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CURRICULUM VITAE

Jeffrey A. Medin PhD

Professor
Department of Pediatrics
Division of Hematology and Oncology - Pediatrics

OFFICE ADDRESS:

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8701 Watertown Plank Rd
Milwaukee, WI 53226

EDUCATION:

1980 - 1985 B.Sc., University of Wisconsin-Parkside, Kenosha, WI
1986 - 1991 Ph.D., University of Kentucky, Department of Biochemistry, Lexington, KY

FACULTY APPOINTMENTS:

1985 - 1986 Special Rare Reagents Technician, Work Experience: Quality Assurance on HIV and Hepatitis Test Kits, Abbott Laboratories, Diagnostic Division/QC, Abbott Park, IL
1986 - 1991 Doctoral Candidate, Mentor: Mary Sue Coleman, PhD, Areas of Research: Biochemistry, Molecular Biology, Enzymology, Baculovirus Protein Expression, University of Kentucky, Lexington, KY
1992 - 1993 National Research Council Bio-Tech Fellow, Mentor: Keiko Ozato, PhD, Areas of Research: Nuclear Hormone Receptors and Ligands Transcription, Protein-Protein and Protein-DNA Interactions, Laboratory of Molecular Growth Regulation, National Institute of Child Health and Human Development, NIH., Bethesda, MD
1994 - 1996 Intramural Research Fellow, Mentor: Stefan Karlsson, MD, PhD, Areas of Research: Gene Therapy for Gaucher Disease, Hematopoiesis, Retroviral Construction, Molecular and Medical Genetics Section DMNB, NINDS, NIH., Bethesda, MD
1996 - 1998 Senior Staff Fellow, Mentor: Roscoe Brady, MD, Areas of Research: Gene Therapy for Fabry Disease, Enzymology, Hematopoiesis, Developmental and Metabolic Neurology Branch, National Institute of Neurological Disorders and Stroke. NIH., Bethesda, MD
1998 - 2001 Assistant Professor of Medicine (tenure-track), Areas of Research: Gene Therapy, Hematopoiesis, Lysosomal Storage Diseases, Cancer, University of Illinois at Chicago
1999 - 2001 Affiliate Member, Biochemistry and Molecular Biology, University of Illinois at Chicago
2001 - 2006 Scientist, Division of Stem Cell and Developmental Biology, Ontario Cancer Institute
2001 - 2008 Associate Professor, Medical Biophysics, Faculty of Medicine, University of Toronto
2001 - 2012 Affiliated Scientist, Division of Experimental Therapeutics, Toronto General Research Institute
2004 - Present Full Member, Institute of Medical Science, Faculty of Medicine, University of Toronto
2006 - 2012 Senior Scientist (tenure-level), Areas of Research: Gene Therapy, Cancer, Lysomal Storage Diseases, Hematopoiesis, Ontario Cancer Institute
2008 - Present Full Professor, Medical Biophysics, Faculty of Medicine, University of Toronto
2013 - 2015 Senior Scientist (tenure-level), University Health Network (Ontario Cancer Institute, Toronto General Research Institute, Toronto Western Research Institute Appointments)
2016 - 2017 Co-Program Leader, MCW Cancer Center, Hematologic Malignancy and Immunotherapy Research Program, Medical College of Wisconsin, Milwaukee, WI
2016 - Present Inaugural MACC Fund Professor, Pediatrics, Hematology/Oncology, Medical College of Wisconsin, Milwaukee, WI
2016 - Present Research Director, Pediatrics, Hematology/Oncology, Medical College of Wisconsin, Milwaukee, WI
2016 - Present Vice Chair of Research Innovation, Pediatrics, Hematology/Oncology, Medical College of

Wisconsin, Milwaukee, WI
2016 - Present Professor of Biochemistry, Biochemistry, Medical College of Wisconsin, Milwaukee, WI
2016 - Present Adjunct Senior Investigator, Blood Research Institute, BloodCenter of Wisconsin, Milwaukee, WI
2016 - Present Affiliate Scientist, University Health Network, Toronto, Canada

EDUCATIONAL ADMINISTRATIVE APPOINTMENTS:

2000 Course Director: BCHE 595: Biochemistry Graduate Student Journal Club, Biochemistry, University of Illinois at Chicago, Chicago, IL
2003 - Present Section Leader, MBP1001Y: Advanced Cell Biology, University of Toronto, Toronto, Canada
2004 - 2006 Section Leader, MBP1007/8: Fundamentals in Cell and Molecular Biology, University of Toronto, Toronto, Canada
2006 Course Coordinator - MBP1007/8: Fundamentals in Cell and Molecular Biology, University of Toronto, Toronto, Canada
2007 - Present Course Coordinator - MB1001Y: Advanced Cell Biology, University of Toronto, Toronto, Canada
2013 Course Coordinator of Biotherapeutics: Clinical implementation, Gene therapy, Immunotherapy, and New Mouse Model, University degli Studi di Palermo, Palermo, Sicily

AWARDS AND HONORS:

1986 Cash Awards: Abbott Employee Suggestion Program, Abbott Labs
1986 - 1989 Pre-doctoral Fellowship in Biotechnology, US Department of Defense
1992 - 1993 Associateship Award, National Research Council
1994 - 1996 Intramural Research Training Award, National Institutes of Health (NIH)
1995 Trainee Investigator Award, The Clinical Research Mtg.
1999 Prostate Cancer Research Program: New Investigator Award, US Department of Defense
2005 Visiting Professor: CIHR-CNR Exchange Program, University of Palermo, Sicily
2011 Visiting Professor, University degli Studi di Palermo, Palermo, Sicily
2011 Distinguished Alumni Award for Achievement, University of Wisconsin-Parkside
2014 Fall Commencement Speaker, University of Wisconsin-Parkside
2019 - Present University of Wisconsin-Parkside Foundation Board member

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

1987 - Present American Association for the Advancement of Science
1995 - Present American Society for Biochemistry and Molecular Biology
1996 - Present American Society of Hematology
1997 - Present American Society of Gene and Cell Therapy
1998 - 2008 International Society of Experimental Hematology
2003 - 2009 European Society of Gene Therapy
2005 - 2008 Canadian Society of Biochemistry, Molecular & Cellular Biology
2008 - 2009 Tissue Engineering and Regenerative Medicine International Society (TERMIS)
2021 - Present Society for Immunotherapy of Cancer

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Editorial Board
2009 - Present World Journal of Stem Cells
2015 - Present Cell and Gene Therapy Insights
2015 - Present Biomedicines
Ad-Hoc Reviewer
2006 Journal of Gene Medicine (2006 review)
2006 Digestive Diseases and Sciences (2006 review)
2006 Expert Review of Vaccines (2006 review)
2006 - 2013 Cancer Detection and Prevention, Cancer Gene Therapy
2007 Blood (2007 review)
2007 Molecular Cancer Therapeutics (2007 review)
2007 Immunology Letters (2007 review)
2008 Canadian Medical Association Journal (2008 review)

2008 Pharmacological Research (2008x2 review)
2008 Drug News and Perspectives (2008 review)
2009 Biotechnology and Bioengineering (2009 review)
2009 Oncogene (2006, 2009 review)
2009 International Journal of Cancer (2009 review)
2009 Immunological Investigations (2009 review)
2010 Molecular Cancer (2010 review)
2010 Amino Acid (2010 review)
2010 Glycobiology (2010 review)
2011 Expert Opinion on Biological Therapy (2011 review)
2011 Journal of Mass Spectrometry (2011 review)
2012 Brain (2012 review)
2012 International Immunology (2012 review)
2013 Cancer Gene Therapy (2006x2, 2007x2, 2008x2, 2009x3, 2010, 2011x2, 2012, 2013 review)
2013 Immunology and Cell Biology (2013 review)
2014 Journal of Cellular and Molecular Medicine (2014 review)
2014 Journal of Lipid Research (2014 review)
2014 Science Translational Medicine (2014 review)
2014 Biological Chemistry (2014 review)
2015 Molecular Genetics and Metabolism (2008, 2010, 2015 review)
2015 PLOS ONE (2013, 2014, 2015 review)
2015 PLOS Genetics (2015x2 reviews)
2015 Human Molecular Genetics (2015 review)
2016 Orphanet Journal of Rare Diseases (2016 review)
2016 International Journal of Molecular Sciences (2016 review)
2017 Journal of Clinical Investigation (2017 review)
2017 Dental Research (2017 review)
2017 Cancers (2017 review)
2017 Journal of Advanced Research (2017 review)
2017 BBA - Molecular Basis of Disease (2017 review)
2017 Journal of Molecular Medicine (2011, 2017 review)
2017 Journal of Virological Methods (2017 review)
2018 Acta Pharmaceutica Sinica B (2018 review)
2019 Biochemical Journal (2019 review)
2019 Journal of Neuroscience Methods (2019 review)
2019 Scientific Reports (2015, 2019 review)
2019 Gene Therapy (2007x2, 2008x2, 2009, 2011x3, 2019x2 review)
2020 Human Gene Therapy (2006, 2020 review)
2020 Journal of Medical Genetics: Part A (2020 review)
2020 Immunotherapy (2008, 2020 review)
2020 Molecular Metabolism (2020 review)
2021 BMC Supplements (2020, 2021 review)
2021 Genetics in Medicine (2021 review)
2021 Ann NY Acad Sci (2021 review)
2021 Molecular Therapy (2006x3, 2007, 2008, 2009x5, 2010, 2011x2, 2012x2, 2013, 2015x2, 2017x2, 2019, 2021x2 review)
2021 BBA Molecular and Cell Biology of Lipids (2020, 2021 review)
2021 Nature Communications (2014, 2021 review)
2022 Molecular Therapy Methods & Clinical Development (2019, 2021x4, 2022x2 review)

LOCAL/REGIONAL APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2008 - 2009 Member, Research and Health Care Advisory Committee, Canadian Breast Cancer Foundation, Ontario Region
2008 - 2009 Member, Scientific and Medical Advisory Committee, Prostate Cancer Research Foundation of Canada
2013 - Present Ad hoc Member, Advisory Committee, US LDN
2013 - Present Member, Scientific Advisory Board, Plexcera Therapeutics

2015 - 2018 Member, Viral Gene Transfer Vectors Committee, American Society of Gene and Cell Therapy
2016 Academic Founder, AVROBIO LTD
2016 - Present Member, Scientific Advisory Board, AVROBIO LTD
2016 - Present Member, Scientific Advisory Board, Rapa Therapeutics

