#### LEILA RACHEL LAX

**ADDRESS:** Biomedical Communications University of Toronto at Mississauga Terrence Donnelly Health Sciences Complex 3<sup>rd</sup> Floor, 3359 Mississauga Road North Mississauga, ON, Canada L5L 1C6

**FACULTY APPOINTMENT:** Assistant Professor (Part-time .2 FTE) Biomedical Communications Dept. of Biology, University of Toronto Mississauga

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**MEMBER OF GRADUATE FACULTY:** Yes Institute of Medical Science, Faculty of Medicine University of Toronto

WEBSITE: http://bmc.med.utoronto.ca/bmc/research/faculty-research/lax-2/

EDUCATION	
2012	<b>Ph.D.</b> Theory and Policy Studies in Education, Department of Higher Education (Specialization in Health Professions Education & Computer Applications), Ontario Institute for Studies in Education, University of Toronto
1996	M.Ed. Higher Education, Specialization in Health Professional Education, Ontario Institute for Studies in Education, University of Toronto
1983	<b>B.Sc.AAM</b> . Department of Art as Applied to Medicine, Faculty of Medicine, University of Toronto
1979	B.A. University College, University of Toronto

### **AWARDS**

#### **eLearning Curriculum Design & Development Awards**

2010 Association of Faculties of Medicine John Ruedy Award for Innovation in Medical Education for the Communication & Cultural Competence Program Website, Dr. Lynn Russell, Prof. Leila Lax, Laura Jayne Nelles, & Dr. Cathy Smith.

2010 Society for Teaching and Learning in Higher Education Alan Blizzard Award for the Communication & Cultural Competence Website and Medical Literacy Program, Lynn Russell, Leila Lax, Cathy Smith, Laura Jayne Nelles, Lorena Dobbie, Kevin Hobbs, Jacquie Jacobs, Stan Rogal, and Colette Peters.

2006-2007 Fred Fallis Award of Excellence in Online Learning, Continuing Education and Professional Development, Faculty of Medicine, University of Toronto, Dr. Anita Singh and Prof. Leila Lax for the End-of-Life Care Distance Education Program, collaborative knowledge building in Knowledge Forum, Nov. 30, 2007.

#### **Teaching**

Innovation in Teaching Award, "BMC Director's Award for Innovation in Teaching", Division of Biomedical Communications, Department of Surgery, Faculty of Medicine, University of Toronto, 1998-1999.

Teaching Award, "Certificate of Appreciation for Excellence in Teaching", Division of Biomedical Communications, Department of Surgery, Faculty of Medicine, University of Toronto:

From Year II M.Sc.BMC students, 2005-2006 From Year II M.Sc.BMC students, 2003-2004 From Year II M.Sc.BMC students, 2000-2001 From Year II M.Sc.BMC students, 1998-1999 From Year II M.Sc.BMC students, 1995-1996

#### **Curriculum Development**

2007 Northrup Frye Award for the Interfaculty Pain Curriculum, Department/Divisional Category, University of Toronto, Interfaculty Pain Curriculum Committee (contributions to curriculum design, program evaluation and website development).

#### **Publication**

2005 Literary Award for best research article published in the Journal of Biomedical Communications, Association of Medical Illustrators, presented at the Annual Meeting, Aug. 2005. Re: **Lax, L**., Rogers, T., Brierley, M., Wilson-Pauwels, L., and Mackay, M. (2005). Visualization of Forensic Demonstrative Evidence for the Canadian Courtroom: A collaborative initiative between Biomedical Communications and Forensic Anthropology. *Journal of Biocommunications*. 30:4.

2019 Literary Award for best research article published in the Journal of Biomedical Communications, Association of Medical Illustrators, presented at the Annual Meeting 2019. Re: Kim **Lax**, **L** 

#### **Research - Poster Citation**

J. Watt-Watson, J. Hunter, P. Pennefather, L. Librach, L. Raman-Wilms, M. Schreiber, **L. Lax**, J. Stinson, T. Dao, A. Gordon, D. Mock. <u>Undergraduate Interprofessional Pain Education Curricula: A Model for Six Health Science Faculties.</u> American Pain Society 22<sup>nd</sup> Annual Scientific Meeting, March 20-23, 2003, #724 Chicago IL, USA.

#### **Medical Illustration**

Keith L. Moore Award in Biomedical Illustration, Honourable Mention, Department of Art as Applied to Medicine, University of Toronto, Faculty of Medicine, 1981.

#### Fine Art

Hart House Art Competition, 1st Prize, University of Toronto, 1983.

Hart House Art Competition, Honourable Mention, University of Toronto, 1983.

Nineteenth Toronto Outdoor Art Exhibition, 1st Prize in graphic art, Mintmark Press, 1980.

University College Art Contest, 1st in graphic art, University of Toronto, 1979.

University College Art Contest, 2nd Prize in graphic art, University of Toronto, 1979.

University College Art Contest, 2nd Prize in graphic art, University of Toronto, 1978.

#### **Academic**

W.J. McAndrews Prize, University College, University of Toronto, Achievement Award, 1979.

# **ACADEMIC AND PROFESSIONAL APPOINTMENTS**

2004 – 2020	Assistant Professor, Biomedical Communications, Department of Biology, University of Toronto Mississauga
1994 – 2020	Associate Member, School of Graduate Studies, Institute of Medical Science, Faculty of Medicine, University of Toronto
1998 – 2020	Member, Wilson Centre for Research in Education, Faculty of Medicine, University of Toronto

2010 – 2020	Member, University of Toronto Centre for the Study of Pain
2007 - 2016	Member, Accreditation Review Committee for the Medical Illustrator, 2 <sup>nd</sup> term
2009 - 2016	Commissioner, Commission on Accreditation of Allied Health Education Programs for the Accreditation Review Committee for the Medical Illustrator (representing programs across North American), 3 year appointment, 2 <sup>nd</sup> term
2014 - 2015	Member, Management Committee for the University of Toronto Centre for the Study of Pain and the Centre for Interprofessional Education
2010 - 2011	Academic Cross-appointment, Dept. of Anthropology, Forensic Science Program
1991 - 2004	Assistant Professor, Division of Biomedical Communications, Department of Surgery, Faculty of Medicine, University of Toronto
1984 - 2014	Certified Member of the Association of Medical Illustrators (CMI).
1983 - 1991	Assistant Professor, Department of Art as Applied to Medicine, Faculty of Medicine, University of Toronto

### **GRADUATE TEACHING**

MSC2002F

"Sequential Medical Communication: Demonstrative Evidence for the Courtroom", 2015 – 2020. Leila Lax co-ordinates and teaches this half course on visual evidence. Hours=3 per week (plus 3 office hours/week), Weeks=12, Enrolment=16

### PREVIOUS GRADUATE TEACHING

MSC2002Y

"Sequential Medical Communication: Demonstrative Evidence for the Courtroom"

Leila Lax co-ordinates and teaches this "Y" course on visual evidence.

Hours=5 per week, Weeks=13, Enrolment=17. Fall 2015 Institutional Composite 4.6

(0.5) & Instructor rating 4.8 (0.5).

MSC2002Y

"Sequential Medical Communication: Demonstrative Evidence for the Courtroom", 2005

**–** 2014.

Leila Lax co-ordinated and taught this "Y" course on visual evidence along with another

faculty member who focused on technology

Hours=3 per week (plus 2 office hours/week), Weeks=13, Enrolment=16

# PREVIOUS UNDERGRADUATE TEACHING

HSC403H5S

"Visualization of Forensic Demonstrative Evidence", 2005-2010

Winter semester. Hours=1.5 per week, Weeks=13, Max. Enrolment=25, TA Hours=50, Instructor rating=6.3 in 2007.

MSC2011H, "Advanced Topics in Forensic Visualization", 2007-2010 Winter semester. This course is taught along side HSC403 with advanced requirements/assessment criteria for Forensic Anthropology masters and doctoral students. Hours=3 per week, Weeks=13, Enrolment=1-3/yr.

HSC402H5F

"E-Learning Environments", 2005-2008, educational theory section on collaborative knowledge building and design research. Brian Sutherland is course director. Hours=1.5 per week, Weeks=3, Max. Enrolment=25.

### **COURSE DESIGN & IMPLEMENTATION**

2015	Pain Interprofessional Curriculum Design Workshop, University of Toronto Centre for the Study of Pain, Continuing Education, Oct. 28-30, 2015. Curriculum design, teaching & evaluation. J Watt-Watson, L Lax, R Davies, S Langois, & J Oskarrson.
2014	Pain Interprofessional Curriculum Design Workshop, University of Toronto Centre for the Study of Pain, Continuing Education, Nov. 11-13, 2014. Curriculum design, teaching & evaluation. J Watt-Watson, R Davies, L Lax, S Langois, & J Oskarrson.
2007 – 2008	MSC6000H, "Advanced Topics in Forensic Visualization", IMS reading and research course, Winter semester. This course is taught along side HSC403 with advanced requirements/assessment criteria for Forensic Anthropology masters and doctoral students. Hours=3 per week, Weeks=13, Enrolment=3 (1 masters and 2 doctoral students).
2005 – 2006	HSC 402H5 "E-Learning Environments", with Meaghan Brierley and Brian Sutherland. Biomedical Communication, Institute of Communications and Culture, University of Toronto at Mississauga
2005 – 2006	MSC 2002Y "Sequential Medical Communication: Demonstrative Evidence for the Courtroom", Biomedical Communications, Institute of Medical Sciences, Faculty of Medicine, University of Toronto
2005 – 2006	HSC 403H5 "Visualization of Forensic Demonstrative Evidence", Biomedical Communication, Institute of Communications and Culture, University of Toronto at Mississauga
1991 – 2003	MSC 2002Y-1 "Relationships between Content, Medium and Audience: <i>Medical Legal Visualization</i> ", Division of Biomedical Communications, Department of Surgery, Faculty of Medicine, University of Toronto
1985 - 1990	Medical Legal Illustration, Department of Art as Applied to Medicine, Faculty of Medicine, University of Toronto
1983 - 1984	Computer Graphics: Telidon, Department of Art as Applied to Medicine, Faculty of Medicine, University of Toronto

### MASTERS STUDENTS RESEARCH COMMITTEES

# Supervisor of Biomedical Communications Students Masters Research Projects and Papers

Contessa Giontsis (MScBMC), Illuminating the Black Box of Procedures in the Fertility Lab. Dates: May 2018 to July 2019 (Content Expert: Dr. Rhonda Zwingerman; Other committee members Prof. Marc Dryer).

