

THE UNIVERSITY OF BRITISH COLUMBIA

Curriculum Vitae for Faculty Members

Date: March 27, 2013

Initials: *Janner*

1. **SURNAME:** Rucker

FIRST NAME: Lance

MIDDLE NAME(S): Martin

2. **DEPARTMENT:** Oral Health Sciences

3. **FACULTY:** Dentistry

4. **PRESENT RANK:** Professor

SINCE: July 1, 2002

5. **POST-SECONDARY EDUCATION**

University or Institution	Degree	Subject Area	Dates
Bellarmino College, Louisville, Kentucky	Honors Program	Biology	1966-1968
University of California, Berkeley	AB	Biological Sciences	1968-1970
University of California, San Francisco	BScD	Science	1970-1974
University of California, San Francisco	DDS	Dentistry	1970-1974

Special Professional Qualifications

U.S. National Board for Dental Examinations, Part I, Qualifying Examination 1972

U.S. National Board for Dental Examinations, Part II, Qualifying Examination 1974

Oral Surgery Clerkship, San Francisco General Hospital January - June 1974

College of Dental Surgeons of British Columbia, Provincial Board Examination, Licensure 1974

National Dental Examining Board of Canada, National Certification 1980

6. **EMPLOYMENT RECORD**

(a) *Prior to Coming to UBC*

University, Company or Organization	Rank or Title	Dates
Externship in liaison with the B.C. Ministry of Health in remote regions of Northern British Columbia	Externship	1974-1975
Private Practice, Dunster, B.C.	General Clinical Dentist	1975-1980
REACH Community Health Centre, Vancouver, B.C.	Administrator, Dental Clinic Coordinator, and Clinician	1981-1990

(b) *At UBC*

Rank or Title	Dates
Assistant Professor	1983-1992
Chairman, Division of Operative Dentistry	1987-2008
Associate Professor	1992-2002
Chairman, Division of General Dentistry	2008-date
Professor	2002-date

(c) *Date of Granting of Tenure at U.B.C.:* July 1, 1988

7. LEAVES OF ABSENCE

Study Leave = September 1, 1991 - August 31, 1992

50% time appointment = September 1, 1992 - August 31, 1994

Leave of Absence = September 1, 1994 - August 31, 1995

Study Leave = September 1, 2003 – February 28, 2004

Study Leave = September 1, 2005 – February 28, 2006

Leave of Absence = January 1, 2009 – June 30, 2009

Study Leave = January 1, 2012 – December 31, 2012

University, Company or Organization at which Leave was taken	Type of Leave	Dates
ErgoLogic Enterprises Incorporated	Industry Transfer	September 1, 1991 - August 31, 1992
ErgoLogic Enterprises Incorporated	Industry Transfer	September 1, 1994 - August 31, 1995
Ergosum Development Corp.	Independent	January 1, 2009 – June 30, 2009

8. TEACHING

(a) *Areas of Special Interest and Accomplishments*

Performance Simulation in Dental Teaching, including the development of performance simulation methods and equipment for the teaching of dental preclinical and clinical psychomotor skills.

Development of fast-track psychomotor problem-based learning (PsyMo PBL) course, including course coordination and refinement, to optimize the psychomotor learning curve within a hybrid problem-based learning curriculum.

Introduction of Optimal Visual Enhancement Devices in the Dental Pre-Clinical and Clinical Settings (including the development of the **optical declination angle measurement device**) in order to enhance visual fine acuity for the acquisition of surgical skills and for the performance of dental clinical operations and general surgical procedures.

Invention, design and development of specialized teaching equipment (including the **Handpiece Pen**, the **glide-bar** simulation articulation device, the **lightweight portable declination angle measurement device**, and the **Surgical Telescope-based Augmented Reality hands-free, heads-up computer-based**

clinical input/output device) used in many universities throughout the world for the teaching of pre-clinical and clinical psychomotor skills in dentistry. Development of ergonomic high-fidelity simulation bite-rim air-turbine precision-control exercise blocks.

Development of Teaching Software, including the **Psychomotor Performance Set Specifications, Precision Evaluation** format, the **Performance Postural Evaluation** format, and the **ClinErgoAssess** format used for optimal, efficient and accurate acquisition of psychomotor clinical skills for microsurgery. **During 2012 and 2013 this format has been used and adapted for use at six university dental schools in the U.S., Canada, and Japan (translated into Japanese).**

Utilization of computer-based technologies for faculty presentations and student use, including training of other faculty to optimize use of computer technologies to enhance teaching tools.

(b) *Courses Taught at UBC*

Clinical teaching of Restorative/Operative Dentistry (RD 430 and RD 440, OHS 430 and OHS 440, DENT 430 and DENT 440), including clinical evaluation and examination of students as well as attendance of, and participation in, related section meetings	1981-date
Lecturer and Clinical Faculty Member for Preclinical Operative Dentistry (OHS 420)	1982-1990 1997-1998
Clinical Teaching in the UBC Summer Clinics	1983-1987
Course Coordinator, Designer, and Developer for Performance Logic Performance Simulation Course (OHS 410)	1984-1997
Course Coordinator for Hypnosis Section of Pain and Anxiety Control Course (OBMS 437)	1985-1999
Course Coordinator , OHS 430 and OHS 440	1986-1990
Advanced Clinical Hypnosis , fourth year electives program	1986-1990, 1995-1998, 2000, 2007
International Student Program: Introduction to Clinical Simulation and Basic Performance Logic	1996-2008
Ergonomics Orientation Seminar Program for International Students	1997-2008
Dental Coordinator , planning, case writing, and development of special medical/dental panel for Sexual Medicine (DPAS 410)	1997-1999
Co-Coordinator for DENT 410 Clinical Ergonomics and Applied Infection Control sections	1998-date
Course Coordinator for DENT 420.3 Intensive Psychomotor Clinical Skills course held for dental students at the end of their second year of Medical/Dental PBL curriculum as their fast-track clinical skills development springboard	1999-2008
Section Coordinator for planning, recruitment, and development of special tutorials for the Dental Ethics Section for DPAS 410 / PACS .	Ethics 2005-date
DENT 410 Dental Morphology Module clinical instructor and clinical consultant for integration of ergonomics into clinical simulation sessions	2007-date
Section Coordinator for clinical ergonomics education for dental hygiene students in DHYG 210	2008-date

DENT 410 Integrated Patient Assessment Module clinical instructor and clinical consultant for integration of ergonomics into clinical simulation sessions 2008-date

Coordinator for ACD planning, recruitment, and development of special tutorials for the **Conflict Resolution Tutorials** for **PACS 420**. 2009-date

Module Coordinator, DENT 410 Integrated Patient Assessment module. 2010-date

Coordinator for ACD planning, recruitment, and development of special tutorials for the **Ethics Tutorial session** for **PACS 440**. 2010-date

Session Coordinator for special tutorials for the Dental Ethics Module for DENT 568 for Graduate Orthodontics residents 2013

PACS 440 Ethics Tutorial

(c) Courses Taught at UBC During the Past Two Years

Session	Course	Scheduled Hours	Class Size	Course / Section Coordinator	Hours Taught			
					Lectures	Tutorials	Labs	Clinic
Fall	DENT 420 PBL Tutorial	9	8			9		
	PACS 410 Ethics Tutorials	12	41	✓ (for ACD expert tutors)		3		
	DENT 430 Operative Dentistry Section	75	55			16		59
	DENT 410 Clinical Simulation (Asepsis)	8	41	✓				8
	DENT 410 Clinical Dental Ergonomics module (including the Surgical Telescopes Symposium)	10	41	✓	4			6
	DENT 420 Adult Patient Assessment module	12	41					12
	DENT 420 Remedial Skills Instruction and Operative Clinical Dentistry	35	1	✓		5		30
	DHYG 210 Clinical Ergonomics for Dental Hygiene module	18	18	✓	4			14

Session	Course	Scheduled Hours	Class Size	Course / Section Coordinator	Hours Taught			
					Lectures	Tutorials	Labs	Clinic
	PACS 440 Ethics Tutorial	3	56	✓ (for ACD expert tutors)		3		
	DENT 440 Operative Case-Based Online Assessment plus Review with Class	4	51	✓		1		3
Winter	DPAS 420 Doctor/Dentist, Patient & Society	36	8			36		
	DENT 410 Clinical Dental Ergonomics (III)	4	41	✓	1			3
	DENT 410 Integrated Patient Assessment Module	12	48	✓	3			9
	DENT 568 Ortho Graduate Ethics	4	4			4		
	DENT 430 Operative Dentistry Section	33	51			9		33
	DENT 420 Psychomotor Skills Instruction and Operative Clinical Dentistry	108	38/46	✓	17	14		77
Spring	DENT 420 (IDDCP) Orientation Psychomotor Skills Instruction and Operative Clinical Dentistry	13	15	✓	3	2		8
	DENT 410 Integrated Patient Assessment Module	116	48	✓	2	26		88
	DENT 410 Dental Morphology Module	6	40					6
	DENT 440 Online Assessment and Review	8	51	✓		8		
	DENT 430 Remedial Skills Instruction and Operative Clinical Dentistry	40	2	✓		4		36

(d) Student Supervision

Student Name	Program Type	Year		Principal Supervisor	Co-Supervisor(s)
		Start	Finish		
Kristy Iwanaka	BDS Sc	2002	2004	B. Craig	L. Rucker
Harminder Sarai	BDS Sc	2002	2004	B. Craig	L. Rucker
Kelly Mandeville	DMD elective	2007	2007	L. Rucker	K. Gardner
Fiona Reid	BDS Sc elective	2009	2009	L. Rucker	

Membership on Master's Degree Thesis Committees

Greg Forrest, Industrial Automation Lab, UBC Mechanical Engineering, MASC 2000-2004.

Catherine Kinnaird, UBC Mechanical Engineering, Center of Excellence for Surgical Education, Vancouver General Hospital, MASC 2001-2004.

Joanne Lim, Neuromotor Control Lab, UBC Mechanical Engineering, MASC 2001-2004.

Membership on Doctoral Degree Thesis Committee

Michel AlSharida, PhD Defense, Electrical and Computer Engineering. "An Active Method for Implementing the Unintentional Islanding Test in Distributed Generation Systems". Chair of Examination Committee, 2013.

(e) Continuing Education Activities

1. **Rucker, L.M.** "Games Dentists Play", UBC Continuing Education one-day course, September 1983.
2. **Rucker, L.M.** and DiNardo, H. "Performance Logic in Dentistry", University of Maryland, Continuing Education one-day course, 1984.
3. **Rucker, L.M.** and DiNardo, H. "Performance Logic in Dentistry", UBC Continuing Education one-day course, January 1984.
4. **Rucker, L.M.** "Performance Logic in Preclinical Teaching", Faculty of Dentistry, January 1984.
5. **Rucker, L.M.** "Games Dentists Play", UBC Continuing Education one-day course, October 1984.
6. **Rucker, L.M.** "Esthetic Bonding - Doing is Knowing", UBC Continuing Education one-day course, April 1985.
7. **Rucker, L.M.** "Esthetic Bonding - Doing is Knowing", UBC Continuing Education one-day course, September 1985.
8. **Rucker, L.M.** "Esthetic Bonding - Doing is Knowing", UBC Continuing Education one-day course, November 1985.
9. **Rucker, L.M.** "Interpersonal Communication Skills - Transactional Games in the Dental Office Setting", UBC Continuing Education one-day course for Dental Auxiliaries, November 1985.

10. **Rucker, L.M.** "Esthetic Bonding - Doing is Knowing", Victoria and District Dental Society, one-day course presentation, January 1986.
11. **Rucker, L.M.** "Induction and Deepening Techniques", Basic Workshop in Clinical Hypnosis, Canadian Society for Clinical Hypnosis, two-day workshop, January 1987.
12. **Rucker, L.M.** "Direct Bonded Veneers", a one-day course co-sponsored by UBC Continuing Education and the College of Dental Surgeons of British Columbia, June 1987.
13. **Rucker, L.M.** "Performance Simulation and Preclinical Teaching", UBC Summer Seminar Series, Department of Clinical Dental Sciences, July 1987.
14. **Rucker, L.M.** "Clinical Hypnosis in Dentistry: A Participation Course", UBC Continuing Education one-day course, October 1987.
15. **Rucker, L.M.** "Clinical Hypnosis in Clinical Dentistry--Doing is Knowing", UBC Continuing Education one-day course, October 1987.
16. **Rucker, L.M.** "Clinical Hypnosis in Clinical Dentistry--Doing is Knowing", UBC Continuing Education one-day course, October 1988.
17. **Rucker, L.M.** "Induction and Deepening Techniques", Basic Workshop in Clinical Hypnosis, Canadian Society for Clinical Hypnosis, two-day workshop, January 1989.
18. **Rucker, L.M.** "Advanced Clinical Hypnosis in Clinical Dentistry", UBC Continuing Education one-day course, February 1989.
19. **Rucker, L.M.** "Ergonomics of the Seated Postures: Back, Neck, and Shoulder Pain in Clinical Dental Practice", two-day presentation at the Zurich Kanton Dental Society Meeting, Zurich, Switzerland, April 1989.
20. **Rucker, L.M.** "Advanced Ergonomic Applications of Performance Logic", two-day presentation at the Fifth International Symposium for Performance Logic and Simulation Training in Dental Education, Newark, New Jersey, June 1989.
21. Belenky, M.M., **Rucker, L.M.**, Lunn, G. and McGregor, C. "Back, Neck and Shoulder Pain...Stop It!", UBC Faculty of Dentistry Continuing Dental Education course, April 20, 1991.
22. **Rucker, L.M.** and Pulos, L. "Clinical Hypnosis in Dentistry: A Participation Course", UBC Faculty of Dentistry Continuing Dental Education course, Vancouver, B.C., November 30, 1991.
23. Belenky, M.M., **Rucker, L.M.**, DiNardo, H.P., McGregor, C., Schoen, D.H., Sunell, S. and Spinnato, S.M. "Back, Neck and Shoulder Pain...Stop It! 5 Quick Steps to Health and Success in Dental Practice", Center for Professional Development, Baltimore College of Dental Surgery, Baltimore, Maryland, January 31-February 1, 1992.
24. Belenky, M.M., **Rucker, L.M.**, DiNardo, H.P., McGregor, C., Schoen, D.H., Sunell, S. and Spinnato, S.M. "Back, Neck and Shoulder Pain...Stop It! 5 Quick Steps to Health and Success in Dental Practice", Center for Professional Development, Baltimore College of Dental Surgery, Baltimore, Maryland, June 19-20, 1992.
25. **Rucker, L.M.** "Clinical Dental Hygiene Rehabilitation: Part I - Basic Performance Rehabilitation; Part II - Performance Analysis", 3 day dental hygienist course taught with Susanne Sunell, Vancouver Community College, Vancouver, B.C., September 30 - October 2, 1992.
26. **Rucker, L.M.**, Belenky, M. and Sunell, S. "Back, Neck, and Shoulder Pain---Stop It!", one day course in Clinical Ergonomics, University of Washington Continuing Dental Education, March 13, 1994.

