

1/31/2016 6:18 PM

NAME:

Alexandra Rose Lucas

PLACE OF BIRTH:

Alexandria, Virginia, U.S.A.

DATE OF BIRTH:

April 2, 1952

NATIONALITY:

United States of America

Canada

MARITAL STATUS:

Married, three children

–Seana Alexandra McFadden

–Baron Douglas Holmes McFadden

–Matthew Francis Agnew McFadden

POST SECONDARY EDUCATION AND DEGREES

B.Sc. (First Class Honours) Biochemistry 07/1970 – 06/1975
 McGill University
 Montreal, Quebec, Canada

M.Sc. 09/1976 – 06/1978
 Department of Microbiology and Immunology
 University of Western Ontario
 London, Ontario, Canada
 Supervisor: W. Flintoff, MD.
 Thesis Title: Mouse hepatitis virus: *In vivo* and
In vitro models of demyelinating disease

M.D. 07/1978 – 06/1982
 University of Alberta,
 (First two years at McGill University)
 Edmonton, Alberta, Canada

Resident, Internal Medicine 07/1982 – 06/1985
 University of Alberta
 Edmonton, Alberta, Canada

Clinical Fellowship Cardiology 07/1985 – 06/1987
 University of Alberta
 Edmonton, Alberta, Canada

FRCP(C) 1987
 Fellow Royal College of Physicians and Surgeons
 Internal Medicine

Research Fellowship Cardiology 07/1987 – 06/1989

Division of Cardiology
 Tufts' University
 Supervisor: J. Isner, MD.

FACC 1992
 Fellowship American College of Cardiology

ACTIVE MEDICAL LICENSES

US – Florida, Virginia, Indiana, Michigan
 Canada – Ontario

EMPLOYMENT HISTORY

Summer Laboratory Assistant 05/1973 – 08/1973
 Department of Dental Biochemistry

University of South Carolina
 Supervisor: R. Miller, MD.

Summer Laboratory Assistant 05/1974 – 08/1974
 Department of Pharmacology
 McGill University
 Supervisor: W. Benfey, MD.

Laboratory Demonstrator 09/1974 – 04/1974
 Cell Biology 201
 McGill University

Laboratory Technician 05/1976 – 08/1976
 Department of Pharmacology
 McGill University
 Supervisor: B. Collier, MD.

Research Rotation- Alberta Heritage Foundation Studentship
 Departments of Biochemistry/Medicine 07/1981 – 06/1982
 University of Alberta
 Supervisor: L. Tyrrell, MD.

Summer Research Project 05/1987 – 08/1987
 Department of Biochemistry
 University of Alberta
 Supervisor: W. Schneider, MD.

Alberta Heritage Foundation Clinical Investigator 07/1989 – 06/1996
 Division of Cardiology
 University of Alberta

Clinical Interventional Cardiologist
 University of Alberta Hospitals 07/1989 – 06/1996
 University of Western Ontario –
 London Health Science Center 07/1996 – 06/2006
 University of Florida 08/2006 – Present

University of Alberta
 Division of Cardiology/Department of Medicine
 Assistant Professor 07/1989 – 06/1994
 Associate Professor 07/1994 – 06/1996

University of Western Ontario 07/1996 – 06/2003
 Associate Professor 07/1996 – 06/2003
 Professor, Faculty of Medicine & Dentistry 07/2003 – 06/2006
 Cross Appointments, Professor
 Dept of Microbiology and Immunology 07/2003 – 06/2006
 Dept of Medical Biophysics 07/2005 – 06/2006

Scientist 07/1996 – 06/2006
 Robarts Research Institute
 Vascular Biology Research Group

Site Director, Coronary Care Unit 07/1997 – 06/2000
 London Health Sciences Centre – University Campus

Coordinator of resident teaching in CCU 07/1997 – 08/2005
 London Health Sciences Centre – University Campus
 University of Western Ontario

Cardiovascular Consultant for Kidney Pancreas 04/2004 – 06/2006
 Transplantation, London Health Sciences Centre

Associate Scientist, Program of Circulation 07/2005 – 06/2006
 Lawson Health Research Institute (LHRI)

Professor, Dept. of Medicine, Division of Cardiology 07/2006 – Present
 College of Medicine, University of Florida
 And Malcom Randall VA Hospital
 Clinical Interventional Cardiologist

Director, Vascular Biology Section 07/2006 – 2007
 Malcom Randall VA Medical Center, Gainesville, FL

Ethel Smith Research Professorship 07/2006 – Present
 College of Medicine, University of Florida

Cross Appointment, Professor 2006 – Present
 Department of Molecular Genetics and
 Microbiology, University of Florida
 and Division of Rheumatology, University of Florida

BIOTECHNOLOGY - Viron Therapeutics

 Chief Clinical Officer 05/1997 – Present
 Founding scientist and inventor 05/1997 – Present
 Consultant 05/1997 – Present

FACULTY SENATE University of Florida – Elected member 2014 – present
Academic Freedom and Tenure Committee 2015

PROFESSIONAL LICENCES

College of Physicians & Surgeons of Alberta CPSA #009908	1989 – 1996 – Inactive
College of Physicians & Surgeons of Ontario CPSO #70833	1996 – Present – Active
Ontario Medical Association OMA #071-2653	1996 – Present – Active
Canadian Medical Association CMA #053690	1996 – Present – Active
Canadian Medical Protective Association Member #911224	1989 – Present – Active
Medical Council of Canada Licentiate Registration # 97685	2005 – Present – Active
Michigan Medical License #L962580	2006 - 2009
Indiana Medical License #01062677A	2006 – 2009
Virginia Medial License #0101240424	2006 – 2009
Florida Medical license #ME 101070	2008 – Present – Active

HONOURS AND AWARDS

First Class Honours, Biochemistry McGill University	1975
Medical Research Council of Canada Studentship University of Western Ontario	1977 – 1978
Alberta Heritage Foundation for Medical Research (AHFMR) Part-time Studentship University of Alberta	1981 – 1982
Chief Resident, Cardiology University of Alberta	1986 – 1987
AHFMR Clinical Research Fellowship Tufts' University	1987 – 1989
AHFMR Clinical Investigator	1989 – 1996

University of Alberta

American Society for Lasers in Surgery and Medicine Award for Outstanding Research – <i>Best Clinical Original Paper</i>	1994
Featured Research American Heart Association <i>“Calreticulin, a potential vascular regulatory protein for inflammatory and thrombotic responses to arterial injury”</i>	1995
Featured Article in Biophotonics Research <i>“Fluorescence technique may stop a silent killer”</i>	1999
<i>“Multiple regression analysis of collagen and elastin in vascular remodeling”</i>	2005
Editor-in-Chief <i>Current Drug Targets: Cardiovascular & Hematological Disorders</i>	2000 – 2006
<i>Journal Clinical and Experimental Cardiology</i>	2012-present
Editorial Board Member <i>International Journal of Cardiovascular Medicine and Science</i>	2000
<i>Cardiovascular Research</i>	2012 - present
Research Poster Reviewer <i>Heart & Stroke Clinical Update 2000</i>	2000
First Degree Black Belt	2001
Second Degree Black Belt	2003
Third Degree Black Belt <i>Kenpo Karate</i>	2005
Renshynkan karate – First degree Black Belt	2012
Interview for Article <i>Good Times, February 2001</i>	2001
Delegate to Canadian Society of Atherosclerosis, Thrombosis and Vascular Biology	2001
S. Vaziri - Award for best student poster. Canadian Society for Atherosclerosis, Thrombosis and Vascular Biology Meeting	2002
Councilor, Canadian Society of Atherosclerosis, Thrombosis and Vascular Biology	2003
Academic Keys Who's Who in Medical Sciences Education (WWMSE)	2004

Editorial Board Member <i>Recent Patent Reviews on Cardiovascular Drug Discovery</i>	2005
Symposia Chair – Canadian Society of Atherosclerosis, Thrombosis and Vascular Biology. <i>The Intrigue of Vascular Innate Immunity</i>	2005
Prix Galien Award, Viron Therapeutics, Inc. (Dr. AR Lucas & Dr. G McFadden, Co-Founders)	2005
Ethel Smith Vasculitis Research Endowed Chair College of Medicine, University of Florida	07/01/06 – Present
USC Teaching Honour Roll Award of Excellence The University of Western Ontario	2006 – 2007
University of Florida Dept. of Medicine Research Award for Dr. E. Dai poster presentation	2007
Shands Cardiac Cath Lab - Physician of the Month award	12/2007
University of Florida Dept. of Medicine Award for Excellence in Teaching	06/04/2009
Award for Excellence in Teaching	06/04/2014
Keystone conference “Bugs to Drugs” Invited Symposium chair and speaker	2011
Serpin Conference Invited Speaker, Chapel Hill NC	2012
Serpin Conference Organization Committee	2012-2014
Serpin Conference Invited Speaker, Leogang, Aurtria	2014