Amanda Miller (MScBMC), Visual Knowledge Building and Translation of Volumetric Radiographic Imagery for Dynamic 3D Medical Legal Visualization. Dates: May 2017 to July 2018. (Content Expert: Dr. Anne Agur; Other Committee Members: Prof. Nick Woolridge).

Ruth Chang (MScBMC), The Online Psychiatric Education Network Design Research Study: Visual knowledge building & translation outcomes of a CPD module on obesity and mental health. Dates: May 2016 to July 2017. (Content writing, Dr. Valerie Taylor; Other committee members: Dr. Derek Ng, Dr. Renu Gupta, Dr. Dana Ross, Dr. Sanjeev Sockalingam, Dr. Robin Mason).

Diana Grossi (MScBMC), Innovations to Improve Psychiatric Care for Women with Antenatal Depression: A design research study of an eLearning module for continuing professional development in the Online Psychiatric Education Network. Co-supervisor, Dr. Valerie Taylor; content writer, Dr. Renu Gupta; other committee members: Dr. Derek Ng, Dr. Dana Ross, Dr. Sanjeev Sockalingam, Dr. Robin Mason. May 2015 to July 2016.

Sarah Kim (MScBMC), Visualizing the Neurobiology of Trauma to Improve Patient Care: Design, implementation, and evaluation of 2D animations for continuing professional development of family physicians in the Online Psychiatric Education Network. Co-supervision Dr. Valerie Taylor (Psychiatrist-in-Chief, WCH); content writer: Dr. Dana Ross; other committee members: Dr. Derek Ng, Dr. Renu Gupta, Dr. Sanjeev Sockalingam, Dr. Robin Mason). May 2015 to July 2016.

Laura Smith (MScBMC) "Forensic Pathology Visualizations for Bereaved Families: A prototype web module depicting heart pathologies leading to sudden cardiac death". May 2012 – July 2013 (master's research project).

Matthew Jang (MScBMC) "Using 3D Animation to Enhance Jury Understanding of Hypoxic Ischemic Encephalopathy in a Medical Malpractice Case". May 2011 – July 2012 (master's research project).

Kim Chin (MScBMC) "Interaction design of visual evidence presentations to evaluate mock jury understanding of a mid-forceps rotational delivery in a medical malpractice case". May 2007 – July 2008 (master's research project & paper).

Marlene Herbst Loth (M.Sc.BMC), "Development of a Website: The Expressive Face in Stained Glass to Help Fine Art Students Learn About Faces and the Muscles of Facial Expression for 6 Basic Emotions", Sept. 2003 – Sept. 2004, (research project & paper).

### Co-Supervisor

Heidi Maj (M.Sc.BMC), "Meeting the needs of health care professionals by visually describing patent ductus arteriosus to the parents of premature infants", Sept. 2001 – Sept. 2002, (master's research project & paper).

Carin Cain (M.Sc.BMC), "Utilizing 3-D computer animation to enhance the clarity of complex medical issues for a courtroom audience", Sept. 1996 - Nov.1998, (research project & paper).

Nadav Kupiec (M.Sc.BMC), "Communicating intraventricular hemorrhage through animation to the parents of preterm infants" (Co-Supervisor with Dr. Arne Ohlsson), Sept.1997- Nov.1999, (research project & paper).

#### **Committee Member**

Stephen Mader (M.Sc.BMC), "Medical legal illustration and animation", Sept. 2003 – Sept. 2004, (master's research project & paper).

Roula Drossis (M.Sc.BMC). "An animated web-based course for medical illustrators: guidelines for CEU course development", Sept. 1998 - Aug.2000, (master's research project).

Kim Auchinachie (M.Sc.BMC), "The development of an animation of the fetal circulation for an undergraduate Anatomy course website", Sept. 1999 - Aug. 2000, (master's research project & paper).

Kimberly Peter (M.Sc.BMC), "Hypermedia design of a problem-based learning tutorial on higher cortical function and epilepsy", Sept. 1995 – June 1998, (master's research project & paper).

Beverly Nash (M.Sc.BMC), "Developing a travel-health education booklet for South East Asians/Indians", Sept. 1995 – Nov.1996, (master's research project & paper).

### POST-GRADUATE RESEARCH SUPERVISION

Qingyang Chen. The Online Psychiatric Education Network Design Research Study: Visual knowledge building & translation outcomes of a CPD module on anorexia nervosa for family physicians. Co-supervision, Dr. Valerie Taylor (Psychiatrist-in-Chief WCH); Content writer: Dr. Richelle Twose; Other committee members: Dr. Derek Ng, Dr. Sanjeev Sockalingam, Dr. Renu Gupta, Dr. Dana Ross, Dr. Robin Mason. May 2015-Aug. 2016.

#### PAPERS PUBLISHED IN REFEREED JOURNALS

Watt-Watson J\*, McGillion M\*, **Lax L\***, Oskarsson J, Hunter J, MacLennan C, Knickle K and Victor JC. (2019). Evaluating an Innovative eLearning Pain Education Interprofessional Resource: A Pre-Post Study. *Pain Medicine*. DOI: 10.1093/pm/pny105
\*Shared recognition as 1<sup>st</sup> author

Murphy L, **Lax L**, Musa R, Langlois S, Kanofsky S, Hunter J, Kumbhare D, Promislow S, Oskarsson J, Davies R, Cockburn L, Barry M, Bjelajac Mejia A, Lanca J, Dao T, Watt-Watson J, Stevens B. (2018). Mapping of Pain Curricula Across Health Professions Program at the University of Toronto, *Canadian Journal of Pain*. 2:1, 182-190. DOI:10.1080/24740527.2018.1479841

Kim S, **Lax LR**, Ross D, Ng D, Grossi D, Gupta R, Sockalingham S, Mason R and Taylor V. (2017). Visualizing the Neurobiology of Trauma: Design and evaluation of an eLearning module for continuing professional development of Family Physicians in the Online Psychiatric Education Network. *Journal of Biocommunication* 41(2).

Watt-Watson J, Lax LR, Davies R, Langlois S, Oskarsson J, Raman-Wilms L. The Pain Interprofessional Curriculum Design Model. *Pain Medicine*. 2017(18):1040-1048. doi: 10.1093/pm/pnw337

- **Lax Leila,** Philip Don, Singh Anita, Kim Hyon & Mazzotta Paolo. (2016). Core-periphery assessment of collaboration for knowledge building and translation in continuing medical education. *QWERTY: Interdisciplinary journal of technology, culture and education.* 11(2);48-78.
- **Lax, L.,** Singh, A., Scardamalia, M., & Librach, L. (2015). Self-Assessment for Knowledge Building in Health Care. *QWERTY: Journal of Technology and Culture.* Vol.10(1) 47-68. (Selected for republication in 10<sup>th</sup> Anniversary Edition with other leading researchers in the field).
- **Lax, L,** Watt-Watson, J., Lui, M., Dubrowski, A., McGillion, M., Hunter, J., MacLennan, C., Knickle, K., Robb, A. & Lapeyre, J. (2011). <u>Innovation and Design of a Web-based Pain Education Interprofessional Resource</u>. *Pain Research and Management, Journal of the Canadian Pain Society*, Nov/Dec 2011, 16(6):427-432. Available at: <a href="http://www.pulsus.com:80/journals/toc.jsp?sCurrPg=journal&jnlKy=7&isuKy=1003">http://www.pulsus.com:80/journals/toc.jsp?sCurrPg=journal&jnlKy=7&isuKy=1003</a> (under Original Articles #2)
- Nelles, Laura Jayne, Smith, Cathy M., **Lax, Leila R.,** and Russell, M. Lynn (2011). Translating Face-to-Face Experiential Learning to Video for a Web-Based Communication Program. *The Canadian Journal for the Scholarship of Teaching and Learning*, Vol. 2: Iss. 1, Article 8. DOI: <a href="http://dx.doi.org/10.5206/cjsotl-reacea.2011.1.8">http://dx.doi.org/10.5206/cjsotl-reacea.2011.1.8</a> Available at: <a href="http://ir.lib.uwo.ca/cjsotl-reacea/vol2/iss1/8">http://ir.lib.uwo.ca/cjsotl-reacea/vol2/iss1/8</a>
- **Lax, L.,** Scardamalia, M., Watt-Watson, J., Hunter, J., & Bereiter, C. (2010). <u>Beyond Learning Management Systems: Designing for interprofessional knowledge building in the health sciences</u>. *Canadian Journal for Learning and Technology, 36*(1). <a href="http://www.cjlt.ca/index.php/cjlt/issue/view/70">http://www.cjlt.ca/index.php/cjlt/issue/view/70</a>
- **Lax, Leila. R.**, Russell, M. Lynn, Nelles, L.J., and Smith. Cathy M. <u>Scaffolding Knowledge Building in a Webbased Communication and Cultural Competence Program for International Medical Graduates. *Acad Med.* 2009;84(10 Suppl)S5-S8.</u>
- **Lax, Leila**, Singh, Anita, Tamber, Anoo, and Kim, Hyon. (2009). <u>Design Research Outcomes of Collaborative Knowledge Building in a Web-based Continuing Education and Professional Development Program for Family Physicians</u>. *Proceedings of the 4<sup>th</sup> International Conference on E-Learning*. Toronto, Ontario, July 2009.
- Hunter, Judith; Watt-Watson, Judy; McGillion, Michael; Raman-Wilms, Lalitha; Cockburn, Lynn; **Lax, Leila**; Stinson, Jennifer; Cameron, Andrea; Dao, Thuan; Pennefather, Peter; Schreiber, Martin; Librach, Larry; Kavanagh, Trish; Gordon, Allan; Cullen, Nora; Mock, David; Salter, Michael. (2008). <u>An Interfaculty Pain Curriculum: Lessons learned from six years experience</u>. *Pain: International Association for the Study of Pain*. Elsevier Science.
- **Lax, L.,** Singh, A., Scardamalia, M., & Librach, L. (2006). Self-Assessment for Knowledge Building in Health Care. *QWERTY: Journal of Technology and Culture*. Vol.1(2) 19-37.
- Mader, S., Wilson-Pauwels, L., Nancekivell, S., **Lax, L.,** Agur, A., & Mazierski, M. (2005). Medical-Legal Illustrations, Animations and Interactive Media: Personal injury lawyers' perceptions of effective attributes. *Journal of Biocommunications*. 31:3.
- **Lax, L.,** Rogers, T., Brierley, M., Wilson-Pauwels, L., and Mackay, M. (2004a). Visualization of Forensic Demonstrative Evidence for the Canadian Courtroom: A collaborative initiative between Biomedical Communications and Forensic Anthropology. *Journal of Biocommunications*. 30:3.
- **Lax, L.,** Taylor, I., Wilson-Pauwels, L., and Scardamalia, M. (2004b). Dynamic Curriculum Design in Biomedical Communications: Integrating a Knowledge Building Approach and a Knowledge Forum<sup>®</sup> Learning Environment in a Medical Legal Visualization Course. *Journal of Biocommunications*. 30:1.

