program Chair and Program Committee Member for the International Conference on Computers and Education, Seoul.
- 2000 Program Committee Member for the International Artificial Intelligence and Education Conference, San Antonio
- 2000 Program Committee Member for the International Conference on Intelligent Tutoring Systems, Montreal
- 2000 Program Committee organizer for Workshop on Modeling Human Tutoring Tactics and Strategies, International Conference on Intelligent Tutoring Systems, Montreal
- 2000 Program Committee Member for the International Conference on Computers in Education, Taipei, Taiwan
- 1997-1998 Adjudication Committee, Section 12, Social Sciences and Humanities Research Council Canada
- 1997 Adjudication Committee FCAR, Nouvelles technologies d'information et de communication (NTIC) en education
- 1995-1996 Nominating Committee Member for the Educational Psychology Division of the American Psychological Association
- 1994-1995 Planning Committee Member for the Artificial Intelligence and Education Conference
- 1992 Programming Committee for the International Conference on Intelligent Tutoring Systems
- 1991-1992 Scientific Advisor for Canadian Government, Communications Department, Canadian Research on Automation in the Workplace,
- 1991-1993 Scientific Advisor for Centre de Recherche Informatique de Montreal,
- 1990-1991 University Senate, (University), University of Wisconsin-Madison
- 1990 High Ability Student Recruitment for the School of Education, University of Wisconsin-Madison
- 1989-1991 Student/TA Advisory Committee (Department), University of Wisconsin-Madison
- 1989-1991 Grievance Committee (Department), University of Wisconsin-Madison
- 1989-1990 Facilities Committee (Faculty), University of Wisconsin-Madison

### Professional Service

- 2017 Lajoie, S (2017). The Voice: Crossing Disciplinary Boundaries to Improve Technology-Rich Learning Environments [Video Interview]. Teachers College Record. Retrieved from <http://www.tcrecord.org/content.asp?contentid=21770>
- 2015 Le Devoir, <http://www.ledevoir.com/societe/science-et-technologie/453167/prix-therese-gouin-decarie-sciences-sociales-l-art-d-apprendre-a-apprendre>
- 2015 Quoted in the HillTimes by Ted Hewitt, president of the SSHRC for her leadership in the field of humanities and technologies (<http://www.hilltimes.com/opinion/policy-briefing/2015/11/09/its-time-to-think-different-about-innovation/44102>)
- 2015 SSHRC Media Production, Imaging Canada's Future
- 2013 McGill Reporter, Developing and assessing teaching tools for a techie generation

- 2013 Globe and Mail, Cream of the Crop
- 2013 Le Devoir, Le recours à la technologie favorisera la formation des élèves
- 2013 Headway, School 3.0
- 2013 SSHRC Partnerships for Success: interview with Dr. Susanne Lajoie & Dr. Roger Azevedo on YouTube
- 2013 Mindshare interview YouTube
- 2009 Steering Committee Chair and host of the MiniEdPsych series
- 2008 Organized the Inaugural Mini-EdPsych Speaker Series and presented at it
- 2002 Presentation for Faculty of Education Homecoming, McGill University
- 2000 Presentation for Graduate Faculty of Students on Graduate Supervision
- 1999 Presentation for the Centre of University Teaching and Learning on Graduate Supervision Practices
- 1998 Presentation for the Centre of University Teaching and Learning on The Use of WebCT for Small Group Discussions
- 1998 Presentation on Grantsmanship to McGill and Concordia Faculty
- 1997 Presentation on Grantsmanship to McGill and Concordia Faculty
- 1997 T.V. interview for Educational Psychology course delivered by Concordia
- 1996 Workshop Co-Chair for the International Conference on Intelligent Tutoring Systems
- 1996 Presentations to the Standing Committee on Education, National Assembly of Quebec, Montreal
- 1995 Presentation to Integrated Private School Board of Quebec on Computers as Cognitive Tools
- 2000 Presentation to the Education Commission on Computer Learning Environments in Schools
- 1993 Invited writer for the National Council of Teachers of Mathematics Assessment Standards (United States)
- 1992 Scientific Advisor for Air Force Intelligent Systems and Design Group, Brooks AFB, San Antonio, TX

### Research Review

- 2018 Associate Editor, AI for Human Learning and Behavior Change (specialty section of Frontiers in Artificial Intelligence)
- 2018 NRO Programme Council for Fundamental Education Research (PROO) Programme for Education Research (Netherlands) Reviewer
- 2018 SSHRC Postdoctoral Review
- 2015-present Educational Psychology Review
- 2015 International Journal of Problem Based Learning
- 2013-present Reviewer for the Interdisciplinary Journal for Problem Based Learning
- 2013-present MITAC Reviewer
- 2011-present SSHRC ad-hoc reviewer
- 2010 Medical Council of Canada grant reviews
- 2009-present Editorial Board, National Council on Measurement in Education's (NCME) Educational Measurement: Issues and Practice (EMIP)
- 2003 Reviewer of National Science Foundation Grants

2003	Reviewer of NSERC Grants
2002	Reviewer of Grants in Singapore Technological Granting Agency
2001	Invited to serve on the National Science Foundation review panel for Educational Technology. Declined for this semester told them to invite me next year.
2000	Reviewer for Mathematical Thinking and Learning
1999	FCAR proposal reviewer
1997	Reviewer for Teachers College Record
1992-present	Program Committee for the International Conference on Intelligent Tutoring Systems
1994-present	Reviewer for the International Conference on Artificial Intelligence and Education
1997-present	Reviewer for the International Conference on Intelligent Tutoring Systems
1996-present	Reviewer for the Journal of Mathematics Education
1991-1993	Reviewer of proposals to the United States Department of Education, Office of Educational Research and Improvement
2013	Book reviewer for Springer
1991, 2000, 2012	Book Reviewer for Lawrence Erlbaum Associates Book Reviewer for W. Brown Publishing Co.
1990	Book Reviewer for Educational Researcher
1990-present	Reviewer for Metacognition and Learning Reviewer for the Journal of Educational Psychology Reviewer for Cognition and Instruction. Reviewer for Machine-Mediated Learning. Reviewer for Review of Educational Research. Reviewer for Instructional Science
1983-	Reviewer for Division C (Learning and Instruction) of the American Educational Research Association (AERA), Section 6 (Technology) and 4b (Applied Cognition)

### **Professional Memberships**

Member of the American Educational Research Association

Member of the American Psychological Association

Member of the International Learning Sciences and Computer Supported Collaborative Learning

Member of the International Artificial Intelligence in Education Society

Member of the International Society of the Learning Sciences

Member of the European Association for Research on Learning and Instruction