

CURRICULUM VITAE

1. Name, position, academic department

Laurent Brossay,
Associate Professor
Dept of Molecular Microbiology & Immunology, Box G,
Brown University
Providence, RI 02912
(401) 863-9645
Laurent_Brossay@Brown.edu

2. Home address

3. Education

1983 - 86	Bachelor in Biochemistry Rennes University, Rennes, France
1986 - 88	Master in Biology Rennes University, Rennes, France Supervisor: Bernard Genetet
1989	Exchange France-Quebec Laval University, Quebec City, Canada Supervisor: François Auger
1990 - 94	Ph. D., Microbiology - Immunology Laval University, Quebec City, Canada Supervisor: Jacques Hébert

4. Professional appointments

Jul 94-Feb 95	Post-doctoral Fellow University of California, Los-Angeles, CA, USA Supervisor: Eli Sercarz
Feb 95-Apr 97	Post-doctoral Fellow University of California, Los-Angeles, CA, USA Supervisor: Mitchell Kronenberg
May 97-Dec 99	Research Scientist La Jolla Institute for Allergy and Immunology, CA, USA Supervisor: Mitchell Kronenberg
2000-June 06	Assistant Professor of Medical Science, Brown University
June 06-Present	Associate Professor of Medical Science, Brown University
July 09-Present	Interim Chair, Department of Molecular Microbiology & Immunology

5. Publications

a) Chapters in books

1. Villeneuve, A., **L. Brossay**, G. Paradis, and J. Hébert. 1994. Characterization of neutralizing epitope in variable domain I of B and C complex serovars of *Chlamydia trachomatis*. Proceedings of the 8th international symposium on human chlamydial infections. 122-125
2. Tessmer, M.S., S.H., Robbins, and **L. Brossay**. 2004. Development of murine NK cells and their maturation and activation during viral infection. *Recent Res. Devel. Immunol.* 6: 61-77
3. Tessmer M. S., and **L. Brossay**. 2007. Beyond MHC class I; Non classical NK cell recognition. *Recent Res. Devel. Immunol. Editor of the book.* 2: 59-76
4. Reilly E. C., L. D. Fast, and **L. Brossay**. 2008. The impact of senescent T cells on aging immune systems. *Research Media: Current Research in Immunology.* 2: 109-119

b) Refereed Journal Articles

1. **Brossay, L.**, G. Paradis, A. Pépin, L. Côté, W. Mourad, and J. Hébert. 1993. Idiotype and anti-anti-idiotypic antibodies to *Neisseria gonorrhoeae* lipooligosaccharides with bactericidal activity but no cross-reactivity with red blood cell antigens. *J. Immunol.* 151: 234-243
2. **Brossay, L.**, A. Villeneuve, G. Paradis, L. Coté, W. Mourad, and J. Hébert. 1994. Mimicry of a neutralizing epitope of the major outer membrane protein of *Chlamydia trachomatis* by anti-idiotypic antibodies. *Infect. Immun.* 62: 341-347
3. Villeneuve, A., **L. Brossay**, G. Paradis, and J. Hébert. 1994. Determination of a neutralizing epitope in variable domain I and IV of the major outer membrane protein from *Chlamydia trachomatis* serovar K. *Microbiology* 140: 2481-2487