27. **Rucker, L.M.** "Performance Logic and Ergonomics", one day course, Open Learning Agency Dental Assisting Tutor Program, Vancouver, B.C., July 9, 1995.
28. **Rucker, L.M.**, Belenky, M.M. and Maschak, L. "Back, Neck and Shoulder Pain - STOP IT!", UBC Faculty of Dentistry Continuing Dental Education course, December 2, 1995.
29. **Rucker, L.M.** "Direct Hypnotic Induction Techniques for Dentists and Physicians", part of A Two-Day Introductory & Advanced Hypnosis Training Workshop, The Canadian Society of Clinical Hypnosis (B.C.), Vancouver, B.C., February 3-4, 1996.
30. **Rucker, L.M.** "Magnification and Surgical Telescopes in Dental Practice: How to Use Them, How to Choose Them", UBC Faculty of Dentistry Continuing Dental Education course, Vancouver, B.C., April 10, 1996.
31. **Rucker, L.M.** "Constantly Under Construction: Designing InterNet Publications to Address the Ever-Changing Needs of Dental Educators", presentation for B.C. Dental Educators Conference on Celebrating Quality Dental Education, The Open Learning Agency, Vancouver, B.C., October 19, 1996.
32. **Rucker, L.M.** "Peak Performance Training", Open Learning Agency audioconference, Burnaby, B.C., November 1996.
33. **Rucker, L.M.** "Peak Performance in Dental Clinical Practice", Open Learning Agency audioconference, February 1997.
34. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry", Advanced Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 8-9, 1997.
35. **Rucker, L.M.** "Ergonomics and the Dental Office", College of Dental Surgeons of British Columbia, March 14, 1997.
36. Beattie, C., Lunn, G. and **Rucker, L.M.** "Magnification and Surgical Telescopes in Dental Practice: How to Use Them, How to Choose Them", one day course, Vancouver Community College, Vancouver, B.C., April 12, 1997.
37. **Rucker, L.M.** "Problem-Based Learning Psychomotor Education: The U.B.C. Vision and the Next Generation of Clinical Simulation", 2 day intensive, Thammasat University, Faculty of Dentistry, Bangkok, Thailand, February 1998.
38. **Rucker, L.M.** and Sunell, S. "Surgical Telescopes and Clinical Posture - Dental Ergonomics for Dentists and Dental Hygienists", one day course, University of Washington, Seattle, Washington, December 5, 1998.
39. Pulos, L., Kuttner, L. and **Rucker, L.M.** "Rapid Induction Techniques & Other Considerations for Emergency Medicine & Dentistry", Intermediate/Advanced Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., January 30, 1999.
40. **Rucker, L.M.** "Introduction to Rapid Induction Techniques for Dentists & Medical Emergencies", Introductory Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., January 31, 1999.
41. **Rucker, L.M.** "Directed Practice for Dentistry & Medical Emergencies", Introductory Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., January 31, 1999.

42. **Rucker, L.M.** and Belenky, M.M. "Surgical Telescopes: How to Choose, Use, and Maximize the Benefits of Optical Magnification Devices in Dental Practice", Institute of Stomatology, Medical University of Łódź, Hands-on Course, Poland, September 9, 1999.
43. **Rucker, L.M.** and Sunell, S. "Surgical Telescopes and Clinical Posture, Dental Ergonomics for Dentists and Dental Hygienists", one day course, University of British Columbia, Vancouver, B.C., October 23, 1999.
44. **Rucker, L.M.** "Clinical Hypnosis in Dentistry", Institute of Stomatology, Medical University of Łódź, Poland, December 14, 1999.
45. **Rucker, L.M.** "Computer Integration in Dental Clinical Practice", Institute of Stomatology, Medical University of Łódź, Poland, December 16, 1999.
46. **Rucker, L.M.** "Surgical Magnification and Clinical Ergonomics", Institute of Stomatology, Medical University of Łódź, Poland, December 17, 1999.
47. **Rucker, L.M.** "Introduction to Rapid Induction Techniques for Dentists & Medical Emergencies", Introductory Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2000.
48. **Rucker, L.M.** "Directed Practice for Dentistry & Medical Emergencies", Introductory Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2000.
49. **Rucker, L.M.** "Clinical Ergonomics", Canadian Dental Association Pacific Dental Conference, Vancouver, B.C., March 10, 2000.
50. **Rucker, L.M.** "Concept Zero: Does the Workplace Work for You, or Do You Work for the Workplace?", Occupational and Environmental Hygiene Seminar Series, University of British Columbia, Vancouver, B.C., March 24, 2000.
51. **Rucker, L.M.** and Sunell, S. "Clinical Ergonomics and Surgical Magnification", one day hands-on workshop, Okanagan Periodontal Study Club, Kelowna, B.C., May 13, 2000.
52. **Rucker, L.M.** "Clinical Ergonomics for Orthodontic Certified Dental Assistants", two hour presentation, B.C. Orthodontic CDA Study Club, Vancouver, B.C., October 21, 2000.
53. **Rucker, L.M.** "Rapid Induction Techniques for Dentists and Emergency Medicine", Introductory Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2001.
54. **Rucker, L.M.** "Directed Practice for Dentistry and Medical Emergencies", Introductory Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2001.
55. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry", Intermediate/Advanced Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2001.
56. **Rucker, L.M.** "Clinical Hypnosis in Dentistry", participation course, Institute of Stomatology, Łódź, Poland, March 31, 2001.
57. **Rucker, L.M.**, Belenky, M.M. and Dzieciakowski, T. "Surgical Telescopes: How to Choose, Use, and Maximize the Benefits of Optical Magnification Devices in Dental Practice", Institute of Stomatology, Medical University of Łódź, Hands-on Course, Poland, September 15, 2001.

58. **Rucker, L.M.** "Clinical Hypnosis in Dentistry", participation course, Institute of Stomatology, Medical University of Łódź, Poland, September 16, 2001.
59. **Rucker, L.M.** "Rapid Induction Techniques for Dentists and Medical Emergencies", part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2002.
60. **Rucker, L.M.** "Directed Practice for Dentistry and Medical Emergencies", part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2002.
61. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry", Intermediate/Advanced Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2002.
62. **Rucker, L.M.** and Sunell, S. "Everyday Dental Ergonomics: How to Practice in Balance and Comfort", one day course, University of British Columbia, Vancouver, B.C., March 9, 2002.
63. **Rucker, L.M.** "Clinical Hypnosis for the Creative Writer", Special Hypnosis Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Holiday Inn Broadway, Vancouver, B.C., October 2002.
64. **Rucker, L.M.** "Rapid Induction Techniques for Dentists and Medical Emergencies", Basic Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2003.
65. **Rucker, L.M.** "Directed Practice for Dentistry and Medical Emergencies", part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2003.
66. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry", Intermediate/Advanced Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2003.
67. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry", Intermediate/Advanced Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., January 2004.
68. **Rucker, L.M.** "Rapid Induction Techniques for Dentists and Medical Emergencies", Basic Program, part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2004.
69. **Rucker, L.M.** "Directed Practice for Dentistry and Medical Emergencies", part of a Two-Day Hypnosis Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 2004.
70. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry", Advanced Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 4-5, 2006.
71. **Rucker, L.M.** "Everyday Dental Ergonomics: How to Practice in Balance and Comfort," Advanced Educational Training Study Club, Vancouver, B.C., January 17, 2007.
72. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry", Advanced Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 24-25, 2007.
73. **Rucker, L.M.** "Dental Ergonomics for Dental Assistants: Balance in roles of Primary and Secondary Operation," Lower Mainland Dental Assistants Society, Burnaby, B.C., Continuing Education Presentation. May 28, 2007.

74. **Rucker, L.M.** and Perrin, T. "Screenplay Writing Teams: The Mystery of It All." presentation at the International Mystery Writers' Festival at Riverpark Center. June 18, 2007
 75. **Rucker, L.M.** and Belenky, M.M. "Clinical Dentistry Made Healthy with Balanced Clinical Ergonomics", UBC Continuing Dental Education, Vancouver, BC, One-Day Hands-On Workshop, October 20, 2007.
 76. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry", Advanced Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 9-10, 2008.
 77. **Rucker, L.M.** "Clinical Ergonomics for Dental Hygiene: Staying Healthy by Making your Operatory Equipment Work for You" UBC Continuing Dental Education, Vancouver, BC, September 25, 2008.
 78. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry" Materials preparations and training for teaching faculty for two days of presentations, demonstrations, and clinical supervision. Advanced Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 14-15, 2009.
 79. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry" Two days of presentations, demonstrations, and clinical supervision. Advanced Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., March 20-21, 2010.
 80. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry" Presentations, demonstrations, and clinical supervision. Advanced Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 12-13, 2011. **Note: Fifteen (15) UBC undergraduate dental students participated in this workshop for the full weekend.**
 81. **Rucker, L.M.** and Perrin, T. "Good Times with Bad Bourbon: How Writing Collaboration Can Defy Geographical Distance and Annihilate Writer's Blocks at the Same Time", NewWestLitFest, New Westminster, BC, April 16, 2011.
 82. **Rucker, L.M.** "Clinical Dental Practice Made Comfortable with Balanced Clinical Ergonomics", Alpha Omega Dental Society, B.C. Chapter, November 29, 2011.
 83. **Rucker, L.M.** "Rapid Induction Techniques and Other Considerations for Emergency Medicine and Dentistry" Presentations, demonstrations, and clinical supervision. Advanced Training Seminar, Canadian Society of Clinical Hypnosis (B.C. Division), Vancouver, B.C., February 18-19, 2012.
 84. **Rucker, L.M.** "Ergonomics of Human Interfaces for Dental Equipment Design," UBC Mechanical Engineering Graduate Student group, Vancouver, BC, March 12, 2012.
 85. **Rucker, L.M.** "Clinical Hypnosis in Dentistry: What Every CDA Needs to Know." Burnaby New Westminster Dental Assistants Society, New Westminster, B.C., Continuing Education presentation. June 18, 2012.
 86. **Rucker, L.M.** "Clinical Hypnosis in Dentistry: Trance Camp 101." West Coast Dental Hygienists Association, Surrey, B.C., Continuing Education presentation. November 6, 2012.
- (f) *Visiting Lectures (indicate university/organization and dates)*

International Level Invited Lectureships

University of the Pacific, San Francisco, California

June 1983

University of Helsinki, Faculty of Dentistry, Helsinki, Finland

August 1984

Society of Japanese Dental Educators, Osaka, Japan	June 1985
University of Minnesota, School of Dentistry, Minneapolis	August 1985
University of Michigan, School of Dentistry, Ann Arbor, MI	June 1987
University of Maryland, College of Dentistry, Baltimore, Maryland	July 1987
Zurich Kanton Dental Society, Zurich, Switzerland	April 1989
New Jersey University Medical and Dental College, Newark, New Jersey	June 1989
World Health Organization, Geneva, Switzerland	November 1994
Aichi-Gakuin University, Faculty of Dentistry, Nagoya, Japan	January 1998
Thammasat University, Faculty of Dentistry, Bangkok, Thailand	February 1998
University of Malaya, Faculty of Dentistry, Malaysia	February 1998
American Association of Dental School Deans Conference, Key Largo, USA	November 1998
American Dental Association, Board of Trustees, Chicago, USA	April 1999
University of the Pacific, San Francisco, California	September 1999
Institute of Stomatology, Łódź, Poland	September 1999
Central European Dental Exhibition, Łódź, Poland	September 1999
Institute of Stomatology, Łódź, Poland	December 1999
Central European Dental Exhibition, Łódź, Poland	September 2000
Institute of Stomatology, Łódź, Poland	September 2000
Moscow State University of Medicine and Dentistry, Russia	September 2000
Institute of Stomatology, Łódź, Poland	March 2001
Stomatological Advances of the XXI Century Conference, Poznań, Poland	April 2001
Central European Dental Exhibition, Łódź, Poland	September 2001
Institute of Stomatology, Łódź, Poland	September 2001
Central European Dental Exhibition, Łódź, Poland	September 2002
Institute of Stomatology, Łódź, Poland	September 2002
Naukowo-Szkolenia (SALDENT) Conference, Poznań, Poland	March 2003
Marcinkowski Institute of the Medical University of Poznan	March 2003
Polish Institute of Clinical Ergonomics, Wroclaw, Poland	October 2006

International Mystery Writers' Festival, Riverpark, USA	June 2007
International Mystery Writers' Festival, Riverpark, USA	June 2008
Central European Dental Exhibition, Poznan, Poland	September 2009
University of Maryland, Baltimore College of Dentistry, USA	August 2010
University of Louisville, School of Dentistry, USA	July, 2011
University of Maryland, Baltimore College of Dentistry, USA	September 2011
Japan Dental Ergonomics Association, Fukuoka, Japan	December 2011
University of Louisville, School of Dentistry, USA	January, 2012
University of California, San Francisco School of Dentistry, USA	April, 2012
University of Louisville, School of Dentistry, USA	July, 2012
University of California, San Francisco School of Dentistry, USA	January, 2013
<u>National Level Invited Lectureships</u>	
Canadian Dental Association, Edmonton, Alberta	1983
University of Manitoba, Winnipeg, Manitoba	June 1984
Ontario Workers' Compensation Board, Toronto, Ontario	February 1996
Canadian Dental Association, Vancouver, BC	March 2000
University of Manitoba, Winnipeg, Manitoba	May 2000
McGill University, Montreal, Quebec	January 2003
<u>Regional Level Invited Lectureships</u>	
R.E.A.C.H. Medical Rounds Lectures, Vancouver	1981-1982
R.E.A.C.H. Board of Directors Lecture Series	1981-1982
Medical Rounds, St. Paul's Hospital, Vancouver	January 1985
Victoria and District Dental Society	January 1986
Canadian Society for Clinical Hypnosis	January 1987
British Columbia Periodical Writers' Association	April 1988
Canadian Society for Clinical Hypnosis	January 1989
Nikkei Medical Dental Society	May 1989
British Columbia Dental Hygiene Association	November 1989

College of Dental Surgeons of British Columbia Annual Meeting	March 1995
Open Learning Agency, Burnaby, B.C.	June 1995
Vancouver Community College	September 1995
Emily Carr College	December 1995
Greater Vancouver Regional District Municipal Safety Group, North Delta, B.C.	November 1996
Open Learning Agency	November 1996
Open Learning Agency	February 1997
Chinese Canadian Dental Society	November 1997
Holistic Health Practitioner Program, Langara College	March 1998
Future Problem Solving Workshop, Gifted Learners Program, Vancouver School Board	May 1998
Seniors' Wellness Group, Renfrew Park Community Center, Vancouver, B.C.	May 1998
Library Staff Colloquial, University of British Columbia, Vancouver, B.C.	April 2000
Seniors' Wellness Group, Marpole Community Center, Vancouver, B.C.	May 2000
Safety Day, University of British Columbia, Vancouver, B.C.	April 2002
School of Environment & Health, University of British Columbia, Vancouver, B.C.	January 2007

9. SCHOLARLY AND PROFESSIONAL ACTIVITIES

(a) *Areas of Special Interest and Accomplishments*

Anthropometric Studies: By performing basic measurements of surgical performance, we have moved well toward optimizing the human operator in the performance of fine motor skills. This has included field testing, design review, and specification of **Performance Simulation Laboratory hardware** prototypes and assembly products.