FELLOWSHIPS

1) Royal College of Physicians and Surgeons of Canada (FRCPC)	1987
2) American College of Cardiology (FACC)	1992
3) American Society for Laser Medicine and Surgery, Inc.	1998

COMMITTEES & SOCIETIES

Reviewer:

1) Granting Agencies – Reviewer

(a) Medical Research Council of Canada	1999 – 2000
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- (b) CIHR Cardiovasc. System B panel committee member 2000 – 2003
- (c) HSFO – Committee VI member 2004
- (d) American Heart Association – R2 Committee 2008 – Present
- (e) (GZHK) German Cardiovascular Research Inst Berlin 6/21/2014
- (f) Reviewer NIH COBRE program Ad hoc 2014

2) Granting Agencies – External Reviewer

- a) Medical Research Council
- b) Canadian Medical Discovery Fund
- c) BC Health Care Research Foundation
- d) Heart and Stroke Foundation of Canada 2002 – Ongoing
- e) Canadian Institutes of Health Research
- f) NIH Site Visit – Spectroscopy Group at MIT 1995
- g) NIH 2001
- h) Alberta Heritage Foundation for Medical Research 2001
- i) The Lung Association/Canadian Thoracic Society 2003
- j) Irish Research Board 2006
- k) VA Hospital (Malcom Randall) Merit Award reviewer

3) Journals

- a) Editor-in-Chief - Current Drug Targets: 2001 - 2006
Cardiovascular & Hematological Disorders
- b) Editor-in-Chief – Journal of Clinical and Experimental 2011 - present
Cardiology
- c) Editorial Board member – International Journal of
Cardiovascular Medicine and Science
- d) Editorial Board member – Open Biochemistry Journal
- e) Editor – Bentham Science Open Book initiative 2006 – Present
- f) Reviewer:
Lasers in Surgery and Medicine
Cardiovascular Research
Circulation
Journal of European Society of Cardiology
Stroke
Cellular and Molecular Sciences 2008
FASEB
Canadian Journal Cardiology
Thrombosis and Haemostasis

Committees:

- 1) Lasers in Medicine – Dean’s Committee 1990 – 1992
– University of Alberta

- 2) M.D. Admissions Committee 1990 – 1991
– University of Alberta
- 3) Canadian Cardiovascular Society – Edmonton, Alberta 1993
Meeting Planning Committee
- 4) Public Affairs Committee – Faculty of Medicine
- 5) Alberta Heritage Foundation for Medical Research 1992 – 1994
Studentship Panel, Edmonton, Alberta
– University of Alberta
- 6) Search and Selection Committee for Cardiovascular 05/1997 –
Present
Disease Research Group Robarts Research Institute
– University of Western Ontario
- 7) Medical Sciences Graduate Studies 1992-1995
– University of Alberta
- 8) Search and Selection Committee for 1996-1998
Vascular Biology Group
– University of Western Ontario
- 9) Cardiology Search and Selection Committee for 1996-1997
Extended Role Nurse, London Health
Sciences Centre – University Campus
- 10) MRC Group in Vascular Imaging 1997 – Present
- 11) Resuscitation Committee
– London Health Sciences Centre 1998 – Present
- 12) Critical Pathways Post Infarct 1999 – Present
Management Committee
- 13) Robarts Research Institute Graduate Student 1998 – 1999,
Awards Committee Chair 1999
- 14) Heart & Stroke Clinical Update Conference 2000
Planning Committee, Heart & Stroke Foundation
- 15) Boston Scientific advisor Technology Review Board 2001 – 2006
- 16) University of Western Ontario Department of 1996-2001
Medicine Research Committee

Organizer/Chair for Scientific Sessions:

- 1) Co-chair of the joint CCS/CSATVB 2001
Oral session on Atherosclerosis
- 2) Co-chair of American Heart Association meeting 1997
session, “Smooth Muscle Cells in Atherosclerosis”

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| 3) UWO Committee on Equity | 2000-2004 |
| 4) Co-chair of Canadian Cardiovascular Congress simultaneous session, Edmonton. | 2002 |
| 5) Session organizer, Medical Therapeutics Annual Meeting, Bethesda, Maryland, | 07/23/2003 –
07/ 26/2003 |
| 6) Animal Use Subcommittee, University Council on Animal Care, University of Western Ontario | 2003 – 2006 |
| 7) Poster Judge, Robarts Research Day, The John P. Robarts Research Institute -- London, ON | 01/28/2004 |
| 8) Robarts Seminar Series Committee, Present Robarts Research Institute, London, ON | 02/2004 – |
| 9) National Scientific Reviewer for Canadian Cardiovascular Society abstract review | 2003 – Present |
| 10) Chair and Program Organizer, CSATVB Program Symposium I, Canadian Cardiovascular Congress, Montreal, Quebec | 10/22/2005 –
10/26/2005 |
| 11) Symposium organizer and Speaker AHA New Orleans, LA | 11/11/2008 |
| 12) Serpins 2011 – Meeting Advisory Committee – Chapel Hill, NC, October 2011 | |
| 13) University Maastracht and University Leiden – Invited speaker April, 2012 | |
| 14) FEBS course Invited speaker September 2012 | |
| 15) Serpin Conference Organization Committee Leogang Austria | 2012-2014 |
| 16) Organizing Committee Abstract reviewer World Heart Congress 2014 | |
| 17) Awards Committee Reviewer World Heart congress 2015 | |

Seminar Series:

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| 1) Ethel Smith Vasculitis Seminar Series | 2008–Present |
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Societies:

- 1) Canadian Cardiovascular Society
- 2) Alberta Cardiovascular Society
- 3) American Medical Association
- 4) Massachusetts Medical Society
- 5) American College of Cardiology

- 6) American Heart Association Basic Science Council
- 7) New York Academy of Science
- 8) Ontario Medical Association
- 9) Canadian Society of Atherosclerosis, Thrombosis and Vascular Biology
- 10) American Transplant Society
- 11) ISHLT – International Society of Heart and Lung Transplantation
- 12) SPIE – The International Society for Optical Engineering
- 13) ASBMB – American Society for Biochemistry and Molecular Biology
- 14) Friends of Fort Liberté

Extracurricular Activities:

Tae Kwon Do (Advanced Red Belt)	1976 – 1987
Chung Mou Quan	1987 – 1989
Kempo Karate (Third Degree Black Belt)	1996 – Present
Sorinji Ryu Karate (First Degree Black Belt)	2007 – Present
Levar harp	2015-Present
Bicycling tours:	
Europe	1975
Banff to Jasper, Canada	1977
Scotland	1979
Switzerland	1982
Luxembourg	2000
Medical Director	2002 – 2014
Annual Medical Mission Fte Liberté, Haiti	

SYMPOSIA, SEMINARS

Symposia

- 1) American Heart Association (17 abstracts)
- 2) Canadian Society of Atherosclerosis, Thrombosis & Vascular Biology (70 abstracts)
- 3) Alberta Heritage Foundation for Medical Research (2 abstracts)
- 4) American Society for Lasers in Surgery and Medicine (7 abstracts)
- 5) American College of Cardiology (3 abstracts)
- 6) SPIE (10 abstracts)
- 7) Keystone Symposia (8 abstracts)
- 8) International Society of Heart and Lung Transplantation (3 abstract)
- 9) Congress on Inflammation (4 abstracts)
- 10) Serpin Congress (4 abstracts)
- 11) SPIE (10 abstracts)

Invited Lectures

- 1) The atherectomy device and development of a novel atherectomy device. Interventional Cardiology Update, Ottawa, Ontario. 1991