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Active

Peer Review

Title:	Fabry Disease: Mechanisms and Next-Generation Therapies (Competitive Renewal)
Source:	Canadian Institutes of Health Research MOP 123528
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	01/2012 - 09/2017
Direct Funds:	$724,611 (CAD)

Title:	The FACTs Project: Fabry disease Clinical research and Therapeutics
Source:	CIHR Emerging Team Grant: Rare Diseases and the Kidney Foundation of Canada
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	02/01/2012 - 01/31/2017
Direct Funds:	$2,500,000 (CAD)

Title:	Red Flag: Overcoming Self-Tolerance to Leukemia
Source:	Princess Margaret Foundation. Toronto, Canada
Role & Effort:	Co-Principal Investigator
PI:	Paige
Dates:	08/2012 - 07/2016
Direct Funds:	$870,000 (CAD)

Title:	Development and Application of a Therapeutic Cancer Vaccine
Source:	Krembil Foundation. Toronto, Canada
Role & Effort:	Co-Principal Investigator
PI:	Paige
Dates:	08/2012 - 07/2016
Direct Funds:	$480,000 (CAD)

Prior

Peer Review

Title:	Fabry's disease MSC and recombinant retrovirus transduction in vitro normal, Fabry's patient and baboon model experiments
Source:	Osiris Therapeutics. UIC#99-2-327
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	03/20/1999 - 03/19/2001

Direct Funds:	$163,447 (USD)
Title:	Improved "suicide" gene therapy in allogeneic BMT
Source:	UIC Campus Research Board
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	07/01/1999 - 06/30/2000
Direct Funds:	$13,520 (USD)
Title:	Bridge funding for gene transfer core for program project grant
Source:	UIC Office of the Vice Chancellor for Research
Role & Effort:	Co-Investigator (Head of Core)
Dates:	09/01/1999 - 1999
Direct Funds:	$30,000 (USD)
Title:	Retrovirus-mediated immunotherapy of prostate cancer
Source:	Blowitz-Ridgeway Foundation
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	09/01/1999 - 08/31/2001
Direct Funds:	$99,498 (USD)
Title:	Development of retrovirus-mediated immunotherapy of prostate cancer
Source:	US Department of Defense: #PC991135
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	05/01/2000 - 02/28/2004
Direct Funds:	$225,000 (USD)
Title:	Radiolabeled herceptin for breast cancer imaging and treatment
Source:	Susan G. Komen Breast Cancer Foundation
Role & Effort:	Co-Investigator
Dates:	10/01/2000 - 09/30/2002
Direct Funds:	$197,510 (USD. Year 2 surrendered due to overlap with next grant.)
Title:	Enhancement of gene therapy outcomes for Fabry disease
Source:	NIH 1 R01 HL70569-01
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	09/29/2001 - 08/31/2006
Direct Funds:	$800,000 (USD)
Title:	Novel approach for evaluating and treating advanced breast cancer patients whose tumors overexpress HER-2/neu
Source:	US Department of Defense: #BC000229
Role & Effort:	Co-Investigator (PI: Blend)
Dates:	11/01/2001 - 05/31/2003

Direct Funds:	$197,510 (USD)
Title:	The biodistribution of a-galactosidase A following gene therapy for Fabry disease.
Source:	National Organization for Rare Disorders
Role & Effort:	Mentor
PI:	Yoshimitsu
Dates:	06/01/2002 - 05/31/2004
Direct Funds:	$125,000 (USD)
Title:	Molecular therapeutics of B cell malignancies
Source:	National Cancer Institute of Canada (Terry Fox Program Project)
Role & Effort:	Project Leader & Head of Animal Core
PI:	Stewart
Dates:	05/01/2003 - 06/30/2006
Direct Funds:	$2,500,000 (CAD)
Title:	Maritimes dialysis screening for Fabry disease
Source:	TkTCorporation/Dalhousie University
Role & Effort:	Co-Investigator
PI:	West
Dates:	05/01/2003 - 04/30/2004
Direct Funds:	$29,000 (CAD)
Title:	Cardiac remodeling: Role of intrinsic bone marrow stem cells and host regulatory factors
Source:	Heart and Stroke Foundation
Role & Effort:	Co-Investigator
PI:	Liu
Dates:	09/01/2003 - 08/31/2006
Direct Funds:	$250,200 (CAD)
Title:	CRP Gene Therapy Grant
Source:	University Health Network
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	04/01/2004 - 03/31/2008
Direct Funds:	$336,662 (CAD)
Title:	Tissue Engineering: Immune response and vascularization
Source:	Canadian Institutes of Health Research
Role & Effort:	Co-Investigator
PI:	Sefton
Dates:	07/01/2004 - 06/30/2007
Direct Funds:	$302,400 (CAD)
Title:	Research Program in Immune Tolerance in Transplantation (RITT)
Source:	Canada Foundation for Innovation (Infrastructure Only)

Role & Effort:	Head of Innovative Development Laboratory, Principal Investigator of Section on Modifying Gene Expression
PI:	Jeffrey A. Medin
Dates:	07/01/2004 - 06/30/2007
Direct Funds:	$10,700,000 (CAD)
Title:	Combined radiation and immuno-gene therapy for prostate cancer
Source:	Canadian Prostate Cancer Research Institute
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	03/01/2005 - 02/28/2006
Direct Funds:	$50,000 (CAD)
Title:	Lentivirus gene therapy for Farber disease in NHPs
Source:	NINDS/NIH 1 R21 NS051500-01
Role & Effort:	Principal Investigator
Dates:	03/01/2005 - 02/31/2007
Direct Funds:	$249,750 (USD)
Title:	Development of DC-based immunotherapy using erbB2 as a model antigen
Source:	Prostate Cancer Research Foundation of Canada
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	04/01/2005 - 03/31/2007
Direct Funds:	$112,500 (CAD)
Title:	Animal modeling and lentivirus-mediated correction of Farber disease
Source:	Vaincre les Maladies Lysosomales, France
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	08/01/2005 - 07/31/2006
Direct Funds:	$15,000 (Euros)
Title:	Screening of renal dialysis patients in Ontario for indications of Fabry disease
Source:	Genzyme Canada Corporation
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	2005
Direct Funds:	$53,321 (CAD)
Title:	Direct injection of recombinant lentivector into fetal primates for correction of Lysosomal Storage Disorders
Source:	NHLBI/NIH Center for Fetal Monkey Gene Transfer
Role & Effort:	Principal Investigator

PI:	Jeffrey A. Medin
Dates:	2005
Direct Funds:	$0
Title:	Enhanced immunogene therapy for colon cancer
Source:	National Colorectal Cancer Campaign
Role & Effort:	Co-Principal Investigator
PI:	McCart
Dates:	02/01/2006 - 01/31/2007
Direct Funds:	$55,000 (CAD)
Title:	Novel Suicide Gene Modified Donor Th2 Cells for GVHD Prevention (Exploratory/Development Grant)
Source:	NIH "Bench-to-Bedside"
Role & Effort:	Co-Principal Investigator
PI:	Fowler
Dates:	06/2006 - 05/2008
Direct Funds:	$100,000 (USD)
Title:	Cardiac remodeling: Role of intrinsic bone marrow stem cells and host regulatory factors
Source:	Heart and Stroke Foundation (Competitive Renewal)
Role & Effort:	Co-Investigator
PI:	Liu
Dates:	09/01/2006 - 08/31/2009
Direct Funds:	$290,233 (CAD)
Title:	Immunogene therapy for prostate cancer: Testing outcomes in non-human primates
Source:	Ontario Cancer Research Network
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	09/01/2006 - 08/31/2009
Direct Funds:	$560,100 (CAD)
Title:	Enhancement of gene transfer outcomes for Fabry disease
Source:	Heart and Stroke Foundation
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	05/01/2007 - 04/30/2010
Direct Funds:	$465,000 (CAD. Grant declined due to overlap with next grant.)
Title:	Cancer Immunotherapy Program - Group Grant
Source:	National Cancer Institute of Canada
Role & Effort:	head of Project 1
PI:	Bramson
Dates:	07/01/2007 - 06/30/2010
Direct Funds:	$2,841,324 (CAD)

Title:	Enhancement of FasL-mediated killing of primary prostate cancer cells
Source:	Prostate Cancer Research Foundation of Canada
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	07/2007 - 06/2008
Direct Funds:	$60,000 (CAD)

Title:	The Regenerative Medicine Project (REMEDI)
Source:	Canada Foundation for Innovation (Infrastructure Only)
Role & Effort:	Head of Vector Core Facility
PI:	Weisel
Dates:	07/2007 - 06/2010
Direct Funds:	$15,800,000 (CAD)

Title:	Enhanced immunogene therapy for colon cancer
Source:	National Colorectal Cancer Campaign
Role & Effort:	Co-Principal Investigator
PI:	McCart
Dates:	07/2007 - 06/2008
Direct Funds:	$30,000 (CAD)

Title:	Enhancement of gene transfer outcomes for Fabry disease
Source:	Canadian Institutes of Health Research
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	08/01/2007 - 07/31/2012
Direct Funds:	$626,685 (CAD)

Title:	Ontario Regional Biotherapeutics Program (ORBiT)
Source:	Source and identifying no.: Ontario Cancer Research Network (OCRN)
Role & Effort:	Co-Principal Investigator
PI:	Keating
Dates:	10/2007 - 10/2008
Direct Funds:	$55,020 (CAD)

Title:	Localized IL-12 Immunotherapy for CML
Source:	Canadian Institutes of Health Research (Proof-of-Principle)
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	01/2008 - 12/2008
Direct Funds:	$150,000 (CAD)

Title:	Molecular dynamics of the cell surface proteome in primary prostate cancer cells: Towards development of novel combinatorial therapies
Source:	Canadian Institutes of Health Research

Role & Effort:	Co-Principal Investigator
PI:	Kislinger
Dates:	01/01/2009 - 12/31/2011
Direct Funds:	$423,000 (CAD)

Title:	Ontario Regional Biotherapeutics Program (ORBiT)
Source:	Ontario Institute of Cancer Research
Role & Effort:	Co-Principal Investigator
PI:	Lead PI: Bell
Dates:	01/01/2009 - 01/01/2011
Direct Funds:	$260,045 (CAD)

Title:	CIHR Training Program in Regenerative Medicine (Trainee Support Only)
Source:	Canadian Institutes of Health Research
Role & Effort:	Co-Investigator
PI:	Levy
Dates:	03/2009 - 02/2015
Direct Funds:	$1,950,000 (CAD)