Dental Robotics: Design and development of a dental robotics handpiece. Precursor to haptic interface control designed as joint project between Mechanical Engineering and Dentistry. Linkages established led to current grant-supported development of design tools to evaluate and prescribe movement for laparoscopic surgery (see below).

Computer Ergonomics: Invention and investigation of the Performance Logic Keyboard for general application to all electronic and computer keyboard input, the ErgoBall Pointing Device (computer input pointing device), etc. [see Publications Record, Section 5 for a complete listing of inventions, innovations and developments].

Dental Clinical Ergonomics:

- ◆ Invention of devices and instruments for optimizing clinical accuracy and ergonomics, including the Declination Angle Measurement gauge (for surgical telescopes), etc. [see Publications Record, Section 5 for a complete listing of inventions, innovations and developments].
- ◆ Invention of devices and instruments for optimizing pre-clinical and clinical dental education, including the **glide-bar simulation articulation device**, the **Handpiece Pen**, etc. [see Publications Record, Section 5 for a complete listing of inventions, innovations and developments].
- ◆ Invention and design of **STAR**, a **Surgical Telescope-based Augmented Reality hands-free, heads-up computer-based clinical input/output device** [see Publications Record, Section 5 for a complete listing of inventions, innovations and developments].

Clinical and Surgical Computer Interface Development: We now have four separate companies in various stages of involvement with the University on this project, which we intend to develop to full commercial availability. The STAR project has moved from concept and detailed discussions with all four corporations to agreements negotiated through the Faculty Development Office and the University Industrial Liaison Office. I am the UBC coordinator of this project, and it will involve assistance and cooperation from many faculty members to achieve success. This head-mounted computer input/output device should allow dentists (and surgeons in general) to have full, hands-free access to all computer records input and output, to have hands-free control of the surgical/operatory equipment and support hardware, and to incorporate augmented reality into diagnosis and treatment in a way which has never before been possible. It should alter the way all dentists and surgeons work, and make the clinical environment safer and more efficient for everyone, including patients.

Computer Applications in Dental Practice and Teaching: On-going investigations of computer software and hardware developments as applied to clinical practices and teaching (specifically for clinical ergonomics, patient simulation and clinical treatment).

Teaching and Service Applications of My Research: Development of surgical ergonomic concepts (applied performance logic) which is used in undergraduate teaching in an effort to prevent Cumulative Trauma Disorders in oral health workers, and is also made available to clinicians and assistants in practice for the same goals. This work has involved collaboration with other institutions, most notably the University of Maryland and the Human Performance Institute in Japan. As a result of my work, I have become an international rehabilitation consulting resource, regularly contacted by health professionals (dentists, dental hygienists, and dental assistants who have been injured and who wish to return to work) and their insurance companies.

Product Spinoffs and Other Physical Applications of My Research: My work has led to development and manufacture of products which are aimed at reducing the injury risk of workers who repetitively perform psychomotor tasks. Surgeons, laboratory technicians, and other workers who repetitively perform ultrafine psychomotor tasks often use surgical magnification. I have pioneered the concept of custom declination surgical telescopes. My work with Designs For Vision, Inc. has resulted in the availability of such an option on their products. Nearly 400 dentists in B.C. now are able to work with custom declination surgical telescopes because of my research work here at UBC. Another spinoff of Performance Logic research here at UBC was the development of the ErgoLogic computer keyboard. This keyboard was designed for computer users who perform keyboard work for two or more hours per day, and who are therefore at an elevated statistical risk for developing certain types of Repetitive Strain Injuries. The keyboard was patented and was co-developed with Key Tronic Corporation (North America's largest keyboard manufacturer). It has been manufactured and sold world-wide under several brand names since 1994. About fifteen thousand of the keyboards have been sold. A 2006 feature article in the online panel "E-mailBattles.com" declared the product to be the most ergonomically responsible solution to the "world's best RSI keyboard" for high-end, high-risk users. (http://www.emailbattles.com/2006/04/24/other_aadehidhca_ia/)

The **Dental Clinical Ergonomics Research Group** here at UBC (of which I am Director) completed three years of clinical ergonomics research in cooperation with the disability insurance industry and the Workers' Compensation Board. We have examined the musculoskeletal status of dentists and hygienists via an extensive survey (not dissimilar to that of Shugars in the early 1980s) and in particular evaluated the potential and real preventive impact of clinical ergonomics education and of surgical magnification usage on reduction of risks for experiencing musculoskeletal pain and discomfort in eight regions of clinicians' bodies. Half of our 600 respondents had been exposed to clinical ergonomics consistency throughout their education, and the other half had been trained in dental schools without specific clinical ergonomics education. In short the study allowed us to clearly define Postural and Positional Practice Profiles which are associated with increased risks of musculoskeletal pain and discomfort, and Profiles which are associated with decreased risks. The results of this research have been published to many publications to date, and were incorporated by **Rucker, Belenky and Sunell into a textbook during 2012.**

(b) Research or Equivalent Grants [indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)]

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)
Dental Alumni Fund Grant	The study of visual acuity and its relationship to the anthropometric, educational, and clinical performance parameters as measured in the Performance Simulation setting	C	\$1,500	1984-1985	Dr. L. Rucker	
Dental Alumni	Comparing teaching methodologies for the introduction and use of a dental mirror	C	\$400	1984-1985	Dr. M. Boyd	Dr. L. Rucker
Dental Alumni Fund Grant	The study of lenses and magnification as related to Visual Fine Acuity and to the anthropometric, educational, and clinical performance parameters as measured in the Performance Simulation setting	C	\$1,100	1986-1987	Dr. L. Rucker	
Ivoclar-Vivadent Canada Ltd.	The study of clinical evaluation of porcelain and resin veneers	NC	\$2,500 \$3,500 \$4,000	86-87 87-88 88-89	Dr. L. Rucker	Drs. W. Richter, M. MacEntee and A. Richardson

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)
Designs for Vision Inc.	To study the effects of custom-set surgical telescopes on dental student performance in the Performance Simulation Laboratory	NC	\$20,600 \$5,000	1990-1991 1991-1992	Dr. L. Rucker	
UBC Teaching and Learning Enhancement Fund	The Performance Simulation Dental Teaching Laboratory: Update and expansion to include dental specialty areas, and current teaching/ learning technologies	C	\$30,000	1991-1992		Drs. L. Rucker and M. Boyd
National Research Council of Canada	To develop a fully operational prototype of the Transformer Keyboard	C	\$61,500	1991-1992	Dr. L. Rucker	
Science Council of British Columbia	To study the commercial feasibility of full technology transfer of the Transformer Keyboard	C	\$19,985	1991-1992	Dr. L. Rucker	
UBC Teaching and Learning Enhancement Fund	The Performance Simulation Dental Teaching Laboratory	C	\$40,000	1992-1993		Drs. L. Rucker and M. Boyd
Workers' Compensation Board of British Columbia	To evaluate the preventive effects of clinical ergonomics training and surgical magnification	C	\$53,979	1997-2000	Dr. L. Rucker	Ms. S. Sunell
KaVo Corporation & B.C. Student Summer Works	Studies on SonicSys restorative systems	C	\$1,500	1998	Dr. L. Rucker	
Association of Canadian Community Colleges (Partnerships for Tomorrow Program)	Investigation and collaboration for research and educational methodologies – Stomatological Institute of Łódź, Poland and Marcinkowski Institute, Poznań	C	\$1,200 \$3,400 \$3,500 \$4,100 \$2,800 \$4,940	1999 2000 2001 2002 2002 2003	Dr. L. Rucker	

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)
Japan Society for the Promotion of Science	Posture and its effect upon stress of dentists during treatment	C	¥5,600,000 (≈ \$72,000)	2000-2001	Dr. T. Takeichi	Drs. Y. Ito and L. Rucker
UBC Teaching and Learning Enhancement Fund	Interactive Virtual Tooth Reality Part 1 - Morphology and Part 2 – Restoration	C	\$32,188	2001-2002	Dr. B. Chehroudi	Drs. D. Brunette and L. Rucker
National Science and Engineering Research Council of Canada	Quantifying the fidelity of surgical simulators with applications to surgical training, surgical skill evaluation, equipment evaluation and equipment design	C	\$166,400	2001-2003	Dr. A. Hodgson	Drs. K. MacLean, L. Rucker, A. Qayumi and A. Nagy
UBC Teaching and Learning Enhancement Fund	Virtual Reality in Dentistry: Integration of Animation and VR Object Movies for Teaching and Learning Anatomy, Restorative Dentistry, and Endodontics	C	\$23,484	2002-2003	Dr. B. Chehroudi	Drs. L. Rucker and J. Coil
Workers' Compensation Board of British Columbia	Ergonomics Health Promotion for B.C. Dental Offices	C	\$61,725	2003-2004	Dr. L. Rucker	Drs. S. Sunell and C. Cramer
Association of Universities and Colleges of Canada (Partnerships for Tomorrow Phase II Program)	Dental Professional Educational Exchange with Marcinkowski Institute, Poznań, Poland	C	\$6,347	2004	Dr. L. Rucker	
ADEA Council of Sections Project Pool	Clinical Simulation Inventory of North American Dental Schools	C	\$12,000	2005	Dr. K. Gardner	Dr. L. Rucker
Canadian Foundation for Dental Hygiene Research & Education (CFDHRE)	Utilization of Research by Canadian Dental Hygienists	C	\$7,522	2006-2007	Dr. S. Sunell	Dr. L. Rucker

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)
Kerr Orascoptic	Evaluation of Surgical Telescope mounted LED light sources	NC	\$3,250	2009-2010	Dr. I. Emanuels	Dr. L. Rucker

(c) *Invited Presentations at Scientific Meetings*

[See also Publications Record, Section 3]

1. **Rucker, L.M.** and Belenky, M.M. "The Second International Workshop on Performance Simulation and Numerical Terminology in Dental Education", University of Osaka, Japan, June 1985.
2. **Rucker, L.M.** "Performance Simulation: The Method", presented as part of the symposium entitled "Performance Simulation in Professional Education", American Educational Research Association Annual Meeting, San Francisco, California, April 19, 1986.
3. **Rucker, L.M.** "The Ergonomic Realities of Dentistry in the 90's", Pacific Coast Society of Orthodontists Annual Session, Monterey, California, September 30, 1996.
4. **Rucker, L.M.** "Clinical Ergonomics and Surgical Magnification: Optimal Occupational Health", Central European Dental Exhibition (CEDE 2000) Lecture, Łódź, Poland, September 2000.
5. **Rucker, L.M.** "Clinical Ergonomics and Surgical Magnification: Optimal Occupational Health", Central European Dental Exhibition (CEDE 2001) Lecture, Łódź, Poland, September 2001.
6. **Rucker, L.M.** "Clinical Ergonomics and Surgical Magnification: Optimal Occupational Health", Central European Dental Exhibition (CEDE 2002) Lecture, Łódź, Poland, September 2002.
7. **Rucker, L.M.** "Symposium on Contemporary Educational Strategies in Dental Education: Their Impact on Teaching and Learning --- Postponement of Pre-Clinical Instruction until the End of the Second Year", AADR 32nd Annual Meeting and Exhibition, San Antonio, Texas, March 12, 2003.
8. **Rucker, L.M.** " Surgical magnification and performer-centered dental clinical ergonomics Does your equipment work for you ... or *do you work for your equipment?*", 3rd International Clinical Ergonomics Forum, Wroclaw, Poland, October 6, 2006.
9. **Rucker, L.M.** and Porth, C. "Operatory design for optimized clinical learning", AADR 38th Annual Meeting and Exhibition, Phoenix Arizona, March 17, 2009.
10. **Rucker, L.M.** "Clinical Ergonomics and Surgical Magnification: Optimal Occupational Health", Central European Dental Exhibition (CEDE 2000) Lecture, Łódź, Poland, September 2000.
11. **Rucker, L.M.** and Belenky, M. M. "Equipment Selection, Operatory Design, and Surgical Magnification: Ergonomics for High Efficiency, Maximum Productivity, and Personal Comfort", Central European Dental Exhibition (CEDE 2009) Lecture, Poznań, Poland, September 25, 2009.
12. **Rucker, L.M.** Emanuels, I. and Belenky, M. "PBL Skills for Integration of Clinical Ergonomics", 7th International Conference on Problem-Based Learning in Dentistry: Elements of a Successful Program, Whistler, BC, September 21-24, 2011.

