



**McGill University
Department of
Microbiology & Immunology**

**Annual Report
(January – December 2011)**

Prepared by Dr. Joaquin Madrenas, MD, PhD, FCAHS

Professor and Chairman

SECTION I

Overview

a. Executive Summary

The Department of Microbiology and Immunology at McGill is an academic department within the Faculty of Medicine whose mission is to foster and nurture outstanding research and education in the area of Infection and Immunity while providing administrative service to the McGill community and beyond. The department is the primary administrative home of 19 faculty members whose research operation takes place in different research groups or centers within McGill and affiliated hospitals and institutes. The department also coordinates education in the different aspects of Microbiology and Immunology through an extensive participation in undergraduate and graduate education programs within the Faculties of Medicine and Science, medical and other professional programs, and post-graduate education and training activities.

2011 has been a very significant year in the life of the Department of Microbiology and Immunology at McGill. Significant events that occurred in this year can be grouped in three major areas: departmental membership renewal, strategic positioning of the department, and redevelopment of the physical environment.

Membership renewal

In terms of human renewal, the following key events happened in 2011:

- arrival of a new chair of the Department, Dr. Joaquín Madrenas, who relocated from the Robarts Research Institute and The University of Western Ontario and started as full professor and chair in August 1, 2011;
- retirement of two professors from the department (Drs. Zafar Ali-Khan and Malcolm Baines) on August 31, 2011;
- initiation of recruitment drive with hiring of Dr. Connie Krawczyk, who started as a tenure track assistant professor in April 1, 2011 and with selection phase for 3 additional recruits to arrive in the late 2012 and early 2013;
- recruitment of a departmental secretary Ms. Ireini Ghobri;

Strategic positioning of the department

During 2011, and compounded by the arrival of a new chair, an extensive strategic analysis of research, teaching and administrative activities of the department was undertaken, and has resulted in:

- promoting multidisciplinary and collaborative initiatives that enhance research activities within the department, e.g., CFI initiatives, multi-investigator grant proposal, etc.;
- streamlining of working departmental committees (undergraduate education, graduate and post-graduate studies, seminars, core facilities, merit evaluation, and tenure committees);
- establishing of policies and procedures that facilitate academic, administrative and technical activities in the department;
- stabilizing the financial base of the department and recovering from accrued debts;
- developing partnerships with external corporations to enhance and support academic activities;
- proactively recognizing outstanding achievements and excellence of departmental members;
- developing research support platforms for departmental members and collaborators (e.g., expanded flow cytometry core facility, centralized glassware washing and autoclaving, etc.).

Redevelopment of the department's physical environment

Following extensive assessment of the state of the Duff Medical Building, which houses the administrative and teaching facilities of the department and 70% of the members of the department, McGill embarked into a functional and technical analysis of redevelopment for this building. Dr. Madrenas acted as representative of the occupants of the building in an infrastructure and facilities committee that reviewed architectural proposals and selected the architectural firm to proceed with this analysis, a milestone completed in early fall 2011. It is expected that this exercise will lead to a fully redeveloped Duff Medical Building by early 2016.

Significant accomplishments

The commitment and performance of the members of the Department of Microbiology and Immunology to academic excellence, as part of the mission of the department, are well illustrated by the standard metrics of scholarly performance for the department, i.e., research grants, publications, education, knowledge translation and community outreach. A detailed list of these achievements is included in the report that follows this summary. A few significant accomplishments are:

- Promotion to full professorship of Drs. Silvia Vidal and Matthias Götze
- Renewal of the Tier I Canada Research Chair assigned to Dr. Silvia Vidal
- Honorary Doctorate in Medicine from the Faculté de Médecine de l'Université de Montréal to Dr. Mark Wainberg
- Induction of Dr. Mark Wainberg to Fellowship of the American Association for the Advancements of Science
- Induction of Dr. Joaquín Madrenas to the Canadian Academy of Health Sciences
- First and second prizes at the 2011 McGill Undergraduate Research Conference for two Microbiology and Immunology undergraduate students: 1st Prize in Biological Sciences for Ms. Kristina Salmon (Supervisors Drs. Hervé Le Moual and Samantha Gruenheid) and 2nd Prize in Medical Sciences for Mr. Raphaël Brisset Di Roberto (Supervisor Dr. Benoit Cousineau)
- Awarding of a patent to Dr. Robert Murgita
- Awarding of over \$4 million in peer reviewed funding to primary members of the department
- Publication of over 90 research papers and book chapters with an annual accumulated impact of over 600.

Challenges

2011 also provided an opportunity to identify key challenges ahead of us:

- renewal, innovation and sustainability of educational programs at the undergraduate and graduate levels emphasizing problem solving research strategies and life-long learning;
- building departmental identity towards recognition of the department as one of the top 10 departments of Microbiology and Immunology in the world;
- creation of a working environment that identifies and nurtures individual abilities and is prepared to confront administrative challenges;
- promotion of multi-disciplinary, trans-departmental research environments that optimize creativity and maximize resource allocation and accessibility;
- successful completion of recruitment and space renovation projects.

a. Faculty Listing

1. List of Faculty members with primary appointments in the Department

Professors

Dr. Joaquin Madrenas (Chairman, 2011-present)

Dr. Albert Berghuis	Dr. Robert Murgita
Dr. James Coulton	Dr. Martin Olivier
Dr. Matthias Götte	Dr. Silvia Vidal
Dr. Greg Matlashewski	Dr. Mark Wainberg

Associate Professors

Dr. Dalius Briedis	Dr. Greg Marczyński
Dr. Benoit Cousineau	Dr. Ciriaco Piccirillo
Dr. Sylvie Fournier	Dr. Donald Sheppard
Dr. Herve Le Moual	

Assistant Professors

Dr. Jörg Fritz
Dr. Samantha Gruenheid
Dr. Connie Krawczyk

2. List of Faculty with secondary appointments

Adjunct Professors

Dr. Jacques Archambault	(Institut de Recherches Cliniques de Montréal, IRCM)
Dr. Jones David	(ID Biomedical Corporation, Montreal, QC)
Dr. Albert Descoteaux	(Institut Armand Frappier, Université du Québec, INRS)
Dr. Andres Finzi	(Centre de Recherche du CHUM, Université de Montréal)
Dr. Byong Lee	(Sheldon Biotechnology Centre, McGill University)
Dr. Shan-Lu Liu	(Bond Life Sciences Center, University of Missouri)
Dr. Allan Matte	(Macromolecular Structure Group, Biotechnology Research Institute, National Research Council of Canada)

Adjunct Professors (cont'd.)

- Dr. Suh Woon-Kyung (Institut de Recherches Cliniques de Montréal, IRCM)
- Dr. Dan Zilberstein (Faculty of Biology, Technion – Israel Institute of Technology)

Affiliated Members

- Dr. Maziar Divangahi (Meakins-Christie Laboratories, McGill University)

Associate Members

- Dr. Jack Antel (Department of Neurology, Montreal Neurological Institute)
- Dr. Amit Bar-Or (Department of Neurology, Montreal Neurological Institute)
- Dr. Marcel Behr (Division of Infectious Diseases and Medical Microbiology, Montreal General Hospital)
- Dr. Miguel Burnier (Chair, Department of Ophthalmology, McGill University)
- Dr. Nicholas Christou (Department of Surgery)
- Dr. Ines Colmegna (Department of Medicine, Royal Victoria Hospital)
- Dr. Andre Dascal (Senior Physician, Jewish General Hospital)
- Dr. Florence Dzierszinski (Institute of Parasitology, MacDonald Campus)
- Dr. Anne Gatignol (Lady Davis Institute for Medical Research)
- Dr. Philippe Gros (Rosalind and Morris Goodman Cancer Research Centre)
- Dr. Sabah Hussain (Critical Care Division, Royal Victoria Hospital)
- Dr. Armando Jardim (Institute of Parasitology, MacDonald Campus)

Associate Members (cont'd.)

Dr. Lawrence Kleiman	(Lady Davis Institute for Medical Research)
Dr. Antonis Koromilas	(Department of Oncology, Lady Davis Institute for Medical Research)
Dr. Arnold Kristof	(Critical Care Division, Royal Victoria Hospital)
Dr. Richard Lalonde	(McGill AIDS Centre)
Dr. Chen Liang	(Lady Davis Institute for Medical Research)
Dr. Vivian Loo	(Department of Medicine, Division of Infectious Diseases, Montreal General Hospital)
Dr. Ameer Manges	(Department of Epidemiology, Biostatistics and Occupational Health)
Dr. Jack Mendelson	(Department of Medicine, Jewish General Hospital)
Dr. Mark Miller	(Department of Medicine, Jewish General Hospital)
Dr. Andrew Mouland	(HIV-1 RNA Trafficking Laboratory, Lady Davis Institute for Medical Research)
Dr. Jay Nadeau	(Biomedical Engineering, McGill University)
Dr. Momar Ndao	(Department of Medicine, Division of Infectious Disease)
Dr. Marianna Newkirk	(Division of Rheumatology, Montreal General Hospital)
Dr. Dao Nguyen	(Department of Medicine, Montreal General Hospital Research Institute)
Dr. Kostas Pantopoulos	(Lady Davis Institute, Jewish General Hospital)
Dr. Joyce Rauch	(Department of Rheumatology, Montreal General Hospital)

Associate Members (cont'd.)

Dr. Michael Reed	(Medicine, Infectious Diseases, Montreal General Hospital)
Dr. Anna Paula Ribeiro	(Institute of Parasitology, MacDonald Campus)
Dr. Stephane Richard	(Lady Davis Institute, Jewish General Hospital)
Dr. Petra Rohrbach	(Institute of Parasitology, MacDonald Campus)
Dr. Maya Saleh	(Department of Medicine, McGill Life Science Complex)
Dr. Michel Tremblay	(Rosalind and Morris Goodman Cancer Research Centre)
Dr. Christos Tsoukas	(Immune Deficiency Treatment Centre – IDTC, Montreal General Hospital)
Dr. Bernard Turcotte	(Hormones & Cancer Research Unit, Department of Medicine)
Dr. Brian Ward	(Montreal General Hospital)
Dr. Ji Zhang	(Biomedical Sciences, Faculty of Dentistry)

SECTION II
Research

Summary

Of the 19 primary Departmental academic members, 8 receive salary support from FRSQ (3) or from the Canada Research Chair Program CRC (5) reducing the impact of academic salaries on the McGill budget. One Professor receives a Dawson award to a level approximately equivalent to that of Tier 2 CRC awards. Virtually all our Professors (85%) have one or more research grants from FRSQ, NSERC, CIHR, NIH, or private foundations to support their research projects and trainees. These grants totaled \$15,376,325. Our faculty members published 90 scholarly articles in peer-reviewed journals from January to December 2011 with a total impact factor of 546.313 (*please see below for the list of publications*). All presented their research to numerous scholarly meetings, received awards and contributed to their respective academic and research institutions.

a. Awards

Dr. Albert Berghuis

- Tier 1 Canada Research Chair in Structural Biology (7 year award), 2009.

Dr. James Coulton

- Awarded six-month sabbatical leave by McGill University beginning January 2011 and extended to August 2011.
- Visiting Professor, The Leverhulme Trust, UK; award to J.W. Coulton for accommodation and transportation expenses while on sabbatical leave (April to August 2011), The University of York.
- Distinguished Visitor, The University of York, award to J.W. Coulton for research costs and living expenses while on sabbatical leave (April to August 2011).