Title:	CIHR Biological Therapeutics Training Grant (Trainee Support Only)
Source:	Canadian Institutes of Health Research
Role & Effort:	Co-Investigator
PI:	Hampson
Dates:	03/2009 - 02/2015
Direct Funds:	$1,787,630 (CAD)

Title:	Proteomic profiling of prostatic secretions: Biomarker discovery and validation.
Source:	Prostate Cancer Foundation of Canada
Role & Effort:	Co-Principal Investigator
PI:	Kislinger
Dates:	06/01/2009 - 06/30/2010
Direct Funds:	$60,000 (CAD)

Title:	GMP Cell and Vector Production Facility
Source:	Canadian Foundation for Innovation (Infrastructure Only)
Role & Effort:	Co-Principal Investigator
PI:	Keating
Dates:	01/01/2010 - 12/01/2013
Direct Funds:	$18,443,813 (CAD)

Title:	Gamma- and lenti-vector transduction of MSCs: Cell-fate control for safety
Source:	Apeth GmbH
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	07/2012 - 08/2013
Direct Funds:	$157,000 (CAD)

Title:	Genetic correction of a novel 'knock-in' mouse model for Farber disease

Source:	NIH R21
Role & Effort:	Principal Investigator
PI:	Jeffrey A. Medin
Dates:	01/01/2013 - 12/31/2014
Direct Funds:	$274,995 (USD)

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

International

Is there a future potential for gene therapy in Fabry disease?, 1st International Symposium on Lysosomal Storage Diseases, Seville, Spain, 04/27/2001

Gene therapy for Fabry disease, National Institute of Neuroscience National Center of Neurology and Psychology, Tokyo, Japan, 08/27/2001

Gene therapy for Fabry disease, The First Department of Internal Medicine, Kagoshima, University, Kagoshima, Japan, 08/30/2001

Gene therapy for disorders with cardiovascular manifestations, Kagoshima University, Kagoshima, Japan, 10/23/2003

Broad-scale implementation of lentivirus vectors for gene therapy of lysosomal storage diseases, Institut Federatif de Recherch Louis Bugnard, Toulouse, France, 09/17/2004

Novel prodrug/enzyme combinations for suicide gene therapy using lentiviral vectors, European Institute of Oncology, Milan, Italy, 09/16/2005

Lentivirus-mediated gene therapy for lysosomal storage disorders, Instituto di Biomedicina e Immunologia Molecolare, Cosiglio Nationale delle Ricerche, Palermo, Italy, 10/18/2005

Lentivirus-mediated gene therapy for lysosomal storage disorders, Department of Medicine I of A.O. "V. Cervello" Hospital, Palermo, Italy, 10/28/2005

Plenary Talk: Immunogene therapy for prostate cancer, XVth Congresso Nazionale della Societa Italiana di Urologia Oncologia, Taormina, Italy, 11/06/2005

Gene therapy for Fabry disease, Lunchtime 'Meet-the-Professor' Session 54th Annual Scientific Session of the Japanese College of Cardiology, Kagoshima, Japan, 09/25/2006

Multi-faceted gene therapy of cardiomyopathy using lentiviral vectors, Keynote speaker Symposium: Diagnoses and Treatment of Cardiomyopathies 54th Annual Scientific Session of the Japanese College of Cardiology, Kagoshima, Japan, 09/27/2006

Cell fate control in gene and cell therapy, Department of Molecular Pharmacology Tohoku University, Sendai, Japan, 02/05/2008

Cell fate control in gene and cell therapy, Department of Medicine Jichi Medical University, Tochigi-ken, Japan, 02/07/2008

Gene therapy for cardiomyopathies, Graduate School of Medicine, Kagoshima University, Kagoshima, Japan, 02/21/2008

Direct lentiviral injection induces potent anti-CEA immunity in CEA transgenic mice, EHRLICH II-2nd World Conference on Magic Bullets, Nurnberg, Germany, 10/04/2008

Gene therapeutic approaches in Fabry disease, 2nd International Postgraduate Course 'Lysosomal Storage Disorders and the Nervous System', Berlin, Germany, 11/20/2009

Gene therapeutic approaches in LSDs, 3rd International Postgraduate Course Lysosomal Storage Disorders: From science to clinic, Berlin, Germany, 11/08/2010

Localized Il-12 immuntherapy for leukemia, Universita degli Studi di Palermo, Palermo, Italy, 05/11/2011

Gene therapy for LSDs, 4th International Postgraduate Course Lysosomal Storage Disorders: Diagnostic background and clinical therapy, Berlin, Germany, 11/14/2011

Generation and correction of a novel mouse model of ceramide storage disorder, Universita degli Studi di Palermo, Palermo, Italy, 10/05/2012

Lunch Seminar: Life, Death, and Ceramide, Department of Cell and Molecular Pharmacology Medical College of South Carolina, Charleston, South Carolina, USA, 04/24/2013

Towards a clinical trial of gene therapy in Fabry Disease, Gene, Cell & Molecular Therapies for Inherited Metabolic Diseases Mtg UCL Institute of Child Health, London, England, 03/27/2014

Il-12 Immunotherapy for Cancer, University College, London, England, 03/31/2014

Lentivector-mediated/IL-12 immunotherapy in cancer therapy from concept to clinic to company, Scuola di Medicina eChirurgia, Universita degli Studi di Palermo, Palermo, Italy, 06/22/2016

Lentivirus-mediated gene therapy for Fabry disease, Corporate Seminar, 22nd Annual Meeting of the Japan

Society of Gene and Cell Therapy, Tokyo, Japan, 07/29/2016

Modulation of the local tumor micro-environment by LV-mediated expression of IL-12 in primary AML cells, International Symposium, 22nd Annual Meeting of the Japan Society of Gene and Cell Therapy, Tokyo, Japan, 07/29/2016

Invited Lecture, Gene Therapy for Fabry Disease: Clinical Trial and New Directions. Scuola di Medicina e Chirurgia, Universita degli Studi di Palermo, Palermo, Italy, 06/06/2017

Gene Therapy in Inflammatory Diseases., International Genetics of Ankylosing Spondylitis Consortium (IGAS Conference)., Palermo, Italy, 10/14/2017

Invited Lecture, Gene Therapy for Fabry Disease., New Horizons in Fabry Disease: International Conference on Advances in the Treatment of Fabry Disease, Prague, Czech Republic., 11/25/2017

Invited Lecture, Gene Therapy for Fabry Disease., 5th European Fabry Summer School., Roissy CDG Cedex, France., 06/22/2018

Closing Keynote Presentation, Potential treatments for Rare Diseases: A bright future?, European Symposium on Lysosomal Storage Disorders 2018, Vienna, Austria, 10/27/2018

National

Gene transfer into bone marrow-derived cells for systemic correction of Fabry disease, American Red Cross Holland Laboratory, Rockville, MD, USA, 04/07/2000

Rational targets for gene therapy into hematopoietic cells: Fabry disease and beyond, University of Massachusetts Medical School, Worchester, MA, USA, 06/13/2000

Retrovirus-mediated immunotherapy of prostate cancer, University of Iowa College of Medicine, Iowa City, IA, USA, 07/17/2000

Gene therapy in Fabry disease, Queen Elizabeth II Health Sciences Center Dalhousie University, Halifax, Nova Scotia, Canada, 02/11/2002

Gene therapy for Fabry disease: provincial or pervasive tenets, Department of Human Genetics, McGill University, Montreal, Quebec, Canada, 03/19/2003

Therapeutic application of retrovirus-mediated gene transfer: Fabry disease and prostate cancer immunotherapy, Department of Molecular Genetics and Biochemistry University of Pittsburgh, Pittsburgh, PA, USA, 01/06/2004

Broad Scale Implementation Workshop on Advances in Pathogenesis and Therapy, Glycoproteinoses: An International Workshop on Advances in Pathogenesis and Therapy, Rockville, MD, USA, 04/02/2004

Broad-scale use of leutivectors and tissue remodeling in gene therapy for lysosomal storage disorders, Laboratoire d'Organogenese Experimentale Hospital du Saint-Sacrement, Quebec City, Quebec, Canada, 04/30/2004

Immunogene therapy for prostate cancer, Centre de Recherche du CHUL, Quebec City, Quebec, Canada, 04/30/2004

Retrovirus-mediated gene therapy for acquired and inherited disorders, The Department of Internal Medicine Wayne State University and the Karmanos Cancer Institute, Detroit, MI, USA, 08/11/2004

Broad-scale implementation of retroviral vectors for correction of lysosomal storage disorders, Child Health Research Center Speaker Series Columbus Children's Research Institute, Columbus, OH, USA, 11/04/2004

Gene therapy for Fabry disease, Canadian Fabry Association Meeting and Patient Conference, Halifax, Nova Scotia, Canada, 05/13/2006

Lentivirus-mediated gene therapy for Fabry disease, 9ieme Colloque de l'Association de Therapie Genique du Quebec Institut Neurologique de Montreal, Montreal, Quebec, Canada, 11/03/2006

DC and T cell directed immuno-gene therapy for prostate cancer, Department of Microbiology and Molecular Cell Biology Eastern Virginia Medical School, Norfolk, VA, USA, 11/09/2007

DC and T cell directed immuno-gene therapy for prostate cancer, Canadian Society of Consulting Pharmacists Annual Meeting, Philadelphia, PA, USA, 11/14/2007

Cell fate control gene therapy, 14th Annual Meeting of International Society for Cellular Therapy, Miami, FL, USA, 05/19/2008

Cell fate control mediated by novel enzyme/prodrug systems, 4th Canadian Gene Therapy and Vaccines Symposium ATGQ, Montreal, Quebec, Canada, 05/26/2008

Cell fate control gene therapy, Lentigen Corporate Symposium at the 11th Annual Meeting of the American Society for Gene Therapy, Boston, MA, USA, 05/29/2008

An overview of gene transfer therapy, Advances in the Treatment of Lysosomal Storage Disorders, Halifax, Nova Scotia, Canada, 06/07/2008

How to turn leukemia cells into vaccines in one easy step, Lentigen Corporation, Gaithersburg, MD, USA, 12/11/2008

Outcomes of testing lentivector-mediated gene therapy for Farber disease in non-human primates, 5th Annual WORLD Symposium (Lysosomal Diseases), San Diego, CA, USA, 02/19/2009

Direct injection of lentivectors for immunotherapy of cancer, BC Cancer Agency, Vancouver, British Columbia, Canada, 04/09/2009

Treatments in development: Gene Therapy, Canadian Fabry Association General Meeting & Patient Conference, Halifax, Nova Scotia, Canada, 09/19/2009