- 2) Laser-induced fluorescence in cardiovascular disease. British Columbia Cancer Research – Vancouver, British Columbia 1992
- 3) Laser-induced fluorescence and clinical studies. Presented to Cardiac Cath Lab staff May 21, 1992.
- 4) A novel viral anti-inflammatory protein, SERP-1, reduces atherosclerotic plaque development in cholesterol fed rabbits after balloon angioplasty. Zymogenetics, Seattle, Washington, 1994.
- 5) A novel viral anti-inflammatory protein, SERP-1, reduces atherosclerotic plaque development in cholesterol fed rabbits after balloon angioplasty. BIOGEN, Boston, Massachusetts, 1994.
- 6) A novel viral anti-inflammatory protein, SERP-1, reduces atherosclerotic plaque development in cholesterol fed rabbits after balloon angioplasty. Hoffman Laroche, Basel, Switzerland, 1994.
- 7) SERP-1, a novel viral anti-inflammatory protein reduces atherosclerotic plaque after angioplasty in rabbits. American Heart Association, November 1994.
- 8) Calreticulin, a potential vascular regulatory protein for inflammatory and thrombotic responses to arterial injury. Featured Research, American Heart Association, November 1994.
- 9) SERP-1, a novel viral anti-inflammatory protein reduces atherosclerotic plaque after angioplasty. Robarts Institute, University of Western Ontario, London, Ontario, November 1995.
- 10) SERP-1, a novel anti-inflammatory protein reduces atherosclerotic plaque after angioplasty. Hammersmith Hospital, February 1996.
- 11) Calreticulin, a potential vascular regulatory protein for inflammatory and thrombotic responses to arterial injury. Calreticulin Workshop, Lake Como, Italy, April 1996.
- 12) Can we use viral proteins to treat atherosclerosis. Robarts Research Institute, September 1996.
- 13) Numerous presentations to investors for Viron. Ongoing.
- 14) Viral anti-inflammatory proteins and atherogenesis, Gunton Symposium, Robarts Research Institute, September 1997
- 15) Serpins and the regulation of inflammation. Anatomy and Cell Biology, University of Western Ontario, London, Ontario. February 13, 1998.
- 16) Thrombolysis and vascular surgery. Vessel Wall Research Group Seminars, McMaster University, Hamilton, Ontario. February 18, 1998.
- 17) Effect of anti-inflammatory agents: serine proteinase inhibitors, ASHLT First Annual Fall Education Meeting, Coronary Allograft Vasculopathy: Insights into

- Pathogenesis, Prevention, and Treatment. Washington, D.C. September 25-27, 1998.
- 18) Viral and vascular serpins, the role of thrombolysis in atherogenesis. Atherosclerosis Society Symposium, Canadian Cardiovascular Society/Atherosclerosis Society Symposium on Smooth Muscle Cells. October 21, 1998.
 - 19) Viral serpin reduced atherosclerosis is associated with upregulation of the uPA receptor and PAI-1. Second Joint Meeting of the International Cytokine Society and International Society for Interferon and Cytokine Research. Jerusalem, Israel, October 27-29, 1998.
 - 20) Viral and vascular serpins in atherogenesis. Medical University of South Carolina – Cardiovascular Research Group, Charleston, South Carolina, February 22, 1999.
 - 21) Viral anti-inflammatory proteins: dissection of mechanisms involved in transplant vasculopathy development. The Ohio State University Medical Centre – Division of Transplantation. Columbus, Ohio, June 9, 1999.
 - 22) Viral anti-inflammatory proteins: dissection of mechanisms involved in transplant vasculopathy development. The University of Minnesota – Twin Cities Campus, Minneapolis, Minnesota, November 17-18, 1999.
 - 23) Fluorescence spectroscopic analysis of porcine cardiac valves prior to implant. Food and Drug Administration, Washington, D.C., May 9, 2000.
 - 24) Fluorescence based optical analysis of atherosclerotic plaque: Transplant vasculopathy and prothrombotic arterial plaque. Food and Drug Administration, Washington, D.C., May 9, 2000.
 - 25) Optical analysis of unstable plaque. 2nd Annual Symposium for The Centre of Vascular Imaging, Robarts Research Institute, London, Ontario, October 17, 2000.
 - 26) Viral anti-inflammatory proteins as potential therapeutic agents. Genentech, San Francisco, California, July 2000.
 - 27) MT1 and MT7: Effects of chemokine binding proteins on vasculopathy development. DuPont Pharmaceuticals, October 4, 2000.
 - 28) Evading the immune system: Lessons learned from viruses. The Joint American Transplant Meeting, Transplant 2001, Chicago, Illinois, May 12, 2001.
 - 29) Serpins in Atherosclerotic Plaque Development – Robarts Research Institute Vascular Biology Research Group, February 14, 2001.
 - 30) Development of Viron Therapeutics, Inc. – Lecture to Ivey Business School, University of Western Ontario, November 2001.
 - 31) Transplant vasculopathy: A Tale of Two Serpins, Albert Einstein University, January 2002.

- 32) Transplant vasculopathy: Biotherapeutics Groups, University of Western Ontario. February 2002.
- 33) Vascular Biology Retreat: Four Points Sheraton, London, ON, May 22, 2002.
Presentation: "Analysis of Serpin Mediated Regulation of Transplant Vasculopathy Development."
Poster: "A Viral Serpin, Serp-1, Reduces Endothelial Nexin and Timp Expression"
Poster: "Viral Chemokine Binding Proteins Block Early Inflammatory Responses and Rat Aortic Allograft Vasculopathy Development"
- 34) Third International Serpins Symposium: Reduced Plaque Growth in Rat Models of Angioplasty Injury and Aortic Allograft Transplant after Treatment with Unique Poxviral Serine and Cysteine Proteinase Inhibitors. Chicago, IL, June 2002.
- 35) Viral chemokine binding proteins modulate early inflammatory responses in rat aortic allograft vasculopathy development. *Keystone Symposia on Molecular and Cellular Biology*, Breckenridge, Colorado, January 7-12, 2003.
- 36) Women and Cardiovascular Disease - Current Issues". Women and Health. Somerville House, University of Western Ontario. March 27, 2003.
- 37) Immunomodulatory Effects of Viral Proteins on Inflammatory Risks. Presentation on behalf of Viron Therapeutics Inc. Montreal, Quebec, June 17, 2003; Alexion Inc., Connecticut, July 9, 2003; Hartford, Connecticut, July 29, 2003; Genzyme, Boston, Mass., November 4, 2003; Xenon Genomics Inc., Vancouver, BC, December 11, 2003; Washington, D.C., April 26, 2004.
- 38) Serp-1, a viral serpin with anti-inflammatory activity alters gene expression profiles in human monocytes. *Vascular Biology Retreat*, Four Points Sheraton, London, Ontario. July 3, 2003.
- 39) Viral serpins and the innate immune response. *University of Minnesota*, Cardiovascular Division, Minneapolis, Minnesota. September 3, 2003.
- 40) Serpins and the innate immune response. *Division of Rheumatology, St. Joseph's Health Care*, London, ON. September 12, 2003.
- 41) Serpins in inflammation and vascular disease: A new therapeutic approach. Cardiovascular Rounds, *London Health Sciences Centre – University Campus*. October 6, 2003.
- 42) Viral serpins and the innate immune response. Invited Speaker, *University of Toronto, Laboratory Medicine and Pathobiology*, Toronto, Ontario. November 17, 2003.
- 43) Viral Proteins for Immunosuppression. *Centre for Transplant Research and Development Spring Retreat*, Oakwood Inn, Grand Bend, Ontario. April 16-18, 2004.
- 44) Affairs of the Heart: New approaches to artery disease, heart attack and stroke. Library Lecture Series, *London Public Library, Central Branch*. April 21, 2004.