Dr. Benoit Cousineau

- William Dawson Scholar Award (06/2008 to 06/2013).
- Chercheur-Boursier Senior FRSQ (07/2009 to 07/2012).
- Hugh and Helen McPherson Award (McGill University) (07/2008 to 07/2011).

Dr. Matthias Gotte

- Career award (Chercheur-boursier Senior) - Fonds de la recherche en santé (FRSQ) - Title: Molecular mechanisms involved in delayed chain-termination - Term: 01/07/2009 - 31/06/2013

Dr. Samantha Gruenheid

- Tier 2 Canada Research Chairs Amount: \$100,000/year Chair: Renewal 2010-2015.

Dr. Joaquin Madrenas

- Tier 1 Canada Research Chair in Immunobiology (resigned in 2011 to move to McGill) 2007-14.
- Schulich Dean's Award of Excellence - Team Award for the Canadian R&D Centre for Probiotics, 2011.
- Inducted to the Canadian Academy of Health Sciences in 2011.

Dr. Ciro Piccirillo

- Tier 2 Canada Research Chair, in Regulatory Lymphocytes of the Immune System, (2009-2014).
- Research Excellence Fellowship MUHC- MGH Foundation, (2010- 2011)

Dr. Donald Sheppard

- FRSQ Chercheur-Clinicien Junior II- Role: Principal Investigator (Term 7/1/2011-7/1/2012, 34,000/yr)- Title: Le role du developement dans le virulence de la moisissure Aspergillus fumigates
- Clinician Scientist Award Phase II, Canadian Institutes of Health Research- Role: Principal Investigator (Term: 7/1/2008-7/1/2011, 60,000/yr) - Title: Identification and characterization of genes of Aspergillus fumigatus important in virulence..

Dr. Silvia Vidal

- Tier 1 Canada Research Chair in Host Response to Viruses 2011-2018 (First renewal)

Dr. Mark Wainberg

- Honorary Doctorate (Honoris Causa) Faculté de médecine Université de Montréal
- Elected as a Fellow of the American Association for the Advancement of Science.

b. Publications

Dr. Albert Berghuis

Zhang, Z., Mui, M.Z., Chan F., Roopchand, D.E., Marcellus, R.C., Blanchette, P., Li, S., Berghuis, A.M. & Branton, P.E. (2011) Genetic analysis of B55 α /Cdc55 PP2A subunits: Association with the adenovirus E4 or f4 protein. *J. Virol.* 85, 286-295.

Freiburger, L.A., Baettig, O.M., Sprules, T., Berghuis, A.M., Auclair, K. & Mittermaier, A. (2011) Competing allosteric mechanisms modulate substrate binding in a dimeric enzyme. *Nature Struct. & Mol. Biol.* 18, 288-294.

Fong, D.H., Xiong, B., Hwang, J. & Berghuis, A.M. (2011) Crystal structures of two aminoglycoside kinases bound with a eukaryotic protein kinase inhibitor. *PLoS ONE.* 6(5): e19589. doi:10.1371/journal.pone.0019589.

Hambleton, S., Salem, S., Bustamante, J., Bigley, V., Boisson-Dupuis, S., Azevedo, J., Fortin, A., Haniffa, M., Ceron-Gutierrez, L., Bacon, C.M., Menon, G., Trouillet, C., McDonald, D., Carey, P., Ginhoux, F., Alsina, L., Zumwalt, T.J., Kong, X.F., Kumararatne, D., Butler, K., Hubeau, M., Feinberg, J., Al-Muhsen, S., Cant, A., Abel, L., Chaussabel, D., Doffinger, R., Talesnik, E., Grumach, A., Duarte, A., Abarca, K., Moraes-Vasconcelos, D., Burk, D., Berghuis, A., Geissmann, F., Collin, M., Casanova, J.L., Gros, P. (2011) IRF8 Mutations and Human Dendritic-Cell Immunodeficiency. *New Eng. J. Med.* 365, 127-138.

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Dr. Dalius Briedis

Briedis, D.J. "Orthomyxoviruses", In, *Fundamentals of Molecular Virology*, 2nd Edition, N.H. Acheson, ed., John Wiley & Sons, 2011.

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Dr. James Coulton

Plesa, M., Kim, J., Paquette, S.G., Gagnon, H., Ng-Thow-Hing, C., Gibbs, B.F., Hancock, M.A., Rosenblatt, D.S., and Coulton, J.W. Interaction between MMACHC and MMADHC, two human proteins participating in intracellular vitamin B12 metabolism. *Molecular Genetics and Metabolism* 102:139-148 (2011).

Dr. Ben Cousineau

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Generation and evaluation of A2-expressing *Lactococcus lactis* live vaccines against *Leishmania donovani* in BALB/c mice. Yam KK, Hugentobler F, Pouliot P, Stern AM, Lalande JD, Matlashewski G, Olivier M, Cousineau B. J Med Microbiol. 2011 Sep;60 (Pt 9):1248-60. Epub 2011 Apr 28.

Dr. Jörg Fritz

Fritz J.H. and Gommerman J.L. Cytokine/Stromal Cell Networks and Lymphoid Tissue Environments. Journal of Interferon & Cytokine Research, 31(3):277-289

Magalhaes J.G., Rubino S.J., Travassos L.H., Le Bourhis L., Duan W., Sellge G., Geddes K., Reardon C., Lechmann M., Carneiro L.A., Selvanantham T., Fritz J.H., Taylor B.C., Artis D., Mak T.W., Comeau M.R., Croft M., Girardin S.E., Philpott D.J. Nucleotide oligomerization domain-containing proteins instruct T cell helper type 2 immunity through stromal activation. PNAS 108(36):14896-901.

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Dr. Connie Krawczyk

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Gervais FG, Sawyer N, Stocco R, Hamel M, Krawczyk C, Sillaots S, Denis D, Wong E, Wang Z, Gallant M, Abraham WM, Slipetz D, Crackower MA, O'Neill GP. Pharmacological characterization of MK-7246, a potent and selective CRTH2 antagonist. *Mol Pharmacol*. 2011 Jan;79(1):69-76.

Dr. Herve Le Moual

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Dr. Joaquin Madrenas

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Filler G, Liu D, Huang SS, Casier S, Chau LA, Madrenas J. Impaired GFR is the most important determinant for FGF-23 increase in chronic kidney disease. *Clin Biochem* 2011; 44: 435.

Frodermann V, Chau TA, Sayedyahosseini S, Toth JM, Heinrichs DE, Madrenas J. A Modulatory IL-10 Response to Staphylococcal Peptidoglycan Prevents Th1 / Th17 Adaptive Immunity to *S. aureus*. *J Infect Dis* 2011; 204: 253.

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Dr. Greg Marczynski

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Dr. Greg Matlashewski

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Dr. Martin Olivier

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Dr. Ciro Piccirillo

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Dr. Donald Sheppard

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Dr. Sylvia Vidal

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Dr. Mark Wainberg

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c. Presentations & Lectures

Dr. Albert Berghuis

Presentations at Professional Meetings

- Antibiotic Resistance: is the "Magic Bullet" history? Canadian Undergraduate Conference on Healthcare (CUCOH) 2011. Kingston, Ontario, November, 2011. Invited Speaker.

Presentations at Internal and External Seminar Series

- Structural studies of antibiotic resistance mechanisms. Institute of Experimental Biology (IIBE), University of Guanajuato, Guanajuato, Mexico. September, 2011.
- Structural biological studies of antibiotic resistance mechanisms. Department of Microbiology & Immunology, Dartmouth College, Hanover, New Hampshire. October, 2011.
- Enzyme mediated catalysis of the Baeyer-Villiger reaction; crystallographic studies of cyclohexanone monooxygenase. Department of Chemistry, Dartmouth College, Hanover, New Hampshire. October, 2011.

Dr. James Coulton

Presentations at Professional Meetings

- Coulton, J.W., Cottreau, A.L., Biot-Pelletier, D.M.P., Bostina, M., and Rouiller, I. High-resolution electron microscopy of ExbB and ExbD, a complex in the cytoplasmic membrane of Escherichia coli. IX European Symposium of The Protein Society, Stockholm, May 2011, poster 12013
- Cottreau, A.L., Biot-Pelletier, D.M.P., Bostina, M., Rouiller, I. and Coulton, J.W. High-resolution electron microscopy of ExbB and ExbD, a complex in the cytoplasmic membrane of Escherichia coli. Canadian Society of Microbiologists Annual Meeting, St. John's, NL, June 2011, poster MC8 and oral presentation MC51
- Miousse, I.R., Plesa, M., Watkins, D., Rosenblatt, D.S, and Coulton, J.W. Phage display predicts regions on MMACHC that bind its partner MMADHC in human intracellular cobalamin metabolism. International Congress of Human Genetics, Montreal, QC, October 2011, poster 1148F
- Plesa, M., Hancock, M.A., Deme, J.C., Watkins, D., Rosenblatt, D.S. and Coulton, J.W. Surface plasmon resonance – mass spectrometry to identify novel binding partners in intracellular vitamin B12 metabolism. International Congress of Human Genetics, Montreal, QC, October 2011, poster 1337F

Presentations at Internal and External Seminar Series

- J.W. Coulton, Bacterial membrane proteins: the career of some Fhu's; The Leverhulme Lecture, The University of York, May 2011
- J.W. Coulton, High-resolution electron microscopy of ExbB and ExbD, a complex in the cytoplasmic membrane of Escherichia coli. Presentation at the annual research retreat, Department of Biology, The University of York, June 2011
- Cottreau, A.L., Biot-Pelletier, D.M.P., Bostina, M., Rouiller, I. and Coulton, J.W. ExbB and ExbD form a complex in the cytoplasmic membrane of Escherichia coli. Annual Scientific Meeting, Groupe d'étude des protéines membranaires, McGill University, June 2011, poster 18 and oral presentation
- Sverzhinsky, A., Cottreau, A.L., Sprules, T., Bostina, M., Rouiller, I. and Coulton, J.W. Cytoplasmic membrane protein complex from Escherichia coli: ExbB-ExbD. 14th Annual Chemistry and Biochemistry Research Conference, Concordia University, October 2011, poster
- J.W. Coulton, MIMM department chalk talk, November 2011

Dr. Sylvie Fournier

Presentations at Internal and External Seminar Series

- February 17 2011 Université de Montréal Département de Microbiologie et Immunologie (invited speaker)
- October 28 2011 Chalk Talk-TGIF Department of Microbiology and Immunology, McGill University

Dr. Jorg Fritz

Presentations at Professional Meetings

- Hospital Maisonneuve-Rosemont, Montreal, QC, Canada. "B cells regulate innate resistance". (invited by Dr. Laurent Sabbagh) 01. April 2011.
- University of Sherbrooke, XVIIe Colloque d'Immuno-Inflammation, Eastman, QC, Canada. "B cells regulate innate resistance" (invited by Dr. Jana Stankova) 17. June 2011.
- Concordia University, Montreal, QC, Canada. Mini-Symposium in Immunology and Inflammation. "Acquisition of a multifunctional TNF/iNOS producing IgA+ plasma cell in the gut". (invited by Dr. Pavel Gris) 29. November 2011.

Presentations at Internal and External Seminar Series

- Seminar Series - Department of Microbiology and Immunology. "B cells regulate innate resistance". (invited by Dr. Samantha Gruenheid) 07. April 2011.