Gene therapy for lysosomal storage disorders, La 3e Journee de la Recherche du Regroupement Neurosciences et Sante mentale de l'Universite Laval Universite Laval, Quebec City, Quebec, Canada, 11/26/2009

Gene therapy for lysosomal storage disorders, 16th Annual Child Health Research Symposium Alberta Children's Hospital, Calgary, Alberta, Canada, 03/10/2010

Novel fate control safety systems for cell transplantation, Canadian Blood and Marrow Transplant Group 2010 Meeting, Vancouver, British Columbia, Canada, 04/08/2010

Updates on novel cell fate control systems Presenter and Session Chair, Association de therapie genique du Quebec Annual Meeting, Lac Carling, Quebec, Canada, 05/02/2010

Gene therapy for Fabry disease, Stem Cell Network and Health Canada Workshop on Cell Therapies: Challenges and Opportunities, Ottawa, Ontario, Canada, 12/14/2010

Novel mouse model to inform clinical gene therapy trials, The Jackson Laboratory, Bar Harbor, Maine, USA, 08/08/2011

Development of gene therapy for Fabry disease, Grand Rounds Departement de Pediatrie Centre hospitalier universitaire de Sherbrooke, Sherbroke, Quebec, Canada, 05/29/2012

Updates on the development of gene therapy for Fabry disease, Canadian Fabry Associate 2012 National Conference, Halifax, Nova Scotia, Canada, 06/08/2012

Immunotherapy is driving the renaissance of gene therapy, Department of Cell and Molecular Pharmacology Medical College of South Carolina, Charleston, South Carolina, USA, 04/24/2013

Systemic ceramide accumulation: Generation of a novel murine model and genetic correction, Service de genetique medicale and Axe Sante Metabolique, Centre de Recherche CHU Sainte-Justine, Montreal, Quebec, Canada, 05/29/2013

Canadian FACTs Team progress towards implementation of clinical gene therapy for Fabry disease, 2013 Garrod Symposium, Sherbroke, Quebec, Canada, 05/31/2013

Changes in biochemical pathways due to deletion of alpha-galactosidase A in different organs of the Fabry mouse., 2013 Garrod Symposium, Sherbrooke Quebec, Canada, 05/31/2013

Consequences of Ceramide Accumulation in a Mouse Model of Farber Disease, 14th Annual LSD Club, Quebec City, Quebec, Canada, 05/09/2014

Consequences of Ceramide Accumulation in a Mouse Model of Farber Disease, Laboratoire D'Organogenese Experimentale University of Laval, Quebec City, Quebec, Canada, 05/09/2014

Revisting IL-12: Lentivirus-mediated localized expression generates potent anti-leukemia immunotherapy, Universite de Montreal, Montreal, Quebec, Canada, 09/11/2014

Gene Therapy Update, 15th Annual LSD Club Meeting, Banff, Alberta, Canada, 05/08/2015

Update on the status of the FACTs Gene Therapy Project, BC and Yukon Fabry Patient Conference, Vancouver, British Columbia, Canada, 09/26/2015 - 09/25/2015

Invited Lecture, Immunotherapy for AML., Therapeutic Advances in Childhood Leukemia and Lymphoma (TACL)., Chicago, IL, 10/25/2017

Invited Lecture, Gene Therapy for Fabry Disease., 10th Stem Cell Clonality and Genome Stability Retreat, Chicago, IL, 05/15/2018

Invited Lecture, Surface Antigen Discovery and Novel Bispecific Antibodies for Multiple Myeloma., University of Florida Cancer Center Grand Rounds., Gainesville, FL, 11/14/2018

Invited Lecture, Gene Therapy for Fabry Disease: From Concept to Clinic to Company, American College of Medical Genetics and Genomics 2019 Annual Meeting, Seattle, WA, 04/04/2019

Regional

Parochial or pervasive tenets? Gene therapy for Fabry disease targeting hematopoietic cells, McMaster University Gene Therapy Series, Hamilton, Ontario, Canada, 11/20/2002

Pharmacological-regulated dimerzation of KDR receptor: Effect on hematopoietic cells, 7th Annual NEB Symposium Mount Sinai Hospital, Toronto, Ontario, Canada, 04/27/2004

Progress in gene therapy for prostate cancer, Prostate Cancer Research Foundation of Canada, Hockley Valley Resort, Ontario, Canada, 01/20/2007

Limits of Regeneration: Remodeling and Tissue Integration, Tissue Engineering and Regenerative Medicine International Society (TERMIS) NA 2007 Conference, Toronto, Ontario, Canada, 06/13/2007

Lentivirus-mediated gene therapy for Lysosomal Storage Disorders, Children's Health Research Institute, London, Ontario, Canada, 01/21/2009

Immuno-gene therapy for cancer, Biology Seminar Series Winter 2010 York University, Toronto, Ontario, Canada, 02/01/2010

Development of gene therapy for Farber disease, Department of Biological Sciences Colloquium University of Wisconsin-Parkside, Kenosha, Wisconsin, USA, 10/07/2011

Progress on Implementation of a Pan-Canadian Gene Therapy Trial for Fabry Disease, 41st Annual AGSBS Graduate Symposium 'Human Intervention in Biology: the bad, the good, and the ugly' York University, Toronto, Ontario, Canada, 03/20/2014

You have made it a long way just on hard work, Fall Commencement Speaker, University of Wisconsin-Parkside, Kenosha, Wisconsin, USA, 12/13/2014

Consequences of acid ceramidase deficiency in mice and humans, 3rd International Conference on the Molecular Medicine of Sphingolipids, French Lick, Indiana, USA, 09/19/2016

Invited Lecture, CAR-T cells and the management of multiple myeloma, 5th Annual Advances in Hematology and Oncology Fall Symposium, Green Bay, WI, 10/22/2016

Invited Lecture, That New CAR Smell: From Antigen Discovery to Rationale Targets for Immunotherapy., UW-MCW-MACC Symposium, Waisman Center, University of Wisconsin-Madison. Madison, WI., 05/23/2017

Invited Lecture, Gene Therapy of Fabry Disease., BIOS Symposium Series, University of Wisconsin-Parkside. Kenosha, Wisconsin, 09/15/2017

Invited Lecture, New Targets for Immunotherapy in AML and MM, Elucidation and Implementation., UW Carbone Cancer Center. Madison, WI., 02/14/2018

Local

Rational targets for gene therapy into hematopoietic cells: Fabry disease and beyond, Toronto General Research Institute, Toronto, Ontario, Canada, 05/24/2000

Immunotherapy for prostate cancer by transfer of genes for prostate antigens into dendritic cells, Toronto General Research Institute Rounds Toronto General Hospital, Toronto, Ontario, Canada, 09/19/2001

Gene therapy for classical and 'cardiac variant' Fabry disease, Cardiovascular Research Seminar Series The Hospital for Sick Children, Toronto, Ontario, Canada, 05/02/2002

Gene therapy for hematopoietic disorders, Institute of Medical Science Summer Undergraduate Research Program, Toronto, Ontario,Canada, 06/24/2002

Prostate cancer immunotherapy, Bierstock Family Symposium on Prostate Cancer Ontario Science Centre, Toronto, Ontario, Canada, 09/23/2002

Immuno-gene therapy approaches targeting prostate cancer, Princess Margaret Hospital GU Tumor Board Special Presentation, Toronto, Ontario, Canada, 10/18/2002

Progress in the development of gene therapy for Fabry disease, Toronto General Hospital Research Institute Research Rounds, Toronto, Ontario, Canada, 02/19/2003

Lentivirus-mediated gene transfer: focus on cardiovascular applications, Stem Cell Network Cardiovascular Meeting, Toronto, Ontario, Canada, 07/06/2003

Update and new initiatives in immuno-gene therapy for prostate cancer, Bierstock Family Symposium on Prostate Cancer, Toronto, Ontario, Canada, 10/14/2003

Gene Therapy, Research Day in Transplantation and Immunology Vaughan Estate, Toronto, Ontario, Canada, 11/20/2003

Gene therapy for Fabry disease, Infection, Immunity, Injury and Repair Program Hospital for Sick Children, Toronto, Ontario, Canada, 11/24/2003

Immunological tolerance via therapeutic gene transfer, Challenges in Regenerative Medicine Conference University of Toronto, Toronto, Ontario, Canada, 01/19/2004

Retrovirus-mediated gene therapy for lysosomal storage disorders: Focus on Fabry and Farber disease, Genetics Grand Rounds Hospital for Sick Children, Toronto, Ontario,Canada, 02/12/2004

Lentivirus mediated gene therapy for lysosomal storage disorders, Toronto General Research Institute Rounds Toronto General Hospital, Toronto, Ontario, Canada, 03/10/2004

Why gene therapy does not work and what is being done about it, Department of Oncology and Hematology

Grand Rounds Princess Margaret Hospital, Toronto, Ontario, Canada, 04/23/2004

Neonatal gene therapy using lentivirus vectors for long-term correction of Fabry disease, HSC Pediatric Regenerative Medicine Retreat Hart House University of Toronto, Toronto, Ontario, Canada, 06/21/2004

Gene therapy for Fabry disease, Canadian LSD Club, Toronto, Ontario, Canada, 10/25/2004

Hematopoietic, cardiac, and neo-natal implementation of lentivectors for gene therapy of inherited diseases, UHN Research Day, Toronto, Ontario, Canada, 11/01/2004

Using the full bag of clubs: Alternative Immunological Approaches to Prostate Cancer Therapy, Plenary Speaker, Prostate Cancer Research Foundation of Canada Year 2005 Annual Meeting, Toronto, Ontario, Canada, 06/23/2005

Updates on immunotherapy for prostate cancer, Princess Margaret Hospital Urology Rounds, Toronto, Ontario, Canada, 09/07/2005

Gene therapy for lysosomal storage disorders: Focus on safety using novel suicide effector genes, Genetics Grand Rounds Hospital for Sick Children, Toronto, Ontario, Canada, 01/19/2006

Novel prodrug/enzyme combinations for suicide gene therapy using using lentiviral vectors, Molecular Pathobiology Invited Speaker Series, University of Toronto, Toronto, Ontario, Canada, 01/30/2006

Immunogene therapy for prostate cancer, Department of Surgery Research Committee Seminar Series University of Toronto, Toronto, Ontario, Canada, 02/08/2006

Engineered overexpression of FasL to enhance cytolysis of prostate cancer cells, Mount Sinai Hospital Urology Research Rounds, Toronto, Ontario, Canada, 06/07/2006

Somatic cell therapies: Gene therapy and dendritic cell vaccines, 4th Annual International Symposium on Transfusion Immunology and Related Topics: Cellular Therapies Canadian Blood Services, Toronto, Ontario, Canada, 09/16/2006