- 45) Viral Proteins for Immunosuppression. Grand Rounds. *London Health Sciences Centre, University Campus*, May 27, 2004.
- 46) Serpins – Unsung heroes of the vasculature. Grand Rounds. *University of Florida College of Medicine, Gainesville, Florida*, July 23, 2004.
- 47) Serpins – A death defying act. Visiting Professor Lecture Series, University of Minnesota, Minneapolis, Minnesota, October 8, 2004.
- 48) Serpins – A death defying act. Cardiology Grand Rounds, *University of Florida, Gainesville, Florida*, November 16, 2004.
- 49) Serpins - Unsung Heroes of the Vasculature. Guest Lecturer, Pathology Department, *Dunedin School of Medicine, New Zealand*, November 30, 2004.
- 50) Viral Serpins – Unsung Heroes of the Vasculature. Guest Speaker, Work in Progress Research Seminar Series. *Juravinski Cancer Centre, Hamilton, Ontario*, December 9, 2004.
- 51) Serpins - Unsung Heroes of the Vasculature. Guest Speaker, *Western Michigan University, Kalamazoo, Michigan*. January 14, 2005.
- 52) "Immunomodulation by serpins: Novel therapeutic protease inhibitors?". Invited Speaker, *VBWG Annual National Faculty Meeting, American College of Cardiology Scientific Session, Orlando, Florida*, March 4, 2005.
- 53) Serpins - Unsung Heroes of the Vasculature. Session #6: Secreted viral immunomodulatory proteins. "*Viral Immune Evasion*" Meeting. *Acapulco, Mexico*, March 8-12, 2005.
- 54) The Intrigue of the Vascular Innate Immune Response. Invited seminar, Department of Medicine, *University of Florida College of Medicine, Gainesville, Florida*, August 17, 2005.
- 55) From bench to biotech. Invited talk, *Master of Biotechnology Symposium, University of Toronto, Toronto, Ontario*, November 10, 2005.
- 56) Vascular Inflammation. Invited seminar, *Ohio State University*, December 2, 2005.
- 57) Viral Anti-Inflammatory Proteins as Therapeutics. Invited talk, *14th International Conference of the Inflammation Research Association, The Hyatt, Cambridge, Maryland*, October 15-19, 2006.
- 58) Autoimmune Symposium. Invited talk. *University of Florida*, September 2007
- 59) Canadian Cardiovascular Congress. Invited seminar. Women in Research The Hyatt, Vancouver, BC, October 21-25, 2006
- 60) Cardiology Grand Rounds. Viral Immune Evasion for therapeutic Application. *Georgetown University*, November 2006

- 61) “Harnessing Viruses to Treat Disease”. Invited talk. The 44th Annual Florida Junior Science, Engineering and Humanities Symposium. *University of Florida College of Medicine*, Gainesville, Florida, February 4, 2007.
- 62) University of British Columbia – “Viral Immunotherapeutic Proteins; A New Approach to Inflammatory Vascular Disease” October 11, 2007.
- 63) Cardiology Grand Rounds, University of Florida – “Aneurysms and Vasculitis” October 18, 2007.
- 64) Canadian Society of Atherosclerosis Thrombosis and Vascular Biology (CSATVB) – “Academic Career Development for a Female Scientist: Barriers and Joys” - October 21, 2007.
- 65) Medical Grand Rounds, University of Florida “Innate Immunity and Illness – Viral Immune Modulating Agents as a New Therapeutic Approach” - December 20, 2007.
- 66) Interventional Cardiology Rounds – “ The Endothelium; A living Carpet of Cells Lining the Vasculature” December 2007
- 67) Heart and Lung Institute - Saint Paul’s Hospital, University of British Columbia, “The Serpin Saga” - March 14, 2008
- 68) Center for Pre-collegiate Education and Training - 50th Annuals Univ. of FL Student Science Training Program (UF-SSTP) “Farming Viruses for New Drugs” June 2008.
- 69) LSU Health Science Center – “Inflammation in Cardiovascular disease - Viral anti-inflammatory proteins as a new potential therapeutic approach” New Orleans, LA October 23, 2008
- 70) University of Pittsburgh Medical Center, Cardiovascular Institute, University of Pittsburgh, “The Serpin Saga” - September, 2008
- 71) American Heart Association symposium New Orleans, Nov 2008. “Serpins and the Interactions of the Thrombotic and Inflammatory Response Cascades”
- 72) Medical Grand Rounds, University of Florida “Innate Immunity and Illness – Viral Immune Modulating Agents as a New Therapeutic Approach” - October 30, 2008.
- 73) Medical University of South Carolina “Serpins for Treatment of Inflammatory Disorders: A Tale of Two Serpins.” Charleston, SC – March 2009.
- 74) Orlando Medical School Medical Grand Rounds – Inflammation and Vascular Disease April 9, 2009.
- 75) University of Florida, “Viral Chemokine Modulating Proteins and Vascular Disease,” Research in Progress Rheumatology Division Rounds –July 1, 2009
- 76) Medical Grand Rounds, University of Florida, “Inflammation in Cardiovascular Disease: Clinical Trial of a New Class of Viral Anti-Inflammatory Protein Therapeutic” – November 19, 2009

- 77) Cardiology Grand Rounds University of Florida “Chronic Allograft Vasculopathy: Newer Therapeutic Approaches” - January 7, 2010
- 78) Interventional Cardiology Rounds “The Endothelium in Interventional Cardiology” University of Florida April 26, 2010
- 79) Cardiology, University of Maryland, Baltimore, MD “The serpin Saga: A Tale of three Serpins” April 29, 2010
- 80) 2011 Keystone Symposium on Drugs from Bugs: The Anti-Inflammatory Drugs of Tomorrow, Snowbird, Utah, “Viral Bugs Make Good Drugs” Invited Speaker – Apr 6, 2011
- 81) Cardiology, University Of Alabama, Birmingham, AB, “Viral Serpin Immune Modulating Therapeutics” June 7, 2011.
- 82) World Heart Congress, “Analysis of Myomaviral Serpin Treatment for Inflammatory Vasculitic Syndromes, Giant Cell and Takayasu Arteritis” Vancouver Canada July, 2011.
- 83) Serpin Congress, Chapel Hill, NC, Serpins and Therapeutics. “Viral Serpin Immunotherapeutics” October, 2011.
- 84) Molecular Genetics and Microbiology, Gainesville, FL, “Viral Serpin Immune Modulating Therapeutics” March, 2012
- 85) University Leiden Pharmaceutical Development - “Viral Anti-Inflammatory Serpin Therapeutics” June 2012
- 86) Molecular analysis of the M-T7 Anti-inflammatory protein activity through mutagenesis
World Heart Congress Toronto, ON, Canada, July 27, 2012
- 87) Viral Immune Evasion Workshop, Spetzes, Greece, “Viral Immune Modulating Therapeutics” October, 2012, Invited speaker.
- 88) Department of Medicine Grand Rounds “Sepsis, DIC, and Serpins” October 11, 2012
- 89) Invited speaker “Viral Serpin Therapy for Sepsis” Department of Medicine Research Retreat University of Florida, Gainesville, FL, March? 2013
- 90) Rheumatology Research in Progress – “Serpins, Inflammation and Vasculitis”
May 20, 2013
- 91) Myxomavirus-derived Serpin; A New Therapeutic Approach to Lethal Viral Infections

- 92) Serpin Conference Organization Committee, Invited speaker Leogang Austria – “Serpin Therapeutics – from Virus to Man”
- 93) San Antonio 2014 JCEC Omics Conference “Serpin Therapeutics – from Virus to Man”
- 94) Department of Molecular Genetics and Microbiology - “Serpin Therapeutics – from Virus to Man” April 2014
- 95) World Heart Congress - “Serpin Therapeutics - from Virus to Man” July 2014
- 96) Getting Across Vascular Biology Workshop - Chemokines: Glycosamine glycan (GAG)s Interaction and Chronic Transplant Vascular Disease and Rejection Mount Desert, Maine, September, 2014
- 97) University of Florida Department of Molecular Genetics and Microbiology Chemokines: Glycosaminoglycan (GAG)s Interaction and Chronic Transplant Vascular Disease and Rejection November, 2014
- 98) American College Wound Healing Keynote Addresss“Atherosclerosis, Cancer and Wound Healing; The Systems Biology Connection” Dec 6, 2014
- 99) University of Florida Department of Medicine Grand Rounds “Atherosclerosis, Cancer and Wound Healing; The Systems Biology Connection” Dec 11, 2014
- 100) Medical University South Carolina, Charleston, SC – Cardiology Grand Rounds “Atherosclerosis, Cancer and Wound Healing; The Systems Biology Connection” April 30, 2015
- 101) Arizona State University, Biodesign Institute, Phoenix AZ – Biodesign Discovery Lecture “Atherosclerosis, Cancer and Wound Healing; The Systems Biology Connection” April 14, 2015