Watt-Watson J, Hunter J, Pennefather P, Librach L, Raman-Wilms L, Schreiber M, **Lax L**, Stinson J, Dao T, Gordon A, Mock D, Salter M. (2004). An Integrated Undergraduate Pain Curriculum, Based on IASP Curricula, for Six Health Science Faculties. *Pain: International Association for the Study of Pain.* Elsevier Science.

#### ARTICLES PUBLISHED IN NONREFERRED JOURNALS & REPORTS

**Lax L,** Watt-Watson J, & Oskarrsen J. eLearning Innovations (updated). <u>Pain Interprofessional Curriculum</u> Design Manual. International workshop held at University of Toronto, Oct. 28-30, 2015.

**Lax L**, & Raman-Wilms L. Outcomes for Student Assessment and Program Evaluation (updated). <u>Pain Interprofessional Curriculum Design Manual.</u> International workshop held at University of Toronto, Oct. 28-30, 2015.

**Lax L,** Watt-Watson J, Oskarrsen J & Langlois S. PICD Model Applied to Case Development (updated). <u>Pain Interprofessional Curriculum Design Manual.</u> International workshop held at University of Toronto, Oct. 28-20, 2015.

**Lax L,** Watt-Watson J, & Oskarrsen J. eLearning Innovations. <u>Pain Interprofessional Curriculum Design Manual.</u> International workshop held at University of Toronto, Nov. 12-14, 2014.

**Lax L, &** Raman-Wilms L. Outcomes of <u>Pain Interprofessional Curriculum Design Manual.</u> International workshop held at University of Toronto, Nov. 12-14, 2014.

**Lax L,** Watt-Watson J, & Oskarrsen J. PICD Model Applied to Case Development. <u>Pain Interprofessional Curriculum Design Manual.</u> International workshop held at University of Toronto, Nov. 12-14, 2014.

Watt-Watson J, Davies R, **Lax L**, Langlois S, Oskarrsen J, & Raman-Wilms L. <u>Pain Interprofessional Curriculum Design Manual.</u> International workshop held at University of Toronto, Nov. 12-14, 2014.

Lax, Leila R. Reflections on my doctoral thesis journey. BMC Newsletter. Vol. 26. No. 1, Spring 2012, pp8-20.

**Lax, L.** and Russell, L. <u>Design Research Outcomes of the Communication and Cultural Competence Program for International Medical Graduates: A web-based medical literacy program on the MCC C2LEO objectives. Submitted to the Medical Council of Canada and the Ontario Ministry of Citizenship and Immigration, 2008.</u>

Lax, L., Watt-Watson, J., Pennefather, P., Hunter, J., and Scardamalia, M. Interim Report – Pain Week IT & E-Learning Components: Project to Examine the Cost/Effectiveness of E-Learning for Interfaculty Health Professional Education. (unpublished report) Interprofessional Education Management Committee, Dr. Catharine Whiteside (Chair), University of Toronto, submitted May 30, 2002.

Lax, L., Watt-Watson, J., Pennefather, P., Hunter, J., and Scardamalia, M. <u>Final Report – Pain Week IT & E-Learning Components: Project to Examine the Cost/Effectiveness of E-Learning for Interfaculty Health Professional Education.</u> (unpublished report) Interprofessional Education Management Committee, Dr. Catharine Whiteside (Chair), University of Toronto, submitted Nov. 26, 2002.

### DOCTORAL DISSERTATION AND MASTERS QUALIFYING RESEARCH PAPER

Lax, Leila R. Knowledge Building in Continuing Medical Education. Doctoral Dissertation, March 26, 2012, 275 pgs. Supervisor: Dr. Marlene Scardamalia. Available at: <a href="http://hdl.handle.net/1807/32313">http://hdl.handle.net/1807/32313</a>

Goldstein-Lax, Leila. Master's Qualifying Research Paper (M.Ed.), <u>Medical Informatics: A Study of Problembased Tutors' Computer Competencies.</u> University of Toronto, Ontario Institute for Studies in Education, Higher Education, Specialization in Health Professions Education, Toronto. 1996. Supervisor: Dr. Niall Byrne.

#### RESEARCH GRANTS AND FUNDING

# Visual Knowledge Building & Translation Design Research Lab Projects:

Royal Bank of Canada for Online Psychiatric Education Network (OPEN), Taylor V. & Lax L. Presented March 29, 2016 at Women's College Hospital. \$25,000 (\$15,000 for OPEN implementation of the Anorexia, Antenatal Depression & Neurobiology of Trauma CPD modules & \$10,000 for BMC/MRP sponsorship for Ruth Chang, 2016-2017).

University of Toronto Department of Psychiatry Excellence Funds for the Development of the Ontario Psychiatric Education Network (OPEN), Taylor V., **Lax L,** Socklingam S, Mason R & Gupta R. 2015-2016, \$10,0000 BMC/MRP sponsorship for Diana Grossi.

Women's College Hospital, Department of Psychiatry Research Fund for the Development of the Ontario Psychiatric Education Network (OPEN), Taylor V. & Lax L. 2015-2016, \$10,0000 BMC/MRP sponsorship for Sarah Kim.

Women's College Hospital, Department of Psychiatry Research Fund for the Development of the Ontario Psychiatric Education Network (OPEN), Taylor V. & Lax L. 2015-2016, \$10,0000 (BMC Post-graduate research sponsorship for Qingyang Chen.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and Lax, L. <u>Palliative Care eLearning Program.</u> Design research and program redevelopment, April 2020 – ongoing (L.Lax \$10 000). <a href="https://pcelprogram.ca">https://pcelprogram.ca</a>

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax**, **L**. <u>Palliative Care eLearning Program</u>. Design research and program redevelopment, April 2019 – March 2020 (L.Lax \$10 000). https://pcelprogram.ca

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>Palliative Care eLearning Program.</u> Design research and program redevelopment, April 2018 – March 2019 (L.Lax \$10 000). <a href="https://pcelprogram.ca">https://pcelprogram.ca</a>

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>Palliative Care eLearning Program.</u> Design research and program redevelopment, April 2017 – March 2018 (L.Lax \$10 000). <a href="https://pcelprogram.ca">https://pcelprogram.ca</a>

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and Lax, L. <u>Palliative Care eLearning Program.</u> Design research and program redevelopment, April 2016 – March 2017 (L.Lax \$10 000). <a href="http://icarus.med.utoronto.ca/eolcare">http://icarus.med.utoronto.ca/eolcare</a>.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and Lax, L. <u>End-of-Life Care Distance Education Program</u>, Design research and program redevelopment, April 2015 – March 2016 (L.Lax \$10 000). <a href="http://icarus.med.utoronto.ca/eolcare">http://icarus.med.utoronto.ca/eolcare</a>.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and Lax, L. <u>End-of-Life Care Distance Education Program</u>, Design research and program redevelopment, April 2014 – March 2015 (L.Lax \$10 000). <a href="http://icarus.med.utoronto.ca/eolcare">http://icarus.med.utoronto.ca/eolcare</a>.

Canadian Institute of Health Research/Community Alliances for Health Research & Knowledge Exchange on Pain (FRN 86786). 5-year, team research grant, total \$2.5 million. Co-PIs: Watt-Watson Judy, McGillion Michael, **Lax Leila**, Hunter Judy. Theme 2: <u>E-Learning Interprofessional Pain Curriculum for Pre-Licensure Health Sciences Students</u>. Jan. 1, 2008 – March 31, 2014. \$350,000 (\$70,000 per year), <a href="https://bmc.med.utoronto.ca/peir">https://bmc.med.utoronto.ca/peir</a>

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research and program redevelopment, April 2013 – March 2014 (L.Lax \$7 500). <a href="http://icarus.med.utoronto.ca/eolcare">http://icarus.med.utoronto.ca/eolcare</a>.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2012 – March 2013 (L.Lax \$7 500). http://icarus.med.utoronto.ca/eolcare.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2011 – March 2012 (L.Lax \$5 500). <a href="http://icarus.med.utoronto.ca/eolcare">http://icarus.med.utoronto.ca/eolcare</a>.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2010 – March 2011 (L.Lax \$7 500). <a href="http://icarus.med.utoronto.ca/eolcare">http://icarus.med.utoronto.ca/eolcare</a>.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2009 – March 2010 (L.Lax \$7 500). <a href="http://icarus.med.utoronto.ca/eolcare">http://icarus.med.utoronto.ca/eolcare</a>.

Russell, L. and Lax, L. Ontario College of Physicians and Surgeons and Medical Council of Canada, Communication and Cultural Competence Program for International Medical Graduates, Ontario Ministry of Citizenship and Immigration, September 2007 – December 2009, \$ 41 200 (L.Lax \$15 000). http://icarus.med.utoronto.ca/iccc/ or http://www.img-ccc.ca

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2008 – March 2009 (L.Lax \$15 000). http://icarus.med.utoronto.ca/eolcare.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax**, **L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2007 – March 2008 (L.Lax \$15 000). http://icarus.med.utoronto.ca/eolcare.

Russell, L. and Lax, L. Ontario College of Physicians and Surgeons and Medical Council of Canada, Communication and Cultural Competence Program for International Medical Graduates, Ontario Ministry of Education and Training, September 2006 – August 2007, \$67 800 (L.Lax \$15 000).

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2006 – March 2007 (L.Lax \$15 000). http://icarus.med.utoronto.ca/eolcare.

Russell, L. and Lax, L. Ontario College of Physicians and Surgeons and Medical Council of Canada, Communication and Cultural Competency Program for International Medical Graduates, Ontario Ministry of Education and Training, February 2005 – August 2006, \$205 870 (L.Lax \$15 000). Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2005 – March 2006 (L.Lax \$15 000). http://icarus.med.utoronto.ca/eolcare.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2004 – March 2005 (L.Lax \$15 000). <a href="http://icarus.med.utoronto.ca/eolcare">http://icarus.med.utoronto.ca/eolcare</a>.

Ontario Ministry of Health and Long-Term Care. Co-Pls: Singh, A. and **Lax, L**. <u>End-of-Life Care Distance Education Program</u>, Design research, April 2003 – March 2004 (L.Lax \$10 000). http://icarus.med.utoronto.ca/eolcare.