Immuno-gene therapy for prostate cancer, Plenary Speaker Toronto Wake-up Call Business Breakfast, Toronto, Ontario, Canada, 11/30/2007

Prostate Cancer: How research is helping patients, Panel Discussion Ontario Institute for Cancer Research/Prostate Cancer Research Foundation of Canada Public Panel Presentation, Toronto, Ontario, Canada, 09/16/2008

Better late than never onto the bandwagon: Proteomic studies with a defined focus in prostate cancer, PMH Urology Rounds, Toronto, Ontario, Canada, 11/05/2008

Lentivirus-mediated gene therapy for Lysosomal Storage Disorders, Mount Sinai Hospital Genetic Grand Rounds, Toronto, Ontario, Canada, 01/15/2009

Lentivirus-mediated gene therapy for lysosomal storage disease in large animal models, 12h Annual Department of Laboratory Medicine and Pathobiology Graduate Student Research Day University of Toronto, Toronto, Ontario, Canada, 02/24/2009

Gene therapy for Fabry disease, Canadian Fabry Association Ontario Meeting, Toronto, Ontario, Canada, 09/19/2010

The Renaissance of Gene Therapy, MaRS Future of Medicine Series, Toronto, Ontario, Canada, 01/10/2012

Lentivirus-mediated gene therapy for cancer immunotherapy, Medical College of Wisconsin Cancer Center, Milwaukee, Wisconsin, USA, 01/12/2012

Generation and correction of a novel mouse model of a ceramide storage disorder, Molecular Structure and Function Program Seminar Series. The Hospital for Sick Children, Toronto, Ontario, Canada, 10/29/2012

Canadian gene therapy trial for Fabry disease, 21st Annual Symposium New Developments in Prenatal Diagnosis and Medical Genetics Mount Sinai Hospital, Toronto, Ontario, Canada, 05/15/2013

Update on Fabry gene therapy trial, Metabolic Grand Rounds Hospital for Sick Children, Toronto, Ontario, Canada, 06/14/2013

Gene therapy for inherited defects, Summer Student Lecture Series Department of Medical Biophysics University of Toronto, Toronto, Ontario, Canada, 07/29/2013

Principles of gene therapy and cellular therapeutics, and potential application to Sickle Cell Disease Keynote Lecture, Learning for Life Seminar - Exploring new treatments for SCD Sickle Cell Awareness Group of Ontario, Toronto, Ontario, Canada, 09/14/2013

Gene Therapy - where are we now?, Canadian Fabry Association 4th Ontario Patient Meeting, Toronto, Ontario, Canada, 10/06/2013

Stem cell gene therapy: Canadian protocol targeting Fabry disease, Canadian College of Medical Geneticists Annual Meeting, Toronto, Ontario, Canada, 11/09/2013

Fabry Disease, Canadian Organization for Rare Disorders: Rare Disease Day Conference, Toronto, Ontario,

Canada, 03/06/2015

Applications of Lentivirus-Mediated Gene Transfer for Anti-Cancer Immunotherapy, Medical College Cancer Center, Milwaukee, Wisconsin, USA, 03/25/2015

Acid ceramidase deficiency in mice and humans, Department of Biochemistry, Medical College of Wisconsin, Milwaukee, Wisconsin, USA, 02/03/2016

Gene therapy and overview of lab program, Pediatric Hematology/Oncology Tumor Board, Medical College of Wisconsin, Milwaukee, Wisconsin, USA, 02/18/2016

Novel CARs and CAR-Ls for immunotherapy of cancer, Hematologic Malignancy and Transplantation Research Program, Medical College of Wisconsin, Milwaukee, Wisconsin, USA, 03/24/2016

Antigen independent and dependent immunotherapy, Cancer Center Grand Rounds, Medical College of Wisconsin Cancer Center, Milwaukee, Wisconsin, USA, 04/05/2016

Lentivector-mediated gene transfer for antigen-dependent and antigen-independent immunotherapy of cancer, Department of Pediatrics, University of Wisconsin School of Medicine and Public Health, Madison, WI, USA, 04/28/2016

Roundtable Participant, MACC Fund Celebration, Children's Hospital of Wisconsin, Milwaukee, Wisconsin, USA, 04/29/2016

Modulation of the tumor microenvironment by lentifector/Il-12 gene transfer, 3rd Annual Pediatric Cancer Symposium sponsored by Northwestern Mutual, Milwaukee, Wisconsin, USA, 05/19/2016

Translating Science into Stories, Medical College of Wisconsin Professionalism Week, Milwaukee, Wisconsin, USA, 10/10/2016

Invited Lecture, Cancer Immunotherapy, MCW President's Advisory Council Luncheon, Milwaukee, WI, 01/04/2017

Invited Lecture, Gene Therapy for Fabry Disease., Children's Research Institute Research Conference., Milwaukee, WI, 01/12/2018

MCW Keynote Speaker, Designing new CARs for immunotherapy of MM and AML., 4th Department of Medicine Research Retreat, Milwaukee, WI, 03/09/2018

Invited Lecture, How to Give a Bad Seminar in the Biomedical Sciences., MCW DOM Research Program, Milwaukee, WI, 03/13/2019

COMMITTEE SERVICE:

Medical College of Wisconsin

1999 - 2001 Member, Institutional BioSafety Committee, University of Illinois at Chicago

2000 - 2001 Member, Medical Student Research Committee, University of Illinois at Chicago

2002 Chair, PhD Oral Exam Committee, Department of Genetics, University of Toronto

2002 - 2004 Poster Judge and Member, UHN Research Day Planning Committee, University Health Network

2002 - 2005 Site Leader, Regenerative Medicine Platform Committee, University Health Network

2003 - 2015 Member, Biosafety Committee, University Health Network

2003 - 2004 Member, McEwen Funds Advisory Committee, University of Toronto

2003 - 2004 Member, MaRS Building Space Committee, University of Toronto

2004 - 2005 Member, McEwen Chair Search Committee, University of Toronto

2004 Chair, PhD Oral Exam, Faculty of Dentistry, University of Toronto

2005 Chair, PhD Exam Committee, University of Toronto

2005 - 2015 Chairperson, Animal Care Committee (TGH/TWH/CBS), University Health Network

2006 - 2010 Member, Molecular Medicine Training Program, University of Toronto

2006 Chair, PhD Exam Committee, Department of Zoology, University of Toronto

2006 Chair, PhD Exam Committee, Department of Public Health Services, University of Toronto

2007 Chair, PhD Exam Committee, Department of Biology, University of Toronto

2007 Chair, PhD Exam Committee, Department of Laboratory Medicine and Pathobiology, University of Toronto

2007 Chair, PhD Exam Committee, Department of General Medicine and Microbiology, University of Toronto

2007 - 2011 Member, PMH Prostate Research Program Training Grants Panel

2007 Chair, PhD Exam Committee, Department of Pharmacology, University of Toronto

2008 Member, PhD Exam Committee, Department of Immunology, University of Toronto

2008 Member, MSc Exam Committee, Department of Medical Biophysics, University of Toronto

2008 Chair, PhD Exam Committee, Department of Pharmacology/Toxicology, University of Toronto
2008 Chair, PhD Exam Committee, Department of Health Policy, Management, and Evaluation, University of Toronto
2008 Member, MSc Exam Committee, Department of Medical Biophysics, University of Toronto
2008 Chair, PhD Exam Committee, Department of Immunology, University of Toronto
2009 Chair, PhD Exam Committee, Department of Pharmacology/Toxicology, University of Toronto
2009 Chair, PhD Exam Committee, Department of Immunology, University of Toronto
2009 Member, PhD Exam Committee, Institute of Medical Science, University of Toronto
2010 Chair, PhD Exam Committee, Department of Ecology and Evolutionary Science, University of Toronto
2010 Chair, MSc Exam Committee, Department of Medical Biophysics, University of Toronto
2011 Chair, MSc Exam Committee, Department of Medical Biophysics, University of Toronto
2011 Chair, Reclassification Exam Committee, Department of Medical Biophysics, University of Toronto
2011 Chair, PhD Exam Committee, Department of Cell and Systems Biology, University of Toronto
2011 Chair, MSc Exam Committee, Department of Medical Biophysics, University of Toronto
2011 Chair, PhD Exam Committee, Department of Medical Genetics, University of Toronto
2011 Chair, Qualifying Exam Committee, Department of Medical Biophysics, University of Toronto
2011 Chair, PhD Exam Committee, Department of Ecology and Evolutionary Science, University of Toronto
2012 Chair, PhD Exam Committee, Department of Speech Language Pathology, University of Toronto
2012 Chair, PhD Exam Committee, Department of Biochemistry, University of Toronto
2012 Chair, PhD Exam Committee, Institute of Medical Science, University of Toronto
2013 Chair, PhD Exam Committee, Department of Laboratory Medicine and Pathobiology, University of Toronto
2013 Chair, Department of Biochemistry, University of Toronto
2014 Chair, PhD Exam Committee, Department of Physiology, University of Toronto
2014 - 2015 Member, Curriculum Committee, Department of Medical Biophysics, University of Toronto
2014 Chair, PhD Exam Committee, Department of Immunology, University of Toronto
2016 - 2018 Member, Alison Ebert Mentoring Committee, Medical College of Wisconsin
2016 Co-Chair, Section Chief Search Committee, Hematology/Oncology, Pediatrics, Medical College of Wisconsin
2016 - Present Member, Institutional BioSafety Committee, Medical College of Wisconsin
2017 - Present Ad hoc Member, Institutional Biosafety Committee, Medical College of Wisconsin
2018 - Present Elected Member, MCW School of Medicine Rank Committee, Medical College of Wisconsin
2018 - Present Member, Human Gene Transfer Scientific Review Committee – Non-Cancer, Medical College of Wisconsin

EXTRAMURAL TEACHING:

Medical Student Education

1999 University of Illinois at Chicago, BCHE 563: Principles of Molecular Medicine
1999 University of Illinois at Chicago, Lecture: BCHE 495
1999 University of Illinois at Chicago, Lecture: PMPC 495: Biotechnology I
1999 University of Illinois at Chicago, Lecture: GC473: Seminar in Comparative Medicine

Graduate Student Education

1996 National Institute of Health (NIH), Lectures in the Foundation for Advanced Education in the Sciences - Gene 501M: Molecular Biology of Human Genetic Disease.
2002 University of Toronto, Lecture: LMP1018S: Molecular Biology and Application to Human Disease
2002 University of Toronto, Lecture: MSC2010Y: Advanced Concepts in Human Genetic Disease
2004 University of Toronto, Lecture: LMP1018S: Molecular Biology and Application to Human Disease
2004 - 2011 University of Toronto, Lecture: MSC2010Y: Advanced Concepts in Human Genetic Disease
2006 University of Toronto, Lecture: LMP1018S: Molecular Biology and Application to Human Disease
2007 University of Toronto, Lecture: MSC2020H: Diagnostic and Therapeutic Strategies in Genomic Medicine
2008 University of Toronto, Lecture: LMP1018S: Molecular Biology and Application to Human Disease.