13. Emanuels, I. **Rucker, L.M.** and Belenky, M. M. "Problem-based Psychomotor Skills Education", 7th International Conference on Problem-Based Learning in Dentistry: Elements of a Successful Program, Whistler, BC, September 21-24, 2011.
14. Rucker, B.G. and **Rucker, L.M.** "Teaching Sexual Intimacy in China". Canadian Sex Research Forum (CSRF) Annual Conference, Vancouver, BC, September 24, 2011.
15. **Rucker, L.M.** "Dental Clinical Ergonomics Assessment", Japanese Dental Ergonomics Association (JDEA) Keynote Lecture, Fukuoka, Japan, December 18, 2011.
16. **Rucker, L.M.** "**The Five Criteria for Ergonomically Healthy Clinical Practice**", **University of California, San Francisco (UCSF) Dental Alumni Association Annual Scientific Meeting, San Francisco, California, April 20, 2012.**

(d) *Other Presentations*

[See Publications Record, Section 3]

(e) *Media Appearances and Presentations*

1. **Rucker, L.M.** "The Collapse of the Government Denticare Scheme and its Effects upon Health Care", news interview for BCTV Six O'Clock News, August 26, 1982.
2. **Rucker, L.M.** "An Hypnotic Dentist", The Courier, Vancouver, June, 1988.
3. **Rucker, L.M.** "Clinical Hypnosis in Clinical Dentistry", radio interview with Dr. David Suzuki, aired on 270 radio stations across Canada during August and September 1988.
4. **Rucker, L.M.** "The U.B.C. Faculty of Dentistry Performance Simulation Laboratory", presentation and interview for BCTV News, March 8, 1990.
5. **Rucker, L.M.** "Peak Performance Training in Dentistry", interview by Abe Hefter, UBC Reports, January, 1991.
6. **Rucker, L.M.** "Modern Advances in Dentistry: Clinical Hypnosis in Clinical Care", CBC News Special (aired as part of "The National: News at Six"), approximately 3 minutes, February 23, 1994.
7. **Rucker, L.M.** "Lance Rucker Follows His Nose: Solving the Mystery of a Hyper-Creative Dentist", news article by John Lyttle in the Canadian Dental Association *Communique*, page 11, May/June 2001.
8. **Rucker, L.M.** "ULSD's Simulation Expertise Recognized Worldwide", news article in *InciDentals*, a publication of the University of Louisville School of Dentistry, page 14, Fall 2002.
9. **Rucker, L.M.** Radio interview "UBC Faculty of Dentistry professor wins Angie nomination" CBC for Victoria Books and Arts broadcast. May 28, 2007.
10. **Rucker, L.M.** Radio interview "UBC Faculty of Dentistry professor wins Angie award" CFUN Vancouver. June 25, 2007.
11. **Rucker, L.M.** "**The Winning Hand: Ergonomics and Hand Pain**", interview by Rebecca Stone, *Mentor*, September, 2012, pp. 28-31.

(f) *Conference / Workshop Participation (Organizer, Keynote Speaker, etc.)*

Chairman and Organizer, Second North American Workshop on Performance Logic and Numeric Terminology in Dental Education, Vancouver, B.C., June 1986.

Co-Chairman, The Third International Congress on Performance Simulation in Dental Education, "Sim 94", Seattle, Washington, March 1994.

Panel Moderator with Michael Belenky, Third International Congress on Performance Simulation, "Simulation: Impact on Dental Education", "From Posture to Performance: Human-Centered Ergonomics in Clinical Simulation", "Overview of Dental Simulation in Dental Education", Seattle, Washington, March 15-16, 1994.

Chairman, Pacific Region, Conference of Operative Dentistry Educators (C.O.D.E.), 1997-1998.

Co-Chairman, Special Interest Group on Performance Logic and Simulation, "Simulation in Dental Schools of North America: Individual Reports of Advances in Technology and Methods for the Future of Pre-clinical Psychomotor Education", AADS Annual Session and Exhibition, Minneapolis, Minnesota, February 28-March 4, 1998.

Chairman, Special Interest Group on Clinical Simulation, "Multimedia Clinical Simulations: Reports on Clinical Educational Hardware and Software at the Technological Leading Edge of Dental Education", AADS 76th Annual Session and Exposition, Vancouver, B.C., March 9, 1999.

Chairman, Special Interest Group on Clinical Simulation, "Taking the 'Pre' Out of 'Preclinical': Innovative Approaches for Clinical Simulation", AADS 77th Annual Session and Exposition, Washington, DC, April 4, 2000.

Plenary Chairman, Frontiers of Hypnosis, "Empirically-Based Hypnotherapy", 5th National Assembly of the Federation of Canadian Societies of Clinical Hypnosis, Vancouver, B.C., October 20, 2000.

Chairman, Special Interest Group and **Moderator**, Symposium on Clinical Simulation, "Lead to Action: Making the Choices and Making Them Work", ADEA 79th Annual Session and Exposition, San Diego, California, March 5, 2002.

Participant and Presenter, 7th International Conference on Problem-Based Learning in Dentistry: Elements of a Successful Program, Whistler, BC, September 21-24, 2011.

(g) *Summer Student Supervision*

"Effects of Low-Magnification Surgical Telescopes on Preclinical Operative Dental Performance", Yi-Mun Leong, 1992.

"UBC Faculty of Dentistry Web Site Design and Construction", Alex Lohachitranont, 1996.

"UBC Faculty of Dentistry Orientation Video", Jacalyn Sollid, 1997.

"Studies on Sonicflex Restorative Systems", Vohn Rosang, 1998.

"Clinical Skills Preparation/Evaluation Assistance", Angie Lohachitranont, 1999.

"Clinical Skills Intensive Training", Jake Bessie, 2000.

"Clinical Skills Intensive Training", Sophia Makkanji, 2001.

"Clinical Skills Intensive Training", Pita Dhaliwal, 2002.

"Clinical Skills Intensive Training", Camellia Parsa, 2003.

"Clinical Skills Intensive Training", Camellia Parsa, 2004.

"Clinical Skills Intensive Training", Camellia Parsa, 2005.

"Clinical Skills Intensive Training", Brian Chung, 2006.

"Clinical Psychomotor Skills Instruction", Brian Chung, 2007.

"Clinical Psychomotor Skills Instruction", Melody Lau, 2008.

(h) *Work/Study Student Supervision*

"Evaluation of the preventive effects of clinical ergonomics training and surgical magnification", Nori MacGowan, 1998-2000.

"Evaluation of the preventive effects of clinical ergonomics training and surgical magnification", Jane Burns, 1998-2000.

"Surgical Magnification: STEP and SMWS Sector Updating", Jake Bessie, 2001-2003.

"Integration of Dentistry Resource Information for Doctor, Patient, and Society courses at UBC," Erin Burley, 2002.

10. SERVICE TO THE UNIVERSITY

(a) *Memberships on Committees (including offices held and dates)*

University

University of B.C. Computer Users Group	1984-1995
President's Advisory Committee for the Selection of a Head for the Department of Restorative Dentistry	1985
Advisory Committee on Information Technology (ACIT)	
Standing Committee on Digital Scholarly Resources (DSR)	1996-1998
Subcommittee on UBC Copyright Policy	1996-1998
Dean's Strategic Initiative Focus Group for University Reorganization	1997
President's Advisory Committee for the Selection of a Head for the Department of Oral Biological and Medical Sciences	1997-1998
President's Advisory Committee for the Selection of a Head for the Department of Oral Health Sciences	1997-1998
University Committee for Academic Accommodation for Students with Disabilities	1998-1999
Teaching Laboratory Improvement Committee	2007-2009
Senator, University Faculty Senate	2008-date
Senate Academic Policy Committee, Member	2008-2011
Senate Academic Appeals Committee, Member	2008-date

Senate Academic Appeals Committee, Co-Chair	2010-2011
Senate Academic Appeals Committee, Chair	2011-date
Senate Academic Building Needs Committee, Member	2011-date

University Planning and Property Advisory Committee (PPAC), Member	2011-date
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Faculty

Appointment to Faculty Council, Part-time Instructor Representative	September 1982
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Instrument Committee	1983-1990, 1995-1997
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Dental Admissions Committee (Undergraduate and International Dental Degree Completion Program [IDDCP])	1985-1990, 2000-date
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Open House Clinic Tours coordinator	2007-2010, 2013
Admissions Counselor	2001-2005
IDDCP Chief Examiner for Psychomotor Skills Evaluation	2001-2004

Dental Hygiene Admissions Committee	2012-date
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Dental Curriculum Committee	1986-1991
Timetable Subcommittee of the Curriculum Committee	1986-1989
Chairman	1986-1989

Clinic Equipment Review Committee	
Evaluation Testing Resource for Prototypes, Specification Review for Clinic Dental Equipment	1986-2011

Subcommittee to Evaluate and Revise the First and Second Year Curriculum	1987-1988
Chairman	1987-1988

Screening Documentation Committee	1987-1988
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Peer Review Committee for Teaching Dentistry	1993-2001
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Faculty of Dentistry InterNet Web Site Committee	1995-1996
Chairman	1995-1996

ADI (Assistant Dentist Interaction) Program Development	1995-1996
Program Developer, ADI Four-Handed Dentistry pilot programs	1996

Academic Progress Committee Chairman	1996
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DENT 400 Curriculum (PBL) Committee	1996-1998
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DENT 410 Curriculum (PBL) Committee	1996-1998
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Micromotor Skills Committee	1996-1999
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Clinic Design and Development Group for New Dental Clinical Facility (New Clinic Group)	1997-1999
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Clinic Management Subcommittee on Equipment and Supplies	1997-2011
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Clinic Information Systems Committee	1997-2010
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Clinical Education Systems Committee	1997-2005
Admissions Committee, International Dental Degree Completion Program	1998-1999
New Clinic Committee (Dean's Advisory Committee which steers design and development of the UBC Dental Clinics for completion in 2006) Clinic Flow Consultation Subcommittee	1999-2006 2002-2006
Operative Clinical Liaison Program Manager	2006-2011
Integrated Care Clinic Instructors' Resource Web Site (co-development with Dr. Cheri Porth)	2006-2011
Establishment and promotion of the American College of Dentists' Ethics and Professionalism Award	2007-date
Co-coordinator (with Dr. J. Richardson) of the weekly e ² (Educational Enhancement) Forum for UBC Dental Faculty, including ICC instructors	2010-2011
Organizer and Chair, UBC Faculty of Dentistry Professional Dental Educators Forum	2010
Establishment and promotion of the American College of Dentists' Professional Leadership Award	2011-date

Department

Selection Committee for Assistant Professor in Operative Dentistry/Prosthodontics	1987
Selection Committee for Assistant Professor in Periodontics	1995
Selection Committee for Assistant Professor in Pediatric Dentistry	1995
Selection Committee for Assistant Professor in Restorative Dentistry	2001-2006
Operative Clinical Liaison Program Manager	2006-2011
Supervisor, Clinical Ergonomics Integration into the DENT 410 Morphology module	2007

(b) Other Service (including dates)

Director of Performance Simulation Laboratory	1983-1999
Clinical Simulation Advisor to all clinical divisions	1984-1990, 1995-2011
Class Advisor (2nd Year Class)	1989-1991, 2004-2007
Class Advisor 3rd Year Class)	2007-2011
Director of Clinical Ergonomics	1997-date
Chairman , Division of Operative Dentistry	1987-2007
Chairman , Division of General Dentistry	2008-date

Presenter and Facilitator , Surgical Telescope Symposium	1990-date
Design of Clinical Simulation Laboratory (CSL) equipment installations (including replacement of mannequin heads and addition of fiber optic support for all CSL student preclinical work stations). During this period I also oversaw the contracting and actual construction to my specifications of the Performance Simulation Laboratory storage areas, audio visual areas systems, teaching and supply support areas, biomaterials dispensing, management, and disposal stations which affects all student preclinical laboratory work at the University of British Columbia Faculty of Dentistry. Site inspections and follow-up reviews of the laboratory were completed over a three month period.	September-November 1993
Development of the Clinical Education Centre (CEC) concept for the Faculty of Dentistry's clinical and simulation training programs	1995-2010
Design and development of the International Student Clinical Simulation Facility	April-September 1996
Redesign of dedicated simulation laboratory and adjacent large classroom (JBM 248 & 248A)	1997, 1999
Class Academic Advisor (3rd Year Class)	1998-1999, 2005-2011
Design / Redesign of New Clinic Operatory	1998-2011
Class Advisor (4th Year Class)	1999-2000
Planning and design of the Clinical Education Centre (CEC) and the new clinical and simulation training facilities for the Faculty of Dentistry	1999-2011
Class Advisor (1st Year Class)	2000-2003
Designer of Bite Plane Simulation Block Preparation Trainer (Arch Form Teaching Simulator) manufactured by Frasco GmbH, Germany	2001
Facilitator of Agreement for Cooperation between UBC and the Medical University of Łódź, Poland	2001
Ergonomic equipment design consultations for the new dental clinic at UBC. Travel to Helsinki, Finland at the Planmeca Oy offices and research facility	May 2004
Set-up and testing of new prototypes plus design refinements of new equipment features at the OPTEST center (UBC Finning Site)	2004-2005
Set-up and testing of new prototypes plus design refinements of new equipment features at the UBC Staging Test Site (former UBC JBM 248)	2005-2006
Design and Testing of mannequin torso and mannequin head articulation prototypes, plus design refinements of new equipment features (patient chair firmware and motorized light prototypes) at the UBC Oral Health Centre. Inventory of the open and closed operatory layouts (with Flannery) as part of the clinical equipment installation and assessment process.	2005-2007
Pilot testing of Peer Review process for Dr. Karen Gardner	2006-2007

11. SERVICE TO THE COMMUNITY

(a) *Memberships on Scholarly Societies (including offices held and dates)*

International

Licentiate - State of California	1974-date
Federation Dentaire Internationale (Member)	1983-1994
American Dental Education Association (Member)	1983-date
Clinical Simulation Special Interest Group (Chairman)	1998-2002
Clinical Simulation Section Councillor	2001-2007
House of Delegates (Member)	2003-2007
American Society of Clinical Hypnosis (Member)	1985-1989
Conference of Operative Dentistry Educators (C.O.D.E.)	1984-date
Committee Chairman and Regional Coordinator	1989, 1998-1999
World Future Society	1998-2001
Academy of Operative Dentistry (Member)	2000
American College of Dentists (Fellow)	2001-2011
Ethics Coordinator, B.C. Section, Regency 8	2003-date
Institute of Dental Ergonomics (Teaching Faculty Member)	2005-2006