4. Villeneuve A., **L. Brossay**, G. Paradis, and J. Hébert. 1994. Characterization of the humoral response induced by a synthetic peptide of the major outer membrane protein of *Chlamydia trachomatis* serovar B. *Infect. Immun.* 62: 3547-3549
5. **Brossay, L.**, G. Paradis, R. Fox, M. Koomey, and J. Hébert. 1994. Identification, localization and distribution of the PilT protein in *Neisseria gonorrhoeae*. *Infect. Immun.* 62: 2302-2308
6. Sydora, B. C., **L. Brossay**, A. Hagenbaugh, M. Kronenberg, and H. Cheroutre. 1996. TAP-independent selection of CD8⁺ intestinal intraepithelial lymphocytes. *J. Immunol.* 156: 4209-4216
7. Jullien, D., **L. Brossay**, P. A. Sieling, R. L. Modlin, and M. Kronenberg. 1996. CD1: clues on a new antigen presenting pathway. *Research in Immunol.* 147: 321-328
8. Teitell, M., H. R. Holcombe, **L. Brossay**, A. Hagenbaugh, M. J. Jackson, L. Pond, S. P. Balk, C. Terhorst, P. A. Peterson, and M. Kronenberg. 1997. Nonclassical behavior of the mouse CD1 molecule. *J. Immunol.* 158: 2143-2149
9. **Brossay, L.**, D. Jullien, S. Cardell, B. C. Sydora, N. Burdin, R. L. Modlin, and M. Kronenberg. 1997. mCD1 is mainly expressed on hematopoietic derived cells. *J. Immunol.* 159: 1216-1224
10. **Brossay, L.**, S. Tangri, M. Bix, S. Cardell, R. Locksley, and M. Kronenberg. 1998. Mouse CD1 autoreactive T cells have diverse patterns of reactivity to CD1 targets. *J. Immunol.* 160: 3681-3688
11. **Brossay, L.**, N. Burdin, S. Tangri, and M. Kronenberg. 1998. Antigen presenting function of mCD1: one molecule with two different kinds of antigenic ligands. *Immunol. Rev.* 163: 133-144
12. Wolfgang, M., P. Lauer, H. S. Park, **L. Brossay**, J. Hébert, and M. Koomey 1998. PilT mutations lead to simultaneous defects in competence for natural transformation and twitching motility in pilated *Neisseria Gonorrhoeae*. *Molecular Microbiology* 29: 321-330
13. Amano, M., N. Baumgarth, M. D. Dick, **L. Brossay**, M. Kronenberg, L. A. Herzenberg, and S. Strober. 1998. CD1 expression defines subsets of follicular and marginal zone B cells in the spleen: b2m dependent and independent forms. *J. Immunol.* 161: 1710-1717
14. Burdin, N., **L. Brossay**, Y. Koezuka, M. Grusby, M. Taniguchi, and M. Kronenberg. 1998. Selective ability of murine CD1 to present glycolipids: a-galactosylceramides specifically stimulate NK T lymphocytes. *J. Immunol.* 161: 3271-3281
15. **Brossay, L.**, M.C. Chioda, N. Burdin, Y. Koezuka, G. Casorati, P. Dellabona, and M. Kronenberg. 1998. CD1d mediated recognition of a glycolipid by NK T cells is highly conserved throughout mammalian evolution. *J Exp Med.* 188: 1521-1528