2008 University of Toronto, Lecture: MBP1007/8: Fundamentals in Cell and Molecular Biology.
2009 University of Toronto, Lecture: LMP1018S: Molecular Biology and Application in Human Disease

Continuing Medical Education

2000 - 2001 University of Illinois at Chicago, Written lecture for PHAR 605: Advances in Pharmacy. Continuing Curriculum Option
2002 Princess Margaret Hospital, Toronto, Lectures in the Prostate Cancer Course. CPCRI Training Grant
2004 Princess Margaret Hospital, Toronto, Lectures in the Prostate Cancer Course, CPCRI Training Grant

MCW STUDENTS, FACULTY, RESIDENTS AND CLINICAL/RESEARCH FELLOWS MENTORED:

Graduate Students

Committees

Chris Reid, Medical College of Wisconsin
Samantha Chou MSTP/IDP, Medical College of Wisconsin

Postdoctoral Researchers

2018 - Present, Medical College of Wisconsin
2018 - Present Jitka Rybova, PhD, Medical College of Wisconsin

Clinical/Research Fellows

2016 - 2018 Salvatore Manuel Molino, PhD, Postdoctorate, Medical College of Wisconsin
2016 - 2018 Ensaf Alhujaily, PhD, Postdoctorate, Medical College of Wisconsin

EXTRAMURAL STUDENTS, FACULTY, RESIDENTS, AND CLINICAL/RESEARCH FELLOWS MENTORED:

Graduate Students

MS Students Advised

2013 - Present Robyn Oldham, University of Toronto
2014 - Present Murtaza Nagree, University of Toronto
Greg Rampersad, University of Toronto
Amanda Moretti, University of Toronto
Abdulfatah Alayoubi, University of Toronto
Lucia Lopez Vasquez, University of Toronto
Sean Devine, University of Toronto
Matthew Scaife, University of Toronto
Elliot Berinstein, University of Toronto

PhD Students Advised

2013 - Present Fabian Yu, University of Toronto
Shopha Ramsubir, University of Toronto
Shaalee Dworski, Msc, PhD, University of Toronto
Miriam Mossoba, University of Toronto
Anton Neschadim, University of Toronto
Juliane Symes (nee Bielawski), University of Toronto
James Wang, University of Toronto

Committees

Yonatan Lipsitz, University of Toronto
Mustafa Kamani (Biochemisty), University of Toronto
Michael Mielnik, University of Toronto
Joshua L. Paterson (IMS), University of Toronto
Christopher Thomson, University of Toronto
Michael Ha (MBP), University of Toronto
Billal Ayach (IMS), University of Toronto
Marcelo Cypel, University of Toronto
Louis Zhen Wei (Immunology), University of Toronto
Geoffrey de Couto (Physiology), University of Toronto

Emily Cowan, University of Toronto
Jane Cullis (MBP), University of Toronto
Ema Ciucurel (IBBME), University of Toronto
Lan-Chau Kha, University of Toronto
Mobin A. Karimi, University of Toronto
Gabrielle Lam (IBBME), University of Toronto
Clea Senechal (IMS), University of Toronto
Kathryn Ottolino-Perry (IMS), University of Toronto
Rama Grantab (MBP), University of Toronto
Shaanthy Tharmapalan, University of Toronto
Liu Zhang, University of Toronto

Clinical/Research Fellows

Koji Higuchi, MD, University Health Network
Severine Loisel-Meyer, PhD, Postdoctorate, University Health Network
Chyan-Jang Lee, PhD, Postdoctorate, University Health Network
Tania Felizardo, PhD, Postdoctorate, University Health Network
Nobuo Mizue, MD, PhD, Postdoctorate, University Health Network
Amir Varkouhi, MD, PhD, Postdoctorate, University Health Network
Mustafa Kamani, PhD, Postdoctorate, University Health Network
Takahiro Nonaka, PhD, Postdoctorate, University Health Network
Jianhui Cai, MD PhD, Postdoctorate, University Health Network
Takeya Sato, PhD, Postdoctorate, University Health Network
Jagdeep Walia, MD, Postdoctorate, University Health Network
Josh Silvertown, PhD, Postdoctorate, University Health Network
Toshihiro Takenaka, MD, PhD, Postdoctorate, National Institute of Health (NIH)
Salvadore Mejia-Guerrero, PhD, Postdoctorate, University Health Network
Natalia Pacienza, PhD, Postdoctorate, University Health Network
Christopher Siatskas, PhD, Postdoctorate, University of Illinois at Chicago, University Health Network
Sheng-Ben Liang, MD PhD, Postdoctorate, University Health Network
Gangjian Qin, MD, University of Illinois at Chicago, University Health Network
Makoto Yoshimitsu, MD, PhD, Postdoctorate, University Health Network

Faculty

2017 - Present Kevin Rarick, PhD, Department of Pediatrics, Medical College of Wisconsin

INTELLECTUAL PROPERTY: INVENTION DISCLOSURES:

01/07/2005 Medin, J., "Human CD25 can be used as an innocuous cell surface marker for selecting and tracking transduced cells following recombinant retrovirus-mediated gene transfer. VECTOR ENCODING THERAPEUTIC POLYPEPTIDE AND SAFETY ELEMENTS TO CLEAR TRANSDUCED CELLS." Invention No. 2005-041. Disclosure date: 01-07-2005. IP: CA2,584,494; PCT/CA2008/000579; US12/532,572; CA2,719711.

11/22/2005 Folwer, D., Lavie, A., Medin, J., Sato, T., "Lentivirus expressing mutant forms of human thymidylate monophosphate kinas (tmpk), F105Y and R16G Large lid. Invention No. 2005-003. Disclosure date: 11-22-2005. IP: US60/748,828; CA2,566,267; US11/559,757; US12/052,565; US12/843,238

05/11/2006 Loisel-Meyer, S., Medin, J. "Lenti-huCEA/LTS." Invention No. 2006-031. Disclosure date: 05-11-2006. IP: US60/916,136; PCT/CA2008/000848; US12/598,874.

05/11/2006 Loisel-Meyer, S, Medin, J., "Lenti-huCEA." Invention No. 2006-030. Disclosure date: 05-11-2006. IP: US60/916,136;PCT/CA2008/000848; US12/598,874

05/27/2006 du Manoir, J., Kerbel, R., Medin, J., Mossoba, M., "MDA-MB-W231/Her2/neu (231-H2N)." Invention No. 2006-033. Disclosure date: 05-27-2006.

01/11/2007 Devine, S., Medin, J., Neschadim, A., "Safety Cassette for Gene Therapy Vectors and Stem Cell Transplantations." Invention No. 2007-051. Disclosure date: 01-11-2007. IP: US61/038,398; PCT/CA2009/000342.

01/23/2008 Devine, S., Medin, J., "Cell Fate Control Fusion Construct." Invention No. 2008-013. Disclosure

date: 01-23-2008. IP: US61/038,398; PCT/CA2009/000342; US12/933,460

04/24/2008 McCart, J.A., Medin, J., Paige, C., "Lentivector IL-12 for Immunotherapy. Invention No. 2008-062. Disclosure date: 04-24-2008. IP: US61/038,398; PCT/CA2009/000342; US12/933,460

04/24/2008 McCart, JA., Medin, J., Paige, C., "Lentivector IL-12 for Immunotherapy. Invention No. 2008-076. Disclosure date: 04/24/2008. IP: US60/916,136; PCT/CA2008/000848; US12/598,874

11/11/2009 Amarnath, S., Fowler, D, Medin, J., Chian-Ming Wong, J., "Programmed Death Ligand-1 (PD-L1) Immune Modulation Gene Therapy. Invention No. 2009-109. Disclosure date: 11-11-2009. IP: US61/261,081; PCT/US2010/56450

03/16/2011 Felizardo, T., Loisel-Meyer, S., Medin, J., Pacienza, N., "Induction of tolerance to human a-galactosidase A in Fabry mice by administration of dendritic cells lentivirally transduced to express human IL-10." Invention No. 2011-025. Disclosure date: 3-16-2011. IP: Awaiting further research.

03/27/2011 Alayoubi, A., Haken, R., Medin, J., "Mouse Model of Farber Disease." Invention No. 2011-030. Disclosure date: 3-27-2011. IP: Under review.

06/24/2011 Medin, J., Neschadim, A., "Novel chimeric fusion protein for pharamcalogically-controlled induction of apoptosis in gene and cell therapy applications." Invention number: 2011-048. IP: CA2,584,494; PCT/CA2008/000579; US12/532,572; CA2,719,711

11/20/2011 Amarnath, S., Fowler, D., Medin, J., Riley, "Programmed Death Ligand-1 (PDL1)-transduced K562 cells Convert Human Th1 Cells Into Regulatory T Cells." Invention No. 2012-008. Disclosure date: 11-20-2011.

01/09/2012 Fowler, D., Medin, J., Rader, C., "Modulated delivery of therapeutic factors using transduced and expanded rapamycin-resistant T cells." Invention No. 2012-008. Disclosure date: 01-09-2012. IP: Under review.

INTELLECTUAL PROPERTY: PATENTS:

10/31/2001 Fowler, D., Jung, U., Gress, R., Erdmann, A., Levin, B., June, C., Medin, J., "Generation and use of TC1 and TC2 cells." Application No. US60/336,473. Application date: 10-31-2001. Country: United States. Type: Provisional. Status: Expired.

10/31/2002 Fowler, D., Jung, U., Gress, R., Erdmann, A., Levine, B., June, C., Medin, J., "Generation of use of TC1 and TC2 cells." Application No. PCT/US02/35240. Application date: 10-31-2002. Country: PCT. Type: PCT. Status: Expired.

12/09/2005 Sato, T., Lavie, A., Fowler, D., Medin, J., "Thymidylate kinase mutants and uses thereof." Application No. US60/748,828. Application date: 12-09-2005. Country: United States. Type: Provisional. Status: Expired.