RESEARCH TRAINEES

POST DOCTORAL FELLOWS

- Wen Yue, MD – 1990–1992
- Liying Liu – 1992–1996
- Masis Perk, MD – 1990–1992
- Wei-dong Yan, MD – 1992–1994
- Erbin Dai, MD – 1994–1996
- Marita Lundstrom-Hobman, PhD (Research Associate) – 1994–1996
- Alexander Christov, PhD – 1997–1998
- Li Hui. PhD – 2001– 2002
- Kasinath Viswanathan, PhD – June 2002–2005
- Yunming Sun, PhD, PDF–NSERC/Viron Therapeutics, Inc.– July 2002–2006

- Steve Kypraios, Clinical Cardiology Fellow – Sept 2004 – 2006
- Lyubomir A. Petrov, MD – June 2005– 2008
- Ganesh Munuswamy Ramunajam, PhD – October 2005 – 2009
- Jide Togonu-Bickersteth – July 2008 – June 2009
- Mee Bartee, PhD – January 2008 – 2011
- Jennifer Williams, MD, PhD – 2009 – Present
- Hao Chen, MD, PhD – 2010 to present
- Donghang Zheng, MD, PhD – 2010 – present
- Jennifer Davids, PhD - 2013
- Sriram Ambadipadi, PhD - 2013-present
- Sufi Morshed, PhD – 2015- present

MEDICAL RESIDENCY RESEARCH TRAINEES

- Ashish Gupta, MD, PhD 2010 - 2011
- Jorge Fuentes, MD 2013-2014
- Kevin Ergle, MD 2014

GRADUATE STUDENTS

- Dean Kolodziejczyk, MSc. Department of Medicine, University of Alberta–1994–1996, MSc 1996.
A Newly Developed Migration Assay Shows Increased Monocyte Activity in Patients with Unstable Coronary Artery Disease. September, 1996
- Harold Isaacs, Department of Anatomy, University of Western Ontario, 1997–2001, MSc 2001.
The Effects of the Viral Serine Protease Inhibitor, Serp-1, on Monocyte Diapedesis in Culture. 1999
- Christian Zalai, Department of Microbiology and Immunology, University of Western Ontario, 1998 – 2000, MSc The Role of Calreticulin in Vascular Wound Healing 2000
- Leila Bocksch, Department of Microbiology and Immunology, University of Western Ontario, 1999 – 2001, MSc 2001.
- Sepideh Vaziri, Department of Microbiology and Immunology, University of Western Ontario, 2000 – 2003, MSc 2003.
- Renee Korol – Department of Medical Biophysics – joint student with Peter Canham, University of Western Ontario, 2002-2007, PhD 2007
- Dana McIvor – Department of Microbiology and Immunology, University of Western Ontario, 2003 – Present.
- Karen Kennedy – Department of Biomedical Engineering, University of Western Ontario, 2004 – Present.
- Jokubus Richardson, Department of Microbiology and Immunology, University of Western Ontario, 2005 – 2007, MSc 2007
- Jennifer Davids – Department of Molecular Genetics and Microbiology, University of Florida, 2007 – 2013.

RESEARCH ASSOCIATES/ RESEARCH BIOLOGICAL SCIENTISTS

- Alexander Christov, 1998 – 2002
- Erbin Dai, MD – 1996–2009
- Liying Liu, MD – 1996–Present

RESEARCH TECHNICIAN

- Hai Yan Guan, MD – 1997–2001
- Hong Diao, MD – 2003–2004

SUMMER STUDENTS and UNDERGRADUATE RESEARCH ROTATION STUDENTS

- Marcus Radosavijlevic, MD – 1989
- Anees Chagpar, MD – 1991, 1993 – Surgical Resident)
- Linuo Lenore Zou – June 1 – August 31, 1994
- Samir Khoury – June 1 – August 31, 1994
- Jennifer Klinke – June 1 – August 31, 1995/June 1 – August 31, 1996 – in Medical School
- Hung Quoc Luu – June 1 – August 31, 1996
- Shazir Karmali – June 1, August 31, 1996
- Michael Mah – June 1 – August 31, 1996
- Amy Kreiser – June 1 – August 31, 1996
- Lily Fan – May 3 – August 31, 1997, May – August 1998 – BSc. student
- Dennis Klironomos – May 15–August 31, 1997, May–August 1998
- Christian Zalai – May – August 1998, BSc.
- Denny Ivanova – May – August 1998, BSc.
- Christian Zalai – May – August 1999
- Sepideh Vaziri – May – August 1999
- Jennifer Brown – May – August 2000
- Alice Khuu – May – August 2000
- Julia LaPorta – May – August 2001
- Lukasz Petrykowski – May – August 2001
- Brodie Nadeau – May – August 2001
- Pracha Vatsya – May – August 2002, 2003, 2004
- Jide Bickersteth – May – August 2002, 2003, 2004
- Danielle Marentette – June – August 2002
- Yu Li – May – August 2003
- Anna Piekos – May – August 2003
- Jakob Richardson – May–August 2004
- Jeffrey Yu – May – August 2005
- Baron McFadden – May – August 2005 and 2007
- Colin Sullivan – June 2007– August 2007
- Nicole R. Fife - September 2008 - 2009
- Shashank Ghandi – September 2008 – 2009
- Vivek Singh – 2009- present
- Sami Saikaly, 2009- present

- Malcolm Nix, 2012 – present
- Jared Smith, BS, 2012-present
- Adisson Fortunel, 2013-2014 HHMI studentship
- Luc Loyola 2014- present
- Vishnu 2014-present
- Wenyi 2014 –present
- Kyle Boudeau – 2015 - present

MICROBIOLOGY & IMMUNOLOGY STUDENTS (483)

- Carolyn Icton, Honours Microbiology research course – September 1997 – May 1998
- Leila Bosksch, Honours Microbiology research course – September 1998 – May 1999
- Jennifer Brown, Honours Microbiology research course – September 1999 – May 2000
- Rozina Jadoon, Honours Microbiology research course – September 1999 – May 2000
- Brodie Nadeau, Honours Microbiology research course – September 2000 – May 2001
- Aaron Bigham, Honours Microbiology research course – September 2001 – May 2002
- Jide Bickersteth, Honours Microbiology research course – September 2002 – May 2003
- Ben Pang, Honours Microbiology research course – September 2002 – May 2003
- Shannon Clark, Honours Microbiology research course – September 2003 – May 2004
- Jakob Richardson, Honours Microbiology research course – September 2003 – May 2004
- Kerise Manchester, Honours Microbiology research course – September 2004–May 2005
- Soha Ramadan, Honours Microbiology research course – September 2004 – May 2005
- Mira Schnabel, Honours Microbiology research course – September 2005 – May 2006
- Alyse Goldberg, Honours Cell Biology (450) course, in conjunction with Dr. Aaron Fenster, Imaging – September 2005 – May 2006

GRADUATE STUDENT PROGRAM ROTATING IDP STUDENTS

- Amanda Barrett, Molecular Genetics and Microbiology – February 2007
- Robbie Newman, Molecular Genetics and Microbiology – February 2007

STUDENT RESEARCH FUNDING

- Robarts Research Institute Graduate Student Award
Christian Zalai – May 1999 – May 2000 \$ 8,500
- Ontario Graduate Scholarship Program
Leila Bocksch – May 2000 – May 2001 \$15,000

- Martin L. Wills Student Scholarship (Heart & Stroke)
Lei Dai – Summer 2000 \$ 2,000
- John D. Schultz Science Student Scholarship (Heart & Stroke)
Andrea Wan – Summer 2000 \$ 3,500
- Scholarship (Heart & Stroke)
Pracha Vatsya – Summer 2003 \$ 3,500
- Adisson Fortunel, 2013-2014 HHMI studentship

GRADUATE SCHOLARSHIP

- Jennifer David – 2009 - Present

POST DOCTORAL FELLOWSHIP – NIH

- Mee Yong Bartee, PhD – 2009 - 2013

WISEST Summer High School Research Students

- 1991, 1992, 1993, 1995

HIGH SCHOOL CO-OP STUDENTS

Ontario High Schools

- Shoshana Lowe, Central High School 1997–1998
- Alice Khuu, Central High School 1999–2000
- Debbie Chang, Lucas High School 2000
- Lei Dai, Lucas High School 2000
- Julia Laporta, Lucas High School 2001
- Emily Manning, Lucas High School 2001
- Stephanie Fraser, Lucas High School 2002
- Brescia Quan, Central High School 2003
- Titus Lo, Lucas High School 2003
- Andre St. Amant, Lucas High School 2004
- Cathryn Lott, Lucas High School 2004
- Sarah Maxwell, Lucas High School 2005
- Charles Lim, Lucas High School 2006