Dr. Matthias Gottee

Presentations at Professional Meetings

- Annual CFAR (Center for AIDS Research) Conference: “Molecular Basis for HIV Disease and Therapy”, Case Western Reserve University, August 18-19, 2011, Cleveland, Ohio, USA. “Inhibition of HIV Reverse Transcriptase: Beyond NRTIs and NNRTIs” - Invited Speaker.
- 61st Annual Conference of the Canadian Society of Microbiologists. Memorial University of Newfoundland, St. John's, Newfoundland. June 20-23, 2011. “Contribution of a Mutational Bias in HCV Replication to the Genetic Barrier in the Development of Drug Resistance”- Invited Speaker.
- 4th Congress of European Microbiologists - FEMS 2011; Geneva, Switzerland, June 26-30, 2011. Invited Speaker at the Symposium on “Structure-Function of Viral Polymerases”.
- HEP DART 2011, December 4-8, Kauai, Hawaii, USA. Refereed Presentation “Contribution of a Mutational Bias in HCV Replication to the Genetic Barrier in the Development of Drug Resistance”.

Presentations at Internal and External Seminar Series

- Invited Presentation: Global Health & Emerging Pathogens Institute – Mount Sinai School of Medicine, New York City, NY, USA, January 19, 2011
- Invited Presentation: Center for the Study of Hepatitis C - The Rockefeller University, New York City, NY, USA, January 18, 2011
- Invited Presentation: Gilead Science Inc. Foster City, CA, USA, August 4, 2011

Dr. Samantha Gruenheid

Presentations at Professional Meetings

- Canadian Society of Microbiologists Annual Meeting, St. John’s, NL, Canada June 23, 2011. The Cri1 locus mediates susceptibility to *Citrobacter rodentium* infection in mice.

Presentations at internal and external seminar series

- University of Michigan, Cardiovascular Center, Ann Arbor, MI, USA. Oct. 10, 2011. Identification and characterization of NleA, a bacterial virulence factor that inhibits COPII.
- Universite de Montreal, Department of Microbiology, Montreal March 18, 2011. Molecular Dissection of Host /Pathogen interactions in EHEC, EPEC and *C. rodentium* infections.
- Rocky Mountain Laboratories (NIH/NIAID), Hamilton, Montana, USA March 3, 2011. Molecular Dissection of Host /Pathogen interactions in EHEC, EPEC and *C. rodentium* infections

- Biotechnology Research Institute, Montreal, Jan. 18th, 2011. Molecular Dissection of Host /Pathogen interactions in EHEC, EPEC and *C. rodentium* infections.
- McGill University Soup and Science, Montreal, Jan. 17th, 2011. Infectious disease, host/pathogen interactions, bacterial infections.

Dr. Connie Krawczyk

Presentations at Professional Meetings

- Poster – CIHR New Investigators Forum - "molecular regulation of dendritic cell function" Oct 14-16 2011.

Presentations at internal and external seminar series

- Immunology Montreal, November 17, 2011 "Molecular mechanisms of DC activation".

Dr. Herve Le Moual

Presentations at Professional Meetings

- Thomassin, J.L., Brannon, J., Gruenheid, S. and Le Moual H. (2011). OmpT of Enterohemorrhagic and Enteropathogenic *Escherichia coli* contribute differently to antimicrobial Peptide Degradation. *Poster*, American Society for Microbiology, 111th General Meeting, New Orleans, LA, USA.
- Salmon, K., Thomassin, J.L., Zhu, L., Gruenheid, S. and Le Moual H. (2011) RT-qPCR analysis of two-component system gene expression in *Citrobacter rodentium*. *Poster*, 6th Undergraduate Research Conference, McGill University, Montreal, QC, Canada.
- Le Moual H. (2011) Targeting bacterial resistance to host antimicrobial peptides as an alternative strategy to treat infections. *Invited speaker*, 2nd Annual World Congress of Microbes, Guangzhou, China.

Dr. Joaquin Madrenas

Presentations at Professional Meetings

- Madrenas J. The art and science of grant writing. CST/AST Distinguished Fellows Research Symposium. 2011 Annual Scientific Meeting of the Canadian Society of Transplantation. Mont-Tremblant PQ, March 2, 2011.
- Madrenas J. Funding transplantation research in Canada. Panel discussion. 2011 Annual Scientific Meeting of the Canadian Society of Transplantation. Mont-Tremblant PQ, March 4, 2011.
- Madrenas J. Regulation of Adaptive Immune Responses by Innate Immunity: learning from superbugs. 2011 Annual Scientific Meeting of the Canadian Society of Transplantation. Mont-Tremblant PQ, March 5, 2011.

- Madrenas J. Immunology 101: how the immune system interacts with bacteria. Danoners Training Conference. London ON, April 7, 2011.
- Madrenas J. Peritonitis and Immune Response. 2011 World Congress of Nephrology. Vancouver BC, April 11, 2011.
- Mitsopoulos P, Christie DA, Madrenas J. Generation And Characterization Of An Inducible Systemic Stomatin-Like Protein-2 Knockout Mouse. Annual Meeting of the Canadian Society of Immunology. Lake Louise, AB, April 8-10, 2011.
- Christie DA, Lian D, Wang H, Hatch G, Madrenas J. SLP-2 deficiency in T cells is associated with decreased respiratory complex I levels and impaired TCR-dependent responses. Annual Meeting of the American Association of Immunologists. San Francisco CA, May 13 – 17, 2011.
- Madrenas J. An Immunology Primer for Non-Immunologists. 2011 Canadian Hypertension Congress, Nottawasaga Inn, Alliston, ON October 4, 2011.
- Madrenas J. Regulation of Innate Immunity and Inflammation by Commensal Bacteria. 2011 Canadian Hypertension Congress, Nottawasaga Inn, Alliston, ON October 5, 2011.
- Madrenas J. The Do's and Do Not's of Grant Writing. CIHR Institute of Infection and Immunity New Investigator Forum, Manoir du Lac Delage, Lac Delage QC, October 14-16, 2011.
- Madrenas J. Regulacion de la respuesta immune adaptativa por la inmunidad natural. I Curso Avanzado de Inmunologia, Instituto de Inmunologia, Universidad Central de Venezuela, Caracas, Venezuela, October 26, 2011.
- Madrenas J. Systems biology of *S. aureus* commensalism and infection. II Congreso de Inmunologia Basica y Clinica, Instituto de Inmunologia, Universidad Central de Venezuela, Caracas, Venezuela, October 27-28, 2011.
- Madrenas J. SLP-2: a regulator of membrane compartmentalization. II Congreso de Inmunologia Basica y Clinica, Instituto de Inmunologia, Universidad Central de Venezuela, Caracas, Venezuela, October 27-28, 2011.
- Madrenas J. Career Planning. KRESCENT Workshop, Montreal, QC, December 9, 2011.

Presentations at internal and external seminar series

- Madrenas J. Reclaiming the University: an evolutionary view of academic scholarship. King's Speakers Series. King's University College at The University of Western Ontario. London ON, February 14, 2011.
- Madrenas J. University: a challenge to embrace change. Seminar Series, Department of Biochemistry, The University of Western Ontario, London ON, March 11, 2011.

- Madrenas J. Systems Immunology of *S. aureus* commensalism and infection. University of Pennsylvania Immunology Colloquium. Philadelphia, PA, March 14, 2011.
- Madrenas J. Slipin Beauty: Awakening Mitochondrial Function with SLP-2. Dr. Robert Zhong Research Seminar, Department of Pathology, University of Western Ontario. London ON. June 2, 2011.
- Madrenas J. Chalk Talk. Department of Microbiology & Immunology, McGill University. Montreal PQ, September 30, 2011.

Dr. Greg Marczynski

Presentations at Professional Meetings

- Bacterial Cell Biology Conference (ZingConference), November 16-19, 2011, Puerto Morelos, Mexico. Poster P70. Cell cycle replication control requires unexpectedly weak DNA-binding sites. J. Taylor, G.T. Marczynski.

Dr. Greg Matlashewski

Presentations at Professional Meetings

- Matlashewski, G. (invited presentation) Progress in meeting the visceral leishmaniasis elimination target. Regional technical advisory committee for visceral leishmaniasis elimination. Kathmandu, Nepal. July 15, 2011.
- Matlashewski, G. (Invited presentation)Point of care diagnosis of Visceral leishmaniasis. Grand Challenge Gates Foundation annual meeting. Delhi. India. Nov. 4, 2011

Presentations at internal and external seminar series

- Matlashewski, G. Elimination of Visceral leishmaniasis. Department of Microbiology and Immunology, McGill, Feb. 24, 2011

Dr. Martin Olivier

Presentations at Professional Meetings

- Leishmania-Macrophage Interaction: A Signaling Story. "XX Congreso de la Federación Latinoamericana de Parasitología (FLAP)" and the "XV Congreso de la Sociedad Colombiana de Parasitología y Medicina" Bogota, Colombia. September 2011
- Leishmania Metalloprotease gp63 and Innate Immune Response. ASTMH 60th Annual Meeting Philadelphia, USA. December 2011

Presentations at internal and external seminar series

- How to Dodge the Innate Immune Response? A Lecture by Dr. Leish and Mr. Hyde...Institute of Parasitology, McGill University Ste-Anne-de-Bellevue, Quebec, Canada February 2011

- Phosphatase, metalloprotease and leishmaniasis: A dangerous trio. Seattle Biomedical Research Institute. Seattle, Washinton, USA April 2011
- Mécanismes d'Évasion de la Réponse Innée par le Protozoainre Parasite *Leishmania*. Centre de Recherche du CHUM-St-Luc. Montréal, Qc, Canada June 2011
- From Malarial Hemozoin to the Development of a HA-Based Adjuvant Platform. GlaxoSmithKline Laboratories. Laval-des-Rapides, Qc, Canada October 2011

Dr. Ciro Piccirillo

Presentations at Professional Meetings

- CSACI Annual Meeting (Victoria, BC)(2010): Functional dynamics and stability of Foxp3+ regulatory T cells.
- McGill B cell Symposium (2010): Functional stability of Foxp3+ Treg cells in organ-specific autoimmunity.
- 5th Vaccine Renaissance Conference, RI, USA (2011): Foxp3+ Treg cells in health and disease.

Presentations at internal and external seminar series

- McGill Department of Microbiology and Immunology seminar (FEB 2011): Functional stability of Foxp3+ Treg cells in organ-specific autoimmunity.
- Alberta Diabetes Institute (ADI) (AUG 2011): Stability of Foxp3+ Treg cell function in health and disease.
- MUHC Grand Rounds: Cancer immunobiology (2011): from mechanisms to immunotherapy.
- MUHC Combined Endocrine Round: Immunoregulatory defects in the patho-physiology of type 1 diabetes.

Dr. Donald Sheppard

Presentations at Professional Meetings

- 49th Infectious Diseases Society of America Annual Meeting. Boston Role of Galactosaminogalactan in Fungal Adherence. 2011.
- Invited Presentation, The Philippine Society of Hematology and Blood Transfusion Manila, Philippines Role of Membrane Bound Antifungals in Mediating Protection Against Fungal Infection Sept 7 2011.