11/14/2006 Lavie, A., Fowler, D., Medin, J., "Thymidylate kinase mutants and uses thereof." Application No. CA2,566,267. Application date: 11-14-2006. Country: Canada. Type: Utility. Status: Patent pending.

11/14/2006 Sato, Takeya, Lavie, Arnon, Fowler, Daniel H., Medin, Jeffrey, "Thymidylate kinase mutants and uses thereof." Application No. US12/843,238. Application date: 11/14/2006. Country: US. TYPE: Utility-Continuation. Status: Patent Pending.

05/04/2007 McCart, J.A., Paige, C., Medin, J., "Compositions and methods for cancer treatment." Application No. US60/916,136. Application date: 05-04-2007. Country: United States. Type: Provisional. Status: Expired.

03/27/2008 Medin, J. "Vector encoding therapeutic polypeptide and safety elements to clear transduced cells." Application No. PCT/CA2008/000579. Application date: 03-27-2008. Country: PCT. Type: PCT. Status: Expired.

03/27/2008 Medin, J., "Vector encoding therapeutic polypeptide and safety elements to clear transduced cells." Application No. CA2,719,711. Application date: 03-27-2008. Country: Canada. Type: Utility. Status: Patent pending.

03/27/2008 Medin, J., "Vector encoding therapeutic polypeptide and safety elements to clear transduced cells." Application No. US12/532,572. Application date: 03-27-2008. Country: United States. Type: Utility. Status: Patent Pending.

05/05/2008 McCart, JA., Paige, C., Medin, J., "IL-12 Immunotherapy for Cancer." Application No. US12/598,899. Application date: 05-05-2008. Country: United States. Type: Utility. Status: Patent pending.

05/05/2008 Paige, C., McCart, JA., Medin, J., "IL-12 Immunology for Cancer." Application No. CA2,723,320. Country: Canada. Type: Utility. Status: Patent Pending.

05/05/2008 McCart, JA., Medin, J., Loisel-Meyer, S., "Composition and Methods of Cancer Treatment." Application No. US12/598,874. Application date: 05-05-2008. Country: United States. Type: Utility.

Status: Patent Pending.

05/05/2008 McCart, JA., Paige, C., Medin, J., "IL-12 Immunotherapy for cancer." Application No. EP08748251.9 Country: Europe. Type: Utility. Status: Patent Pending.

05/05/2008 Paige, C., Medin, J., "IL-12 Immunotherapy for cancer." Application No. PCT/CA2008/000849. Application date: 05-05-2008. Country: PCT. Type: PCT. Status: Expired.

05/08/2008 McCart, JA., Medin, J., "Composition and Methods of Cancer Treatment." Application No. PCT/CA2008/000848. Application date: 05-05-2008. Country: PCT. Type: PCT. Status: Expired.

03/20/2009 Devine, S., Medin, J., "Thymidylate kinase fusions and uses thereof." Application No. PCT/CA2009/000342. Application date: 03-20-2009. Country: PCT. Type: PCT. Status: Expired.

03/20/2009 Devine, S., Medin, J., "Thymidylate kinase fusions and uses thereof." Application No. US12/933,460. Application date: 03-20-2009. Country: United States. Type: Utility. Status: Issued.

03/20/2009 Devine, S., Medin, J., "Thymidylate kinase fusions and uses thereof." Application No. US61/038,398. Application date: 03-20-2008. Country: United States. Type: Provision. Status: Expired.

11/13/2009 Fowler, D., Medin, J., Chian-Ming Wang, J., Amarnath, S., "Modulated Programmed Death Ligand-1." Application No. US61/261,081. Application date: 11-13-2009. Country: United States. Type: Provisional. Status: Expired.

11/12/2012 Medin, J., Chian-Ming Wang, J., Fowler, D., Amarnath, S., "Modulated programmed death ligand-1." Application No. PCT/US2010/56450. Application date: 11-12-2010. Country: PCT. Type: PCT. Status: Handled by other Institution or Co-Applicant.

REVIEWER FOR GRANTS:

2000 University of Illinois at Chicago Campus Research Board Internal Competition
2001 Associazione Italiana per la Ricerca sul Cancro
2002 NHLBI/NIH P01 Program Project Grant Reviewer
2002 Canadian Blood Services. Research and Developmental Intramural Grant Competition.
2002 NHLBI/NIH Tissue Engineering RFA Grant Reviewer
2002 Multiple Myeloma Research Foundation. Collaborative Program Grant Reviewer.
2003 CIHR Research Partnership Program.
2003 NIH Ad Hoc Reviewer, Pathology Study Section
2003 Krembil Neuroscience Grant Competition, Toronto, ON
2004 Canadian Breast Cancer Foundation Reviewer
2004 - 2006 Canada Research Chairs College of Reviewers
2004 National Cancer Institute of Canada Program Project Reviewer
2004 National Cancer Institute of Canada Program Project Reviewer
2004 - 2007 Cancer Research Society of Canada. Panel B: Pharmacogenics/Immunology
2005 CIHR Ad Hoc Reviewer, Cancer Progression and Therapeutics (CPT) Panel
2005 SickKids Foundation Grant Reviewer
2005 Canadian Blood Services Intramural Grant Competition
2005 National Cancer Institute of Canada Program Project Reviewer
2005 Canadian Blood Services Intramural Grant Competition
2006 Canadian Breast Cancer Foundation Research Project Grant Reviewer Panel A
2006 - 2009 Ontario Research Fund (ORF) Life Sciences and Agriculture Peer Review Panel, Panel Member
2006 - Present ANR Reviewer. Programme pluriannuel de Recherche sure les Maladies Rares (MRAR)
2006 - Present Lysosomal Storage Disease Research Consortium (LSDRC), USA, Reviewer
2006 - 2009 Canadian Institute of Health Research: Cancer Biology and Therapeutics (CBT) Panel Member
2007 NIAID, NIH - MCW Center for Medical Countermeasures against Radiological Terrorism. Ad hoc Reviewer.
2007 NSERC Collaborative Health Research Projects, Ad hoc Reviewer
2007 Vienna Science and Technology Fund, Ad hoc Reviewer
2008 Manitoba Health Research Council Grant, Government of Manitoba. Ad hoc Reviewer.
2008 Canadian Breast Cancer Foundation Research Project Grant Reviewer Panel A
2008 Canadian Breast Cancer Foundation, BC/Yukon Region, Ad hoc Reviewer.
2009 Canadian Breast Cancer Foundation Research Project Grant Reviewer Panel A
2009 Heart and Stroke Foundation of Canada, Scientific Review Committee.
2009 - 2011 Canadian Breast Cancer Foundation, Ontario Region. Vice-Chair: Research Panel A.
2009 MRC Strategic Grant Application. Medical Research Council. London. Ad Hoc Reviewer.

2009 MRC Developmental Pathway Funding Scheme. Medical Research Council. London. Ad hoc Reviewer.
2009 Principal Research Fellowship, The Wellcome Trust. London. Ad Hoc Reviwer
2009 Research Training Fellowship, The Wellcome Trust. London. Ad hoc Reviewer.
2010 - Present Cancer Research Society of Canada. Panel B: Pharmacogenics/Immunology
2010 MRC Strategic Grant Application. Medical Research Council. London. Ad hoc Reviewer.
2010 MRC Molecular and Cellular Medicine Board. Medical Research Council. London. Ad hoc Reviewer.
2010 Grant Application and Fellowship. Vaincre les Maladies Lysosomales. Paris. Ad hoc Reviewer.
2010 Grant Applications. Heart and Stroke Foundation of Canada. Ad hoc Reviewer.
2011 Kay Kendall Leukemia Fund. London. Ad hoc Reviewer.
2011 ANR Blanc-SVSE1-Physiologie, physiopathologie, sante publique proposal.
2011 - 2014 Canadian Institute of Health Research. Panel Member: Fellowship-Post-PhD Awards Committee.
2013 Association Francaise contre les Myopathies. Paris. Ad hoc Reviewer.
2013 OCI/PMH Knudson Fellowship Review Panel. Ad hoc Reviewer.
2013 Welcome Trust Early Postdoctoral Training Fellowship. Ad hoc Reviewer.
2013 MRC Application: Stem Cell Gene Therapy. Ad hoc Reviewer.
2013 NIH PPG Workgroup 031. October 2013. Ad hoc Reviewer.
2014 - 2015 Canadian Institute of Health Research. Panel Member: New Investigators C Awards Committee.
2014 Stichting tegen Kanker. Foundation Contre le Cancer. Belgium. Ad hoc Reviewer.
2014 Welcome Trust Principle Research Fellowship. London. Ad hoc Reviewer.
2015 Alberta Innovates Health Solutions. Panel Member: Postgraduate Fellowship Review Committee.
2016 Clinical Research Seed Grant Review Committee. MCW Cancer Center Spring Competition/ Ad hoc Reviewer.
2017 Panel Member: Basic Science Pilot Grant Panel. MCW Cancer Center.
2017 Ad hoc Reviewer. Genome Canada.
2018 Ad hoc Reviewer. Sanfilippo Children's Foundation. Australia.
2018 Organizing Committee. 4th International Workshop on the Molecular Medicine of Sphingolipids. Weizmann Institute and Ein Gedi, Israel.
2018 Organizing Committee. 5th Annual Pediatric Cancer Symposium sponsored by Northwestern Mutual Life.
2018 Ad hoc Reviewer. American Society of Gene and Cell Therapy Career Development Award 2018.
2018 Ad hoc Reviewer. Stichting tegen Kanker. Foundation contre le Cancer. Belgium.
2018 Organizing Committee. 1st Great Lakes Translational Glycomics Symposium. Milwaukee, WI.
2019 Ad hoc Reviewer. Medicine by Design Cycle 2 Team Grant. University of Toronto. Toronto, Ontario.
2019 Poster Reviewer. Adenovirus Vectors and Other DNA Virus Vectors. American Society of Gene and Cell Therapy 2019 Annual Meeting. Washington, DC.
2019 Ad hoc Reviewer. NINDS Career Development and Fellowship Training at NST-2 Study Section, NIH.