Scardamalia, M., Institute for Knowledge Innovation and Technology and Hamilton Health Sciences Research Group, <u>Interprofessional Knowledge Building in Health Care</u>, CANARIE-OLT E-learning Program, 2003 Competition, March 2003 – March 2004. (Lax, L. knowledge building iterative design and evaluation, \$20 000).

**Lax, L.(PI),** Watt-Watson, J., Pennefather, P., Hunter, J. <u>Effective Pain Management Through Interprofessional Collaborative Knowledge Building.</u> University of Toronto Centre for the Study of Pain, Dr. Mike Salter (Director), University of Toronto, 2002-2003. Educational Research matched funding \$7 000.

**Lax, L. (P.I.),** Watt-Watson, J., Pennefather, P. <u>Project to Examine the Cost/Effectiveness of E-learning for Interfaculty Health Sciences Education</u>. University of Toronto Centre for the Study of Pain (Director Dr. Michael Salter), University of Toronto, April 2001-2002. \$5 000.

Lax, L. (P.I.), Watt-Watson, J., Pennefather, P. <u>Project to Examine the Cost/Effectiveness of E-learning for Interfaculty Health Sciences Education</u>. The Academic Priority Fund of the Council of Health Science and Social Work Deans (Interprofessional Education Management Committee, Chair Dr. Catharine Whiteside), April 2001-2002. \$10 000. <a href="https://icarus.med.utoronto.ca/pain">https://icarus.med.utoronto.ca/pain</a>

### **RESEARCH PROJECTS (completed/unfunded)**

University of Toronto Centre for the Study of Pain - Interfaculty Pain Curriculum. Pain Curricular Mapping Survey of 7 Health Sciences Programs. Lax L (PI) & Murphy L (Lead). May 2015-Dec 2017.

University of Toronto Centre for the Study of Pain - Interfaculty Pain Curriculum. Interprofessional Collaborator Assessment Rubric. Lax L (PI) & Langlois S (Lead). March 2015-April 2017.

University of Toronto Undergraduate Health Sciences <u>Interfaculty Pain Curriculum.</u> University of Toronto Centre for the Study of Pain. Program evaluation. 2002-2016.

**Lax, L.,** Scardamalia, M. and BMC students. Web Knowledge Forum in Medical Legal Visualization: Examination of the use of visual images in combination with text in collaborative knowledge building and the intersection and integration of online and face-to-face learning in a master's course. 1999-2008. <a href="http://builder.ikit.org/llax">http://builder.ikit.org/llax</a>

**Lax, L.,** Scardamalia, M. <u>Visualizing Clinical Reasoning in Morning Report Online in Web Knowledge Forum,</u> 2001-2002, http://kf.oise.utoronto.ca/webcsile/morningreport.html

### **SYMPOSIUM ORGANIZER & PRESENTER**

Seidelman W, Hildebrandt S, Mackinnon S, Polak J, Berger P, Agur A & Lax L. (co-ordinator), The Vienna Protocol: Medicine's confrontation with continuing legacies of its Nazi past. Holocaust Education Week Symposium, Nov. 10, 2019. Faculty of Medicine, University of Toronto, Toronto, Canada. <a href="https://www.holocaustcentre.com/hew-2019/the-vienna-protocol">https://www.holocaustcentre.com/hew-2019/the-vienna-protocol</a>

Lax, Leila. Perspective of a Medical Artist: Toward informed use of the Pernkopf Atlas – information dissemination, research study with medical artists & museum archive/exhibit of original anatomical illustrations.

#### **INVITED SPEAKER**

2017	Lax LR, Chang R, Chen Q, Grossi D, Gupta R, Kim S, Ross D & Taylor, V. OPEN Showcase, Women's College Hospital, May 25, 2017.
2014	Lax LR. Educational Design of eLearning Environments for Health Care Professionals. Women's College Hospital, Dept. of Medicine, Medical Grand Grounds. WCH room 6214 & webcast to Sunnybrook Health Sciences Centre, Wed. March 5, 2014, 55 minutes. <a href="http://alex2.sunnybrook.ca/Mediasite/Catalog/Full/03f1a78417c44818a337f102c191035e21">http://alex2.sunnybrook.ca/Mediasite/Catalog/Full/03f1a78417c44818a337f102c191035e21</a>
2010	Lynn Russell, <b>Leila Lax</b> , Cathy Smith, Laura Jayne Nelles, Lorena Dobbie, Kevin Hobbs, Jacquie Jacobs, Stan Rogal, and Colette Peters. Society for Teaching and Learning in Higher Education Alan Blizzard Award Presentation: The Communication & Cultural Competence Website and Medical Literacy Program for International Medical Graduates, Ryerson University, Toronto, ON. June 25, 2010.
2015	<b>Lax L,</b> & Raman-Wilms L. Outcomes for Student Assessment and Program Evaluation. Pain Interprofessional Curriculum Design. International workshop, University of Toronto, Oct. 28-30, 2015.
2015	<b>Lax L,</b> Watt-Watson J, Oskarrsen J & Langlois S. PICD Model Applied to Case Development. <u>Pain Interprofessional Curriculum Design.</u> International workshop held at University of Toronto, Oct. 28-20, 2015.
2015	<b>Lax L,</b> Watt-Watson J, & Oskarrsen J. eLearning Innovations. <u>Pain Interprofessional Curriculum Design.</u> International workshop, University of Toronto, Oct. 28-30, 2015.
2014	Watt-Watson J, Davies R, <b>Lax L</b> , Langlois S, Oskarrsen J, & Raman-Wilms L. Pain Interprofessional Curriculum Design Workshop. Nov. 12-14, 2014, University of Toronto. <a href="http://sites.utoronto.ca/pain/picd/workshop.html">http://sites.utoronto.ca/pain/picd/workshop.html</a>
2014	Lax L & Watt-Watson. PICD Model for Case Development. In Watt-Watson J, Davies R, Lax L, Langlois S, Oskarsson J, Raman-Wilms L. Pain Interprofessional Curriculum Design Workshop. Nov. 12-14, 2014. University of Toronto, Toronto, Canada.
2014	Lax L & Raman-Wilms. Assessment & Educational Outcomes. In Watt-Watson J, Davies R, Lax

Workshop. Nov. 12-14, 2014. University of Toronto, Toronto, Canada.

L, Langlois S, Oskarsson J, Raman-Wilms L. Pain Interprofessional Curriculum Design

- 2014 Lax L & Watt-Watson. eLearning Design. In Watt-Watson J, Davies R, Lax L, Langlois S, Oskarsson J, Raman-Wilms L. Pain Interprofessional Curriculum Design Workshop. Nov. 12-14, 2014. University of Toronto, Toronto, Canada.
- 2014 **Lax Leila** & Watt-Watson Judy (non-referred). The Pain Education Interprofessional Resource Project. CAHR/CIHR Summative Meeting, January 24, 2014, Toronto, Ontario. <a href="http://www.cahr-pain.ca">http://www.cahr-pain.ca</a>
- 2010 Lax, LR, Lui, M., & Dubrowski, A. Educational Design & Evaluation of a Web-based Interprofessional Pain Curriculum Resource for Pre-licensure Health Sciences Students. International Pain Education Symposium, University of Toronto, Toronto, ON, Aug. 27, 2010.
- 2006 Lax, L. (presenter), Rogers, T., & Brierley, M. <u>Forensic Visualization for Expert Testimony</u>. Ontario Crown Attorneys Course, Homicide Summer School, University of Western Ontario, Faculty of Law, London, ON, July 18, 2006.

## **CONFERENCE ORAL PRESENTATIONS (REFERRED)**

- 2019 Lax Leila, Singh Anita & Mazzotta Paolo. Curb Your Enthusiasm: Is there such a thing as too much Knowledge Building? Knowledge Building Summer Institute 2019, oral presentation, OISE, University of Toronto, April 7, 2019.
- Leila Lax (PhD) (presenter), Valerie Taylor (MD,FRCPC,PhD), Derek Ng (PhD), Qingyang Chen (MScBMC), Diana Grossi (MScBMC), Renu Gupta (MD,FRCPC), Sarah Kim (MScBMC), Dana Ross (MD,FRCPC), Ruth Chang (MScBMC), Richelle Twose (MD,FRCPC), Sanjeev Sockalingam (MD,MHPE,FRCPC,FAPH) & Robin Mason (PhD). The Online Psychiatric Education Network (OPEN) Design Research Initiative for Knowledge Building and Translation. Richard Reznick Wilson Centre Research Day, University of Toronto, Oct. 13, 2017.
- 2016 Ross, D (presenter), Kim S, **Lax L**, Taylor V, Ng D, Gupta R, Mason R and Sockalingam S. Understanding the Neurobiology of Trauma: Content, design and evaluation of an eLearning module for continuing professional development. International Society for Traumatic Stress Studies. 32 Annual Meeting, Dallas, Texas, USA, Nov. 10, 2016.
- Langlois S (presenter), **Lax L**, Murphy L, Kanofsky S, Hunter J, Oskarsson J, and Promislow S. Assessment of Interprofessional Collaborator Competence of Health Sciences Students in the Interfaculty Pain Curriculum at the University of Toronto. All Torgether Better Health. Oxford, England, Sept. 6-9, 2016.
- Langlois S (presenter), **Lax L**, Kanofsky S, Kumbhare D, Murphy L, Promislow S, Hunter J. Measuring Collaborator Competencies: Using the Interprofessional Collaborator Assessment Rubric (ICAR) in the IPE Curriculum. Collaborating Across Boarders V, conference presentation, Virginia, USA, Sept. 29-Oct. 2, 2015. Oral presentation. Refereed.
- 2015 **Lax Leila.** Co-Design of a Pain Interprofessional eLearning Program for Health Sciences Education. Association of Medical Illustrators Annual Meeting, Cleveland Clinic, Cleveland, Ohio, July 22-26, 2015.
- 2015 Cetlin C, Cormier N, Devasagayam N, Lancefield R, Ng D, Won J and **Lax L**. The Art of Visual Persuasion and Implications for Plaintiff v. Defense Illustrations. Student presentation.

Association of Medical Illustrators 70<sup>th</sup> Annual Conference, Cleveland Clinic, July 22-25, 2015.