- Plenary Address, 2nd Annual Conference of the India Society of Critical Care Medicine, Agra, India Guidelines for Management of Fungal Infections in the ICU: New Evidence Sept 4 2011.
- Molecular Mycology of Pathogenic Fungi Summer Course, Marine Biology Laboratories, Woods Hole, Massachusetts. (Invited Faculty) Molecular mechanisms of Fungal Adherence, August 10 2011.
- Plenary Address, 4ieme Journée de Formation en Infectiologie Hématologie, Paris, France New pharmacologic paradigms governing the efficacy of antifungal prophylaxis June 17 2011.
- 21st European Congress of Clinical Microbiology and Infectious Diseases, Milan Italy. Membrane accumulation of azoles mediates protection against fungal infection May 7 2011.
- Invited Presentation, MSD International Consultation on Pharmacokinetics, Milan, Italy Intracellular Pharmacokinetics of Posaconazole May 6 2011.
- Invited Presentation, European Bone Marrow Transplantation Group Annual Meeting. Intracellular antifungals mediate protection during prophylaxis April 4 2011. Paris, France.
- Invited presentation, ESCMID Biofilms in Nosocomial Fungal Infections Conference Institut Pasteur, Paris, France. Galactosaminogalactan mediates *Aspergillus fumigatus* adherence to host tissues and virulence, Jan 31 2011

Presentations at internal and external seminar series

- Invited Speaker, Singapore General Hospital Conference Series, Singapore Role of Membrane Bound Antifungals in Mediating Protection Against Fungal Infection, August 31 2011.
- Microbiology Grand Rounds; St John Health Centre, St John New Brunswick Galactomannan guided approach to managing fungal infections, Feb 24 2011.
- Invited Seminar, Department of Microbiology, Queens University, Kingston ON. *Aspergillus* adherence and galactosaminogalactan, Jan 26 2011.
- Invited Seminar, Department of Microbiology and Immunology, Tel Aviv University Galactosaminogalactan mediates *A.fumigatus* adherence to host tissues and virulence, Jan 2 2011.
- Infectious Diseases Grand Rounds, McMaster University Health Centre Novel Diagnostic approaches to *Aspergillus* infection, Jan 10 2011.

Dr. Silvia Vidal

Presentations at Professional Meetings

- “Genetic control of the antiviral response”. EMBO/Pasteur Institute Conference on the Host Genetic Control of Infectious Diseases. 27-30 September, 2011. Paris, France. Invited speaker
- “MHC class I receptors and their ligands modulate the NK cell antiviral response”. AAI 98th Annual Meeting. May 13-17, 2011. San Francisco, California. Invited speaker

Presentations at internal and external seminar series

- “NK cell receptors and their MHC class I ligands govern host response to virus infection”. Department of Immunology, University of Toronto, July 12, 2011.
- “Input of MHC class I receptor signals quantitatively modulates host resistance to viral infection through virus-specific receptors”. NIH Twinbrook Seminar Series, March 29, 2011.

Dr. Mark Wainberg

Presentations at Professional Meetings

- Unité de maladies infectieuses. Université de Montpellier, France. «Transmission des souches du VIH résistantes aux ARV et la relation avec la capacité de réplication virale». January 2011.
- European HIV/HCV Drug resistance conference. Paphos, Cyprus. “Compensatory effects of the E138K NNRTI resistance mutation in HIV RT on the M184V NNRTI mutation associated with resistance against 3TC and FTC”. March 2011.
- Ecole Normale Supérieure. Lyon, France. “Compensatory mutagenesis in HIV evolution”. June 2011.
- Poland National AIDS Conference. Warsaw, Poland “HIV evolution and compensatory mutagenesis as factors in the future of HIV transmission”. June 2011.
- Lusaka, Zambia. TanZamBo project meeting. “The future of HIV therapy in the aftermath of ARV prevention research”. June 2011.
- University of Toronto. Department of Microbiology. “Factors governing the development and transmission of HIV drug-resistant viruses”. June 2011.
- University of Port-au-Prince, Haiti, (by teleconference). Le problème de la résistance du VIH aux médicaments antiviraux. June 2011.
- International conference on HIV transmission, Rome, Italy. Invited speaker. “Dynamics of transmission of the M184V resistance mutation”. July 2011.

- International Virology conference, Sapporo, Japan. “Compensatory mutagenesis involving drug resistance mutations in HIV reverse transcriptase.” September 2011.
- International Retrovirology Conference, Amsterdam, The Netherlands. “Reverse transcriptase mutations that confer drug resistance complement each other to restore full-level viral replication capacity.” October 2011.
- International Conference on HIV Integrase. Siena, Italy. “Novel Mutations in the HIV Integrase Gene that Confer Resistance to Second Generation Integrase Strand Transfer Inhibitors” October 2011.

d. Grants

Agency	Grant	Duration of Grant	Funding Amount/year	Total amount of grant	Researcher
CFI					
1	Regulation of inflammatory and adaptive immune responses upon innate immune recognition by pathogens	2011-2016	\$250,000		Fritz, Jorg
2	Regulation of inflammatory and adaptive immune responses upon innate immune recognition by pathogens	2011-2016	\$20,000		Fritz, Jorg
CIHR					
1	Structural biological studies of antibiotic resistance mechanisms	2011 - 2016	\$211,951	\$1,059,754	Berghuis, Albert
2	Structural studies of the fungal mannan biosynthesis pathway”	2011 - 2016	\$165,037	\$825,186	Berghuis, Albert
3	Structural proteomics of host-pathogen interactions	2011 - 2016	\$54,600	\$273,000	Berghuis, Albert
4	CIHR strategic training program in chemical biology	2009 - 2015	\$300,000	\$1,800,000	Berghuis, Albert
5	Structural biology of the TonB interactome	2008-2013	\$160,497		Coulton, James
6	Sheldon Biotechnology Centre: Surface Plasmon Resonance Facility	2007-2012	\$78,662		Coulton, James
7		2008-2011	\$130,464		Cousineau, Ben
8	CIHR Training Program		\$390,000		Fournier, Sylvie
9	Functions of Nod1 and Nod2 in host resistance	2011-2016	\$132,523		Fritz, Jorg
10	Molecular mechanisms involved in resistance to different classes of RT inhibitors	2007-2012	\$115,000		Gotte, Matthias
11	Molecular mechanisms involved in delayed chain-termination	2008-2011	\$68,000		Gotte, Matthias
12	HCV Genetic Variability and Drug Resistance	2011-2014	\$136,000		Gotte, Matthias

Agency	Grant	Duration of Grant	Funding Amount/year	Total amount of grant	Researcher
CIHR					
13	Genetic dissection of the host response to intestinal infections	2008-2013	\$116,974		Gruenheid, Samantha
14	Resistance of <i>Citrobacter rodentium</i> and related enteric pathogens to antimicrobial peptides.	2010 -2013	\$90,310.00	\$296,000.00	Le Moual, Herve
15	Systems Immunology of <i>S. aureus</i> infection	2010-2015	\$166,672.00		Madrenas, Joaquin
16	CIHR Human Immunology Network	2011-2014	\$200,000.00		Madrenas, Joaquin
17	The role of SLP-2 in TCR signalosome assembly and T cell activation	2007-2011	\$134,694.00		Madrenas, Joaquin
18	London Regional Cell and In Vitro Molecular Imaging Faci	2011-2013	\$51,500.00		Madrenas, Joaquin
19	Molecular Basis for <i>Leishmania</i> Virulence	2006-2011	\$720,000		Matlashewski, Greg
20	Subversion of Macrophage Signaling - by the Protozoan Parasite <i>Leishmania</i> .	2011-2016	\$840,000		Olivier, Martin
21	Hemozoin: An Inorganic Heme-Based Crystal Responsible for Hepatosplenomegaly Development During Malaria.	2011-2012	\$100,000		Olivier, Martin
22	Defining immunological checkpoints to enhance cancer immunotherapy.	2008-2011	\$140,000		Piccirillo, Ciro
23	Functional dynamics of Foxp3+ regulatory T cells in vivo.	2007-2012	\$132,000		Piccirillo, Ciro
24	Immunomodulation of Regulatory Mechanisms in Mucosal Immunity: a multi-disciplinary bench-to-bedside approach to the study and treatment of IBD.	2007-2012	\$497,280		Piccirillo, Ciro

Agency	Grant	Duration of Grant	Funding Amount/year	Total amount of grant	Researcher
CIHR					
25	New Emerging Team .Immune Regulation and Biomarker Development in Pediatric and Adult Onset Human Autoimmune Diseases.	2007-2012	\$399,807		Piccirillo, Ciro
26	Molecular Mechanisms of Invasive Aspergillosis.	2009-2014	\$133,933		Sheppard, Donald
27	Genetics of natural killer cell response to virus infection	2010-2015	\$179,000		Vidal, Silvia
28	CIHR team in mutagenesis and infectious diseases	2008-2013	1,086,000		Vidal, Silvia
29	Molecular genetics of host susceptibility to cardiovirulent coxsackievirus infection	2006-2011	\$130,000		Vidal, Silvia
30	Genetic Dissection of Airway Hyperresponsiveness and Susceptibility to Allergic Asthma	2010-2015	\$142,633		Vidal, Silvia
31	IHR Training Program in Integrative Approaches to Human Health	2009-2015	\$488,619		Vidal, Silvia
32	Canadian mouse mutant repository: A core resource for mouse models of human disease"	2006-2011	\$519,036		Vidal, Silvia
33	Genetic dissection of host response against respiratory virus infection in RCS mice	2008-2011	\$180,000	\$200,000	Vidal, Silvia
34	Development of new strategies to target HIV replication and stimulate anti-HIV post-exposure immunity.	2011-2012	\$166,666		Wainberg, Mark
35	Studies on HIV integrase inhibitors as key components of effective therapy: Molecular and pathogenesis studies.	2011-2012	\$88,538		Wainberg, Mark

Agency	Grant	Duration of Grant	Funding Amount/year	Total amount of grant	Researcher
CIHR					
36	Patterns of drug resistance and viral evolution in patients undergoing primary HIV infection.	2011-2012	\$128,550		Wainberg, Mark
37	Methylation of HIV viral proteins as key steps in viral replication.	2011-2012	\$55,595		Wainberg, Mark
FQRNT					
1	Regroupements strategiques "Centre for Host-Parasite Interactions"	2009 – 2015	\$350,000	\$2,100,000	Berghuis, Albert
2	Regroupements strategiques ROTEQ, le regroupement québécois de recherche sur la fonction, la structure et l'ingénierie des proteins	2008 – 2014	\$250,000	\$1,500,000	Berghuis, Albert
3	Regroupement stratégique, Faculté de médecine vétérinaire, Université de Montréal	2006-2011	\$6,000		Coulton, James
4	Center for Host-Parasite Interactions	2010-2012	\$30,000		Cousineau, Ben
5	Creation d'une nouvelle plateforme pour la caracterisation de l'ARN polymérase du virus de l'hépatite C (NS5B) et de ses d'inhibiteurs à l'échelle de la molécule individuelle	2009-2012	\$18,000	\$54,060	Gotte, Matthias
6	Centre for Host-Parasite Interactions.	2009-2014	\$350,000		Olivier, Martin