SERVICE:

1998 - 2000 Director: Clinical Gene Therapy Laboratory. University of Illinois at Chicago.
1999 - 2001 Trainer: MD/PhD Training Program. University of Illinois at Chicago.
2000 Fellow: Honors College. University of Illinois at Chicago.
2002 - 2007 Founder and Meeting Organizer (yearly), Langdon Hall Gene Therapy Conference, Langdon Hall, Cambridge, Ontario.
2002 Organizer: Department of Medical Biophysics Open House. University of Toronto.
2002 Bickell/Cummings Foundation Reviewer. University of Toronto
2003 - 2008 Mentor: Physician Scientist Training Program, School of Medicine, Temple University.
2003 - 2004 Member: Orsino GMP Cell Processing Facility Scientific Advisory Board
2003 External Thesis Reviewer: McGill University.
2003 CRIO Grant Site Representative: OCI
2003 Session Chair: Medical Biophysics Retreat. University of Toronto
2004 - 2008 Head: Clinical Research Program in Gene Therapy, OCI
2005 Judge: IMS Alan Wu Poster Competition
2006 Coordinating Abstract Reviewer. American Society of Hematology Annual Meeting. Gene Transfer/Therapy Section.
2006 - 2010 Member: University of Toronto Molecular Medicine Training Program
2006 Judge: IMS Summer Student Research Poster Day
2007 External Academic Promotion Reviewer: Department of Oncology, University of Alberta.

2007 - 2008 Judge: CREMS Research Day Poster. IMS at University of Toronto.
2007 External Academic Promotion Reviewer: Baylor College of Medicine
2008 Judge: IMS Summer Student Research Poster Day
2008 External Academic Promotion Reviewer. Department of Oncology. University of Alberta.
2009 Founder and Meeting Organizer, Langdon Hall Gene Therapy Conference, Langdon Hall, Cambridge, Ontario.
2010 Qualifying examiner. University of Toronto. Institute of Medical Science.
2010 Judge: IMS Summer Student Research Poster Day
2011 External Academic Promotion Reviewer. Department of Medical Biophysics. University of Western Ontario.
2011 CREMS Research Scholar Application Reviewer. University of Toronto.
2011 PhD Examiner. Institute of Medicine. University of Toronto.
2011 MSc Internal Examiner. Institute of Medical Science. University of Toronto.
2011 PhD External Examiner. UBC Faculty of Graduate Studies.
2012 External Academic Promotion Reviewer. Faculty of Medicine. University of Ottawa.
2012 - 2015 Director, UHN Vector Core Facility at the Krembil Discovery Tower at Toronto Western Hospital
2012 Session Chair. CBMTG Conference. April 2012. Toronto.
2013 Session Chair. 9th WORLD Symposium. Lysosomal Disease Network Annual Research Meeting. February 2013. Orlando, FL.
2017 - Present College of Reviewers. Canadian Institutes of Health Research
2017 External Academic Promotion Reviewer. Faculty of Medicine. Northeast Ohio Medical University.
2018 External Academic Promotion Reviewer. Department of Pediatrics. Emory University.
2018 External Academic Promotion Reviewer. Faculty of Medicine. University of Virginia.
2019 External Academic Promotion Reviewer. Department of Immunology and Microbiology. Scripps Research Institute, Florida.

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Refereed Journal Publications/Original Papers

1. **Medin JA**, Hunt L, Gathy K, Evans RK, Coleman MS. Efficient, low-cost protein factories: expression of human adenosine deaminase in baculovirus-infected insect larvae. Proc Natl Acad Sci U S A. 1990 Apr;87(7):2760-4. PMCID: PMC53770
2. **Medin JA**, Coleman MS. Lack of functional significance of Cys227 and Cys234 in terminal deoxynucleotidyltransferase. J Biol Chem. 1992 Mar 15;267(8):5199-201.
3. Keller H, Dreyer C., Medin J., Mahfoudi A., Ozato K., and Wahli W. Fatty acids and retinoids control lipid metabolism through activation of PPAR/RXR heterodimers. Proc Natl Acad Sci USA. 90(6):21160-2164(1993).
4. Bhaumik K., Medin J., Gathy K., and Coleman M.S. Mutational analysis of active-site residues of human adenosine deaminase. J Biol Chem. 268(8):5464-5470 (1993).
5. Keller H., Mahfoudi A., Dreyer C., Hihi A.K., Medin J., Ozato K., and Wahli W. Peroxisome proliferator-activated receptors (PPARs) and lipid metabolism. Annals NY Acad Sci 684:157-173 (1993).
6. Segars JH, Nagata T, Bours V, **Medin JA**, Franzoso G, Blanco JC, Drew PD, Becker KG, An J, Tang T. Retinoic acid induction of major histocompatibility complex class I genes in NTera-2 embryonal carcinoma cells involves induction of NF-kappa B (p50-p65) and retinoic acid receptor beta-retinoid X receptor beta heterodimers. Mol Cell Biol. 1993 Oct;13(10):6157-69. PMCID: PMC364675
7. Krey G., Keller H., Mahfoudi A., Medin J., Ozato K. Dreyer C., and Wahli W. Xenopus peroxisome proliferator activated receptors: Genomic organization, response element recognition, heterodimer formation with RXR, and activation by fatty acids. J Steroid Biochm Mol Biol. 47(1-6):65-73(1993).
8. Lee IJ, Driggers PH, **Medin JA**, Nikodem VM, Ozato K. Recombinant thyroid hormone receptor and retinoid X receptor stimulate ligand-dependent transcription in vitro. Proc Natl Acad Sci U S A. 1994 Mar 01;91(5):1647-51. PMCID: PMC43220
9. Bovolenta C, Driggers PH, Marks MS, **Medin JA**, Politis AD, Vogel SN, Levy DE, Sakaguchi K, Appella E, Coligan JE. Molecular interactions between interferon consensus sequence binding protein and members of the interferon regulatory factor family. Proc Natl Acad Sci U S A. 1994 May 24;91(11):5046-50. PMCID: PMC43928
10. **Medin JA**, Minucci S, Driggers PH, Lee IJ, Ozato K. Quantitative increases in DNA binding affinity and

positional effects determine 9-cis retinoic acid induced activation of the retinoid X receptor beta homodimer. Mol Cell Endocrinol. 1994 Oct;105(1):27-35.
11. Nunez SB, **Medin JA**, Keller H, Wang K, Ozato K, Wahli W, Segars J. Retinoid X receptor beta and peroxisome proliferator-activated receptor activate an estrogen response element. Recent Prog Horm Res. 1995;50:409-16.
12. **Medin JA**, Gathy K, Coleman MS. Expression of foreign proteins in Trichoplusia ni larvae. Methods Mol Biol. 1995;39:265-75.
13. Schiffmann R, **Medin JA**, Ward JM, Stahl S, Cottler-Fox M, Karlsson S. Transfer of the human glucocerebrosidase gene into hematopoietic stem cells of nonablated recipients: successful engraftment and long-term expression of the transgene. Blood. 1995 Aug 01;86(3):1218-27.
14. Migita M, **Medin JA**, Pawliuk R, Jacobson S, Nagle JW, Anderson S, Amiri M, Humphries RK, Karlsson S. Selection of transduced CD34+ progenitors and enzymatic correction of cells from Gaucher patients, with bicistronic vectors. Proc Natl Acad Sci U S A. 1995 Dec 19;92(26):12075-9. PMCID: PMC40299
15. **Medin JA**, Migita M, Pawliuk R, Jacobson S, Amiri M, Kluepfel-Stahl S, Brady RO, Humphries RK, Karlsson S. A bicistronic therapeutic retroviral vector enables sorting of transduced CD34+ cells and corrects the enzyme deficiency in cells from Gaucher patients. Blood. 1996 Mar 01;87(5):1754-62.
16. **Medin JA**, Tudor M, Simovitch R, Quirk JM, Jacobson S, Murray GJ, Brady RO. Correction in trans for Fabry disease: expression, secretion and uptake of alpha-galactosidase A in patient-derived cells driven by a high-titer recombinant retroviral vector. Proc Natl Acad Sci U S A. 1996 Jul 23;93(15):7917-22. PMCID: PMC38849
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19. **Medin JA**, Brandt JE, Rozler E, Nelson M, Bartholomew A, Li C, Turian J, Chute J, Chung T, Hoffman R. Ex vivo expansion and genetic marking of primitive human and baboon hematopoietic cells. Ann N Y Acad Sci. 1999 Apr 30;872:233-40; discussion 240-2.
20. Medin J.A., Takenaka T., Caprentier S., Garcia V., Basile J.-P., Segui B., Andrieu-Abadie N., Auge N., Salvayre R., and Levade T. Retroviral-mediated correction of the metabolic defect in cultured Farber disease cells. Hum Gene Ther 10(8):1321-1329 (1999).
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22. Takenaka T, Hendrickson CS, Tworek DM, Tudor M, Schiffmann R, Brady RO, **Medin JA**. Enzymatic and functional correction along with long-term enzyme secretion from transduced bone marrow hematopoietic stem/progenitor and stromal cells derived from patients with Fabry disease. Exp Hematol. 1999 Jul;27(7):1149-59.
23. Takenaka T, Qin G, Brady RO, **Medin JA**. Circulating alpha-galactosidase A derived from transduced bone marrow cells: relevance for corrective gene transfer for Fabry disease. Hum Gene Ther. 1999 Aug 10;10(12):1931-9.
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55. Ramsubir S, Nonaka T, Girbés CB, Carpentier S, Levade T, **Medin JA**. In vivo delivery of human acid ceramidase via cord blood transplantation and direct injection of lentivirus as novel treatment approaches for Farber disease. Mol Genet Metab. 2008 Nov;95(3):133-41. PMCID: PMC2614354
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57. Higuchi K, Ayach B, Sato T, Chen M, Devine SP, Rasaiah VI, Dawood F, Yanagisawa T, Tei C, Takenaka T, Liu PP, **Medin JA**. Direct injection of kit ligand-2 lentivirus improves cardiac repair and rescues mice post-myocardial infarction. Mol Ther. 2009 Feb;17(2):262-8. PMCID: PMC2835055
58. Symes J, Evangelou A, Ignatchenko A, Fleshner N, Kislinger T, **Medin JA**. Multidimensional protein identification technology analysis highlights mitoxantrone-induced expression modulations in the primary prostate cancer cell proteome. Proteomics Clin Appl. 2009 Mar;3(3):347-58.
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67. Silvertown JD, Neschadim A, Liu HN, Shannon P, Walia JS, Kao JC, Robertson J, Summerlee AJ, **Medin JA**. Relaxin-3 and receptors in the human and rhesus brain and reproductive tissues. Regul Pept. 2010 Jan 08;159(1-3):44-53.
68. Higuchi K, Yoshimitsu M, Fan X, Guo X, Rasaiah VI, Yen J, Tei C, Takenaka T, **Medin JA**. Alpha-galactosidase A-Tat fusion enhances storage reduction in hearts and kidneys of Fabry mice. Mol Med. 2010;16(5-6):216-21. PMCID: PMC2864812
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