- Elgie Susan (presenter), **Lax Leila**, Watt-Watson Judy, McGillion Michael, Hunter Judith, Rose Tabitha, & Rose Jeff. What Did They Learn Online Today? Student Knowledge Translation Plans. International Society for the Scholarship of Teaching & Learning, October 22-25, 2014, Quebec City, Canada <a href="https://www.issotl14.ulaval.ca/cms/site/issotl14/lang/en/page120663.html">https://www.issotl14.ulaval.ca/cms/site/issotl14/lang/en/page120663.html</a>
- Lax LR. The Democratization of CME: Social network analysis of an online knowledge building community. CME Congress 2012, Toronto, ON, May 30-June 2 (oral presentation, referred).
- Lax LR. Brierley M & Lui M. Collective Experiences in Biomedical Communications Doctoral Research. (co-ordinator).
   Lax LR. Design & Assessment of Social Network Dynamics in a Web-based CME Program for Family Physicians. 67<sup>th</sup> Annual Meeting of the Association of Medical Illustrators Annual Meeting, Toronto, ON, July 25-28, 2012 (oral presentation, refereed).
- Lax, Leila. R. (presenter), Russell, M. Lynn, Nelles, L.J., and Smith. Cathy M. <u>Scaffolding Knowledge Building in a Web-based Communication and Cultural Competence Program for International Medical Graduates.</u> Association of American Medical Colleges, Research in Medical Education, annual meeting, Boston, MA, Nov. 6-11, 2009.
- 2009 Smith, Cathy (presenter), Nelles, Laura Jayne, Lax, Leila, and Russell, Lynn. <u>Improving Medical Communication Skills through Web-based Simulations</u>. Association of Medical Education in Europe, Malaga, Spain, Aug. 29-Sept. 2, 2009.
- Singh, Anita, Lax, Leila (presenter), Tamber, Anoo, and Kim, Hyon. <u>Design Research</u>

  <u>Outcomes of Collaborative Knowledge Building in a Web-based Continuing Education and Professional Development Program for Family Physicians.</u> Fourth International Conference on e-Learning, University of Toronto, Toronto, ON, July 16-17, 2009.
- 2009 Lax, Leila, Singh, Anita (presenter), Tamber, Anoo, and Kim, Hyon. Knowledge Building

  Communities in an End-of-Life Care Distance Education Program. Canadian Association of
  Continuing Health Education Conference, University of Toronto, Toronto, On, May 22-24, 2009.
- Smith, Cathy M., Russell, M., Lynn, Lax, Leila R., and Nelles, Laura J. Using Web-based Simulations to Scaffold Knowledge Building: The Communication & Cultural Competence Program for International Medical Graduates. Health Professions Education Conference: Global best practice in simulation, Hart House, University of Toronto, Toronto, ON, May 21-23, 2009.
- Plenary Session #3. Open Learning: Increasing Participation in the Authentic Discourse of a Domain. Challenge: Marlene Scardamalia, Candace Thille, & David Yaron; International Panel: Leila, Lax, Kirsti Lonka, Mireia Montane, Judy Robinson & Jianwei Zhang. Knowledge Building Summer Institute 2008, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education, University of Toronto, Toronto, ON, August 5, 2008.
- 2008 Russell, L., **Lax**, **L.**, Nelles, L.J., & Smith, C. <u>Scaffolding Web-based Knowledge Building.</u>
  Wilson Centre for Research in Medical Education, Annual Research Day, Sunnybrook Estates, Toronto, ON, October 24, 2008.
- Russell, L., (presenter) Lax, L., Nelles, L.J., Tabak, D., and Smith, C. Communication and Cultural Competence Program: a Web-based self-assessment course for international medical graduates. Canadian Association for Medical Education Conference, Montreal, Quebec, May 3-7, 2008.
- 2007 Singh, A., & Lax, L. End-of Life Care Distance Education Program for Family Doctor. Canadian

Hospice Palliative Care Conference. Westin Harbour Castle Hotel, Toronto, ON, Nov. 5, 2007.

- 2007 Lax, L. Singh, A., Tamber, Supporting Deep Understanding through Facilitated Knowledge
  Building in an End-of-Life Care Program for Family Physicians. Knowledge Building Summer
  Institute 2007, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education, University of Toronto, Toronto, ON, August 7-10, 2007.
- Tamber, A. (presenter), **Lax, L.** & Singh, A. <u>Facilitating Online Learning in Palliative Care.</u>
  Princess Margaret Hospital, Continuing Education Rounds, June 26, 2007. (invited).
- Lax, L., Singh, A., & Tamber, A. Relational Understanding (a.k.a. Knowledge Translation) in an End-of Life Care Distance Education Program. Wilson Centre for Research in Education, University Health Network, Faculty of Medicine, University of Toronto. Education Research Rounds, Feb. 19, 2007
- 2006 Lax, L. (presenter), Singh, A., Scardamalia, M., & Librach, L. Self-Assessment for Knowledge Building in Health Care. Knowledge Building Summer Institute 2006, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education, University of Toronto, Toronto, ON, August 8-11, 2006.
- Mason, C., Corrin, M., Kim, S., Huang, C., Brierley, M., & Lax, L. From the Classroom to the Courtroom. 61<sup>st</sup> Annual Meeting of the Association of Medical Illustrators, Boston, MA, August 3, 2006.
- 2006 Lax, L. (presenter) & Singh, A. Concurrent Self-Assessment in an Online Knowledge Building Community of Family Physicians. Society for Teaching and Learning in Higher Education, Victoria College, University of Toronto, Toronto, ON, June 14-17, 2006.
- 2006 Raman-Wilms, L., Cockburn, L., Dao, T., Grad, H., Waterston, R., Watt-Watson, J. (presenter), Lax, L., & Hunter, J. Evaluating IPE Outcomes: A complex issue. Wilson Centre for Research in Education Research Day, Oct. 13, 2006.
- 2005 **Lax, L. (presenter)**, Singh, A., Librach, Scardamalia, M., and Spero, L. <u>Using Online Pre- & Post-tests for Formative (rather than summative) Self-assessment</u>, Wilson Centre for Research in Education Research Day, Oct. 27, 2005.
- Lax, L. (presenter), Singh, A., Librach, L., Langlands, S., Scardamalia, M., Spero, L., Brierley, M., and Park, J. Concurrent Self-Assessment for Knowledge Building Self-Organizing Systems.
   Knowledge Building Summer Institute 2005, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 9-12, 2005.
- Lax, L., Singh, A. (presenter), Librach, L., Langlands, S., Scardamalia, M., Spero, L., Brierley, M., and Park, J. <u>Developing a Model of Distributed Knowledge Building in an End-of-Life Care Continuing Professional Development Initiative</u>. Knowledge Building Summer Institute 2005, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 9-12, 2005.
- Lax, Leila (presenter), Gan, Yongcheng and Teplovs, Chris., <u>Analyses, Reflections and Tours:</u>
  Biomedical Communications, Knowledge Building Summer Institute 2005, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 9-12, 2005.
- 2005 **Lax, L.** (session chair),. <u>Assessing the Dynamics of Knowledge Growth</u>. Knowledge Building Summer Institute 2005, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 9, 2005.

- 2005 Lax, L. (session chair),. <u>Health Care and Knowledge Building</u>. Knowledge Building Summer Institute 2005, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 9, 2005.
- Lax, L. (presenter), Hunter, J., Watt-Watson, J., Pennefather, P., Hunter, J., and Scardamalia, M., Collaborative Knowledge Building for Interprofessional Education. Interprofessional Education: Grounding Theory in Action. University of Toronto, Toronto, ON, May 26-27, 2005 (p.48).
- Lax, L. (presenter), Hunter, J., Watt-Watson, J., Pennefather, P., Scardamalia, M. and Spero, Profiles of Interprofessional Knowledge Building in an Undergraduate Health Sciences Education and Continuing Professional Development, Knowledge Forum Summer Institute 2004: "Knowledge Building Discoveries and Research Based Innovations", Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 10-13, 2004.
- Lax, L. (presenter), Scardamalia, M., Taylor, I., and Wilson-Pauwels, L., Overcoming Barriers to Conceptual Change: Fueling idea improvement with Knowledge Building dynamic curriculum design and ATK embedded concurrent feedback. Knowledge Forum Summer Institute 2004: "Knowledge Building Discoveries and Research Based Innovations", Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 10-13, 2004.
- Lax, L. (presenter), Watt-Watson, J., Pennefather, P., Hunter, J., and Scardamalia, M. Educational Outcomes of the Pain Week Interprofessional Undergraduate E-Learning Initiative, Knowledge Forum Summer Institute 2003: "Beyond Best Practice", Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 12-15, 2003.
- Lax, L. (presenter), Hunter, J., Watt-Watson, J., Pennefather, P., and Scardamalia, M., Pain Week Knowledge Translation Program: Iterative Design and Development of Interprofessional Knowledge Building For Experts, Knowledge Forum Summer Institute 2003: "Beyond Best Practice", Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 12-15, 2003.
- Lax, L. (presenter), <u>Visual Evidence of Knowledge Building through Ideas and Artifacts</u>, Knowledge Forum Summer Institute 2003: "Beyond Best Practice", Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education/University of Toronto, Toronto, ON, August 12-15, 2003.
- 2003 Watt-Watson, J., Hunter, J., Raman-Wilms, L. and Lax, L. (presenters) <u>Developing and Implementing an Interprofessional Pain Education Curriculum for Six Health Science Faculties</u>. Canadian Pain Society Annual Meeting, May 22 24, 2003, Toronto
- Lax, L., Hunter, J., Langlands, S., Watertson, R., Watt-Watson, J. and Pennefather, P. (presenters) <u>UofT Pain Week E-Learning Project: A Two Year Overview of Interprofessional Collaborative Knowledge Building through Diversity</u>. The Nexus Conference: Connecting Teaching, Technology and Inclusive Learning. Topic: Linking Teaching Practice and Research. Resource Centre for Academic Technology, University of Toronto, May 8-9, 2003.
- 2003 **Lax, L.** (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. Scardamalia, M. <u>E-Learning for Strategic Clinical Management: Advancing Beyond Identification of Students' Conceptions / Misconceptions. Association of Canadian Medical Colleges Canadian Association for Medical</u>

Education Annual Meeting, April 27-29, 2003 – Quebec City, Quebec, Canada. Facilitated poster session: Topic – "Educational Technology".