Agency	Grant	Duration of Grant	Funding Amount/year	Total amount of grant	Researcher
FRSQ					
1	Groupe de recherche axé sur la structure des protéines (GRASP)"	2008 - 2012	\$260,000	\$1,560,000	Berghuis, Albert
2	Groupe d'étude des protéines membranaires (GÉPROM) Projet novateur Gyo electron microscopy of a bacterial membrane protein complex	2011	\$15,000		Coulton, James
NIH					
1	Fine Mapping and Function of Genes for type 1 diabetes.	2009-2014		\$6,790,290.00	Piccirillo, Ciro
2	New Animal Models for Invasive Aspergillosis	2010-2016	\$80,000		Sheppard, Donald
3	Transcriptional regulation of A. fumigatus virulence	2007-2012	\$90,053		Sheppard, Donald
NSERC					
1	Structural studies of Baeyer-Villiger monooxygenases!"	2011 – 2012		\$30,000	Berghuis, Albert
2	Bionanomachines	2011 - 2017	\$300,000	\$1,650,000	Berghuis, Albert
3	Cbl interactome for vitamin B12 metabolism	2007-2012	\$28,000		Coulton, James
4	Cellular dynamics of macromolecular complexes	2010-2015	\$300,000		Coulton, James
5		2008-2013	\$42,500		Cousineau, Ben
6			\$30,000		Fournier, Sylvie
7	Signal transduction by bacterial Ser/Thr Kinases.	2008 - 2013	\$25,000.00	\$125,000.00	Le Moual, Herve
8	Operating grant		\$41,000		Marczynski, Greg
9	Discovery Grant-Title: Role of Iron in the Regulation of PTPs: Impact on Cell Signaling and Functions.	2011-2012	\$40,000		Olivier, Martin

Agency	Grant	Duration of Grant	Funding Amount/year	Total amount of grant	Researcher
Other					
1	Agency: Le Ministre des Relations Internationales, Gouvernement du Québec – Groupe de travail Québec-Mexique -Formation sur l'étude structurale des proteines parasites pour la comprehension des maladies infectieuses	2009 - 2011	\$9,750		Berghuis, Albert
2	Agency: MS Society of Canada		\$90,000		Fournier, Sylvie
3	Agency: Quebec Consortium for Drug Discovery (CQDM) -Phage-based screening platform for the discovery of antivirals	2010-2013	\$240,000	\$446,000	Gotte, Matthias
4	Agency: Tibotec	2011-2012	\$70,000		Gotte, Matthias
5	Agency: The Cranberry Institute - Action of Cranberry Derived Materials Against Bacterial Infections	2011-2012	\$26,000		Gruenheid, Samantha
6	Agency: BMS- Regulation of PD1 mechanism of action		\$125,000.00		Madrenas, Joaquin
7	Agency: ORF- New Technologies for Ginseng Agriculture and Product Development, Co PI	2011			Madrenas, Joaquin
8	Agency: UWO - Rotors and cells for ultracentrifuge	2011	\$48,106.00		Madrenas, Joaquin
9	Agency: KFC - Modulation of PD-associated peritonitis by the bacterial cell wall	2011	\$50,000.00		Madrenas, Joaquin
10	Agency: Grand Challenge Canada- Point of care diagnosis of Visceral leishmaniasis in India	2011-2014	\$887,000		Matlashewski, Greg
11	Agency: Drugs for Neglected Diseases Initiative (DNDi), via Bill and Melinda Gates Foundation- Novel treatment modalities for visceral leishmaniasis	2011 -2015	\$1,900,000		Matlashewski, Greg

Agency	Grant	Duration of Grant	Funding Amount/year	Total amount of grant	Researcher
Other					
12	Agency: Infectious Diseases Research Institute (IDRI), via Bill and Melinda Gates Foundation- Novel Diagnostics for Leishmaniasis	2010 - 2012	\$120,000		Matlashewski, Greg
13	Agency: Grand Challenge Canada- Use a permanent make-up (PMU) device to target intra-dermal delivery of an anti-Cutaneous Leishmaniasis therapy.	2011-2012	\$113,000		Olivier, Martin
14	Agency: JDRF. Integrating genetics with markers of immune response.	2008-2011	\$200,000		Piccirillo, Ciro
15	Agency: Canadian Cystic Fibrosis Foundation- Mechanisms of Aspergillus fumigatus induced progression of chronic airway disease in cystic fibrosis.	2009-2012	\$75,500		Sheppard, Donald
16	Agency: Merck Investigator Study Proposals - Pharmacokinetics and efficacy of membrane-associated posaconazole	2011-2012	\$65,875		Sheppard, Donald

Total Number of Grants		75
Total Amount of Grants Received (Per Year 2011)		\$15,376,325

e. Patents

Dr. Robert Murgita

- “Production of Genetically Engineered Human recombinant Alpha-Fetoprotein with improved yield, Immunological Therapeutic Effects and Diagnostic Value”. ROI 9101

Dr. Martin Olivier

- " Controlled release formulation based on hematin anhydride crystals for the induction of an innate immune reaction" " Martin Olivier and Marie-Josée Bellemare. (Pending Patent in Canada, USA and International) - Priority: US provisional patent application US 61/327,255; Bundling IP US 12/305672.

Dr. Donald Sheppard

- With the office of sponsored research we have initiated patent protection for the use of a genetically modified strain of *Aspergillus niger* as a biosensor for Arsenic

f. Other Research Scholar Activities

Dr. Albert Berghuis

List of activities as a reviewer (internal, external)

Editorial board member

- Antimicrobial Agents and Chemotherapy (ASM Journal; since 2010)
- Protein Engineering Design & Selection (Oxford Journal; since 2004)

Grant review (external reviewer):

- College of Reviewers for the Canada Research Chairs Program (2002-2011)
- College of Reviewers for the Canada Foundation for Innovation New Opportunities Program (2004-2011)
- Referee panel for the X6A beam line at the National Synchrotron Light Source (USA based; 2002-2011)

Grant review (panel member):

- National Institutes of Health – full member DDR (USA: 2010-2014) (3 meetings per year; ~100 applications per meeting)

External referee for tenure and promotions

- University of Alberta
- University of British Columbia
- University of Victoria

List of activities as organizer of national and international meetings or as session chair

- Co-organizer of the Annual GRASP Symposium, Montreal, 2008-2011
- Co-Chair of the 23rd Congress and General Assembly of the International Union of Crystallography; August 5-12, 2014.

List of other research related activities

- Mentor for junior faculty members in the Department of Biochemistry
- Member Chemical Biology Training grant scholarship committee
- Chair GRASP scholarship committee

Dr. James Coulton

List of activities as a reviewer (internal, external)

- Reviewer of applicants for 5-year Fellowships, Biotechnology and Biosciences Research Council (BBSRC), The University of York, April 2011.
- Director's request for Review of research staff, Lady Davis Institute, Jewish General Hospital, December 2011.

List of activities as organizer of national and international meetings or as session chair

- Organizer of the annual international symposium of 11 speakers, June 2011: Cellular dynamics of macromolecular complexes, Université de Montréal

List of other research related activities

- Fellow, American Academy of Microbiology
- Fellow, Alexander von Humboldt-Stiftung, Bonn
- Academic and Research Microbiologist, Canadian College of Microbiologists

Dr. Benoit Cousineau

List of activities as a reviewer (internal, external)

- 2 NSERC Grants
- 1 Tenure dossier

List of other research related activities

- Poster judge at the “Mois de la recherche, Département de Biochimie, Université de Montréal

Dr. Sylvie Fournier

List of activities as a reviewer (internal, external)

- NSERC , November 2011
- MS Society of Canada, December 2011
- PloS One, March 2011
- Quebec-Ottawa Regional Research and Training Centre of the endMS Research and Training Network

Dr. Jorg Fritz

List of activities as a reviewer (internal, external)

Internal

- McGill University Postgraduate Awards Committee (PGAC) - review of 19 Postdoctoral fellowship applications

External

- Academic Editor for PLOSONe: handling of 27 manuscripts.
- Editorial Board Member of the Journal of Clinical & Cellular Immunology
- Ad-hoc Peer Reviewer for PLOS Pathogens (1) & PLOSONe (1)

List of other research related activities

- McGill University Postgraduate Awards Committee (PGAC) - review of 19 Postdoctoral fellowship applications
- External Reviewer - Digestive Disorder Foundation UK (DDF) - Review of 1 grant application.
- Invited Member - Canadian Institutes of Health Research (CIHR)/Fall Competition - Committee: Hematology, Digestive Disease & Kidney (HDK) - Review of 9 grant applications

Dr. Matthias Gotte

List of activities as a reviewer (internal, external)

Journals

- PNAS
- Journal of Molecular Biology
- Nucleic Acids Research
- PLoS Pathogens
- Journal of the American Chemical Society
- Journal of Infectious Diseases
- Nature Structural and Molecular Biology
- Journal of Virology, Retrovirology
- Virology
- Journal of Medicinal Chemistry
- Structure
- Journal of General Virology

Panel member

- The Ontario HIV Treatment Network (two meetings/year, ~ 10 grants/meeting)

Ad hoc

- NIH Study Section on AIDS Discovery and Development of Therapeutics (~ 10 grants/meeting)
- Canadian Institutes of Health Research (CIHR), Virology and Viral Pathogenesis (VVP) (~ 10 grants/meeting)

External

- The Human Frontier Science Program (HFSP), Career Development Award (CDA)

Site visits

- NCI, Frederick, Drug Resistance Program

List of activities as organizer of national and international meetings or as session chair.

International Conferences - Organizing

- Co-Chair: American Society for Microbiology (ASM) Meeting on “Viral Genome Replication”, Banff, February 6-9, 2011

International Conferences – Scientific Committee

- International Workshop on HIV and Hepatitis Virus Drug Resistance and Curative Strategies, June 7-11, 2011 Los Cabos, Mexico
- HEP DART, December 4-8, 2011, Kauai, Hawaii, USA

International Conferences – Session Chair

- 18th International Symposium on Hepatitis C Virus and Related Viruses, September 8-12, 2011 - Session8a: “Antiviral Therapy”

List of other research related activities

- Review of faculty at the Lady Davis Institute (LDI) of the Jewish General Hospital at McGill University.

Dr. Samantha Gruenheid

List of activities as a reviewer (internal, external)

Grant review

- Canada Research Chairs, Reviewer, July 2011

Manuscript review for journals

- Cellular Microbiology (Dec 2011)

- Cell Host and Microbe (Nov. 2011)
- Microbial Pathogenesis (May 2011)
- Cellular Microbiology (Feb 2011)

List of activities as organizer of national and international meetings or as session chair

- Canadian Society of Microbiologists - Infection and immunity symposium co-chair, annual conference, 2011.

Dr. Herve Le Moual

List of activities as a reviewer (internal, external)

- Reviewer for the Open Microbiology Journal.

Dr. Joaquin Madrenas

List of activities as a reviewer (internal, external)

- Nature Medicine
- Immunity, Cambridge, MA.
- The Journal of Experimental Medicine, New York, NY
- Proceedings of the National Academy of Sciences USA (PNAS)
- The Journal of Immunology, Bethesda, MD - Associate Editor 2006-2010
- The Journal of Clinical Investigation
- Blood
- Diabetes
- The Journal of Biological Chemistry, Bethesda, MD
- Pharmacological Reviews - Associate Editor 2007-2010
- JASN (Journal of the American Society of Nephrology)
- The Journal of Leukocyte Biology, Frederick, MD
- European Journal of Immunology, Freiburg, Germany
- Cellular Immunology, San Diego, CA.
- Oncogene
- Cell Death & Differentiation
- International Immunology
- The Journal of Gerontology - Biological Sciences, La Jolla, CA.
- American Journal of Transplantation - Associate Editor 2008-2011
- American Society of Transplantation, Mt. Laurel, NJ
- Nephrology, Dialysis, and Transplantation
- Peritoneal Dialysis International
- Experimental and Therapeutic Medicine - Editorial Board 2009-present
- Journal of Neuroimmunology
- Immunologia - Editorial Board 2006-present
- Journal of Zhejiang University Science
- Reviewer, Chapter Content, J. A. Bellanti's Immunology IV: Clinical Applications in Health and Disease

List of activities as organizer of national and international meetings or session chair

- Member, Canadian Society of Transplantation Scientific Program Committee, Mont-Tremblant PQ, 2011.
- Participant – Speaker, Grant Writing and Peer Review Workshop, CIHR Institute of Infection and Immunity New Investigator Forum, Manoir du Lac Delage, Lac Delage QC, October 14-16, 2011.