16. Tangri, S., **L. Brossay**, N. Burdin, D. Lee, M. Corr, and M. Kronenberg. 1998. Presentation of peptide antigens by mouse CD1 requires protein processing and endosomal localization. *Proc. Natl. Acad. Sci. U. S. A.* 95: 14314-14319
17. **Brossay**, L. O. Naidenko, N. Burdin, J Matsuda, T. Sakai, and M. Kronenberg. 1998. Structural requirements for galactosylceramides recognition by CD1 restricted T cells. *J. Immunol. Cutting Edge* 161: 5124-5128.
18. Couedel, C., M. A. Peyrat, **L. Brossay**, Y. Koezuka, F. Davodeau, S. A. Porcelli and M. Bonneville. 1998. Diverse CD1d-restricted reactivity patterns of human T cells bearing "invariant" AV24BV11 T cell receptors. *Eur J Immunol.* 28: 4391-4397
19. Chang, C.S., **L. Brossay**, M. Kronenberg, and K. P. Kane. 1999. The murine nonclassical class I MHC-like CD1.1 molecule protects target cells from LAK cytotoxicity. *J Exp Med.* 189: 483-491
20. Burdin, N., **L. Brossay**, and M. Kronenberg. 1999. Divergent responses of mouse T cells to glycolipids: CD1 dependence and Th1/Th2 balance. *Eur J Immunol.* 29: 2014-2025
21. Kronenberg, M., **L. Brossay**, Z. Kurepa, and J. Forman. 1999. Conserved functions of nonclassical class I molecules in antigen presentation and NK cell surveillance. *Immunol. Today* 20: 515-521
22. Szalay, C.H., C. Ladel, C. Blum, **L. Brossay**, M. Kronenberg, and S.H.E. Kaufmann. 1999. CD1 modulation decreases TGF production and ameliorates listeriosis in mice. *J. Immunol. Cutting Edge* 162: 6955-6958.
23. **Brossay**, L., and M. Kronenberg. 1999. Highly conserved antigen presenting functions of CD1d molecules. *Immunogenetics* 50: 146-151
24. Elewaut, D., **L. Brossay**, S. M. Santee, O. V. Naidenko, N. Burdin, H. De Winter, C. F. Ware, H. Cheroutre, and M. Kronenberg. 2000. Membrane lymphotoxin is required for the development of different subpopulations of NK T cells. *J. Immunol.* 165: 671-679
25. Burdin, N., **L. Brossay**, M. Degano, H. Iijima, M. Gui, I. A. Wilson, and M. Kronenberg. 2000. Structural requirements for antigen presentation by mouse CD1. *Proc. Natl. Acad. Sci. U. S. A.* 97: 10156-10161
26. Prigozy, T., O. Naidenko, P. Qasba, D. Elewaut, **L. Brossay**, T. Natori, Y. Koezuka, A. Kulkarni, and M. Kronenberg. 2001. Processing of carbohydrates is required for glycolipid antigen presentation by CD1d molecules. *Science* 291: 664-667
27. Kamada, N., H. Iijima, K. Kimura, M. Harada, E. Shimizu, S. Motohashi, T. Kawano, H. Shinkai, T. Nakayama, T. Sakai, **L. Brossay**, Kronenberg M, and Taniguchi M. 2001. Crucial amino acid residues of mouse CD1d for glycolipid ligand presentation to Va14 NKT cells. *International Immunol.* 13: 853-861
28. Biron, C. A., and **L. Brossay**. 2001. NK cells and NKT cells in innate defense against viral infections. *Current Opinion in Immunology* 13:458-464
29. Robbins, S. H., K. B. Nguyen, N. Takahashi, T. Mikayama, C. A. Biron, and **L. Brossay**. 2002. Inhibitory Functions of the Killer Lectin-Like Receptor G1 Molecule during the Activation of Murine NK Cells. *J. Immunol. Cutting Edge* 168: 2585-2589
30. Robbins, S.H., and **L. Brossay**. 2002. Forum: NK Cell Receptors: Emerging Roles in Host Defense Against Infectious Agents. *Microbes and Infection* 4:1523-1530
31. Wesley, J. D., and **L. Brossay**. 2003. NK T cell-NK cell cross-talk: reciprocal interaction and activation? *Archivum Immunologiae et Therapiae Experimentalis.* 51: 121-126
32. Maverakis, E., J. Beech, D. B. Stevens, A. Ametani, **L. Brossay**, P. van den Elzen, R. Mendoza, Q. Thai, L. H. Macias, D. Ethell, C. W. Campagnoni, A. T. Campagnoni, A. Sette, and E. E. Sercarz. 2003. Autoreactive T cells can be protected from tolerance induction through competition by flanking determinants for access to class II MHC. *Proc. Natl. Acad. Sci. U. S. A.* 100: 5342-5347
33. Robbins, S. H., S. C. Terrizzi, T. Mikayama, B. C. Sydora, and **L. Brossay**. 2003. Differential regulation of KLRG1 expression on T cells. *J. Immunol.* 170: 5876-5885
34. Rhee, R. J., S. Carlton, J. L. Lomas, C. Lane, **L. Brossay**, W. G. Cioffi, and A. Ayala. 2003. Inhibition of CD1d activation suppresses septic mortality: a role for NK-T cells in septic immune dysfunction. *J Surg Res.* 115:74-81
35. Eash, S., R. Tavares, E. G. Stopa, S. H. Robbins, **L. Brossay**, and W. J. Atwood. 2004. Differential distribution of the JC virus receptor-type sialic acid in normal human tissues. *American J. of Pathology* 164:419-428
36. Robbins, S. H., M. S. Tessmer, T. Mikayama, and **L. Brossay**. 2004. Expansion and contraction of the NK cell