Florida High Schools

Florida SSTP High school student research introductory program

- Diana Jules 2007
- Vivek Singh 2008
- Navya Reddy 2009
- Samip Doshi 2009

TEACHING

ANATOMY AND CELL BIOLOGY 413 (University of Alberta) 1993 – 1995

- Cell biology and histology lecture on atherosclerosis
- Three hour lecture

PHASE II CLINICAL SKILLS (University of Alberta) 1989 – 1996

- Medicine 425
 - Six hours/year
- PHASE II AND PHASE III (Med 446) MEDICAL STUDENTS (University of Alberta) 1989 –1996
- Ward Rotation
 - Two to three weeks/year
 - OSCE Exam 1990–1995; three hours/year
- OUTPATIENT CARDIOLOGY CLINIC (University of Alberta) 1993 – 1996
- Internal Medicine Residents
 - Sixteen weeks/1992
 - Eight weeks/1993
- CLINICAL METHODS PHASE II (UWO) 1997– Present
- Six hours/1997
 - Nine hours/1998, 2000, 2001, 2002, 2003, 2004
 - Eight hours/1999
 - Eighteen hours/2004
- SUPERVISOR – BIOCHEMISTRY/MICROBIOLOGY & IMMUNOLOGY (483 Projects) 1997– Present
- Twenty hours/year
- SUPERVISOR – MEDICAL BIOPHYSICS (480 Projects) 2003– Present
- One student per year
- MEDICAL STUDENT LECTURES 1998 – Present
- For Dr. J. David Spence
 - For Dr. D. Boughner
1998 – Present
Year 1 CVS – week 3
Case: Valvular heart disease – critical appraisal
- INTERNAL MEDICINE EDUCATIONAL SERIES (UWO) 1997 – 2006
- 1 hour
- CORONARY CARE UNIT INTERNAL MEDICINE RESIDENCY TRAINING 1997 – 2006
- 2 hours/week
- WOMENS' HEALTH SEMINAR (UWO) 2001 – 2005
- 2 hours
- CARDIOVASCULAR SYSTEM B 2002 – 2003
- 12 hours/year
- PATHOLOGY 520B – PUBLIC & PRIVATE PARTNERSHIPS IN RESEARCH 2006
- 2 hours

CLINICAL SKILLS - EPC III Series University of Florida 2008 -- Present
 • 12 hours

HONOURS RESEARCH – University of Florida 2007 -- Present

RESEARCH GRANTS

Principal Investigator

- | | |
|--|--|
| <p>1. AHFMR – CLINICAL INVESTIGATOR AND ESTABLISHMENT GRANT</p> <p>a) The spectroscopic analysis of the evolution of atherosclerotic plaque</p> <p>b) Renewal
Laser-induced fluorescence: a diagnostic tool for cardiovascular disease</p> | <p>1989 – 1992
\$250,000 & ongoing salary</p> <p>1992 – 1997
salary support</p> |
| <p>2. ALBERTA HEART & STROKE FOUNDATION/
CANADIAN HEART FOUNDATION</p> <p>a) The spectroscopic investigation of the role of lipoproteins and platelets in the development of atherosclerotic plaque</p> <p>b) The spectroscopic investigation of the development of atherosclerotic plaque</p> <p>c) Molecular and spectroscopic studies of the genesis of atherosclerotic plaque</p> | <p>1991 – 1993
\$45,000/year</p> <p>1993 – 1996
\$45,000/year</p> <p>1996 – 1999
\$50,000/year</p> |
| <p>3. AHFMR – TECHNOLOGY TRANSFER GRANT PHASE II
The development of a novel atherectomy catheter: the Halliburton endarterectomy catheter</p> | <p>1990 – 1992
\$75,000</p> |
| <p>4. ONTARIO CENTRE OF EXCELLENCE
Laser Research – Dr. B. Wilson, Director
Co-investigator</p> | <p>1997
\$18,000</p> |
| <p>5. ONTARIO CENTRE OF EXCELLENCE
Laser Research – Dr. B. Wilson, Director
Co-investigator</p> | <p>1998
\$30,000</p> |
| <p>6. UNIVERSITY OF ALBERTA CENTRAL RESEARCH FUND</p> <p>a) Laser-induced fluorescence</p> <p>b) The modification of atherosclerotic plaque development and vascular restenosis by cytokine inhibitory proteins</p> | <p>1990 – 91
\$7,000</p> <p>1992 – 93
\$7,000</p> |
| <p>7. UNIVERSITY OF ALBERTA SSRC COMMITTEE</p> <p>a) Laser-induced fluorescence: spectroscopic investigation</p> | <p>1991 – 93</p> |

	of the development of atherosclerotic plaque	\$7,000
b)	Laser-induced fluorescence: identification of nodal conduction tissue	1993 – 94 \$6,000
8.	LONDON HEALTH SCIENCES CENTER MULTI-ORGAN TRANSPLANT PROGRAM	1998 – 99 \$74,901
	Viral anti-inflammatory proteins – A novel approach to the prevention of acute and chronic allograft rejection	(shared)
9.	HEART & STROKE FOUNDATION OF ONTARIO Principal Investigator	
a)	An investigation into the mechanism of viral serpin inhibition of transplant vasculopathy (approved but accepted MRC grant)	1999 – 2001 \$56,795/year
b)	Laser-induced fluorescence: Optical analysis of unstable atherosclerotic plaque	2001 – 2002 \$25,000
c)	An investigation into the mechanisms of viral serpin inhibition of transplant vasculopathy (Grant #T 5033)	2002 – 2005 \$75,502/year
d)	Mechanisms of serpin regulation of vascular repair (terminal award)	2005 – 2006 \$33,900
e)	Serpin regulation of innate immune response and vascular repair (Grant #T 5772)	2006 – 2009 \$ 60,592/year
	Co-Investigator	
a)	Vascular cell responses in atherosclerosis: A genomics approach PI – Dr. Murray Huff Co-PI – Dr. G. Pickering	2001 – 2006 \$20,000/year
b)	Biomarkers in vulnerable carotid plaque with microemboli or ulcers, PI – Dr. J. David Spence	2005 – 2008 \$190,050
10.	MEDICAL RESEARCH COUNCIL OF CANADA/ and CIHR CANADIAN INSTITUTES OF HEALTH RESEARCH Principal Investigator	
a)	An investigation into the mechanism of viral serpin inhibition of transplant vasculopathy	1999 – 2002 \$53,151/year
b)	Serpin regulation of vascular responses to injury (Grant MOP-57682)	2002 – 2005 \$82,723/yr
c)	Inhibition of Transplant Vasculopathy by Chemokine Modulation (Grant III-71117)	2004 – 2005 \$43,043
d)	Inhibition of Transplant Vasculopathy by Chemokine Modulation (Grant MOP-77578)	2005 – 2010 \$93,186
	Co-Investigator	
a)	Brain arteries and aneurysms: microscopic structure and analysis of extracellular matrix PI – Dr. Peter Canham	2001 – 2004 \$110,737

- b) Brain arteries and aneurysms: microscopical structure and analysis of extracellular matrix proteins
PI – Dr. Peter Canham 2005 – 2008
\$168,671
- c) Vascular and cerebrovascular transdisciplinary training program (vcTTP): Integrated training in genetics, biology, mathematics physics and engineering towards an understanding and prevention of vascular and cerebrovascular disease
PI – Dr. Aaron Fenster 2001 – 2007
\$1,015,000
- d) CIHR Group in Vascular Imaging
PI – Dr. Brian Rutt 2001
- e) Development of Interventional Cardiac MRI
PI – Dr. Maria Drangova 2001
- 11. CENTRE FOR TRANSPLANT RESEARCH & DEVELOPMENT**
- a) Modification of Transplant Inflammation
Associate Investigators: Dr. David Kelvin,
Dr. Robert Zhong, Dr. Grant McFadden, Dr. Alexandra Lucas 2000
- b) Centre for Transplant and Research Development
PI – Dr. Tony Jevnikar 2001
Co-PI – Dr. William Wall \$25,000/year
- 12. ROBARTS RESEARCH INSTITUTE**
Research Establishment Fund 1996 – 1999
\$280,000
- 13. UWO/DOM RESEARCH COMPETITION**
Analysis of the effects of viral anti-apoptotic proteins on arterial and cellular apoptotic responses 2004 – 2005
\$5,000
- 14. Ethel Smith Endowed Vasculitis Research Chair**
F008570 Lucas (PI) 2006 – present
The central aim for this research chair is to provide support for research into chronic vasculitic disorders.
- 15. NATIONAL INSTITUTE OF HEALTH**
- a) 1RC1HL100202-01 Lucas (PI) 10/01/2009 – 9/30/2012 (NCE)
NIH - ARRA grant
Serpine Modulation of Inflammatory Vasculitis: Potential for Immunomodulatory Therapy
- b) 1RO1 DE020820-01A1 Kesavalu (PI) 03/01/2011 – 02/28/2016
NIH/NIDCR - Co-investigator
Periodontal Pathogens and Cardiovascular Disease
- c) 1 R01 AI100987-01A1 McFadden, Rahman (co-PIs) 2013- 2018
NIH – Co-investigator