National

Canadian Dental Association (Member)	1974-date
Periodical Writers' Association of Canada (Full Professional Member)	1981-1989
Affiliate of Performing Rights Organization of Canada (SOCAN)	1983-date
Association of Canadian Faculties of Dentistry (Member)	1983-2011
Canadian Society of Clinical Hypnosis (CSCH)	1984-date
Teaching Faculty Member	1986-date
Membership Chairman of B.C. Chapter	1987-1988
Secretary Treasurer of B.C. Chapter	1988-1989
Vice President for Education of B.C. Chapter	1989-1990
Secretary Treasurer of B.C. Chapter	1990-1991
Executive Member of B.C. Chapter	1996-date

Provincial

College of Dental Surgeons of British Columbia (Member and Licentiate)	1974-date
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(b) *Memberships on Other Societies (including offices held and dates)*

Lions Club International	1975-1980
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(c) *Memberships on Scholarly Committees (including offices held and dates)*

Canadian Standards Association (CSA)

Expert reviewer for:	
Dental Materials and Devices (TC106)	
Dental Standards Committee	1991-2011

International Standards Organization (ISO)

Technical Committee on Dentistry (TC106)	1993-2011
Technical Committee on Computer Technology (JTC1/SC18)	1993-2011
Committee and Reviewer for Computer Input Devices (JTC1/WG17)	1993-2011

(d) *Memberships on Other Committees (including offices held and dates)*

ACTRA (Association of Canadian Television and Radio Actors)	1995-2005
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UBCP (Union of British Columbia Performers)
Associate Professional Member

1996-2005

(e) *Reviewer (journal, agency, etc. including dates)*

Reviewer, Canadian Dental Association Journal

1988-date

Reviewer, Patient Education and Counselling

1994-2011

Reviewer, European Journal of Dental Education

1997-date

Software Module Reviewer, American College of Dentists

2003-2009

Reviewer, Journal of Dental Education

2004-date

Reviewer, Journal of the California Dental Association

2004-date

Reviewer, Gerodontology

2013-date

(f) *Consultant (indicate organization and dates)*

International Consultancies

Human Performance Institute Research **Consultant**

November 1983-2011

W.H.O. Consultation/Review of HPI Programs and Progress, Atami, Japan

December 1983

Member, W.H.O. Panel for Consultation/Review of Numeric Terminology
for Oral Health Care, Baltimore, MD

1984

Consultant, W.H.O. Oral Health Section, for Review of Oral Health
Care Model Systems and Formats

December 1984-2005

Consultant, W.H.O. Oral Health Section, Performance Simulation Training
Formats, Geneva, Switzerland

April 1985

Consultant to various corporations *for development of technological equipment designs:*

J. Morita Corporation	1983-2001
A-dec Corporation	1988-date
KaVo	1997-2004
Sirona	1997-2004
Planmeca Oy	2004-2011
Forest Dental	2010-date

Consultant, Jamaican Oral Health, Dental Hygiene and Dental Assisting Programs, for ergonomic assessment of clinics for University of Technology, Kingston. 2010-2011

Consultant, JCDA-OASIS (Online Advice and Searchable Information System) project group for the Canadian Dental Association 2011-date

National and Regional Consultancies

Consultant to the College of Dental Surgeons of British Columbia for the design of Continuing Education/Study Club clinical facility 1990

Consultant to the Children's Hospital Dental Service for review and design of their operating rooms 1990-1991

Consultant to various disability insurance corporations for Ergonomic Practice Assessments. I have been involved in multiple *medical-legal reviews of the ergonomic practices of injured dental and dental hygiene claimants*. I have also been contracted to *organize, manage and assist in rehabilitation of injured professionals:*

Unum/Provident/Paul Revere	1997-2003
Great-West Life	1997-2011
Blue Cross	1997-2010
Sun Life	1997-2011
Imperial Life	1997-2003

Dental and ergonomic rehabilitation consultant to Viewpoint Medical Assessment Services 1999-date

Consultations with the Department of Adult Restorative Dentistry, University of Nebraska Medical Center College of Dentistry, Lincoln, Nebraska 2004-2006

Consultations with the School of Dental Medicine, State University of New York at Buffalo including several presentations for visits of faculty to UBC plus direct consultation with Adec Corporation to help Buffalo explore feasibility of clinic-based simulation at their Faculty 2004-2005

Consultation for the Canadian Armed Forces Dental Clinics the Department of Adult Restorative Dentistry, University of Nebraska Medical Center College of Dentistry, Lincoln, Nebraska 2004-2006

Consultation with the Clinic Administration, Midwestern University, Arizona 2006

Consultation with the Dental Clinic Administration, Columbia University, New York 2007

- Consultation** with the East Main Drop-In Clinic (Dr. Alex Yule) regarding layouts of clinical operatories and equipment requirements to allow practice with ergonomic balance and aseptic efficiency. 2006-2007
- Consultation** for clinical ergonomics program support at the University of Florida, Gainesville. 2010
- Consultation** with the Dental Clinic Administration, Boston University. 2010

(g) *Other Service to the Community*

- U.B.C. Speaker's Bureau - **Registered Speaker**
Clinical Hypnosis, Computer Workstation Repetitive Strain Injuries, Dental Ergonomics 1986-2011
- Director**, Surgical Telescope Evaluation Program (STEP) 1996-date
- B.C. Dancesport Federation, competitor and demonstrator in Ballroom divisions 1987-2005
- Canadian Aikido Federation, Second Kyu (1997) 1987-2011
- Private Practice in Clinical Ergonomics 1995-date
- Founder and CEO, ErgoLogic Enterprises 1990-1997
- Co-Founder, Ubiquity Development Corporation 1998-2002
- Founder and CEO, ErgoSum Development Corporation 1999-date
- Judge, "Speak Out" for the United Nations Pilgrimage for Youth, I.O.O.F. sponsorship 2011

12. **AWARDS AND DISTINCTIONS**

(a) *Awards for Teaching (indicate name of award, awarding organizations, date)*

- Osaka University Faculty of Dentistry Certificate
for special contributions to **continuing dental education** at Osaka University 1985
- Nominee, UBC Excellence in Teaching Award
recognition of **innovation and sustained standard of excellence in teaching** 1991
- W.W. Wood Award, Association of Canadian Faculties of Dentistry,
University of British Columbia Dental Educator of the Year
for contributions to **development and continuation of dental undergraduate program** 1992
- W.W. Wood Award, Association of Canadian Faculties of Dentistry,
University of British Columbia Dental Educator of the Year
for **excellence in teaching** and contributions to development of the dental undergraduate
program 2000

(b) *Awards for Scholarship prior to final degree (indicate name of award, awarding organizations, date)*

- President's Scholarship, Bellarmine College 1968
- USCF Dean's Citation Award, UCSF School of Dentistry 1974

American Association of Endodontists Certificate of Merit 1974

USCF Faculty Award for Gold Foil, UCSF School of Dentistry 1974

(c) *Awards for Service (indicate name of award, awarding organizations, date)*

Awarded **Life Membership in the REACH Centre Association**
in recognition of special services rendered to REACH Community Health Centre 1990

(d) *Professional Awards (indicate name of award, awarding organizations, date)*

Fellowship, American College of Dentists 2001

(e) *Artistic Awards (indicate name of award, awarding organizations, date)*

Presented the "Angie" award for Best Mystery Screenplay of 2007 at the International Mystery Writers' Festival, Riverpark, Owensboro, Kentucky.
June 2007

13. **OTHER RELEVANT INFORMATION**

Establishment of Dental Department, McBride and District Hospital 1975

Private Practice Management **Consultations** for B.C. Dentists September-December 1982

Establishment (with Dr. B. Krasse) of the UBC - R.E.A.C.H. Saliva Testing Pilot Program 1983

Development of instructor orientation materials for instructors involved in the teaching of Clinical Ergonomics at UBC 1983-date

Expert Witness for B.C. Provincial Crown Council September 1983-January 1984

Establishment of UBC - R.E.A.C.H. Dental Student Teaching Program Liaison, including Community Health Project Program Development and Placement of Dental Hygiene students 1984

Establishment of student rotations for evaluation of new clinic equipment re: Performance Logic parameters 1985-1986

Establishment of Network Communication for Interfaculty Information transfer re: Performance Logic/Numerical Terminology information with Universities of Maryland, Minnesota, and other participants in the North American Performance Logic Network 1987

Development of original university-founded technology for the manufacturing/consumer sector. Toward this end I have been involved with strategic manufacturing and marketing partnerships with Key Tronic Corporation of Spokane (the continent's largest keyboard manufacturer) in Malaysia and Singapore in both the computer and dental equipment industries. The performance logic-based ErgoLogic tetrahedral keyboard, as well as the Key Tronic FLEXPRO keyboard, began commercial shipment (in volume) in May, 1994.

Supervision of ergonomic and corporate development and testing of computer keyboard products, in particular to review ISO, CSA, DIN, FCC and all other ergonomic/technical standards and qualifications for the ErgoLogic and other keyboards.

Collaboration with corporate and industrial representatives to provide technical support for custom-declination optical devices (surgical telescopes). Two corporations are now producing such telescopes, and a third is in design phase to apply their optical technology to the custom declination concepts which we at UBC first reported. Based on this work, a high percentage of our dental faculty are now able to operate in both optical and postural balance, and all of our incoming students are now able to operate with the same high precision visual discriminations at the preclinical level as they have available to them during the clinical practice years.

Establishment and direction of the Surgical Telescope Evaluation Program (STEP) to evaluate issues related to surgical magnification and surgical telescope equipment. I have assembled a multidisciplinary team of specialists (representing dentistry, medicine, microsurgery, ergonomics, ophthalmology, optometry, and opticians) to study basic and applied issues related to surgical magnification. Much of the information arising from these discussions sheds new light on long-standing problems and offers new and simpler solutions for this field.

Design and development of an InterNet-based publication and communication system (the Surgical Magnification Web Site), which will be launching a refereed *Journal of Clinical Ergonomics*.

Promoted Clinical Simulation from Special Interest Group to new full Section status in the American Dental Education Association (ADEA).

Development of hardware and computer software to support optimal clinical ergonomics for dental clinical personnel. As a result, the prestige of the UBC Dentistry faculty has been enhanced for its leadership role in developing hardware and software, and manufacturing companies regularly come to seek insights and feedback in evaluating potential of other new and contemplated dental products and clinical operator designs.

Languages spoken and written: English, German, Spanish, French.

THE UNIVERSITY OF BRITISH COLUMBIA

Publications Record

SURNAME: Rucker

FIRST NAME: Lance
MIDDLE NAME(S): MartinInitials:
Date: 27/03/20131. REFEREED PUBLICATIONS (* = significant)(a) Journals

1. **Rucker, L.M.** "Prosthetic Treatment for the Patient with Uncontrolled Grand Mal Epileptic Seizures", *J. of Spec. Care in Dent.* 5(5):206-207, 1985.
2. Belenky, M.M., **Rucker, L.M.** and Kawamura, Y. "Application of Numeric Terms and Performance Simulation in Dentistry", *J. Int. Coll. of Dent.* 17(1):103-116, 1986.
3. * Boyd, M.A. and **Rucker, L.M.** "Effects of Immediate Introduction of Indirect Vision on Performance and Posture", *J. Dent. Educ.* 51(2):98-101, 1987.
4. * **Rucker, L.M.** "Performance Simulation: The Method", *J. Res. in Educ.* ED4:276-350, 1987.
5. * **Rucker, L.M.**, Foster, S. and Belenky, M.M. "A Three-Digit Label Set for Specifying Points on the Hand", *J. Dent. Educ.* 51(4):195-197, 1987.
6. **Rucker, L.M.**, Richter, W., MacEntee, M.I. and Richardson, A.S. "Porcelain and Resin Veneers: Clinically Evaluated 2-Year Results", *JADA* 121(5):594-596, 1990.
7. * **Rucker, L.M.**, Gibson, G. and McGregor, C. "Getting the 'Feel' of It: The Non-Visual Component of Psychomotor Control in Dentistry", *CDA Journal* 56(10):937-941, 1990.
8. **Rucker, L.M.**, Richter, W., MacEntee, M.I. and Richardson, A.S. "Porcelain and Resin Veneers", *CDA Journal* 57(4):252, 1991.
9. Ito, Y., **Rucker, L.M.**, Hashimoto, K. and Takehana, S. "Palpation as a Method for Evaluating Occlusal Discrepancies", *J. Oral Rehabil.* 18(6):563-568, November 1991.
10. Ito, Y., **Rucker, L.M.** and Takehana, S. "Application of Balance Index Standards", *Aichi-Gakuin Dental Sci.* 4(1):65-74, 1991.
11. Nakamura, K., Ito, Y., Fujii, Y., Tsukamoto, N., Takehana, S. and **Rucker, L.M.** "Posture in Crown and Bridge Work. Part 1: Posture, Subjective Fatigue and Technical Assessment During Preparation for a Full Veneer Crown", *J. Jap. Assoc. Dent. Ed.* 8(2):196-200, 1993.
12. * **Rucker, L.M.** "Ergonomics as a Buzzword", *ADVANCE Journal (for Directors in Rehabilitation)* 3(7): August 16-18, 1994.
13. * **Rucker, L.M.**, Beattie, C., McGregor, C., Sunell, S. and Ito, Y. "Declination Angle and Its Role in Selecting Surgical Telescopes", *JADA* 130(7):1096-1100, 1999.
14. * **Rucker, L.M.**, Beattie, C., McGregor, C., Sunell, S. and Ito, Y. "Declination Angle: A Key Factor in Selection of a Surgical Telescope", *Dental Abstracts* 44(6):254-255, November/December 1999.