List of research related activities

- Executive Director, National CIHR Human Immunology Network
- Consultant and Reviewer, Rusnano Biotechnology, Moscow, Russia

Dr. Greg Marczynski

List of activities as a reviewer (internal, external)

- Reviewed 2 manuscripts for Journal of Bacteriology (external)
- Reviewed 2 manuscripts for Plasmid (external)
- Reviewed 1 manuscript for Molecular Microbiology (external)

Dr. Greg Matlashewski

List of research related activities

- Leader of the Visceral Leishmaniasis research program at the World Health Organization, Special Program for Research and Training in Tropical Diseases. Geneva, Switzerland.
- Advisor to the World Health Organization on visceral leishmaniasis elimination.

Dr. Martin Olivier

List of activities as a reviewer (internal, external)

- Member of the FRSQ Junior I Scholarship committee (2010-2011)
- *Ad hoc review for:* PLoS Pathogens, PLoS ONE, PLoS NTD, Nature Review Microbiology, Microbes and Infection, Journal of Immunology...

List of activities as organizer of national and international meetings or as session chair

- Chairman of Symposium on “Hemozoin in Malaria Pathogenesis”
- ICOPA XII, Melbourne Australia. (August 2010)
- Member of the International Scientific Advisory Board.
- The Neutrophil in Immunity, Québec City, Canada. (2010-2012)
- Member of the Selection Committee for the World Leish 5 meeting (2011-2012)

Other research activity

- MUHC Internal Grant review prior to submission
- Animal Protocol Evaluation for project not supported by an operating grant

Dr. Ciro Piccirillo

List of activities as a reviewer (internal, external)

- External Program Reviewer: SIRG, Trinity College, Dublin, Ireland (Drs. K. Mills and J Fletcher)
- External Reviewer for JDRF Center review panel

Other research activity

- McGill (FacMed) Internal Grant Review (3)
- MUHC-Research Institute Internal Grant Review (2)

Dr. Donald Sheppard

List of activities as a reviewer (internal, external)

Grant reviews

- Member, CIHR Microbiology and Infectious Diseases Panel
- External Reviewer NSERC Discovery Awards
- External Reviewer, National Science Foundation USA
- External Reviewer, Wellcome Trust Awards (UK)
- External Reviewer, Cystic Fibrosis Foundation of Canada
- Reviewer, Awards Committee of the Association of Medical Microbiology and Infectious Disease Society of Canada

Journal Reviews

- Plos Pathogens (1)
- Plos One (3)
- Molecular Microbiology (1)
- Infection and Immunity (2)
- Applied and Environmental Microbiology (1)
- Fungal Genetics and Biology (1)
- Canadian Journal of Microbiology (1)
- FEMS Microbiology Letters (1)

List of activities as organizer of national and international meetings or as session chair

- Organizing Chairperson, Symposium on Cell Wall Regulation and Polarity, 2nd International Fungal Cell Wall Meeting, Giens, France 2011

Other research related activities

- Internal Reviewer, MUHC Research Institute, CIHR Operating Grants competition: 1 grant

Dr. Silvia Vidal

List of activities as a reviewer (internal, external)

- CIHR, Immunology and Transplantation Panel
- NIH, Special Emphasis Panel to evaluate grants in response to RFA “An Integrated Approach to Understanding Host-Pathogens Interactions”
- The Wellcome Trust (UK), External Reviewer.

- Israel Science Foundation, External Reviewer.
- Agence Nationale de la Recherche Française, External Reviewer.

List of activities as organizer of national and international meetings or as session chair

- The 2011 Montreal Symposium in Genetics and Infectious Diseases, Montreal, Canada, May 16-17, 2011
- American Association of Immunologists' 98th Annual Meeting; San Francisco, California. May 13-17, 2011. Co-organizer of the symposium "Self-Non-Self Discrimination by Natural Killer Cells" in collaboration with Dr. Kevin Kane, University of Alberta.

List of other research related activities

- The 2011 Montreal Symposium in Genetics and Infectious Diseases, Montreal, Canada, May 16-17, 2011
- American Association of Immunologists' 98th Annual Meeting; San Francisco, California. May 13-17, 2011. Co-organizer of the symposium "Self-Non-Self Discrimination by Natural Killer Cells" in collaboration

Dr. Mark Wainberg

List of activities as a reviewer (internal, external)

- Reviewer for Antimicrobial Agents and Chemotherapy, Journal of Virology, Virology, Retrovirology, AIDS, Journal of AIDS, AIDS Research and Human Retroviruses, among others. Associate Editor of Retrovirology and PlosOne.

List of activities as organizer of national and international meetings or as session chair

- Chairman Committee on Drug Resistance World Health Organization, Member of steering committee Conference of International Union of Microbiology Societies (IUMS) to take place in Montreal, 2014.

Other research activity

- Head HIV Research Axis - Lady Davis Institute
- Director, McGill University AIDS Centre

SECTION III

Teaching and Learning

a. Summary

The department of Microbiology and Immunology has an international reputation for excellence in education at graduate and undergraduate levels. This is reflected in the data compiled in the following tables. The departmental faculty members, both primary and associate members contribute to teaching, and make of education an integral component of their academic workload, contributing to Microbiology and Immunology courses and also to courses developed and coordinated by other departments in the Faculty of Medicine, Dentistry or Science.

The teaching activities are spread across undergraduate courses from year 1 to 3 of different programs, as well in multiple graduate courses and seminars. Lastly, as part of advanced and continuing education, the department provides many opportunities of learning through Seminar Series and Ad Hoc lectures by leaders in the field of Infection and Immunity.

b. Demographics and Metrics

The statistics reported in this section refer to the 12 month period between January to December 2011. There were over 260 undergraduate students registered in the Department of Microbiology and Immunology in the Major (over 230), Honors (19) and Liberal/Faculty (11) programs (Tables-1, 3 and 4). In addition, over 230 Science students were registered in our undergraduate courses as part of their Science education (Table-1). Taken together, the Department of Microbiology and Immunology taught over 70 FTE students in this reporting period (Tables-2 and 5). Specific numbers per listed courses and terms are shown in table 5. In addition, evaluation of the courses by students is shown in (table 6). Our courses averaged excellent evaluation by students.

Completion of our educational programs based on graduation number is shown in Table 7 (for undergraduate students) and Table 8 (for graduate students). 87 students obtained an undergraduate degree, 5 students graduated with a master degree and 12 students with a PhD degree.

In addition to the course lectures, the practical laboratory components in each academic year provide comprehensive basic training in the technical skills required for careers in medical microbiology, molecular biology, immunology and parasitology (MIMM212, MIMM386D1/2 and MIMM413). Our Honors research project courses in Microbiology and Immunology (MIMM502D1/2, 23 students) and Immunology (PHGY419D1/2, 12 students) provides our most research oriented students with a full-year of intensive training in basic and applied research with a Professor-supervisor. The MIMM396/397 undergraduate research project courses continue to provide an accessible 3-credit introduction for many science students to undertake basic research with Professors as supervisors.

Upon graduation, a significant fraction of our graduates enter medical and graduate schools including those at McGill. Feedback received from their supervisors demonstrates that they appreciate the excellent preparation we give to our students for subsequent graduate training and research.

We have established an excellent graduate program that combines state-of-the-art research training with a broad exposure to global issues in Microbiology and Immunology and research on the molecular aspects of viral, microbial, mycological and parasitic infections and host defenses against disease. Each program of graduate studies is tailored by their supervisor to fit the needs and backgrounds of individual students and the departmental Graduate Studies Committee ensures that the students' projects, progress and performance are tracked and evaluated in a fair and uniform manner.

As shown in Table 9, annually we have trained an average of over 75 graduate students over the past five years. The average CGPA of newly admitted students is currently over 3.7 and most students begin as M.Sc. candidates in September or January.

As shown in Table 10, 20 graduate students (27% of the graduate students) received competitive external graduate fellowships from several agencies including CIHR, FRSQ, NCIC, etc totaling \$493,584. The department received internal funding from McGill University totaling over \$1.2 million to support our graduate students. The departmental F. C. Harrison, Jacob Rozanis, and Max Stern fellowships totaling \$43,000 were awarded to 18 outstanding graduate students on the basis of academic achievement.

c. Advanced Research Training

Our goal is to help each graduate student become an independent research scientist. This goal is achieved through focused research training coupled with broad exposure to current scientific discoveries in graduate seminar courses, advanced special topics courses, and discipline specific journal clubs. In addition to supervised research in a Professors laboratory, our seminar courses provide our graduate students with training in effective lecture preparation and the teaching of science subjects followed by immediate feedback to identify existing strengths and areas where improvement is needed. In addition to instructions on the use of Power-point presentations in teaching, we have recently added information sessions on standard research practices consistent with the highest principles of integrity in research to ensure that our students' research performance is above reproach. Graduate students also have opportunities to serve as Teaching Assistants in both lecture and laboratory courses to hone their skills as teachers of undergraduate students. The graduate studies tracking system continues to pay dividends in terms of a more structured student training, better monitoring of progress, correcting problems for students before they escalate and ensuring timely graduation. From January through December 2011, 5 M.Sc. and 12 Ph.D. students successfully defended their theses and graduated (Table-8.). A total of 10 Post Doctoral Fellows were trained in our department in the year of 2011.

SECTION III:

A. DATA ON DEPARTMENTAL ACTIVITIES

TABLE 1. Number of undergraduate students taught in Winter 11/Fall 2011

		Winter	Fall	Total
Undergraduate course enrolment		622	768	1390
Faculty of Science				
	Microbiology and Immunology Students:	263	259	
	I.H.I.: Students	27	36	
Number of non Micro. students taught in MIMM courses by academic staff.				
	B.Sc.	207	147	
	BA/Sc.	27	15	
	Other	11	26	
	Exchange	3	11	
Total		248	199	

TABLE 2.

Full time equivalent (FTE) enrolment of undergraduate students in courses by the Dept. during the past five years

2006-2007	2007-2008	2008-2009	Fall 09 & Winter 10	Fall term 2010	Winter 11	Fall 2011
148	135	147	146	77	64	77

TABLE 3.