Manipulation of inflammasomes and NF- κ B signaling in human myeloid cells by Myxoma

d) 1 R56 HL122140-01A1 Progulsk-Fox (PI) 07/01/2014-06/30/2015
 NIH – Co-Investigator
P. Gingivalis Mediated Disruption of Autophagy in Endothelial Dysfunction

e) 1 R01 HL126956-01 Progulsk-Fox (PI) 04/01/2015 - 03/31/2019
P. gingivalis mediated disruption of autophagy in endothelial dysfunction
 NIH – Co-Investigator

16. AMERICAN HEART ASSOCIATION –

a) Inhibition of Transplant Vasculopathy by Chemokine Modulation 0855421 E 2008-2010
 \$82,500/yr

b) 12GRNT120/0313 Lucas (PI) 2012 – 2014
 Inhibition of Allograft Vasculopathy (AV) through Blockade of Chemokine:GAG Interaction

17. University of Florida

a) Gatorade funding Lucas (PI) 08/01/2011- 7/31/2013
 Serpin Modulation of Inflammatory Vasculitis: Potential for Immunomodulatory Therapy

b) Gatorade funding Lucas (PI) 08/01/2013- 7/31/2014
 Serpin Inhibition of Pancreatic Cancer Cell Growth

c) 00095057 Lucas (PI) 07/01/2013 -06/30/2015
Serpin Regulation of Inflammation

d) 00115070 Lucas (PI) 07/01/2014 - 06/30/2016
Inhibition of Allograft Vasculopathy (AV) through Blockade of Chemokine:GAG Interaction

e) Gatorade/ Cloud Pharmaceuticals Lucas (PI) 07/01/2015 - 06/30/2016
Serpin Reactive Site Peptides for Treatment of Viral Sepsis Interaction

18. UF CTSI Seed funding competition

a) Association Between Periodontal Disease and Cardiovascular Disease, Co PI Awarded 9.24.08 CTSI Project. Major Initiative

b) **UF CTSI Seed funding competition**
 Association Between Periodontal Disease and Cardiovascular Disease, CTSI Project. Major Initiative Co PI, Awarded 9.24.08 2008- 2010
 \$88,000

19. INDUSTRY GRANTS:

a) SQUIBB PHARMACEUTICALS	1993 – 94
Reduction of atherosclerotic plaque	\$15,000
development of Marek's disease infected chickens	
a) BIOGEN	1994 – 96
Development of a viral anti-inflammatory	\$140,000/year
Protein, SERP-1 for treatment of restenosis	
c) SPECTRAL	1996
Assessment of calreticulin for the prevention	\$15,000.00
of restenosis	
d) VIRON THERAPEUTICS INC.	1998 – 99
Analysis of viral proteins	\$50,000
Analysis of viral proteins	1999 – 2000
	\$82,938
Analysis of viral proteins as anti-atherogenic agents	2000 – 2001
	\$151,000
Analysis of viral anti-inflammatory proteins as anti	2001 – 2002
atherogenic agents	\$250,000
Analysis of viral anti-inflammatory proteins as anti	2002 – 2009
atherogenic agents	\$70,000/yr
20. CO-INVESTIGATOR – GRANTS/CLINICAL TRIALS	
a) AHFMR Technology Transfer Grant Phase I	1991 – 1993
Alex Palynchuk Western Instruments Inc.	
Ultrasonic Catheter for Plaque Ablation	
b) AHFMR Technology Transfer Grant Phase I	1991 – 1993
Andrew Shaw, PhD	
Technology Transfer Phase I; Development of	
monoclonal antibodies for platelet activation antigens	
c) GUSTO Angiographic Sub-study	1991
d) A pilot study to evaluate intracoronary administration	1995
of activase for the treatment of intracoronary thrombus	
e) APPROACH angiographic study	1995
f) c7E3 Fab anti G Iib IIIa external platelet receptor	1995
in PTCA study	
g) ReoPro and Johnson & Johnson Palmaz Schatz	1997
stent trial	
h) BARD Canada	1997
An evaluation of the safety and effectiveness of the	
BARD XT coronary stent in the elective treatment of	
atherosclerotic lesions, acute vessel closure, and suboptimal	
results following conventional balloon angioplasty.	

- i) Department of Veterans Affairs Cooperative Studies Program 1999
COURAGE Trial
PI – Dr. W. Kostuk
- j) Numerous trials with UFI Clinical Trials group Dr C Pepine
list upon request 2006-present

MANUSCRIPTS/ABSTRACTS/PRESENTATIONS – SUMMARY

Refereed papers - published or in press	
1977 - Present	109
Book chapters/reviews - published or in press	
1992 - Present.....	23
Total papers and reviews	132
Patents – awarded and submitted	
1992 Present.....	20

PUBLICATIONS

Refereed Papers – published or in press

1. Lucas AR, Flintoff W, Anderson R, Percy D, Coulter M, Dales S. *In vivo* and *in vitro* models of demyelinating diseases: tropism of the JHM strain of Murine hepatitis virus for cells of glial origin. *Cell*. 1977;12:553-560.
2. Lucas AR, Coulter M, Anderson R, Dales S, Flintoff W. *In vivo* and *in vitro* models of demyelinating diseases: II. Persistence and host-regulated thermosensitivity in cells of neural derivation infected with mouse hepatitis and measles viruses. *Virology* 1978;88:325-337.
3. Lucas AR, Klinke P. An unusual case of cardiomyopathy. *Perspectives in Cardiology* 1987;2:21-22.
4. Desnoyers MR, Isner JM, Pandian NG, Wang SS, Hougen T, Fields C, Lucas AR, Salem DM. Clinical and non-invasive hemodynamic results after aortic balloon valvuloplasty for aortic stenosis. *Am J Cardiol* 1988;12:1078-1084.
5. Isner JM, Fields CD, Lucas AR. Laser therapy for cardiovascular disease: Current status and future direction. *Choices in Cardiology* 1988;2:225-228.
6. Isner JM, Lucas AR, Fields CD. The role of laser therapy in the treatment of cardiovascular diseases. *Br J Hosp Med*. 1988;40:172-179.