15. * Belenky, M. and **Rucker, L.M.** "The Infinity of Opportunity: Breaking Barriers to Technological Change in Dentistry", *J. Am. Coll. Dent.* 67(2):23-25, 2000.
16. * **Rucker, L.M.** "Technology Meets Ergonomics in the Dental Clinic: New Toys for Old Games?", *J. Am. Coll. Dent.* 67(2):26-29, 2000.
- 17.* **Rucker, L.M.** and Sunell, S. "Ergonomic Risk Factors Associated with Clinical Dentistry", *J. Calif. Dent. Assoc.* 30(2):139-148, 2002.
18. Sunell, S. and **Rucker, L.M.** "Ergonomic Risk Factors Associated with Clinical Dental Hygiene Practice", *Probe* 37(4):159-166, 2003.
19. Sunell, S. and **Rucker, L.M.** "Boost Your Optic Acumen: The right surgical magnification system can support your musculoskeletal health and improve treatment outcomes", *Dimensions of Dental Hygiene* 2(1):14-20, 2004.
20. Sunell, S. and **Rucker, L.M.** "Surgical Magnification in Dental Hygiene Practice", *Int. J. Dent. Hygiene* 2:26-35, 2004.
21. Sunell, S. and **Rucker, L.M.** "Selecting Surgical Telescopes for Dental Hygiene Practice", *Can. J. Dent. Hyg.* 39(2):54-66, 2005.
22. **Rucker, L.M.**, Sunell, S. and Parsa, C. "Ergonomics for Electrology: Benefits and Guidelines for Proper Selection of Surgical Magnification for Clinicians", *Journal of Electrology* 20(1):9-19, 2005.
23. **Rucker, L.M.** "Dentistry --- A Show of Hands, Please!", *J. Am. Coll. Dent.* 74(3):4-10, 2007.
24. Saito A, Sunell S, **Rucker L.M.**, Wilson M, Sato Y and Cathcart G. "Learning climate in dental hygiene education: a longitudinal case study of a Japanese and Canadian programme" *Intl J of Dent Hyg.* 8 (2):134 – 142, Jul 2009.
25. **Rucker L.M.** "Creative Writing: The Brandon Drake Mystery Suspense Series", *J. Am. Coll. Dent.* 76(2):17-21, 2009.
26. Duong, J., Gardner, K., and **Rucker, L.M.** "Development and retention of fine psychomotor skills: implications for the aging dentist." *J. Can. Dent. Assoc.* 76:a25, 2010.
- 27.* **Rucker L.M.** "Technology in practice: Its impact on dentists, patients, and the profession --- Ergonomics and operator equipment systems." *Inside Dentistry.* 6(7):108-109,120, 2010.
28. **Rucker L.M.** "Head-mounted LED lights for operator use." *J. Can. Dent. Assoc.* 77:b19, 2011.

1. Patents Authored

1. * **Rucker, L.M.** and Hoyle, K. "Space Bar for a Rotating Plane Keyboard", *U.S. PATENT CIP #08/151/685*, Priority Date July 6, 1991, 38 pp.
2. * **Rucker, L.M.**, Hoyle, K. and Hepworth, A. "Rotating Plane Keyboard", *PATENT CONVENTION TREATY*, Priority Date July 6, 1991, Publication 1993, *World Intellectual Property Organization*, The Hague, Netherlands, 46 pp.
3. * **Rucker, L.M.**, Hoyle, K. and Hepworth, A. "Rotating Plane Keyboard", *U.S. PATENT #727,810*, Priority Date July 6, 1991, Publication January 1994, *U.S. Government Printing Office*, 48 pp.

2. Published Abstracts

1. Boyd, M.A. and **Rucker, L.M.** "Learning Indirect Vision Skills", *J. Dent. Educ.* 49(1):52, 1985.
2. **Rucker, L.M.**, Richter, W. and Beattie, C. "Fine Visual Acuity and the Performance Simulation Setting", *J. Dent. Educ.* 49(1):86, 1985.
3. **Rucker, L.M.**, Belenky, M.M. and Foster, S. "Handpoint Specification Using a Logical Three-Digit Label Set", *J. Dent. Educ.* 50(1):45-46, 1986.
4. **Rucker, L.M.** and Belenky, M.M. "Performance Simulation Training and Its Application to Preclinical Education: Logic and Methodology", *J. Dent. Educ.* 50(1):21, 1986.
5. **Rucker, L.M.**, Richter, W., MacEntee, M.I. and Richardson, A.S. "Clinical Evaluation of Porcelain and Resin Veneers: Two Year Results", *J. Dent. Res.* 68(Special Issue):249, Abstract #545, 1989.
6. **Rucker, L.M.**, Beattie, C., McGregor, C. and Ito, Y. "Use of Surgical Telescopes Throughout Clinical Simulation and Clinical Education", *J. Dent. Educ.* (55)1:31, 1991.
7. **Rucker, L.M.** and Ito, Y. "Peak Performance Training Methods for Preclinical Psychomotor Dental Education", *J. Dent. Educ.* 55(1):58, Abstract #15, 1991.
8. **Rucker, L.M.**, Gibson, G. and McGregor, C. "The Non-visual Component of Dimensional Accuracy During Operative Tooth Preparation", *J. Dent. Educ.* 55(1):96, Abstract #76, 1991.
9. **Rucker, L.M.**, McGregor, C., Woo, G. and Leong, Y.-M. "Effects of Low-Magnification Surgical Telescopes on Preclinical Operative Dental Performance", *J. Dent. Educ.* 56(1):34, Abstract #12, 1992.
10. **Rucker, L.M.**, McGregor, C. and Bradey, B. "Imagery Training in Preclinical Psychomotor Dental Education: A Two-Year Update", *J. Dent. Educ.* 56(1):39, Abstract #31, 1992.
11. Burton, J.F. and **Rucker, L.M.** "The Use of Magnification Devices in Dentistry: A Survey of Dental Practitioners", International Association for Dental Research Asia-Pacific Region Divisional Meeting, Singapore, 1993.
12. **Rucker, L.M.** and McGregor, C. "Performance Logic and Performance Simulation: A Decade of Progress", *J. Dent. Educ.* 57(2):97, 1993.
13. **Rucker, L.M.** and McGregor, C. "Surgical Magnification in Clinical Simulation: Enhanced Visual Control of Performance", *J. Dent. Educ.* 60(2):122, 1996.
14. Coil, J.M., Rosang, V.S., Wong, E.J., Ruse, N.D. and **Rucker, L.M.** "Comparison of Time Required for Sonic versus Ultrasonic Retro-cavity Preparation", *J. Dent. Res.* 78(Special Issue):384, Abstract #2230, 1999.
15. Rosang, V.S., Wong, E.J., **Rucker, L.M.**, Ruse, N.D. and Coil, J.M. "Comparison of Micro Crack Generation during Sonic and Ultrasonic Retro-cavity Preparation", *J. Dent. Res.* 78(Special Issue):384, Abstract #2231, 1999.
16. Ito, Y., Takeichi, T. and **Rucker, L.M.** "Neuroendocrine Responses During the Application of Occlusal Appliances", *J. Dent. Res.* 80(Special Issue):147, Abstract #889, 2001.
17. **Rucker, L.M.** "The Ergonomics of Stomatology: Profiles of High-Risk Clinical Practices and How to Avoid Them", Stomatological Advances of the XXI Century, National Conference of the Polish Dental Society, Poznań, Poland, Abstract VI, April 6, 2001.

18. Catherall, J., Luu, P., **Rucker, L.M.** and Chehroudi, B. "Application of 3-Dimensional Imaging and Virtual Reality in Teaching and Learning Restorative Dentistry", *J. Dent. Ed.* 66(2):259, 2002.
19. Lau, P., Catherall, J., Pau, C., **Rucker, L.M.**, Coil, J. and Chehroudi, B. "Teaching and Learning Anatomy and Restorative Dentistry using Virtual Reality and Three-Dimensional Imaging", *J. Dent. Ed.* 67(2):179, 2003.
20. Gardner, K.M. and **Rucker, L.M.** "Clinical Simulation: Ahead of the Game", *J. Dent. Ed.* 69(1):110, 2005.
21. Jamal, R., Pau, C., Coil, J., **Rucker, L.M.**, Hodgson, A., & Chehroudi, B. "Application of computer animation, optoelectronic limb segment tracking, and virtual reality in teaching and learning dental ergonomics." *J. Dent. Ed.* 68 (2), 212, 2006.
22. Porth, C. and **Rucker, L.** "Operatory design for optimized clinical learning" *J Dent Ed.* 73(2): 266-267, 2009.

(d) Conference Proceedings

1. **Rucker, L.M.**, Ed. "Second North American Workshop On Performance Logic and Numeric Terminology in Dental Education", 58 pp., June 23-25, 1986.

(e) Articles

1. **Rucker, L.M.** "Taking It to the Max: How the Patient's Maxilla Controls the Clinician's Body Posture", *Am. Stud. Dent. Assoc. News* 30(5):3, 2000.
2. **Rucker, L.M.**, Beattie, C., McGregor, C., Sunell, S. and Ito, Y. "Declinacion para los telescopos clinicos", *Dental Abstracts en Español* 36(4):221-222, 2000.

(f) Reviews

1. **Rucker, L.M.** Book Review: Advanced Restorative Dentistry, 2nd Ed., by Lloyd Baum and R.B. McCoy, *CDA Journal* 53:11, November 1987.
2. **Rucker, L.M.** Review: Stress Management for the Dental Team, by George and Milone, *CDA Journal* 54:11, page 809, November 1988.
3. **Rucker, L.M.** Book Review: Pickard's Manual of Operative Dentistry, by E.A.M. Kidd and B.G.N. Smith, *CDA Journal* 63(4):135-136, 1997.
4. **Rucker, L.M.** and Sunell, S. Letter to the Editor: Bad Backs and Repetitive Strain, by P. McCann, *Probe* 37(6):250, 2003.

2. BOOK CHAPTERS

1. * **Rucker, L.M.** "Surgical Magnification: Posture Maker or Posture Breaker?", In *Ergonomics and the Dental Care Worker*, Murphy, D.C., Ed., Chapter 8, APHA, pp. 191-216, 1998.
2. * **Rucker, L.M.** and Boyd, M.A. "Optimizing Dental Operatory Working Environments", In *Ergonomics and the Dental Care Worker*, Murphy, D.C., Ed., Chapter 12, APHA, pp. 301-318, 1998.

3. **Rucker, L.M.** "New Technologies for Optimal Ergonomics: Surgical Magnification and Computer-Assisted Clinical Dentistry", In *Ergonomics in Dentistry*, Robinson, M., Ed., New Zealand, submitted and accepted, 2002.

3. INVITED PAPERS / PRESENTATIONS

1. **Rucker, L.M.** "A Study of the Possibilities of the Existence in the Dentinal Tubules of a Unique Mechanoreceptor", Conference of College Students in Dental Research, sponsored by the ADA Council on Dental Research, Washington, DC, August 1968.
2. **Rucker, L.M.** Research, Education, and Action for Community Health (REACH) Lectures: "Fear in Dentistry", "Games Dentists Play", and "Caries as Oral Infection", 1981-1982.
3. **Rucker, L.M.** "Dental Clinical Practice Efficiency Studies" and "Dental Operatory Design" Research, Education, and Action for Community Health (REACH) Board of Directors, 1981-1982.
4. **Rucker, L.M.** "Transactional Analysis in Dental Practice", Canadian Dental Association Annual Convention, 1983.
5. **Rucker, L.M.** "Games Dentists Play", Clinical paper, University of the Pacific Alumni Meeting, San Francisco, California, 1983.
6. **Rucker, L.M.** and Boyd, M.A. "The Simulation Laboratory in Preclinical Dental Education", American Association of Dental Schools (AADS) 60th Annual Session, Cincinnati, Ohio, March 1983.
7. **Rucker, L.M.** "Performance Simulation Equipment", AADS 60th Annual Session, Cincinnati, Ohio, March 1983.
8. **Rucker, L.M.** "UBC Applications of Performance Simulation Laboratory", Sub-group of Expert Panel on Oral Health to Review and Evaluate Performance Simulation Training Systems for Oral Care, July 1983.
9. Boyd, M.A. and **Rucker, L.M.** "Indirect Mirror Vision Skills", ACFD Biennial Scientific Research Meeting, Winnipeg, 1984.
10. **Rucker, L.M.** and Boyd, M.A. "Performance Simulation Laboratory: Educational Innovations", Association of Canadian Faculties of Dentistry (ACFD) XIII Biennial Conference on Canadian Dental Research and Education, Winnipeg, Manitoba, June 1984.
11. **Rucker, L.M.** "Performance Simulation Training in Dentistry", FDI Meeting, Helsinki, Finland, August 1984.
12. **Rucker, L.M.** "Dental Basics, Recent Advances, and Emergencies", Medical Rounds, St. Paul's Hospital, Vancouver, B.C., January 1985.
13. **Rucker, L.M.**, Richter, W. and Beattie, C. "Fine Visual Acuity and Clinical Treatment", AADS 62nd Annual Session, Las Vegas, Nevada, March 1985.
14. Belenky, M.M., Boyd, M.A. and **Rucker, L.M.** "Performance Simulation: An International Collaborative Project", AADS 62nd Annual Session, Las Vegas, Nevada, March 1985.
15. Boyd, M.A. and **Rucker, L.M.** "Learning Indirect Vision Skills", AADS 62nd Annual Session, Las Vegas, Nevada, March 1985.