- Lax, L. (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. Scardamalia, M. <u>E-Learning to Advance Interprofessional Undergraduate Health Sciences Education.</u> Association of Canadian Medical Colleges Canadian Association for Medical Education Annual Meeting, April 27-29, 2003 Quebec City, Quebec, Canada. Facilitated poster session: Topic "Educational Technology".
- 2002 Lax, L. (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. and Scardamalia, M. <u>Idea</u>

  <u>Diversity for Collective Advancement of Knowledge and Understanding</u>. The Centre for Applied
  Cognitive Science, OISE/UT, Knowledge Forum Summer Institute, August 7, 2002, Toronto.
- 2002 **Lax, L.** (presenter), <u>Putting Education into Educational Technology</u>, The Resource Centre for Academic Technology, Round Table, Robarts Library, University of Toronto, March 26, 2002.
- Scardamalia, M and Lax, L. (presenters), <u>Knowledge Building/Knowledge Forum, Courseware Tools Revealed: Understanding the features, benefits and future of courseware tools</u>, Resource Centre for Academic Technology, Hart House, University of Toronto, February 17, 2002.
- Lax, L. (presenter), Two Research Studies: (1) <u>Visual Problem Solving using Knowledge Forum in a 3 Year Iterative Design Project in Biomedical Communications (2) Project to Examine Cost/Effectiveness of E-Learning for UT Interfaculty Health Professional Education, Division of Biomedical Communications, Department of Surgery, Faculty of Medicine, University of Toronto, October 2, 2001.
  </u>
- 2001 Lax, L. (presenter), Knowledge Forum in Biomedical Communications: Teaching, Researching and Designing to Advance Best Practices. The Centre for Applied Cognitive Science, OISE/UT, Knowledge Forum Summer Institute, August 21, 2001, Toronto, Canada.
- 2001 **Lax, L.** (presenter), <u>Knowledge Building Indicators for Research.</u> The Centre for Applied Cognitive Science, OISE/UT, Knowledge Forum Summer Institute, August 23, 2000, Toronto.
- 2000 Lax, L. (presenter), Scardamalia, M. and Taylor, I. <u>Visualizing Knowledge Building and Problem Solving Online in a Biomedical Communications Course</u>. Ontario Medical Education Network, Centre for Research in Education, October 20, 2000, Toronto, ON.
- 2000 Lax, L. (presenter), <u>The Design Exchange: Implications for Teaching, Learning and Knowledge Forum Research</u>, The Centre for Applied Cognitive Science, OISE/UT, Knowledge Forum Summer Institute, August 8, 2000, Toronto, Canada.
- 2000 Lax, L. (presenter), <u>Visual Problem Solving using Web Knowledge Forum in a Medical Illustration Course</u>, The Centre for Applied Cognitive Science, Research Presentation, OISE/UT, March 28, 2000, Toronto, Canada.
- 1999 Lax, L. (presenter), <u>Visualizing Clinical Reasoning in an Internet-based Learning Environment</u>, Medical Education Research Rounds, the Centre for Research in Education, The University Health Network, The Toronto General Hospital, February 25, 1999, Toronto, Canada.
- 1999 Lax, L. (presenter), <u>Visual Problem Solving in an Internet-based, Collaborative Learning Environment.</u> Association of Medical Illustrators Annual Conference, Concurrent Session, July 30, 1999, Atlanta, Georgia, U.S.A.

Lax, L. (presenter), Maximizing the Use of the Medical Illustrator, Winning Strategies for Creating and Presenting Demonstrative Evidence. Ontario Trial Lawyers Association Spring Conference, May 9, 1997, Toronto, Canada.

#### CONFERENCE POSTERS PRESENTED and PUBLISHED IN REFERRED PROCEEDINGS

Ruth Chang (BSc, MScBMC candidate), Leila Lax (PhD), Derek Ng (PhD), Renu Gupta (MD,FRCPC), Dana Ross (MD,FRCPC), Robin Mason (PhD), Sanjeev Sockalingam (MD,MHPE,FRCPC,FAPH) & Valerie Taylor (MD,FRCPC,PhD). The Intersection Between Obesity and Mental Health. Richard Reznick Wilson Centre Research Day, University of Toronto, Oct. 13, 2017.

**L. Lax** BA, BScAAM, MEd, PhD (presenter), J. Watt-Watson RN MSc PhD, R. Davies BHScPT, MAppSc, S. Langlois MScOT, J. Oskarsson RN MN, and L. Raman-Wilms BSc(Phm), Pharm.D, FCSHP. Scaffolding and Contextualizing Innovation with the Pain Interprofessional Curriculum Design (PICD) Model. Richard Reznick Wilson Centre Research Day, Faculty of Medicine, University of Toronto, Richard Reznick Research Day, Nov. 4, 2016.

Sarah Kim (MScBMC), **Leila Lax (PhD) (presenter**), Dana Ross (MD,FRCPC), Derek Ng (PhD), Renu Gupta (MD,FRCPC), Robin Mason (PhD), Sanjeev Sockalingam (MD,MHPE,FRCPC,FAPH) & Valerie Taylor (MD,FRCPC,PhD). Understanding the Neurobiology of Trauma: Design research outcomes of an OPEN eLearning continuing professional development module for family physicians. Richard Reznick Wilson Centre Research Day, University of Toronto, Nov. 4, 2016.

Taylor V, Lax L (presenter), Gupta R, Chen Q, Mason R, and Sockalingam S. The Online Psychiatric Education Network: Building capacity within communities through eLearning for physicians, health care practitioners and patients. Medical Psychiatric Alliance. Peter Gilgan Centre for research and Learning. Toronto, Oct. 5-6, 2016. Poster presentation. Refereed.

S. Langlois (MScOT) (presenter), J. Watt-Watson (RN MSc PhD), L. Lax (BA, BScAAM, MEd, PhD), R. Davies (BHScPT, MAppSc,), J. Oskarsson (RN MN), L. Raman-Wilms (BSc(Phm), Pharm.D, FCSHP). The Pain Interprofessional Curriculum Design Model. All Torgether Better Health. Oxford, England, Sept. 6-9, 2016.

Ross D (presenter), Kim S, **Lax L**, Taylor V, Ng D, Gupta R, Mason R and Sockalingam S. Understanding the Neurobiology of Trauma: Content, design and evaluation of an eLearning module for continuing professional development of family physicians. Harvey Stancer Day, Dept. of Psychiatry, University of Toronto, June 16, 2016.

Gupta R, Lax L, Taylor V, Chen Q, Mason R & Sockalingam S. Overcoming Barriers to CPD for Mental Health Using the Online Psychiatric Network (OPEN) Model. American Psychiatric Association Annual Meeting. Toronto, On. May 16-20, 2015.

Knickle K (presenter), Maclennon C, **Lax L**, Watt-Watson J, McGillion M, Oskarsson J & Lui M. The Pain Education Interprofessional Resource (PEIR): Reflective analysis of collaborative design & innovation processes for multimedia eLearning. The Richard K Reznick Wilson Centre Research Day, Faculty of Medicine, University of Toronto & University Health Network, October 31, 2014. http://www.thewilsoncentre.ca/About/2014RichardReznickWilsonResearchDay.aspx

**Lax L**, Watt-Watson J (presenter), McGillion M, Hunter J, Oskarsson J, Elgie S, Victor C, Lui M, MacLennan C, Knickle K, Rose T, Rose J, Sutherland B. Design and Validation of e-Learning Assessments for Transformative Feedback in a Pain Education Interprofessional Resource for Pre-licensure Health Science Students. IASP 15th World Congress, October 6-11 2014, Buenos Aires, Argentina.

- Watt-Watson J (presenter), McGillion M, Lax L, Hunter J, Oskarsson J, MacLennan C, Knickle K, Victor C. Pain Education Interprofessional Resource (PEIR): A Web-Based Program. International Association for the Study of Pain (IASP) 15th World Congress, October 6-11 2014, Buenos Aires, Argentina.
- McGillion M (presenter), Watt-Watson J, **Lax L**, Hunter J, Oskarsson J, Victor C. Use of the Pain Assessment Skills Tool for Knowledge Building in the Pain Education Interprofessional Resource (PEIR) e-Learning Program. IASP 15th World Congress, October 6-11 2014, Buenos Aires, Argentina.
- Watt-Watson J (presenter), McGillion M, **Lax L**, Hunter J, Oskarsson J, MacLennan C, Knickle K, Victor J. A Pain Education Interprofessional Web-Based Resource. Canadian Pain Society Annual Scientific Meeting, May 20-23, 2014. Quebec City, QC.
- Lax (presenter), J Watt-Watson, M McGillion, J Hunter, J Oskarsson, T Rose, J Rose, S Elgie, M Lui, B Sutherland, C MacLennan, K Knickle & C Victor. (poster #15) What's Your KT Plan?: Educational design of objective-based scorecards for concurrent feedback, structured self-assessment & action planning for prelicensure health sciences students. The Hodges Education Scholarship International Symposium. "Exposing Discourses and Inspiring Conversations". Wilson Centre for Research in Education, Faculty of Medicine, University of Toronto, Toronto, Canada, March 20, 2014. http://www.thewilsoncentre.ca/About/Thesis.aspx
- **Lax LR.,** Scardamalia M, & Singh A. Social Network Structural and Semantic Analyses of Collaborative Knowledge Building in a Web-based CME Program. CME Congress 2012, Toronto, ON, May 30-June 2 (poster presentation, referred).
- **Lax LR**, Scardamalia M, Philip D, & Singh A. Assessing Knowledge Building Symmetries of Position, Power & Participation of Family Physicians in a CME Course. Knowledge Building Summer Institute, Toronto, ON, August 7-10, 2012 (poster presentation, refereed).
- **Lax, L,** Watt-Watson, J., McGillion, M., Hunter, J., Dubrowski, A., Lui, M., MacLennan, C., Knickle, K., Robb, A. & Lapeyre, J. Design Research Outcomes of an Interprofessional Pain Curriculum E-Learning Resource. Canadian Conference on Medical Education, Scholarship in Medical Education, Toronto, Canada, May 7-11, 2011. Poster presentation. Refereed.
- J. Watt-Watson (presenter), M. McGillion, **L. Lax**, J. Hunter, A. Dubrowski, M. Lui, C. MacLennan, K. Knickle, A. Robb, & J. Lapeyre. <u>A Web-Based Interactive Interprofessional Pain Curriculum Resource.</u> Canadian Pain Society, Annual Meeting, Niagara Falls, ON, April 13-16, 2011. POSTER Session.
- Cockburn, L., Raman-Wilms, L., Dao, T., Watt-Watson, J. **Lax, L.,** Grad, H., McGillion, M., Hunter, J., <u>Evaluating a comprehensive pain management plan (cpmp) to measure health science students' knowledge, skills, and attitudes for collaborative pain management.</u> Canadian Pain Society Annual Meeting Calgary, Alberta May 2010.
- Hunter, J., Watt-Watson, J. McGillion, M., Cameron, A., Richardson, D., Lowe, M., Dao, T., **Lax, L**., Grad, H., Raman-Wilms, L., Cockburn, L., Stinson, J., Pennefather, P., Schreiber, M., Gordon, A., Mock, D., Salter, M. A <u>Mandatory interfaculty pre-licensure pain curriculum for 6 health science faculties</u>. International Conference on Residency Education, Victoria, B.C. September 26, 2009/1300 poster abstract 173
- **Lax, L.,** Russell, L., Nelles, L.J., Tabak, D., Smith, C., Brierely, M., Park, J.H., and Hyman, A. <u>Design</u> Research Outcomes of the Communication & Cultural Competence Program for International Medical Graduates. *Proceedings of the 4<sup>th</sup> International Conference on E-Learning*. Toronto, Ontario, July 2009.
- Raman-Wilms, L., Hunter, J., Watt-Watson, J., Regehr, G., Waterston, R., Lax, L., Librach, L., Pennefather, P. Evaluation of an interfaculty pain curriculum for students from six health science faculties: An update