7. Gaffney EG, Clarke RH, Lucas AR, Isner JM. The correlation of fluorescence emission with the plaque content and intimal thickness of atherosclerotic coronary arteries. *Lasers Surg Med.* 1989;9:215-228.
8. Gal D, Rongoine AJ, DeJesus ST, Lu E, Lucas AR, Isner JM. Yucatan microswine: evaluation of a new atherosclerotic animal model for the study of catheter based interventions. *Am Heart J* 1990;119:291-300.
9. Haraphongse M, Kunjara R, Burton J, Tymchak W, Lucas AR, Humen D, Montague TJ. The clinical efficacy of emergency bypass surgery for failed coronary angioplasty. *Can J Cardiol.* 1990;6:186-190.
10. Lucas AR, Lu E, Radosavijevic MJ, Gaffney EJ. The characterization of human coronary artery atherosclerotic plaque fluorescence emission. *Can J Cardiol.* 1990;6:219-228.
11. Lucas AR, Gauthier T, Isner JM, Clarke RH. Angiographic contrast media interference with laser-induced fluorescence excitation and detection in atherosclerotic human coronary arteries. *Am Heart J* 1991;121:110-118.
12. Perk M, Flynn GJ, Smith C, Bathgate B, Tulip J, Wen Y, Lucas AR. Laser-induced fluorescence emission: I. The spectroscopic identification of fibrotic endocardium and myocardium. *Lasers Surg Med.* 1991;112:523-534.
13. Lucas AR, Perk M, Wen Y, Tio F, Schneider W. Laser-induced fluorescence identification of intimal hyperplasia after intravascular stent implantation. *The International Society of Optical Engineering, Diagnostic and Therapeutic Cardiovascular Interventions II*, 1992;1642:183-190.
14. Lucas AR, Perk M, Wen Y, Smith C. Fluorescence spectroscopic detection of early injury-induced atherosclerosis. *The International Society of Optical Engineering – Proceedings of Diagnostic and Therapeutic Cardiovascular Interventions II*, 1992;1642:183-190.
15. Perk M, Flynn G, Gulamhusein S, Tulip J, Parfrey N, Lucas AR. Laser-induced fluorescence identification of sinoatrial and atrioventricular nodal conduction tissue. *PACE* 1993;16:1701-1712.
16. Yan WD, Perk M, Nation PN, Power RF, Liu LY, Jiang X, Lucas AR. Fluorescence spectroscopic detection of virus-induced atherosclerosis. *The International Society of Optical Engineering* 1994;2130(11):74-81.
17. Yan WD, Perk M, Chagpar A, Wen Y, Stratoff S, Schneider WJ, Jugdutt BI, Tulip J, Lucas AR. Laser-induced fluorescence III. Quantitative analysis of atherosclerotic plaque content. *Lasers Surg Med.* 1995;16:164-178.
18. Lucas AR, Wen Y, Jiang XY, Liu LY, Yan WD, Bauer JA, Schneider W, Tulip J, Chagpar A, Dai EB, Perk M, Radosavijevic MJ, Montague P, Garbutt M. Development of an avian model for restenosis. *Atherosclerosis* 1996;119:17-41.

19. Bauer J, Jiang XY, Wen Y, Yan WD, Dai E, Liu LY, Tulip J, Lucas AR. Comparative study of Nd: YAG laser angioplasty at 1.06 μm , 1.32 μm , and 1.44 μm wavelengths: decreased vascular spasm and early mortality with 1.44 μm laser ablation. *Lasers Surg Med*. 1996;19:299-310.
20. Maksymowych WP, Nation N, Nash P, Macen J, Lucas AR, McFadden G, Russell AS. Amelioration of established antigen-induced arthritis in rabbits treated with a secreted viral serine proteinase inhibitor. *J Rheumatol* 1996;23:878-882.
21. Mossman K, Nation P, Mason J, Garbutt M, Lucas AR, McFadden G. Myxoma virus M-T7, a secreted homologue of the interferon gamma receptor, is a critical virulence factor for the development of myxomatosis in European rabbits. *Virology* 1996;215:17-30.
22. Dai E, Khoury S, Wishart D, Kay C, Jugdutt BI, Tulip J, Lucas AR. Laser-induced fluorescence: quantitative analysis of atherosclerotic plaque chemical content in human aorta. *The International Society of Optical Engineering, Lasers in Surgery, Advanced Characterization of Therapeutics and Systems*, 1996;2671:90-103.
23. Lucas AR, Liu LY, Macen J, Nash P, Dai E, Stewart M, Graham K, Etches W, Boshkov L, Nation PN, Lundstrom Hobman M, McFadden G. Virus-encoded serine proteinase inhibitor, SERP-1, inhibits atherosclerotic plaque development after balloon angioplasty. *Circulation* 1996;94:2890-2900.
24. Liu LY, Dai E, Lundstrom Hobman M, Kolodziejczyk D, Lucas AR. Animal models of restenosis: myth or reality. *Current Pharmaceutical Design* 1996;2:553-584.
25. Graham K, Lalani AS, Macen JL, Ness TL, Barry M, Liu LY, Lucas AR, Clark-Lewis I, Moyer RW, McFadden G: The T1/35kDa family of poxvirus secreted proteins bind chemokines and interfere with leukocyte influx into infected tissues. *Virology* 1997;229:12-24.
26. Jugdutt BI, Lucas AR, Khan MI, Blinston GE. Effect of angiotensin-converting enzyme inhibition on infarct collagen deposition and remodeling during healing after transmural canine myocardial infarction. *Can J Cardiol* 1997;13:657-668.
27. Dai E, Stewart M, Ritchie B, Mesali N, Raha S, Kolodziejczyk D, Lundstrom Hobman M, Liu LY, Etches W, Nation N, Michalak M, Lucas AR. Calreticulin, a potential vascular regulatory protein, reduces intimal hyperplasia after arterial injury. *Arterioscler. Thromb. Vasc. Biol.* 1997;17(11):2359-2368.
28. Lucas AR, Dai E, Liu LY, Perk M, Powers RF, Nation PN. Atherosclerosis in Marek's disease virus infected hypercholesterolemic roosters is reduced by HMGCoA reductase and ACE inhibitor therapy. *Cardiovasc Res* 1998;38:237-246.

29. Dzavik V, Burton JR, Kee C, Teo KK, Ignaszewski A, Lucas AR, Tymchak WJ. Changing practice patterns in the management of acute myocardial infarction complicated by cardiogenic shock: elderly compared with younger patients. *Can J Cardiol*. 1998;14(7):923-930.
30. Christov A, Dai E, Liu LY, Miller L, Nash P, Lalani AS, McFadden G, Nation PN, Tulip J, Lucas AR. Detection of transplant vasculopathy in a rat aortic allograft model by fluorescence spectroscopic optical analysis. *Lasers Surg Med* 1999;24:346-359.
31. Christov A, Liu LY, Lowe S, Icton C, Dunmore-Buyze J, Boughner DR, Dai E, Lucas AR. Laser-induced fluorescence (LIF) – recognition of the structural composition of porcine heart valves. *Photochem Photobiol*. 1999;69(3):382-389.
32. Lalani AS, Masters J, Graham K, Liu LY, Lucas AR, McFadden G. The role of the myxoma virus soluble T1 CC-chemokine inhibitor glycoprotein, M-T1, during myxoma virus pathogenesis. *Virology* 1999;256:233-245.
33. Hnatiuk S, Barry M, Zeng W, Liu L, Lucas A, Percy D, McFadden G: Role of the C-terminal RDEL motif of the myxoma virus M-T4 protein in terms of apoptosis regulation and viral pathogenesis. *Virology* 1999;263:290-306.
34. Clarke SE, Weinmann HJ, Dai E, Lucas AR, Rutt BK. Comparison of two blood pool contrast agents for 0.5 T MR angiography: experimental study in rabbits. *Radiology* 2000;214(3):787-794.
35. Christov A, Dai E, Drangova M, Liu L, Abela GS, Nash P, McFadden G, Lucas AR: Optical detection of triggered atherosclerotic plaque disruption by fluorescence emission analysis. *Photochem Photobiol* 2000;72(2):242-252.
36. Liu LY, Lalani A, Dai E, Seet B, Macauley C, Singh R, Fan L, McFadden G, Lucas AR: A viral anti-inflammatory chemokine binding protein, M-T7, reduces intimal hyperplasia after vascular injury. *J Clin Invest* 2000;105:1613-1621.
37. Miller LW, Dai E, Nash P, Liu L, Icton C, Klironomos D, Fan L, Nation PN, Zhong R, McFadden G, Lucas A: Inhibition of transplant vasculopathy in a rat aortic allograft model after infusion of anti-inflammatory viral serpin. *Circulation* 2000;101:1598-1605.
38. Hatton MWC, Ross B, Southward SMR, Lucas AR: Metabolism and distribution of the virus-encoded serine proteinase inhibitor, SERP-1, in healthy rabbits. *Metabolism* 2000;49(11):1449-1452.
39. Christov A, Kostuk WJ, Jablonsky G, Lucas AR: A three tiered fluorescence-based system for monitoring activation-related changes in human platelets. *Biomedical Optics and Imaging, The International Society of Optical Engineering, Optical Biopsy and Tissue Optics* 2000;4161:167-79.

40. Christov A, Dai E, Drangova M, Liu L, Abela GS, Nash P, McFadden G, Lucas AR: Laser-induced fluorescence spectroscopy (LFS): detection of unstable thrombogenic atherosclerotic plaque formation in a rabbit model – a first look diagnostic approach. . *Biomedical Optics and Imaging, The International Society of Optical Engineering, Optical Biopsy and Tissue Optics* 2000;4161:190-201.
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