16. **Rucker, L.M.** and Belenky, M. "Performance Simulation and Numerics in Preclinical Dental Education in North America" Second International Workshop for Performance Simulation and Numeric Terminology in Dental Education, Japanese Dental Educators Society, Osaka, June 1985.
17. **Rucker, L.M.** "Performance Logic and Simulation Training: Theory and Practice", First North American Workshop in Dental Education, Minneapolis, August 1985.
18. **Rucker, L.M.** "Performance Simulation: The Method", Symposium on Performance Simulation in Professional Education, American Educational Research Association Annual Meeting, San Francisco, California, 1986.
19. **Rucker, L.M.**, Belenky, M.M. and Foster, S. "Handpoint Specification Using a Logical Three-Digit label Set", AADS 63rd Annual Session, Washington, DC, March 1986.
20. **Rucker, L.M.** and Belenky, M.M. "Performance Simulation Training and Its Application to Preclinical Education: Logic and Methodology", AADS 63rd Annual Session, Washington, DC, March 1986.
21. **Rucker, L.M.** "Performance Simulation: Logic and Methodology", AADS Symposium on Performance Logic and Performance Simulation in Dental Education, Washington, DC, March 1986.
22. **Rucker, L.M.** "Rationale for Study of Performance Logic, Performance Simulation Training and Numerical Terminology in Dental Education", Second North American Workshop on Performance Logic and Numeric Terminology in Dental Education, Vancouver, B.C., June 1986.
23. **Rucker, L.M.** "Concept Zero", Second North American Workshop on Performance Logic and Numeric Terminology in Dental Education, Vancouver, B.C., June 1986.
24. **Rucker, L.M.** "Performance Simulation Training in North American Dental Faculties: Getting Started", AADS 64th Annual Session, Chicago, Illinois, March 1987.
25. **Rucker, L.M.** "Concepts and Training in Performance Logic", International Symposium on The Curriculum in Operative Dentistry: Future Directions, University of Michigan, June 1987.
26. **Rucker, L.M.** "Special Hybrid Numerics for Clinical Skills Teaching in Homogeneous Language Populations", International Symposium on Performance Simulation and Numeric Terminology in Dental Education, Baltimore, Maryland, July 1987.
27. **Rucker, L.M.** "Proprioceptive and Visual Factors in the Performance of Operative Dentistry", AADS 65th Annual Session, Montreal, Quebec, March 1988.
28. **Rucker, L.M.** "Opening the Gateways to Creativity--Using Hypnosis to Melt Writer's Block", British Columbia Periodical Writers' Association, one-day workshop, April 1988.
29. **Rucker, L.M.** "Performance Logic and Performance Simulation Training in Dental Education: Balance in Practice", Fourth International Symposium for Performance Logic and Performance Simulation Training in Dental Education, Vancouver, B.C., July 1988.
30. **Rucker, L.M.** "Teaching Tomorrow's Student", Keynote Lecture, Operative Dentistry Section, AADS 66th Annual Session, San Francisco, California, March 1989.
31. **Rucker, L.M.** "Visualization as a Precursor to Performance", presentation at the Performance Logic Special Interest Group Session, AADS 66th Annual Session, San Francisco, California, March 1989.
32. **Rucker, L.M.** "Visualization and Imagery as Precursors to Performance", AADS 66th Annual Session, San Francisco, California, March 1989.

33. **Rucker, L.M.** "Clinical Evaluation of Porcelain and Resin Veneers: Two Year Results", American Association for Dental Research (AADR) 18th Annual Session, San Francisco, California, March 1989.
34. **Rucker, L.M.** "Hypnosis in Clinical Practice", Nikkei Medical Dental Society, May 1989.
35. **Rucker, L.M.** "Advanced Ergonomic Applications of Performance Logic", Fifth International Symposium for Performance Logic and Simulation Training in Dental Education, Newark, New Jersey, June 1989.
36. **Rucker, L.M.** "Clinical Hypnosis for Dental Hygienists", B.C. Dental Hygiene Association, November 1989.
37. **Rucker, L.M.** "Performance Simulation in Clinical Application: Resetting the Compromised Environment", AADS 67th Annual Session, Cincinnati, Ohio, March 1990.
38. **Rucker, L.M.** "Balance Index: Key to Performance Simulation", Performance Simulation Special Interest Group, AADS 67th Annual Session, Cincinnati, Ohio, March 5, 1990.
39. **Rucker, L.M.** "Use of Amalgam and Mercury Toxicity", B.C. Society of Pediatric Dentists, Vancouver, B.C., March 4, 1991.
40. **Rucker, L.M.** "Clinical Simulation in Psychomotor Education: Five Working Models", AADS 68th Annual Session, New Orleans, Louisiana, March 12, 1991.
41. **Rucker, L.M.** "The ErgoLogic Solution", COMDEX (Computer Dealers' Exposition), Las Vegas, Nevada, November 1992.
42. **Rucker, L.M.** "Commandos in the Corporate World: Technology Transfer from the University", University of British Columbia Industry Liaison Seminar Series, February 9, 1993.
43. **Rucker, L.M.** "The Performance Logic-Based Development and Design of the Key Tronic FLEXPLO Computer Keyboard", Institute of Office Ergonomics, Apple Computer Research Center, Cupertino, California, February 1993.
44. **Rucker, L.M.** "A Decade of Progress: Report of Research, Methods, and Applications of Human-Centered Ergonomics for Psychomotor Education", AADS 70th Annual Session and Exposition, Chicago, Illinois, March 7-10, 1993.
45. **Rucker, L.M.** and McGregor, C. "Report of Research, Methods, and Applications of Human-Centered Ergonomics for Psychomotor Education", AADS 70th Annual Session, Chicago, Illinois, March 1993.
46. **Rucker, L.M.** Belenky, M.M. and Rucker, L.M. "Clinical Simulation in Dental Education: Preparing Students for Patient Care in the 21st Century", World Consultation on Oral Health Sciences Education, World Health Organization, Geneva, Switzerland, November 11, 1994.
47. **Rucker, L.M.** "Clinical Hypnosis in Dentistry --- An Introduction for Dental Hygienists", B.C. Dental Meeting, Vancouver, B.C., March 1995.
48. **Rucker, L.M.** "Clinical Hypnosis in Dentistry", College of Dental Surgeons of British Columbia Annual Scientific Meeting, March 1995.
49. **Rucker, L.M.** "The Ergonomics of Balance in Dentistry", Open Learning Agency, Vancouver, B.C., June 1995.
50. **Rucker, L.M.** "Performance Logic in Dental Hygiene Practice", Vancouver Community College, Vancouver, B.C., September 1995.

51. **Rucker, L.M.** "Development of an Alternative Psychomotor Keyboard Design", Emily Carr College, December 1995.
52. **Rucker, L.M.** "The ErgoLogic Keyboard: Breakthrough Design for ASTDs of the Computerized Office", Ontario Workers' Compensation Board Annual Ergonomics Conference, Toronto, Ontario, February 1996.
53. **Rucker, L.M.** "The Ergonomic Realities of Dentistry in the 90's", Pacific Coast Society of Orthodontists Annual Session, Monterey, California, October 1, 1996.
54. **Rucker, L.M.** "Computer Workstation Ergonomics - Keyboards and Ergonomic Balance", Greater Vancouver Regional District Municipal Safety Group, North Delta, B.C., November 1996.
55. **Rucker, L.M.** "Surgical Magnification and Clinical Postures", Chinese Canadian Dental Society, November 1997.
56. **Rucker, L.M.** "Surgical Magnification and Clinical Postures", Aichi-Gakuin University, Faculty of Dentistry, Nagoya, Japan, January 16, 1998.
57. **Rucker, L.M.** "Performance Simulation, Surgical Magnification, and Clinical Ergonomics", Thammasat University, Bangkok, Thailand, February 3, 1998.
58. **Rucker, L.M.** "Surgical Magnification and Clinical Postures", University of Malaya, Faculty of Dentistry, Malaysia, February 1, 1998.
59. **Rucker, L.M.** "Clinical Simulation Comes to the Clinic Setting: Taking the 'Pre' Out of 'Preclinical'", AADS 75th Annual Session and Exposition, Minneapolis, Minnesota, March 2, 1998.
60. **Rucker, L.M.** and Rucker, B. "Hypnotherapy and Clinical Hypnosis", Holistic Health Practitioner Program, Langara College, March 1998.
61. **Rucker, L.M.** "Medical Ethics", Future Problem Solving Workshop, Gifted Learners Program, Vancouver School Board, May 1998.
62. **Rucker, L.M.** "Dental Ergonomics and What It Means for Daily Living", Seniors' Wellness Group, Renfrew Park Community Center, Vancouver, B.C., May 1998.
63. **Rucker, L.M.** "Clinical Simulation and Clinical Ergonomics in the Electronic Dental Education Center: Putting the Reality into Virtual Reality, and the Vision into Virtual Vision", AADS 40th Annual Conference of Dental School Deans, Key Largo, Florida, November 14-18, 1998.
64. **Rucker, L.M.** "Clinical Ergonomics: Those who control the light, control the operatory", Vancouver & District Dental Society 90th Anniversary Midwinter Clinic, December 3, 1998.
65. **Rucker, L.M.** "Ergonomics in Clinical Dentistry: Optimal Ergonomics for the Twenty-First Century", ADA Board of Trustees, Chicago, Illinois, April 11, 1999.
66. **Rucker, L.M.** and Belenky, M.M. "Surgical Telescopes, Dental Loupes, and Ergonomic Posture: Increasing Clinical Accuracy, Practice Productivity, and Occupational Health by the Correct Selection and Utilization of Optical Devices for Magnification", Central European Dental Exhibition (CEDE 99), Łódź, Poland, September 12, 1999.
67. **Rucker, L.M.** "Technology in Dental Education: Clinical Simulation", University of the Pacific Dental School, San Francisco, California, September 30, 1999.

68. **Rucker, L.M.** "Ulterior Design: The Story of the ErgoLogic Computer Keyboard", UBC Library Staff Colloquial, University of British Columbia, Vancouver, B.C., April 11, 2000.
69. **Rucker, L.M.** "Everyday Ergonomics What It Means for Daily Living", Seniors' Wellness Group, Marpole Community Center, Vancouver, B.C., May 2000.
70. **Rucker, L.M.** "Clinical Simulation in Dentistry – High Fidelity Plus", University of Manitoba, Winnipeg, Manitoba, May 22, 2000.
71. **Rucker, L.M.** "The Ergonomics of Stomatology: Profiles of High-Risk Clinical Practices and How to Avoid Them", Institute of Stomatology, Łódź, Poland, March 30, 2001.
72. **Rucker, L.M.** "The Ergonomics of Stomatology: Profiles of High-Risk Clinical Practices and How to Avoid Them", Stomatological Advances of the XXI Century, National Conference of the Polish Dental Society, Poznań, Poland, April 6, 2001.
73. **Rucker, L.M.** and Belenky, M.M. "Surgical Telescopes, Dental Loupes, and Ergonomic Posture: Increasing Clinical Accuracy, Practice Productivity, and Occupational Health by the Correct Selection and Utilization of Optical Devices for Magnification", Central European Dental Exhibition (CEDE 2001), Łódź, Poland, September 14, 2001.
74. **Rucker, L.M.** "Clinical Simulation for Fast-Track Clinical Skills Education", ADEA 79th Annual Session and Exposition, San Diego, California, March 5, 2002.
75. **Rucker, L.M.** "Everyday Ergonomics for Living and Working", Safety Day, The University Health & Safety Committee, University of British Columbia, Vancouver, B.C., April 25, 2002.
76. **Rucker, L.M.** "Symposium on Contemporary Educational Strategies in Dental Education: Their Impact on Teaching and Learning. The Postponement of Pre-Clinical Instruction until the End of the Second Year", AADR 32nd Annual Meeting and Exhibition, San Antonio, Texas, March 12, 2003.
77. **Rucker, L.M.** "Ergonomia dla zdrowia i powodzenia w praktyce stomatologicznej [Ergonomics for Health and Success in Dental Practice]", Medical University of Poznan, Marcinkowski Institute of Stomatology, Poznan, Poland, March 19, 2003.
78. **Rucker, L.M.** "The Ergonomics of Stomatology: Profiles of High-Risk Clinical Practices and How to Avoid Them", National Conference of the Polish Dental Society, Poznań, Poland, March 20, 2003.
79. Gardner, K.M. and **Rucker, L.M.** "Clinical Simulation: Ahead of the Game", ADEA 82nd Annual Session and Exposition, Baltimore, Maryland, March 5-9, 2005.
80. **Rucker, L.M.** "Self-Hypnosis for Writer's Blocks", Seminar Presentation for the Bouchercon XXXVI, Chicago, IL., September 2, 2005.
81. **Rucker, L.M.** "Ergonomic Health Promotion in BC Dental Offices: Vision and Perspective: Apples and Oranges?", Seminar Series for the School of Environment & Health, University of British Columbia, Vancouver, B.C., January 26, 2007.
82. **Rucker, L.M.** "Everyday Dental Ergonomics: How to Practice in Balance and Comfort," UBC Advanced Educational Training Study Club, Vancouver, B.C., January 17, 2007.
83. **Rucker, L.M.** and Sunell, S. "Dental Clinical Ergonomics Modules" materials, 22 modules, <http://www.dentistry.ubc.ca/cde/ergo>, revised and presented for use of CE Course participants, October - November, 2007.

84. **Rucker, L.M.** "Clinical Dentistry and Dental Hygiene Practice Made Healthy with Balanced Clinical Ergonomics" Richmond Blundell Study Club evening presentation, April 23, 2008.
85. **Rucker, L.M.** "Clinical Simulation: Ahead of the Game", ADEA 82nd Annual Session and Exposition, Baltimore, Maryland, March 5-9, 2005.
86. **Rucker, L.M.** "Clinical Hypnosis in Pediatric Dentistry" British Columbia Pediatric Dentistry Study Club evening presentation. December 1, 2009. Invited Lecture.
87. **Rucker, L. M.** "Ergonomic Assessments in Clinical Simulation: Education, Calibration, Evaluation" Keynote presentation for the Clinical Simulation Section. ADEA Annual Meeting in Washington DC, March 2, 2010. Conference invited presentation.
88. **Rucker, L.M.** "Clinical Ergonomics in Dentistry" University of British Columbia Pre-Dental Club presentation. March 31, 2010. Invited Lecture.
89. **Rucker, L.M.** "Primer on Clinical Ergonomics for Clinical Dentistry" Keynote presentation for PROF 518, University of Maryland, Baltimore, MD. August 31, 2010. Invited presentations (4 hours).
90. Rucker, B.G. and **Rucker, L.M.** "Sexual Intimacy: A Workshop for Individuals and Couples". Invited 3-day workshop presentations (22 hours). Satir Pacific Institute. Guangzhou, China, June 17-19, 2011.
91. Rucker, B.G. and **Rucker, L.M.** "Sexual Intimacy: A Workshop for Individuals and Couples". Invited 3-day workshop presentations (22 hours). Satir Pacific Institute. Beijing, China, June 24-26, 2011.
92. **Rucker, L.M.** "Surgical Magnification and Clinical Ergonomics: the Basics", University of Louisville, School of Dentistry, Louisville, KY, USA, July 25, 2011
93. **Rucker, L.M.** "Primer on Clinical Ergonomics for Clinical Dentistry" Invited Keynote presentation (5 hours) for PROF 518, University of Maryland, Baltimore, MD. September 6, 2011.
94. **Rucker, L.M.** Emanuels, I. and Belenky, M. "PBL Skills for Integration of Clinical Ergonomics", 7th International Conference on Problem-Based Learning in Dentistry: Elements of a Successful Program, Whistler, BC, September 21-24, 2011.
95. Emanuels, I. **Rucker, L.M.** and Belenky, M. M. "Problem-based Psychomotor Skills Education", 7th International Conference on Problem-Based Learning in Dentistry: Elements of a Successful Program, Whistler, BC, September 21-24, 2011.
96. Rucker, B.G. and **Rucker, L.M.** "Teaching Sexual Intimacy in China". Canadian Sex Research Forum (CSRF) Annual Conference, Vancouver, BC, September 24, 2011.
97. **Rucker, L.M.** "Dental Clinical Ergonomics Assessment", Japanese Dental Ergonomics Association (JDEA) Keynote Lecture, Fukuoka, Japan, December 18, 2011.
98. **Rucker, L.M.** "Surgical Magnification and Clinical Ergonomics: Building the Skills", University of Louisville, School of Dentistry, Louisville, KY, USA, January 6, 2012.
99. **Rucker, L.M.** "Pre-History of Clinical Ergonomics and Clinical Simulation: SIG and Section of ADEA", ADEA Annual Meeting in Orlando, FL March 19, 2012. Conference invited presentation.
100. **Rucker, L.M.** "The ClinErgoAssess format: Understanding Evaluation of Clinical Ergonomics in Clinical and Simulation Dentistry", Workshop presentation for clinical and pre-clinical (simulation) faculty, University of Louisville School of Dentistry, Louisville, KY. Invited workshop (2 hours). July 18, 2012

101. **Rucker, L.M.** "Clinical Ergonomics for Clinical Dentistry", Workshop presentations for DENT 401, University of Louisville School of Dentistry, Louisville, KY. July 2, 2010. Invited presentations (16 hours). July 19-20, 2012
102. **Rucker, L.M.** "I've Got Your Back! (Clinical Ergonomics for Clinical Dentistry)", One-Day Workshop presentation for 85 clinical dental students and faculty, University of California, San Francisco School of Dentistry, San Francisco, CA. January 26, 2013. Invited presentations (8 hours) January 26, 2013.