- American Association of Colleges of Pharmacy / Association of Faculties of Pharmacy of Canada Annual Conference July 19-22, 2008
- Hunter, Judith, Watt-Watson, Judy, Raman-Wilms, Lalitha, Cockburn, Lynn, McGillion, Michael, Cameron, Andrea, **Lax, Leila**, Dao, Thuan, Grad, Helen, and all members of the Interprofessional Pain Curriculum Committee. <u>A Mandatory Interfaculty Pre-licensure Pain Curriculum For 6 Health Science Faculties</u>. University of Toronto, ON, Interprofessional Education Ontario Conference, Jan. 18-20, 2009.
- Cockburn, Lynn, Raman-Wilms, Lalitha, Hunter, Judith, Watt-Watson, Judy, **Lax, Leila**, Dao, Thuan, Grad, Helen, McGillion, Michael. <u>Use of Care Plans for Interprofessional Pain Education</u>. University of Toronto, ON, Interprofessional Education Ontario Conference, Jan. 18-20, 2009.
- **Lax, L.**, Russell, L., Nelles, L.J., Tabak, D., Smith, C., Brierely, M., Park, J.H., and Hyman, A. <u>The Communication and Cultural Competence Program for International Medical Graduates</u>. Wilson Centre for Research in Medical Education, Annual Research Day, Toronto, ON, October 24, 2008.
- Russell, L., **Lax, L.**, and Elgie, S. <u>Validation of a Language Assessment Tool for International Medical Graduates</u>. Wilson Centre for Research in Medical Education, Annual Research Day, Toronto, ON, October 24, 2008.
- **Lax, L.**, Russell, L., Nelles, L.J., Tabak, D., Smith, C., Brierely, M., Park, J.H., and Hyman, A. <u>Design</u> Research Outcomes of the Communication and Cultural Competence Program for International Medical <u>Graduates</u>. Canadian Association for Medical Education Conference, Montreal, Quebec, May 3-7, 2008.
- Russell, L., **Lax**, **L**., and Elgie, S. <u>Validation of a Language Assessment Tool for International Medical</u> Graduates. Canadiian Association for Medical Education Conference, Montreal, Quebec, May 3-7, 2008.
- **Lax, L. (presenter),** Scardamalia, M., Taylor, I., & Brierley, M. <u>Collaborative Knowledge Building and the Intentional Improvement of Ideas in a Medical Legal Visualization Course.</u> University of Toronto Teaching & Learning Symposium. Oct. 16, 2006.
- Singh, A., Lax, L. (presenter), Scardamalia, M., Librach, L., Langland, S., Brierley, M., & Park, JH. <u>End-of-Life Care Distance Education Program for Family Doctors</u>. Wilson Centre for Research in Education Research Day, Oct. 13, 2006.
- Singh, A. (presenter), **Lax, L.,** Scardamalia, M., Librach, L., Langland, S., Brierley, M., & Park, JH. <u>Improvable Knowledge: Collaborative knowledge building distance education program in end-of-life care</u>. American Association for Cancer Education. San Francisco, CA, Oct. 12, 2006.
- Lax, L. (presenter), Scardamalia, M., Taylor, I., Brierley, M. & Wilson-Pauwels, L. <u>Collaborative Knowledge Building and the Intentional Improvement of Ideas in a Medical Legal Visualization Course.</u> Knowledge Building Summer Institute 2006, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education, University of Toronto, Toronto, ON, August 8-11, 2006. <a href="http://www.docstoc.com/docs/42327381/ABSTRACTS-Summer-Institute-2006----Democratizing-Societys-Innovative">http://www.docstoc.com/docs/42327381/ABSTRACTS-Summer-Institute-2006----Democratizing-Societys-Innovative</a>
- **Lax, L. (presenter),** Scardamalia, M., Taylor, I., Brierley, M. & Wilson-Pauwels, L. <u>Collaborative Knowledge Building and the Intentional Improvement of Ideas</u>. Society for Teaching and Learning in Higher Education, Victoria College, University of Toronto, Toronto, ON, June 14-17, 2006.
- Singh, A., Lax, L. (presenter), Scardamalia, M., Librach, L., Langland, S., Brierley, M., & Park, JH. <u>Improvable Knowledge</u>: Integrating design research outcomes in a collaborative knowledge building distance education <u>program in end-of-life care</u>. Society for Teaching and Learning in Higher Education, Victoria College, University of Toronto, ON, June 14-17, 2006.

- Raman-Wilms, L. (presenter), Cockburn, L., Hunter, J., Watt-Watson, J., Waterston, R., **Lax, L.,** Dao, T., Librach, L., Pennefather, P., Grad, H., Schrieiber, M. & the Members of the IPC Planning Committee. <u>A Four Year Evaluation of an Interfaculty pain Curriculum for Health Sciences Students.</u> Society for Teaching and Learning in Higher Education, Victoria College, University of Toronto, Toronto, ON, June 14-17, 2006.
- Singh, A., (presenter), **Lax, L**., Librach, L., Langlands, S., Scardamalia, M., Spero, L., Brierley, M. and Park, JH. <u>Distributed Knowledge Building in an End-of-Life Care Continuing Professional Development Initiative</u>, Wilson Centre for Research in Education Research Day, Oct. 27, 2005.
- Singh, A. (presenter), **Lax, L.**, Librach, L., Langlands, S., Scardamalia, M., Spero, L., Park, JH and Brierley, M. <u>Distributed Knowledge Building in an End-of-Life Care Continuing Professional Development Initiative</u>. Poster Presentation, Association for Medical Education in Europe, Amsterdam, Netherlands Aug 30 Sept 2, 2005.
- Raman-Wilms, L., Hunter, J., Watt-Watson, J. (presenter), Cockburn, L., Regehr, G., Waterston, R., **Lax, L**., Librach, L., and Pennefather, P. <u>An Evaluation of an Interfaculty Pain Curriculum for Health Science Students</u>. International Association for the Study of Pain, August 21-26, 2005, Sydney, Australia.
- Waterston, R. (presenter), Hunter, J., McGillion, M., Watt-Watson, J., Raman-Wilms, L., Cockburn, L., Pennefather, P. and Lax, L. Online Collaboration as Part of an Interprofessional Education Case Study: the importance of equal participation. Interprofessional Education Conference: Grounding Theory in Action. University of Toronto, Toronto, ON, May 26-27, 2005, p.64.
- Singh, A. (presenter), **Lax, L.,** Librach, L., Langlands, S., Scardamalia, M., Spero, L., Park, JH and Brierley, M. <u>Developing a Model of Distributed Knowledge Building in an End-of-Life Care Continuing Professional Development Initiative</u>. Poster Presentation, Ontario Medical Education Network Educational Research Symposium 2005, London, Ontario, May 26-27, 2005.
- Singh, A (presenter), **Lax L**, Librach L, Ryan, D, Scardamalia M, and Spero L (presenter). <u>Integrating E-Learning</u>, <u>Videoconferences and Standardized Patients in a CME Program for End-of-Life Care</u>. Poster Presentation, The 15<sup>th</sup> Annual Provincial Conference on Palliative and End-of-Life Care, Toronto, Ontario, April 3-5, 2005.
- **Lax L** (presenter), Hunter J, Watt-Watson J, Pennefather P, Scardamalia M, and Spero L. <u>Pain Interprofessional Continuing Education Online Initiative</u>. Poster Presentation, Continuing Medical Education Congress, May 15 18, 2004, Royal York Hotel, Toronto, Ontario.
- Waterston, R. (presenter), Hunter, J., **Lax, L.,** Watt-Watson, J., Raman-Wilms, L., Pennefather, P., Regehr, G. <u>Integrating an online case component into an interfaculty pain curriculum for six health professions.</u> Canadian Pain Society, Vancouver, BC, May 2004.
- **Lax L,** Hunter J, Watt-Watson J, Pennefather P, Scardamalia M, and Spero L (presenter). <u>Pain Interprofessional Continuing Education Initiative: Distributed Knowledge Building Online.</u> Poster Presentation, Canadian Association of Medical Education, April 24-27, 2004 Halifax, Nova Scotia.
- Singh, A, Lax L, Librach L, Ryan, D, Scardamalia M, and Spero L (presenter). <u>Integrating E-Learning. Videoconferences and Standardized Patients in a CME Program for End-of-Life Care.</u> Poster Presentation, Canadian Association of Medical Education, April 24-27, 2004 Halifax, Nova Scotia.
- **Lax, L.,** Watt-Watson, J. (presenter), Pennefather, P., Hunter, J. Scardamalia, M. <u>Pain Week E-Learning Project: An Undergraduate Interprofessional Knowledge Building Initiative</u>. American Pain Society 22nd Annual Scientific Meeting, March 20-23, 2003, #726 Chicago IL