- compartment in response to MCMV infection. *J. Immunol.* 173: 259-266
37. Anfossi, N., S. H. Robbins, S. Ugolini, P. Georgel, K. Hoebe, C. Bouneaud, C. Ronet, A. Kaser, C. B. DiCioccio, E. Tomasello, R. S. Blumberg, B. Beutler, S. Reiner, O. Lantz, D. H. Raulet, **L. Brossay** and E. Vivier. 2004. Induction and function of CD8⁺ T cells expressing Ly49 inhibitory receptors specific for MHC class I molecules. *J. Immunol.* 173: 3773-3782
 38. Lawton, A. P., T. I. Prigozy, **L. Brossay**, A. Khurana, D. Martin, T. Zhu, J. S. Bonifacino, and M. Kronenberg. 2005. The mouse CD1d cytoplasmic tail mediates CD1d trafficking and antigen presentation by AP-3 dependent and independent mechanisms. *J. Immunol.* 174: 3179-3189
 39. Robbins, S. H., M. S. Tessmer, L. Van Kaer, and **L. Brossay**. 2005. Direct effects of T-bet and MHC class I expression, but not STAT1, on peripheral NK cell maturation. *Eur. J. Immunol.* 35: 757-765
 40. Wesley, J. D., S. H. Robbins, S. C. Terrizzi, and **L. Brossay**. 2005. Optimal NK T cell activation of NK cells requires functional IFN- γ signaling on antigen presenting cells. *J. Immunol. Cutting Edge* 174: 3864-3868
 41. Tessmer, M. S., C. Fugère, F. Stevenaert, O. Naidenko, H. G. Chong, G. Leclercq, and **L. Brossay**. 2007. KLRG1 binds cadherins and preferentially associates with SHIP-1. *International. Immunol.* 19: 391-400
 42. Wesley, J., M. S. Tessmer, C. Paget, F. Trottein, and **L. Brossay**. 2007. A Y-chromosome linked factor impairs NK T development. *J. Immunol.* 179: 3480-3487
 43. Pilbeam, K., P. Basse, **L. Brossay**, N. Vujanovic, R. Gerstein, A. N. Vallejo and L. Borghesi. 2008 The ontogeny and fate of natural killer cells marked by permanent DNA rearrangements. *J. Immunol.* 180 1432-1441
 44. Guia, S. C. Cagnet, L. de Beaucoudrey, M. S. Tessmer, E. Jouanguy, C. Berger, O. Filipe-Santos, J. Feinberg, Y. Camcioglu, J. Levy, S. Al Jumaah, J. L. Stephan, C. Fieschi, L. Abel, **L. Brossay**, J. L. Casanova, and E. Vivier. 2008. A role for interleukin-12/-23 in the maturation of human Natural Killer and CD56⁺ T cells in vivo. *Blood*, 111: 5008-5016
 45. Chaix J., M. S. Tessmer, K. Hoebe, N. Fuséri, B. Ryffel, M. Dalod, L. Alexopoulou, B. Beutler, **L. Brossay**, E. Vivier, and T. Walzer. 2008. Priming of Natural Killer cells by Interleukin-18. *J. Immunol. Cutting Edge* 181: 1627-1631
 46. Wesley, J., M. S. Tessmer, D. Chaukos, and **L. Brossay**. 2008. NK cell-like behavior of Va14i NK T cells during MCMV infection. *Plos Pathogens.* 4(7):e1000106.
 47. Banh, C. and **L. Brossay**. Inhibitory Receptors, Cadherins and their Interactions. 2009. *Current Immunology Reviews.* 5: 2-9
 48. Wintermeyer, P. C. W. Cheng, S. Gehring, B. L. Hoffman, M. Holub, **L. Brossay**, and S. H. Gregory. 2009. Invariant NKT Cells Suppress Cholestatic Liver Injury. *Gastroenterology.* 136: 1048-1059
 49. Tessmer, M. S., A. Fatima, C. Paget, F. Trottein and **L. Brossay**. NKT Cell Immune Responses to Viral Infection. 2009. *Expert Opinion on Biological Therapy.* 13: 153-162
 50. Nguyen, V., L. Cao, J. T. Lin, N. Hung, A. Ritz, K. Yu, R. Jianu, S. P. Ulin, B. J. Raphael, D. H. Laidlaw, **L. Brossay**, and A. R. Salomon. A new approach for quantitative phosphoproteomic dissection of signaling pathways applied to T cell receptor activation. 2009. *Molecular & Cellular Proteomics.* 8:2418–2431
 51. Banh, C., C. Fugere and **L. Brossay**. Immunoregulatory functions of KLRG1 Cadherin interactions are dependent on forward and reverse signaling. 2009. *Blood.* 114: 5299-5306
 52. Terrizzi SC, C. Banh, and **L. Brossay**. A protocol for the production of KLRG1 tetramer. 2010. *J Vis Exp.* 2010 Jan 12;(35). pii: 1701. doi: 10.3791/1701