Enrolment in undergraduate programs in Microbiology & Immunology, Winter 2011, Fall 2011

	Winter 2011 - CGPA 3.28				Fall 2011 - CGPA 3.31			
	U1	U2	U3	Total	U1	U2	U3	Total
Majors	91	81	60	232	94	75	60	229
Honours			19	19			19	19
Core Sci Comp (Liberal)	2	5	3	10	1	1	9	11
Faculty			1	1				
Internship		1		1				
	263				259			

TABLE 4. Undergraduate students enrolled in Dept. during the past five years

2006-07	2007-08	2008-09	Fall 2009	Winter 10	Fall 2010	Winter 11	Fall 2011
304	275	285	293	276	276	263	259

TABLE 5. Undergraduate enrolment and course FTE's - Winter 2011/Fall 2011					
Table 5.					
Winter 2011	Course Title	Credits	Enrolment	Credits times enrol.	FTE
MIMM 314	Immunology	3	271	813	27
MIMM 386D2	Micro. & Imm. Lab	3	82	246	8
MIMM 387	Applied Micro. & Imm.	3	55	165	6
MIMM 396	Micro. Resarch Project	3	6	18	0.6
MIMM 397	Imm. Research Project	3	2	6	0.2
MIMM 413	Parasitology	3	81	243	8.1
MIMM 466	Viral Pathogenesis	3	82	246	8.2
MIMM 498	Library Research Project Imm.	1	0	0	0
MIMM 499	Library Research Project Micro.	1	0	0	0
MIMM 501D2	Honours Imm Res Project	6	7	42	1
MIMM 502D2	Honours Micro Res Project	6	12	72	2.4
MIMM 509	Inflammatory Processes	3	24	72	2.4
		38	622	1923	64
Summer 2011	Course Title	Credits	Enrolment	Credits times enrol.	FTE
MIMM 396	Micro. Resarch Project	3	1	3	0.1
MIMM 397	Imm. Research Project	3	2	6	0.2
		6	3	9	0.3
Fall 2011	Course Title	Credits	Enrolment	Credits times enrol.	FTE
MIMM 211	Intro. Microbiology	3	224	672	22
MIMM 212	Microbiology Lab	2	108	216	7
MIMM 323	Microbial Physiology	3	83	249	8
MIMM 324	Fund. Virology	3	107	321	11
MIMM 386D1	Micro. & Imm. Lab	3	75	225	8
MIMM 396	Micro. Research Project	3	2	6	0.2
MIMM 397	Imm. Research Project	3	1	3	0.1
MIMM 414	Advanced Immunology	3	46	138	5
MIMM 465	Bactiral Pathogenesis	3	86	258	9
MIMM 498	Library Research Project Imm.	1	1	1	0
MIMM 499	Library Research Project Micro.	1	3	3	0
MIMM 501D1	Honours Imm Res Project	6	8	48	2
MIMM 502D1	Honours Micro Res Project	6	11	66	2.2
		39	850	33150	74

TABLE 6. Student evaluation of undergraduate courses in Microbiology & Immunology					
Winter 2011 and Fall 2011					
course #	number of completed evaluations	evaluation (1=poor 5=excellent)	course #	number of completed evaluations	evaluation (1=poor 5=excellent)
Winter 2011			Fall 2011		
MIMM 314	61	4.05	MIMM 211	68	4.4
MIMM 386D2	25	3.65	MIMM 212	52	4.45
MIMM 387	10	4.45	MIMM 323	17	3.30/5.00
MIMM 413	24	2.85	MIMM 324	22	3.9
MIMM 466	16	3.05	MIMM 386D1		results 201101
MIMM 501D2		results 502D2	MIMM 414	12	4.5
MIMM 502D2	6	4.78	MIMM 465	24	4.2
MIMM 509	12	4.3			
average		3.88	average		4.29

Question 1 - Overall, this is an excellent course (question 1 & 2 average).

Question 2 - Overall, I learned a great deal from this course (question 1 & 2 average).

TABLE 7. Undergraduate students graduations Winter 2011, Spring 2011, Fall 2011					
	Winter 2011	Spring 2011	Fall 2011		
Liberal	0	Liberal	2	Liberal	2
Honours	0	Honours	18	Honours	0
Majors	5	Majors	40	Majors	3
	11	IHI	11		5
			71		
TOTAL	87				

TABLE 8. Total Graduate Degrees granted over the past four years						
	Winter 2011		Spring 2011		Fall 2011	
	registered	graduated	registered	graduated	registered	graduated
M.Sc.	27	0	28	2	29	3
Ph.D.	42	6	39	3	45	3
TOTAL	69	6	67	5	74	6
	2008-09		2009-10		Fall 2010	
	registered	graduated	registered	graduated	registered	graduated
M.Sc.	35	9	31	11	40	5
Ph.D.	50	4	47	14	32	2
TOTAL	85	13	78	25	72	7

TABLE 9. Graduate student and enrolment and funding							
	2005-2006	2006-07	2007-08	2008-09	2009-10	Fall 2010	2011
Total Number of:							
Graduate Students	77	77	75	85	78	72	74*
							* reg in fall term 90**
	** total reg in 2011 (includes students who graduated Winter & Spring 2011)						
Number of New Graduate Students	30	18	26	33	25	13	22
Average CGPA of Incoming Students	3.64	3.60	3.46	3.49	3.66	3.65	3.76
Fellowships/ Scholarships/ Bursaries	\$425,488	482,811	\$697,410	\$747,345	\$1,066,902		\$710,685.43
Teaching/ Demonstratorships/ Service	\$99,048	81,693	\$74,104	\$78,877	\$101,876		\$ 52,611.64
							*for in-dept students
**Research Assistantships	\$1,005,365	869,850	\$713,350	\$922,900	\$1,398,486		\$1,035,422.63
Total Funding	\$1,529,901	1,432,354	\$1,484,863	\$1,749,122	\$2,567,265		\$1,818,790.88
Average Funding per Registered Trainee per annum	\$19,869	18,602	\$19,798	\$20,578	\$29,227/19 mths***		\$20,208.78
*** Last year reporting period Fall 2009 - Fall 2010							

TABLE 10.		<u>Funding of graduate students by source</u>		
			Number of Awards	Total Amount
A.	<u>Departmental Awards</u>			
1.	F.C. Harrison Fellowships		8	\$22,760
	Dr. Jacob Rozanis Fellowship		9	\$10,260
	Max Stern Recruitment Fellowship		1	\$10,000
		TOTAL	18	\$43,020
B.	<u>Internal Funding</u>			
1	Differential Fee Waiver		4	\$24,100
2	Graduate Excellence Fellowship (GEF)		31	\$144,099
3	Research Assistants		63	\$1,055,494
4	GREAT Travel Awards		13	\$5,882
5	Teaching/Demonstrators/Service		18	\$52,612
		TOTAL	129	\$1,282,186
C.	<u>External Fellowships</u>			
1.	CIHR		12	\$339,668
2	FRSQ		4	\$77,250
3	NCIC		1	\$20,000
4	NSERC		2	\$46,666
5	Neuroinflammation		1	\$10,000
		TOTAL	20	\$493,584
		<u>GRAND TOTAL</u>	<u>167</u>	<u>\$1,818,790</u>

Table 11. List of Guest Seminar Speakers in the Infection and Immunity Seminar Series from January to December 2011

<i>DATE</i>	<i>SPEAKER</i>	<i>TITLE</i>
Jan. 20, 2011	Dr. Erwin Schurr Montreal General Hospital Centre for the Study of Host Resistance	“Tuberculosis is a genetic disease”
Feb. 3, 2011	Dr. Ciriaco Piccirillo Associate Professor Department of Microbiology & Immunology, McGill University	“Functional dynamics and plasticity of Foxp3+ regulatory T cells: a story of mice and men”
Feb. 24, 2011	Dr. Greg Matlashewski Professor Department of Microbiology & Immunology, McGill University	“Visceral leishmaniasis: Elimination with existing interventions”
Mar. 3, 2011	Dr. Marika Sarfati Centre de Recherche du CHUM, Hôpital Notre-Dame, Département of Medicine	“Dendritic cells in mucosal diseases”
Mar. 10, 2011	Dr. John Rhode Assistant Professor Dalhousie University Department of Microbiology and Immunology	“Virulence in Shigella: new discoveries, new challenges and new tricks”
Mar. 9, 2011	Dr. Shawn Lewenza Assistant Professor, Westaim-ASRA Biofilm Research Chair, Canadian Cystic Fibrosis Foundation Researcher, Faculty of Medicine, University of Calgary	“Antibiotic resistance and immune evasion strategies of <i>Pseudomonas</i> <i>aeruginosa</i> biofilms”
Mar. 16, 2011	Dr. Tariq Ghayur Senior Principal Scientist & Research Fellow Abbott Laboratories	“The continuing evolution of antibody- based therapeutics”

<i>DATE</i>	<i>SPEAKER</i>	<i>TITLE</i>
Mar. 17, 2011	Dr. Anna Marie Pyle Professor Departments of MCD Biology and Chemistry. Investigator, Howard Hughes Medical Institute, Yale University	“Architecture and folding pathways of group II intron RNAs”
Mar. 24, 2011	Dr. André Veillette Research Unit Director Molecular Oncology, IRCM	“Immune regulation by SAP family molecules”
Mar. 31, 2011	Dr. Ameer Manges Assistant Professor, Department of Epidemiology, Biostatistics and Occupational Health, McGill University	“The intestinal microbiota and risk of hospital acquired <i>Clostridium difficile</i> infections”
Apr. 7, 2011	Dr. Jörg Fritz Assistant Professor Department of Microbiology and Immunology, McGill University	“B cells are regulating innate resistance”
Apr. 14, 2011	Dr. Nathalie Grandvaux Université de Montréal Faculté de médecine, Département de biochimie	"NADPH oxidases in mucosal innate immunity against respiratory viruses"
Apr. 21, 2011	Dr. Roger Lippe Université de Montréal Faculté de médecine, Département de biochimie	"Systemic analysis of viral and host proteins incorporated in Herpes simplex virus type 1 particles"
Apr. 28, 2011	Dr. Damien Montamat-Sicotte Tuberculosis Research Unit Department of Respiratory Medicine National Heart & Lung Institute, Wright Fleming Institute of Infection & Immunity, Imperial College Londo	"CD1b-restricted T cells and immunological memory: Implications for TB vaccine development"

<i>DATE</i>	<i>SPEAKER</i>	<i>TITLE</i>
Sept. 6, 2011	Dr. Paul Kaye University of York, England	"The host response to Leishmania in vivo: new insights into the macrophage response to infection."
Sept. 15, 2011	Dr. Marcel Behr Montreal General Hospital	"Mycobacterium tuberculosis as a symbiont."
Sept. 29, 2011	Dr. Rongtuan Lin Lady Davis Institute, McGill University	"Regulation of antiviral immune response through a RIG-I dependent pathway"
Oct. 13, 2011	Dr. Andrew Moulard Lady Davis Insitute, McGill University	"Elucidating critical HIV-1-host interactions during HIV-1's transit through the cell"
Oct. 27, 2011	Dr. Alfredo Menendez University of Sherbrooke	"Biliary function and enterohepatic bacterial infection"
Nov. 10, 2011	Dr. Simona Steiger Insitute Armand Frappier, Laval	"Regulation of T-cell responses during experimental visceral leishmaniasis"
Nov. 17, 2011	Dr. Andrew Gonzales McGill University	"Adaptation and evolutionary rescue in mircobial model systems"
Nov. 22, 2011	Dr. Philippe Sansonetti Pasteur Institute, France	"Symbionts and Pathogens at mucosal surface, the Yin and Yang of innate immunity"
Nov. 24, 2011	Dr. Eric Boilard Laval University	"Functions of Platelets in Inflammatory Arthritis"

<i>DATE</i>	<i>SPEAKER</i>	<i>TITLE</i>
Dec. 1, 2011	Dr. Andres Finzi Research Assistant Professor Centre de Recherche du CHUM (CRCHUM) Département de Microbiologie et Immunologie Université de Montréal	"Conformational changes of the HIV-1 gp120: structure and function"
Dec. 8, 2011	Dr. Markus Mohrs Full Member Trudeau Institute Saranac Lake, NY	"Dissecting cytokine responses in vivo"

SECTION IV

Academic and Community Service

Dr. Albert Berghuis

Committee Memberships

- Alternate member: Tenure and Promotions Committee (Faculty of Medicine).
- Co-director: GRASP (FRSQ funded Centre).
- Director: McGill Macromolecular X-ray Diffraction Facility (supported through GRASP).