- J. Watt-Watson (presenter), J. Hunter, P. Pennefather, L. Librach, L. Raman-Wilms, M. Schreiber, **L. Lax, J.** Stinson, T. Dao, A. Gordon, D. Mock. <u>Undergraduate Interprofessional Pain Education Curricula: A Model for Six Health Science Faculties.</u> American Pain Society B 22<sup>nd</sup> Annual Scientific Meeting, March 20-23, 2003, #724 Chicago IL
- **Lax, L.** (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. and Scardamalia, M. <u>E-Learning for Strategic Clinical Management: Advancing Beyond Identification of Students' Conceptions / Misconceptions.</u> Association of Canadian Medical Colleges Canadian Association for Medical Education Annual Meeting, April 27-29, 2003 Quebec City, Quebec, Canada. Facilitated poster session: Topic "Educational Technology".
- **Lax, L.** (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. Scardamalia, M. <u>E-Learning to Advance Interprofessional Undergraduate Health Sciences Education</u>. Association of Canadian Medical Colleges Canadian Association for Medical Education Annual Meeting, April 27-29, 2003 Quebec City, Quebec, Canada. Facilitated poster session: Topic "Educational Technology".
- J. Watt-Watson (presenter), J. Hunter, P. Pennefather, L. Librach, L. Raman-Wilms, M. Schreiber, **L. Lax**, J. Stinson, T. Dao, A. Gordon, D. Mock. <u>An Integrated Undergraduate Pain Curriculum for Six Health Science</u> Faculties. University of Toronto Faculty of Nursing Research Day April 23, 2003.
- **L.Lax** (presenter), J.P.Hunter, J.Watt-Watson, S.Langlands, R.Watertson, P.Pennefather, M.Scardamalia. <u>UofT Pain Week E-Learning Project: A Two Year Overview of Interprofessional Collaborative Knowledge</u> <u>Building through Diversity</u>. The Nexus Conference: Connecting Teaching, Technology and Inclusive Learning. Topic: Linking Teaching Practice and Research. Resource Centre for Academic Technology, University of Toronto, May 8-9, 2003.
- **Lax, L.** (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. Scardamalia, M. <u>E-Learning to Advance Interprofessional Undergraduate Health Sciences Education.</u> Tech\_Know\_File.03 Conference, The Resouce Centre for Academic Technology, University of Toronto, May 13-14, 2003.
- J. Watt-Watson (presenter), J. Hunter, P. Pennefather, L. Librach, L. Raman-Wilms, M. Schreiber, **L. Lax,** J. Stinson, T. Dao, A. Gordon, D. Mock. <u>Developing and Implementing an Interprofessional Pain Education</u> <u>Curriculum for Six Health Science Faculties.</u> Canadian Pain Society Annual Meeting, May 22 24, 2003, Toronto
- **Lax, L.** (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. Gordon, A. Scardamalia, M. <u>Educational Outcomes of the Pain Week Interprofessional E-Learning Initiative</u>. Canadian Pain Society Annual Meeting, May 22 24, 2003, Toronto, Ontario, Canada.
- Lalitha Raman-Wilms (presenter), Judy Watt-Watson, **Leila Lax**, Larry Librach, Glenn Regehr, Judi Hunter, Peter Pennefather. <u>Evaluation of an Interdisciplinary, Undergraduate Pain Education Program for Health Professional Students</u>. Association of Faculties of Pharmacy of Canada, Montreal, May 29-June 1, 2003.
- Lalitha Raman-Wilms (presenter), Judy Watt-Watson, **Leila Lax**, Larry Librach, Glenn Regehr, Judi Hunter, Peter Pennefather. Evaluation of an Interdisciplinary, Undergraduate Pain Education Program for Health Professional Students. American Association of Colleges of Pharmacy, July 2003.
- **L.Lax** (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. Scardamalia, M. <u>Educational Outcomes of the Pain Week Interprofessional Undergraduate Health Sciences E-Learning Initiative</u>. The Centre for Applied Cognitive Science, OISE/UT, Knowledge Forum Summer Institute, August 12-15, 2003, Toronto, Canada.
- **L.Lax** (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. Scardamalia, M. <u>Pain Week Knowledge Translation Program: Developing a Model of Interprofessional Knowledge Building</u>. The Centre for Applied Cognitive Science, OISE/UT, Knowledge Forum Summer Institute, August 12-15, 2003, Toronto, Canada.

Watt-Watson, J. (presenter), Hunter, J., Pennefather, P. Librach, L., Raman-Wilms, L., Schereiber, J., Stinson, J., Dao, T., **Lax, L.,** Gordon, A., Mock, D. <u>Integrating IASP Curricula: One Pain Course for Six Health</u> Disciplines. World Congress in Pain, August 17-22, 2002, San Diego, California, U.S.A.

**Lax, L.** (presenter), Watt-Watson, J., Pennefather, P., Hunter, J. Scardamalia, M. <u>Rich Media E-Learning for Collaborative Knowledge Building in an Interfaculty Health Professional Education Initiative.</u> Slice of Life Conference for Medical Multimedia Developers and Educators, June 21, 2002, University of Toronto, Toronto, Canada (Online Poster Demonstration)

Hunter, J. (presenter), **Lax, L.**, Watt-Watson, J., Pennefather, P. <u>Development of a Post-Amputation Pain case as an Interdisciplinary Online Learning Tool</u>. AQIPA/OAAC (Quebec & Ontario Associations for Amputee Care) Joint Congress, May 10-11, 2002, University of Ottawa, Ottawa, Canada.

P. Pennefather, J. Watt-Watson (presenter), J.P. Hunter, L. Librach, **L. Lax**, L. Raman-Wilms, M. Schreiber, J. Stinson, A. Gordon, T. Dao, D. Mock. <u>Pain Week: An Interfaculty, Interprofessional Education Program Dealing With The Multidimensional Issues Of Pain Assessment & Management Program</u>. No. 22.56. 2002 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2002. Online.

**Lax, L.** (presenter), Scardamalia, M. and Taylor, I. <u>Visual Knowledge Building and Problem Solving in Web Knowledge Forum</u>. The Canadian Association for Medical Education Annual Meeting, April 29 – May 1, 2001, Toronto, Canada.

**Lax, L.** (presenter), Scardamalia, M. and Taylor, I. <u>Visual Knowledge Building and Problem Solving</u>. The Centre for Applied Cognitive Science, OISE/UT, Knowledge Forum Summer Institute, August 8, 2000, Toronto.

**Lax, L.** (presenter) and Byrne, N. Medical Informatics: A Study of Problem-based Tutors' Computer Competencies. Annual Meeting of the Canadian Association for Medical Education Conference Proceedings, April 25-28, 1998, Ottawa, Canada.

#### CONTINUING PROFESSIONAL DEVELOPMENT - SELECTED ACTIVITIES

Association of Medical Illustrators Annual Meeting (various years).

Qualitative Analysis Workshop. Nov. 19, 2010, 9am-4pm. Centre for Critical Qualitative Health Research, University of Toronto.

Research Course: Wilson Centre Atelier – Qualitative Research Refined/Design, Execution and Analysis. An intensive course on various theories and methods of qualitative research. Wilson Centre for Research in Education, Faculty of Medicine, University Health Sciences Network, Oct. 20-23, 2008.

#### PROFESSIONAL ACTIVITIES - UNIVERSITY SERVICE

### **Professional Activities – Service at the University of Toronto**

Member, Admissions Committee, Biomedical Communications, Faculty of Medicine, University of Toronto, 1995-ongoing. 2013, 2014 = 8 hours/year; 2016=15 hours/year; 2017 & 2018 = 15 hours.

Chair, Endowment Committee, Biomedical Communications, Faculty of Medicine, University of Toronto, 2013-15. 15 hours/year. 2016 3 hour/year. 2017 2 hours/year.

Creation & Presentation of the Pain Interprofessional Curriculum Design Workshop. Judy Watt-Watson, Robyn, Leila Lax, Sylvia Langois, Jon Oskarsson, & Lalitha Raman-Wilms. Nov. 12-14, 2014. University of Toronto Centre for the Study of Pain. Workshop design & development 100 hours & workshop presentation = 3 days.

Chair, Evaluation Subcommittee of the Interprofessional Pain Curriculum. This committee meets approx. six times a year to update strategies and assessment tools and to conduct full program evaluation of the Interprofessional Pain Curriculum 2013- 2016. 80 hours

Member of the Interprofessional Pain Curriculum Committee, Program committee. This committee meets approx. four times a year to refine the Interprofessional Pain Curriculum, 2001-2015. 10 hours

Member of the Interprofessional Pain Curriculum Committee, Evaluation subcommittee. This committee meets approx. six times a year to refine the Interprofessional Pain Curriculum, 2002-2013. 10 hours

Executive member of the University of Toronto Centre for the Study of Pain. This committee meets twice a year to address any concerns and evaluation of the IPC and to liaise with the Centre for Interprofessional Education.

Member, Biomedical Communications Curriculum Renewal Committee, Biomedical Communications, Masters Program, Institute of Medical Science, Faculty of Medicine, University of Toronto, 2011 (2 hours).

Chair, Evaluation Subcommittee of the Interprofessional Pain Curriculum. This committee meet approx. six times to create the research protocol, strategies and assessment tools and to conduct full program evaluation of the Interprofessional Pain Curriculum 2001- 2002. 80 hours

Reviewer for the Institute of Knowledge Innovation and Technology Summer Institute, OISE/UT. Read and provided feedback comments on research papers submitted for conference presentation, 2007-2014.

Member of the Institute for Knowledge Innovation and Technology, Senior Research Scientist. Participation in international knowledge building videoconferences and online work in Knowledge Society Network. (approx. 60 hours), OISE/UT, 2003-2008.

Reviewer for Canadian Journal of Learning and Technology, special issue on Knowledge Building for the Institute of Knowledge Innovation and Technology, OISE/UT, 2006.

Institute of Medical Science Curriculum Review Committee. Review of two e-based education courses. Meeting and presentation of assessment, Jan. 27, 2006 (10 hours), 2006.

Mentor, Resource Centre for Academic Technology, Faculty Development Workshop, Teaching Online, January 2003, University of Toronto, 2003.

Member, Health Science Education Committee, Faculty of Medicine, University of Toronto, 1995-1998.

# Professional Activities – Service External to the University of Toronto

Lead Reviewer, Accreditation site review on behalf of the Accreditation Review Committee for the Medical Illustrator, 2015 site review of the Biomedical Visualization program at the University of Illinois at Chicago. (Unpaid).

Commissioner, Commission on Accreditation of Allied Health Education Programs for the Accreditation Review Committee for the Medical Illustrator, 2009-2015. Update of ARC-MI Standards and Guidelines. annual meeting 2 days, accreditation review, & conference calls (approx. 50 hours in 2013-2015). Unpaid service.

Member, Accreditation Review Committee for the Medical Illustrator, 2007-2016. (as above)

Save a Childs Heart, Awareness Committee volunteer. Approx. 20 hours 2013-2015. Unpaid service.

Member of International Scientific Committee of QWERTY: Journal of Technology and Culture. Journal is associated with the Collaborative Knowledge Building Group in Europe, 2006-ongoing.

Program Accreditation Review, 2<sup>nd</sup> reviewer on team, review conducted of the Dept. of Art as Applied to Medicine, Johns Hopkins University, Nov. 2010. 50 hours. Unpaid service.

### **CREATIVE PROFESSIONAL DEVELOPMENT**

Creation of the Visual Knowledge Building & Translation (vKBT) Lab in Biomedical Communications. The vKBT Lab is a virtual lab that focuses on design research in health sciences visualization to advance theory-based innovation aimed at improving knowledge and the translation of knowledge to practice. The Royal Bank of Canada funds vKBT research. See <a href="https://bmcresearch.utm.utoronto.ca/vkbt-lab/">https://bmcresearch.utm.utoronto.ca/vkbt-lab/</a>