c) Abstracts

d) Invited Lectures

- Nantes University, France, 1997
- Mount Sinai, New York, NY 1998
- Boston University, Boston MA 1999
- Pasteur – Merieux. Aventis France, 2000
- Harvard Medical School, Harvard, Boston, MA 2000
- Rhode Island Hospital, Providence, RI 2003
- Gent University, Belgium, 2003
- Temple University, Philadelphia, PA 2004

- University of California, Irvine, CA 2004
- University of Pittsburgh School of Medicine, Pittsburgh, PA 2004
- La Jolla Institute for Allergy & Immunology, San Diego, CA 2004
- Dartmouth University, Hanover, NH 2004
- University of Connecticut Health Center, Hartford, CT 2004
- Miriam Hospital, Providence, RI 2005
- Gent University, Belgium 2007
- La Jolla Institute for Allergy & Immunology, San Diego, CA 2007
- University of Vermont, Burlington, VT 2008
- Rhode Island Hospital RI 2008
- Boston University, Boston, MA 2009

e) Oral Presentations at Professional Meetings

- *Keystone Symposia on Molecular and Cellular Biology*. Taos, NM, 1995
- *American Association Immunology Meeting*. San Francisco, CA, 1998
- *19th international Natural Killer Cell Workshop*, Puerto Rico 2002.
- *6th World Congress on Trauma, Shock, Inflammation and Sepsis*, Munich Germany 2004
- *American Association Immunology Meeting*, Washington, DC 2004
- *Keystone Symposia. NK and NKT Cell Biology*, Keystone, CO 2008

6. Research grants

a) Active Funding

NIH Grant RO1 AI 058181 (1-5);

Title: Functions of the KLRG1 molecule on NK cells and T cells

Dates of Award: 05/01/04 – 04/30/10

Principal Investigator: Laurent Brossay.

Direct Costs: \$1,000,000/5years; 30% effort.

The major goal of this project is to study the role of KLRG1 and to identify its ligand

NIH Grant RO1 AI 46709 (6-10)

Title: NK T cell interaction with NK cells during viral infections

Dates of Award: 07/1/07 - 06/30/12

Principal Investigator: Laurent Brossay

Direct Costs: \$1,125,000/5years; 30% effort.

The major goal of this project is to study the interaction of NK T cells and NK cells in the context of MCMV infection.

NIH Grant 3R01AI046709-08S1 (8-10)

Date of Award: 4/24/09 - 06/30/12

Principal Investigator: Laurent Brossay

Direct Costs: \$120,188/3years

NK T cell interaction with NK cells during viral infections

This award provides support under the Research Supplements to Promote Diversity in Health-Related Research Program for Leon Toussaint.

b) Completed grants

NCCR SIG Award 1S10RR021051

Title: BD FACSAria Flow cytometer

Dates of Award: 03/22/07 – 03/21/08

Principal Investigator: Laurent Brossay

Direct Costs: \$402,975; 1% effort

NIH Grant RO1 AI 46709

NK receptors and CD1 roles in NK and NK T cells

Date of Award: 4/1/01 - 3/31/07

Principal Investigator: Laurent Brossay

Direct Costs: \$750,000/5years; 35% effort.

The major goal of this project was to study the functions of NK receptors on both NK and NK T cells in the context of MCMV infection.

NIH RFA RR-00-003

Title: Center for Genetics and Genomics

Date of award 10/1/00-9/30/04;

COBRE - Co-Investigator of Project A - Characterization of Events Regulating the Balance Between Resistance and Infection (Project PI- C.A. Biron)

Direct Costs: \$17,600; 10% efforts year 1, 15% effort year 2 to 4.

Seed Fund Award; Structural Biology and Function of Macromolecular Complexes”

Date of Award: 2006

Co-PI; Laurent Brossay (PI Rebecca page)

Rhode Island Foundation Award

Date of Award: 1/1/00 - 12/31/00

Principal Investigator; Laurent Brossay

Direct Costs: \$ 5,000.

NIH Grant R21 AI 46709

Title: NK receptors and CD1 roles in NK and NK T cells

Date of Award: 10/01/00 - 3/31/01

Principal Investigator; Laurent Brossay

Direct Costs: \$75,000; 40% effort.

Salomon Research Award

Title: Role of the KLRG1 Tyrosine Based Inhibitory Motif

Date of Award: 3/1/02 – 2/28/03

Principal Investigator; Laurent Brossay

Direct Costs: \$10,000.

Medical Research Operating Grant of Canada, 1999 (declined)

7. Service:

(I) To the University

- Member of Search Committee for Faculty Position in Molecular Microbiology & Immunology, 2000-2001; Affirmative Action Minority Representative for Search
- Member of Search Committee for Associate Director of Mouse Transgenic Facility, 2001-2002
- Member of Search Committee for Faculty position in Molecular Microbiology & Immunology, 2004; Affirmative Action Minority Representative for Search
- Chair of Pathobiology Retreat Committee 2001, 2002 & 2003
- Ad Hoc Reviewer for IACUC Protocol Reviews 2005
- Member of MCB Graduate Program Curriculum Committee, 2005
- Member of MD/PhD admissions committee, 2005
- Pathobiology Admissions Committee Member 2006
- Member of Reappointment, Promotion and Tenure Committee, 2006
- Member of IACUC Protocol Reviews 2006-2009
- Pathobiology Curriculum Committee, 2006-present
- Pathobiology Steering Committee, 2009