Activities external to the University

- Grant review (panel member): National Institutes of Health – full member DDR (USA: 2010-2014) (3 meetings per year; ~100 applications per meeting).
- Editorial board member: Antimicrobial Agents and Chemotherapy (ASM Journal; since 2010).
- Editorial board member Protein Engineering Design & Selection (Oxford Journal; since 2004).

Dr. Dalius Briedis

Committee Memberships

- Member, McGill University Laboratory Safety Committee (Resource person for Biohazards).
- Member, McGill University Health Centre Antibiotic Subcommittee of the Pharmacy and Therapeutics Committee.
- Site Director, Division of Infectious Diseases, Department of Medicine, Royal Victoria Hospital.
- Director, Outpatient Intravenous Antibiotic Program, Royal Victoria Hospital.
- Director, Infectious Diseases Clinic, Royal Victoria Hospital.

Dr. James Coulton

Committee Memberships

- Life Sciences Library Advisory Committee, McGill Faculty of Medicine, since 2001.
- Member of the Users' Committee and Advisor to the Director, Sheldon Biotechnology Center, since 2000.
- Canadian Society of Microbiologists: McGill University representative, since 2005.

Activities External to the University

- Co-director, Natural Sciences and Engineering Research Council Collaborative Research and Training Experience (CREATE), 2010-2015 Université de Montréal, McGill University, University of British Columbia, Baylor University.
- Groupe d'étude des protéines membranaires (GÉPROM), Université de Montréal, Chair of the Comité de formation to evaluate applications for training awards, since 2005.
- Brookhaven National Laboratory, NY, project evaluator for beamline X6A, since 2005.

Dr. Benoit Cousineau

Committee Memberships

- Member of the Microbiology & Immunology Chair Recruitment Committee.
- Member of the Duff Renovation Committee, McGill University.
- Member of the Duff Strategic Force Committee.
- Member of the Teaching Lab Renovation Committee.
- Department of Microbiology & Immunology representative at the 2011 McGill Open House.
- Invited lecturer at a Freshman Interest Group session (McGill University).

Activities External to the University

- Member of the American Society for Microbiologists (ASM).
- Member of the Canadian Society of Microbiologists (CSM).
- Member of the Eastern Ribo-Club (guest lab).
- Member of the Canadian Society for Ecology and Evolution (CSEE).

Dr. Sylvie Fournier

Committee Memberships

- CIHR Neuroinflammation Training Program Awards Committee, Member
- UACC Training Subcommittee, Member
- UACC Animal use protocol application review Subcommittee, Member
- April 6 2011, Doctoral Oral Examination of Mr. Hoang Kien, Department of Civil Engineering and Applied Mechanics, McGill University.
- October 11 2011, Doctoral Oral Examination of Mr. Neal Thomas, Department of Art History and Communication, McGill University.

Dr. Jorg Fritz

Committee Memberships

- McGill University Postgraduate Awards Committee (PGAC),
- review of 19 Postdoctoral fellowship applications

Activities External to the University

- External Reviewer - Digestive Disorder Foundation UK (DDF)- Review of 1 grant application.
- Invited Member - Canadian Institutes of Health Research (CIHR)/Fall Competition-Committee: Hematology, Digestive Disease & Kidney (HDK) - Review of 9 grant applications.
- Academic Editor for PLoS One: handling of 27 manuscripts.
- Editorial Board Member of the Journal of Clinical & Cellular Immunology.
- Ad-hoc Peer Reviewer for PLoS Pathogens (1) – PLoS One (1).

Dr. Matthias Gottee

Activities External to the University

- Journal of Biological Chemistry, Editorial Board Member, Since 2010.
- Antimicrobial Agents and Chemotherapy, Editorial Board Member, Since 2007.
- Ontario HIV Treatment Network (OHTN): Chair, Basic Research Grant Panel (two meetings/year), Peer Review Panels.
- Canadian Association for HIV Research (CAHR): Council Member, Scientific Societies.
- Marianopolus College “The Biology Club”, Montreal, Quebec, November 22, 2011- Invited Presentation “New drugs to treat infection with HCV: opportunities and challenges”.

Dr. Samantha Gruenheid

Committee Memberships

- Member, Postgraduate Awards Committee Review of internal studentship and fellowship applications, Faculty of Medicine, McGill University (Jan 2011-present).
- Member, Downtown Campus Facility Animal Care Committee, Review of animal use protocols, facilities inspections, Faculty of Medicine, McGill University (May 2009-present).
- McGill Faculty of Science Open House and Freshman Fair, Departmental representative at Microbiology and Immunology booth, undergrad and graduate, (October 2011).
- McGill University Soup and Science, Montreal, Infectious disease, host/pathogen interactions, bacterial infections (Jan. 17th, 2011).

Activities External to the University

- Canadian Society of Microbiologists – Vice Chair of Infection and Immunity section (2010-present).
- Student oral symposium judge: Canadian Society of Microbiologists Annual Meeting, 2011
- Poster judge: Canadian Society of Microbiologists Annual Meeting, 2011
- Université de Montreal Faculté de Médecine vétérinaire- Poster Judge: Université de Montreal Faculté de Médecine vétérinaire Journée de la recherche, 2011
- Rocky Mountain Laboratories (NIH/NIAID), Hamilton, Montana- Workshop for post docs on balancing starting a career and family, March 2011.

Dr. Herve Le Moual

Activities External to the University

- Member of the NSERC 1501 Research Tools and Instruments evaluation committee.

Dr. Joaquin Madrenas

Committee Memberships

- Chair, Academic Strategic Committee for Duff Building Redevelopment.
- Member, Project Design Committee for Duff Building Redevelopment.

- McGill University Space Committee.
- McGill University Selection Committee for Duff Building Renovation Proposals.

Activities External to the University

- Pre-Clerkship and Transition Year Committee, the University of Western Ontario.
- Clinician Scientist Program Committee, the University of Western Ontario.
- Chair, Nominating and Awards committee, the University of Western Ontario.
- Annual Performance Evaluation committee, the University of Western Ontario.
- Chair, Research committee, the University of Western Ontario.
- Chair, Mentorship committee Dr. Alp Sener, Department of Surgery, the University of Western Ontario.
- Mentorship committee Dr. Mansour Haeryfar, Department of Microbiology & Immunology, the University of Western Ontario.
- Mentorship committee Dr. Laksman Gunaratnam, Department of Medicine.
- Flow Cytometry Core Facility Users Committee, the University of Western Ontario.
- Confocal Microscope Governance Committee, the University of Western Ontario.
- Chairman, CIHR Immunology and Transplantation Panel.
- Member, FOCIS executive committee.
- Member, Medical Review Panel of the Canada Gairdner Foundation Awards.
- Member Royal College of Physicians and Surgeons of Canada Clinician Scientist White Paper Subgroup.
- Member, Canadian College of Reviewers.
- Referee, University of Karachi, Promotion & Tenure Committee.
- Referee, University of Western Ontario, Promotion & Tenure Committee.

Dr. Greg Matlashewski

Activities External to the University

- Meeting with the Director of Communicable Diseases in Bangladesh to determine future policy to treat visceral leishmaniasis with single dose AmBisome, March 2011.
- Meeting with the India Bihar State principal secretary of Health to discuss future policy directions on the diagnosis and treatment of visceral leishmaniasis in Bihar state, India, July 2011.
- Meeting with officials from the India Department of Health and Family welfare, Delhi, to discuss future policy directions on the diagnosis and treatment of visceral leishmaniasis in Bihar state, India, November 2011.

Dr. Martin Olivier

Committee Memberships

- Member of the Selection Committee, MUHC/Faculty of Medicine, PDF/Graduate Student Studentship Competition. (2009-present)

Activities External to the University

- Editorial Work: Guest Editor, PLoS Pathogens.
- Le Bar des Sciences (Québec Science), CEGEP St-Laurent, St-Laurent, Canada (2010).
- CBC Radio One Noon: Dendritic Cells and Steinman's Nobel Prize (October 2011).

Dr. Ciro Piccirillo

Committee Memberships

- Center for the Study of Host Resistance (MUHC).
- McGill FQRNT- Center of Host-Parasite Interactions (CHPI).
- Montreal Diabetes Research Center (MDRC).
- Co-Leader, Infection and Immunity Axis, MUHC Research Institute.
- Research Council of the MUHC Research Institute.
- Director, McGill-MUHC FOCIS Center of Excellence.
- Director, MUHC RI Immunophenotyping platform.
- CIHR Human Immunology Network (CHIN), director of Montreal Node (Fall 2011).

Activities External to the University

- Chair of Immunology, Genetics and Cell Biology grant review panel of CDA.
- Member of the CDA National Research Council.
- Board of Governors for Immunology-Montreal.
- Academic Editor, PLoS One.
- Editorial Board, World Journal of Diabetes.
- Editorial Board, Frontiers in Immunology.
- Member of CSI, AAI and FOCIS societies.
- Establishment of the Teaching Research Excellence to Girls (TREG) Program at Sacred Heart High School destined to raise awareness of high-achieving girls to the importance biomedical research in society.

Dr. Donald Sheppard

Committee Memberships

- Member, University Biosafety Committee.
- Section Head, Medical Mycology laboratory, MUHC.
- Program Director, Royal College Training Programs in Infectious Diseases and Medical Microbiology.
- MUHC Mycology Clinic
- Lutte contre le Cancer, Infectious Disease Representation for MUHC.

Activities External to the University

- Vice Chair, Awards Committee of the Association of Medical Microbiology and Infectious Disease Society of Canada.
- Member of Global Antifungal Advisory Board, Merck Pharmaceuticals.

Dr. Silvia Vidal

Activities External to the University

- Frontiers in Immunology, Associate Editor.
- CIHR Team in mutagenesis and infectious diseases (leader).

Dr. Mark Wainberg

Committee Memberships

- Director, McGill University AIDS Centre.

Activities External to the University

- Chairman, world health organization, committee on HIV drug resistance .
- Associate Editor of retrovirology.
- Associate Editor of PloS One.
- Member of editorial board, Antimicrobial Agents and Chemotherapy.
- Member of editorial AIDS.
- Member of four Ph.D. examining committees.

SECTION V

Consulting Activities

Consulting Activities				
Name of Faculty Member	Private Sector Consulting Number of days	Public Sector Consulting Number of days	Other (please explain)	Total
Dr. Albert Berghuis		7 days (NIH Granting Agency US Based)		7 days
Dr. Matthias Götte	5	3		8 days
Dr. Joaquín Madrenas	15	30	Consultant for CIHR, Canadian, American and International Universities, Gairdner Foundation, Federation of Clinical Immunology Societies (FOCIS), Bristol-Myers & Squibb, Kidney Foundation of Canada, Royal College of Physicians And Surgeons of Canada,	45 days
Dr. Greg Matlashewski		10 days, WHO Geneva (non- paid)		10 days
Dr. Greg Matlashewski		2 days, Bill and Melinda Gates Foundation (non-paid)		2 days
Dr. Ciriaco Piccirillo	21 days (GSK)			21 days
Dr. Ciriaco Piccirillo	2 days (ProScan Rx Pharma Inc.)			2 days
Dr. Ciriaco Piccirillo	4 days (Aegera Therapeutics Inc.)			4 days
Dr. Don Sheppard	4 days (Merck)			4 days
Dr. Don Sheppard	1 day (Pfizer)			1 days
Dr. Mark A. Wainberg		6 days (World Health Organisation)		6 days
Dr. Mark A. Wainberg		Chair of WHO HIV Drug resistance committee.		