4. **NON-REFEREED PUBLICATIONS**

(a) Journals

1. **Rucker, L.M.** "Games Dentists Play - Transactional Analysis in Dentistry", *Oral Health* 75(2):69-71, 1985.

(b) Articles

1. **Rucker, L.M.** "Performance Simulator at UBC", *J. Morita Int. News* 1(11):2-3, 1984.
2. **Rucker, L.M.** "Let There Be Light --- But Where Should It Be?", *Bulletin of the College of Dental Surgeons of B.C.* 14:13, 1996.
3. **Rucker, L.M.** "Let There Be Light --- But Where Should It Be?", *Newsletter of the Open Learning Agency Dental Assisting Program*, February 1996.
4. **Rucker, L.M.** "The Off-Handed Complement: When Left-Handed and Right-Handed Dental Personnel Work Together", *Bulletin of the College of Dental Surgeons of B.C.* 15:10, 1996.
5. * **Rucker, L.M.** "Back to Basics: The Ten Rules of Clinical Hypnosis", Canadian Society of Clinical Hypnosis (B.C.) *Entrancing News* 4:5-6, Fall 1996.
6. **Rucker, L.M.** "Hypnosis in Clinical Dentistry: A Natural Response to an Unnatural Act (Part I)", Can. Soc. Clin. Hypn. (B.C.) *Entrancing News* 1-5, Fall 1996.
7. **Rucker, L.M.** "Hypnosis in Clinical Dentistry: A Natural Response to an Unnatural Act (Part II)", Can. Soc. Clin. Hypn. (B.C.) *Entrancing News* 2-3, Winter 1996.
8. **Rucker, L.M.** "Hypnosis in Clinical Dentistry: A Natural Response to an Unnatural Act (Part III)", Can. Soc. Clin. Hypn. (B.C.) *Entrancing News* 4-6, Spring 1997.
9. **Rucker, L.M.** "The UBC Faculty of Dentistry on the World Wide Web", *Good Impressions: The Newsletter of the UBC Faculty of Dentistry* 9:1, Winter 1997.
10. * **Rucker, L.M.** "Removing the 'Pre' From 'Preclinical': Learning Clinical Simulation Skills In the Clinic", *International Union of Schools of Oral Health* 12(12):9-13, December 1998.
11. **Rucker, L.M.** "Let There Be Light", *Dental Hygiene Notes* 3:4, November/December 1999.
12. **Rucker, L.M.** "The Practice of Dentistry Can Be A Real Pain (Now We Know It Doesn't Have To Be So)", *Good Impressions: The Newsletter of the UBC Faculty of Dentistry* 27:6-7, Summer 2001.
13. **Rucker, L.M.** "High-Risk and Low-Risk Ergonomics: Postural and Positional Profiles for Dentists", *International Union of Schools of Oral Health Newsletter* 14, 2002.

14. **Rucker, L.M.** "High-Risk and Low-Risk Ergonomics: Do you work for your equipment or does your equipment work for you?", *Doctor of Dentistry Magazine* 3:24, 2002.
15. **Rucker, L.M.** "Ergonomic Risks and Clinical Dentistry: A profession of pain . . .", *Doctor of Dentistry Magazine* 4:32, 2003.
16. **Rucker, L.M.** "Ergonomic Risks and Clinical Dentistry: Neutralizing the risk factors . . .", *Doctor of Dentistry Magazine* 5:38, 2003.
17. **Rucker, L.M.** "Transfer of Web-Based Ergonomics Health Promotion Knowledge into the Clinical Workplace", *Newsletter of the BC-Yukon Region of the Association of Canadian Ergonomists*, Spring:1-2, 2004.

(c) Reports

1. **Rucker, L.M.**, Foster, S.F. and Belenky, M.M. "The Theoretical Basis for Mo: An Introduction for Computer Programmes and Systems", Consultants to W.H.O., requested as international collaborative reference report by the *World Health Organization Oral Health Unit*, 14 pp., 1984.
2. * **Rucker, L.M.** and Sunell, S. "Musculoskeletal Health Status in B.C. Dentists and Dental Hygienists: Evaluating the Preventive Impact of Surgical Ergonomics Training and Surgical Magnification", Workers' Compensation Board of British Columbia, 258 pp., November 2000.
3. * **Rucker, L.M.** and Sunell, S. "Ergonomics Health Promotion for B.C. Dental Offices", Workers' Compensation Board of British Columbia, 211 pp., September 2006.
4. **Rucker, L.M. (as Chair of the UBC Senate Committee on Appeals on Academic Standing) authorship of sixteen complete Academic Judicial Appeal decision/reasons reports of approximately 6-10 pages each, reviewed by University legal counsel and by Academic Appeals Committee members. 2012-2013**

5. INNOVATIONS / INVENTIONS / DESIGNS

1. **Rucker, L.M.** Inventor and co-developer (with Dr. D. Beach) of the **Handpiece Pen**, manufactured by the J. Morita Corporation of Japan and used in many universities throughout the world for the teaching of surgical handpiece (psychomotor) skills in dentistry, 1984.
2. **Rucker, L.M.**, Belenky, M.M, and Beach, D. **Performance Set Specification** format (1986), **End-Product Precision Evaluation** format (1986), and **Performance Postural Evaluation** format (1987), used in teaching, research, and evaluation of ergonomic issues in clinical dentistry.
3. **Rucker, L.M.**, Inventor and designer of **declination angle measurement device** (manufactured by *Designs For Vision*) for surgical telescopes, 1990.
4. **Rucker, L.M.**, Inventor, designer, and developer of **ergonomic computer keyboard** (manufactured both by *ErgoLogic* and by *Key Tronic Corporation* [Spokane]) for reducing computer operator exposure to high-risk repetitive strain injuries, 1994.
5. **Rucker, L.M.**, Inventor and designer of **ergonomic computer pointing device** (the *ErgoBall Pointer*) for reducing computer operator exposure to high-risk repetitive strain injuries, 1994.
6. **Rucker, L.M.**, Inventor and designer of **glide-bar simulation articulation device** (manufactured by *A-DEC [Austin Dental Equipment Corporation]*) an optimal ergonomics patient simulator for attaching clinical simulation mannequins to dental operatory equipment, 1997.

7. **Rucker, L.M.**, Designer and builder of **MicroSoft SuperNatural Computer Keyboard** (prototyped for the *Microsoft Corporation*), a hybrid of Microsoft Natural and rotating plane keyboard designs and technologies, 1997.
8. **Rucker, L.M.**, Inventor and designer of **portable declination angle measurement device** (manufactured by *GSC SurgiTel*) for surgical telescopes, 1998.
9. **Rucker, L.M.**, Developer and coordinator of various aspects of clinical simulation performance in university dental clinics, including the following teaching software and computer hardware:
 - ♦ Developer of **hybrid numeric terminology** for teaching psychomotor (clinical) skills, 1986-1989.
 - ♦ Developer of **clinical simulation** in an actual **dental clinic setting**, 1996.
 - ♦ Developer of integrated **psychomotor Problem Based Learning formats** for clinical education, 1999.
10. **Rucker, L.M.**, Inventor and designer of **STAR, a Surgical Telescope-based Augmented Reality hands-free, heads-up computer-based clinical input/output device** (development by *Ubiquity Systems Inc.*), 1999.

6. PATENTS HELD

United States Patent #5,351,066, Rotating Plane Keyboard September 1994

7. SPECIAL COPYRIGHTS, TRADEMARKS

"ErgoLogic", Registered Trademark, U.S. and Canada 1993

"Hyperspace Bar", Registered Trademark, U.S. and Canada 1993

8. ARTISTIC WORKS, PERFORMANCES, DESIGNS

Rucker, L.M., Principal, "Synergy", WTN (Thompson), 1994.

Rucker, L.M., Principal, "Myra Johnson", JDP (Pollio), 1995.

Rucker, L.M., Special Skills Background Actor, "X-Files", X-F for FOX (Contner), 1995.

- * **Rucker, L.M.**, Principal, "Caught in the Net", Still Water / National Film Board of Canada (syndicated by Telefilm AV) (Tennant), 1996.

Rucker, L.M., Actor, "Catch the Wave", MJZ (Henson), 1996.

- * **Rucker, L.M.**, Author, "Intimate Falls", Lochenlode Publishers, Vancouver, 405 pages, April 2001.

- * **Rucker, L.M.**, Author, "No Secrets", Lochenlode Publishers, Vancouver, 360 pages, March 2004.

- * **Rucker, L.M.**, Author, "Final Labyrinth", Lochenlode Publishers, Vancouver, 459 pages, March 2005.

- * **Rucker, L.M.**, and Perrin, Timothy, "Albatross", feature film screenplay, 122 pages, World Premiere and additional performances, Riverpark Festival, Owensboro, KY, June 2007.
- * **Rucker, L.M.**, and Perrin, Timothy, "Bad Bourbon", stage play, 85 pages, WGAw reg. no. 1243468. December, 2007.

9. VIDEO TAPES, AUDIO/VISUAL AIDS & MULTIMEDIA TEACHING MATERIALS

- * **Rucker, L.M.** and McGregor, C. "Performance Logic and Performance Simulation: A Decade of Progress", video production, University of British Columbia, 10:36 minutes, 1993.
- * **Rucker, L.M.**, Ed. "Surgical Magnification Web Site: Surgical Telescope Evaluation Program", <http://www.dentistry.ubc.ca/Personnel/rucker/step/index.html>, 43 pp., 1997.

Rucker, L.M. and Sollid, J. "UBC Faculty of Dentistry Orientation: Welcome to the New Problem-Based Learning Curriculum", video, 1 hour, 1997.

Rucker, L.M. DENT 420.3 WebCT course, 1999-date.

Rucker, L.M. "Looking to the Future – The Integrated Dental Clinic", video production (casting, organizational group contributor), University of British Columbia, 8 minutes, March 2001.

Rucker, L.M. and Sunell, S. "Dental Clinical Ergonomics Module" materials, 22 modules, <https://secure.dentistry.ubc.ca/survey/default.asp?proc=1>, 2006-date.

Rucker, L.M., and Perrin, Timothy, "Albatross", full-length radio play adaptation of the feature film screenplay, 73 minutes, Recorded, optioned, and distributed by Riverpark Center (Zev Buffman), Owensboro, KY, June 2007-2008.

Pulos, L., **Rucker L.M.**, et al "Clinical Hypnosis Inductions, Deepening and Strategies for Psychological, Medical and Dental Applications", CSCH (BC). DVD production. 68 minutes, 2010.

10. INTERNET PUBLICATIONS

Rucker, L.M. "The ErgoLogic™ Keyboard (Model 7.1): Review of Related Research", http://209.24.148.135/ergonomic/el_kbt.htm, 1995.

Rucker, L.M. "Surgical Telescope Evaluation Program", <http://www.dentistry.ubc.ca/Personnel/rucker/step/index.html>, 1998.

Rucker, L.M. "Surgical Magnification Web Site", <http://www.dentistry.ubc.ca/research/ergonomics/welcome.htm>, 1999.

Rucker, L.M. "Let There Be Light!", <http://www.dentalhygienenotes.bc.ca/light.htm>, 2000.

11. WORKS IN PROGRESS

Rucker L.M., **Belenky, M.**, and **Sunell, S.** "Clinical Ergonomics in Dental Education: A Guide to Integration of Ergonomics into Existing Curricula", Manuscript scheduled for publication in summer of 2013.

Rucker L.M. “The Clinical Ergonomics Assessment format (ClinErgoAssess): accessible process evaluation for dental practice.” In preparation for MedEdPortal review, 2013.

Rucker, L.M., Author, “Barrel Proof”, scheduled for release by Lochenlode Publishers, Vancouver, October, 2013, 415 pp. ms.

Rucker, L.M. Module planning for the **Software for Ergonomic Clinical Transfer of Optimized Risk Reduction (SECTORR)** project is moving toward a development phase which seems likely to include manufacture of newly designed direct market (and aftermarket) computer-controlled motorized headrests to permit broadened application for providing “smart operatory equipment” for a huge range of manufactured dental operatory equipment within the next 1-2 years. I am optimistic that spin-back from this technology can be applied and used in dental operatories throughout the world, even those without current computer-chip interfaces.