- Director of the Cell Sorting Facility 2007-present

(II) To the Profession

a) Grant Review

- Ad Hoc Reviewer for NIH Special Emphasis Study Section, 2001, 2002, 2003 & 2004
- Ad Hoc Reviewer for the Swiss National Foundation, 2002
- Ad Hoc Reviewer for the Health Research Board, Dublin, Ireland, 2002
- Ad Hoc Reviewer for Belgium Fund Research, 2004-2006
- Ad Hoc Reviewer for the Fund for Scientific Research - Belgium, 2006, 2007, 2008 & 2009
- Ad Hoc Reviewer for NIH Program Project Application, 2003, 2004, 2007 & 2008
- Ad Hoc Reviewer for the Belgium Foundation against Cancer, 2008
- Ad Hoc Reviewer for NIH Regional Centers of Excellence for Biodefense and Emerging Infectious Diseases Research (RCE) Study Section, 2008
- Ad Hoc Reviewer for NIH Immunity and Host-Defense (IHD) Study Section, 2008
- Ad Hoc Reviewer for Agence Nationale de la Recherche (ANR) France, 2009
- Ad Hoc Reviewer for NIH Immunity and Host-Defense (IHD) Study Section 2009 (2x)
- Ad Hoc Reviewer for Stage 1 review of Challenge Grant Applications 2009
- Ad Hoc Reviewer for the Wellcome Trust, 2009
- Member NIH Immunity and Host-Defense (IHD) Study Section, 2009-present

b) Journals & Textbooks

- Associate Editor for the *Journal of Immunology* 2007 - present
- Ad hoc reviewer for Journals, 1999-Present: *Journal of Clinical Investigation*, *PNAS*, *Blood*, *Plos Pathogens*, *European Journal of Immunology*, *Nature Reviews Rheumatology*, *Journal of Virology*, *Cellular Immunology*, *Virus*, *International Immunology*, *Hepatology*, *Journal of Leukocyte Biology*, *Gastroenterology*, *Journal of Infectious Disease*, *Journal of Leukocyte Biology*, *Arthritis Research*, *Critical Reviews in Immunology*, *Infection and Immunity*, *Trends in Molecular Medicine*, *Immunology*, *Current Immunology Reviews*, *Biochimica et Biophysica Acta*, *Transplantation*, *Rheumatology*, *Expert Review of Anti-infective Therapy*
- Reviewer for Textbooks: 5th edition of the *Kuby Immunology Textbook*, 5th edition of the *Tizard Immunology Textbook*, 6th edition of the *Kuby Immunology Textbook*, 1th edition of the *Nieto and Jane Immunology Textbook*

c) Chair of Meeting Symposium

- Co Chairman NK cell Workshop at the 19th International NK Meeting, Puerto Rico 2002
- Co Chairman Reproductive Immunology Meeting, Providence, RI 2002
- Co Chairman 6th World Congress on Trauma, Shock, Inflammation and Sepsis, Munich, Germany 2004
- Co Chairman Innate Immunity to Microbes Mini-Symposium, AAI Meeting, Washington, DC 2004

d) Outside reader for Ph. D. thesis defense

- Clinton Mathias, University of Connecticut – “Pro-inflammatory Role of NK T Cells in the Development of Allergic Disease” 2004
- Elizabeth Christina Nowak, University of Connecticut – “The role of IL-15 and survival signals in NK cell development, Maintenance and activation” 2006

e) Professional Societies

- 1999 – Present American Association of Immunologists
- 2005 – Present The Society for Natural Immunity

f) Reagent Made on Market

- Anti-CD1d antibody distributed by PharMingen & eBioscience

8. Academic honors

a) Fellowship

- Pre-doctoral Fellowship (M. Sc.) from CNRS, France 1987
- Medical Research Council Fellowship from Canada, 1994-1997

b) Awards

- Exchange France - Quebec Award, 1988
- American Association of Immunologist Junior Faculty Travel Award, 2004
- American Association of Immunologist Faculty Mentor Travel Award, 2009

c) Honors and Awards Received by Students and Trainees

Scott Robbins, Graduate Student 2000 - 2004

- *Poster Presentation Award*, Brown University Pathobiology Retreat, Bristol, RI 2001
- *Poster Presentation Award*, Brown University Pathobiology Retreat, Bristol, RI 2002
- *Charles A. Janeway Memorial Award*, best poster, New England Immunology Meeting 2003
- *Joukowsky Family Foundation Prize* for Outstanding Ph.D. Dissertation 2004

Johnna Wesley, Graduate Student 2002 - 2007

- *Charles A. Janeway Memorial Award*, best poster, New England Immunology Meeting 2004
- *Natural Immunity Society Travel Scholarship* 2005

Jonathan Chong, Undergraduate Student 2004-2005

- *Leallyn B. Clapp Prize for Best Senior Honors Thesis in Biochemistry*

Carla Fowler, Undergraduate Student 2000 – 2001

- *George W. Hagy Prize in Human Biology*

Deanna Chaukos, Undergraduate Student 2006 – 2007

- *2007 Royce Fellowship recipient*

Marlowe Tessmer, Graduate Student 2003 - 2007

- *Poster Presentation Award*, Brown University Pathobiology Retreat, Greenwich, RI 2007

Cindy Banh, Graduate Student 2006 - present

- *Charles A. Janeway Memorial Award*, best poster, New England Immunology Meeting 2008
- *Levy pre-Doctoral Travel Awards* for Ph.D. Student in Biomed 2008
- *NIH F31 AI080230 2009-2011*
- *Poster Presentation Award*, Brown University MCB Retreat, Bristol, RI 2009
- *International Summer Program 2010 award*, Yokoyama, Japan 2010

Leon Toussaint, Graduate Student 2007 - present

- *2009 AAI Minority Scientist Travel Award*

9. Post doctoral trainees

Ayesha Fatima, MD

Position Post-Doctoral Fellow, 2008-2009
Current Position Clinical Assistant Professor, William Beaumont Hospital Pediatric Department

10. Teaching

(I) Graduate Training & Teaching Activities

a) Advisor for Ph.D. Thesis Research

Scott Robbins

Position Graduate Student, Pathobiology Graduate Program, Brown University 2000-2004
Research Project Role of the KLRG1 Molecule during NK Cell Activation
Current Position Scientist at Immune Design, Seattle, WA

Derek Boucher

Position Graduate Student, MCB Program, Brown University 2004-2005
Research Project Mechanism of Induction of KLRG1 on T and NK cells
Current Position FBI Special Agent, Philadelphia, PA

Johnna Wesley

Position Graduate Student, Pathobiology Graduate Program, Brown University. 2002-2007
Research Project Mechanism of Cross-Talk between NK T and NK cells
Current Position Post-Doctoral Research Associate at the Benaroya Research Institute Seattle, WA

Marlowe Tessmer

Position Graduate Student, Pathobiology Graduate Program, Brown University 2003-2007
Research Project Identification of the KLRG1 ligand
Current Position Post-Doctoral Research Associate at Schering-Plough, Palo Alto, CA

Cindy Banh

Position Graduate Student, MCB Graduate Program 2006 - Present
Research Project Inhibitory receptors, cadherins and their interactions

Leon Toussaint

Position Graduate Student, Pathobiology Graduate Program 2007 - present
Research Project Development of NK T cells

Emma Reilly

Position Graduate Student, Pathobiology Graduate Program 2007 - present
Research Project Role of type 2 NK T cells

b) Rotating Graduate Student Trainees

- Ana Maria Dragoi, Graduate Student, Pathobiology Graduate Program 2003
- Chui Sun Yap, Graduate Student, MCB Graduate Program 2005
- Katie Heflin, Graduate Student, Pathobiology Graduate Program 2006
- Nicholas Shubin, Graduate Student, Pathobiology Graduate Program 2009
- Chathuraka Jayasuriya, Graduate Student, Pathobiology Graduate Program 2009

c) Member of Ph. D. Advisory & Thesis Committee

- Gary Pien, 1998-2002 Pathobiology Graduate Program, Thesis Advisor Christine Biron
- Rachelle Salomon, 1999-2004 Pathobiology Graduate Program, Thesis Advisor Christine Biron
- Michael Shaw 2000-2005 Pathobiology Graduate Program, Thesis Advisor George Yap
- Stanimir Ivanov, 2000-2005 Pathobiology Graduate Program, Thesis Advisor Wen Ming Chu
- William Querbes, 2001-2006, Pathobiology Graduate Program, Thesis Advisor Walter Atwood
- Kirsten Hokeness, 2001-2006, Pathobiology Graduate Program, Thesis Advisor Thais Mather
- Ana Maria Dragoi, 2001-2007, Pathobiology Graduate Program, Thesis Advisor Wen Ming Chu
- Alma Zecevic, 2003-2007 Pathobiology Graduate Program, Thesis Advisor Anatoly Zhitkovich
- Doug Wilson, 2003-2008 Pathobiology Graduate Program, Thesis Advisor George Yap
- Tamako Konkin, Pathobiology Graduate Program, Thesis Advisor Shuping Tong 2004-2009
- David Critton, MCB Graduate Program, Thesis advisor Rebecca Page
- Vinh Nguyen, MCB Graduate Program, Thesis advisor Art Salomon
- Ahmet Eken, MCB Graduate Program, Thesis advisor Jack Wands
- Pamela Gaddi, Pathobiology Graduate Program, Thesis Advisor Thais Salazar-Mather
- Kevin Alby, Pathobiology Graduate Program, Thesis Advisor Richard Bennett
- Meredith Crane, Pathobiology Graduate Program, Thesis Advisor Thais Salazar-Mather

(II) Undergraduate Training & Teaching Activities

a) Advisor for Undergraduate Independent Study & Senior Honor Thesis (Bio195/196)

- Carla Fowler, 2000-2001
- James Watson, 2001-2002
- William Schachterle, 2001-2002
- Jacquelyn Parente, 2003-2004
- Jonathan Chong, 2004-2005
- Jorge Rodriguez Barrios, 2004-2005
- Deanna Chaukos, 2007-2008
- Evan Smith, 2008-2009

b) Advisor for Undergraduate Students

- Irene Young, Summer 2000 UTRA Recipient
- Boris Gershman, Summer 2001 Hughes Recipient
- Jonathan Chong, Summer 2004 Hughes Recipient
- Jorge Rodriguez Barrios, Summer 2006 UTRA Recipient
- Tran Le, Summer 2007 UTRA recipient
- Valerie Wong, Summer 2007
- Nathanael Lee, 2009
- Elizabeth Thompson, 2009

Second Reader for: Andrew Kwon, Rebecca Rhee, Kathryn Artis, Sandy Wong, Melissa Zerofsky, Caroline Hu, Elena Gonzalez, Marie Hennelly, Iuliana Ene, Jennifer Phung and Toby Cohen

c) Biology Program Advisor 2003, 2006 & 2008 Class

(III) Brown Course Teaching

2000-2001

- BIO194 *Innate Immunity* – newly developed course offered- **Course leader, 26 lectures 9 students**
- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture 8 students**

2001-2002

- BIO152 *Innate Immunity* 2002, **Course leader, 27 lectures 8 students**
- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture 7 students**

2002-2003

- BIO152 *Innate Immunity* 2003, **Course leader, 26 lectures 16 students**
- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture 6 students**

2003-2004

- BIO152 *Innate Immunity* 2004, **Course leader, 27 lectures 19 students**
- BIO 53 *Principles of Immunology* 2003, **2 Lectures 126 students**
- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture 5 students**

2004-2005

- BIO 53 *Principles of Immunology* 2004, **Co-Director, 9 lectures 103 students**
- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture 5 students**
- BIO 201 *Introduction to MCB Faculty Trainer Research*, **1 lecture 6 students**
- BIO 160 *Development of Vaccines to Infectious Diseases*, **1 lecture 18 students**

2005-2006

- BIO 53 *Principles of Immunology* 2005, **Co-Director, 11 lectures 83 students**
- BIO152 *Innate Immunity* 2005, **Course leader, 27 lectures 17 students**
- BIO 201A *Introduction to MCB Faculty Trainer Research*, **1 lecture 17 students**
- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture 6 students**

2006-2007

- BIO 53 *Principles of Immunology* 2006, **Course leader, 13 lectures 93 students**
- BIO 264 *Viral Immunology* 2006, **2 lectures 9 students**
- BIO 201A *Introduction to MCB Faculty Trainer Research*, **1 lecture 17 students**
- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture 8 students**

2007-2008

- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture 12 students**
- BIO 201A *Introduction to MCB Faculty Trainer Research*, **1 lecture 8 students**

2008-2009

- BIO152 *Innate Immunity* 2008, **Course leader, 22 lectures 18 students**
- BIO 285 *Introduction to Research in Pathobiology* for graduate students, **1 lecture**

2009-2010

- BIO152 *Innate Immunity* 2009, **Course leader, 15 lectures 20 students**
- BIO 201A *Introduction to MCB Faculty Trainer Research*, **1 lecture 8 students**