

CURRICULUM VITAE
Qinghua Wang

Distinguished Professor
Departments of Endocrinology and Metabolism
Fudan University

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B. BIOGRAPHICAL INFORMATION

MD 1988, Shanghai Second Medical University, Shanghai, China
Major: Medicine

PhD 1995, Antwerp University, Antwerp, Belgium
Major: Biochemistry

Present appointment(s)

Distinguished Professor
Huashan Hospital,
Fudan University
July 1, 2014 – present

Deputy Director,
Endocrinology and Diabetes Research Institute, Fudan University

Adjunct Professor, Medicine and Physiology,
Faculty of Medicine,
University of Toronto
July 2014 – present

Scientist, Keenan Research Centre of the Li Ka Shing Knowledge Institute
St Michael's Hospital.
September, 2008 – present

Staff Scientist, Division of Endocrinology and Metabolism, Department of Medicine
St Michael's Hospital.
February 1, 2002 – present

Previous appointment(s)

Associate Professor
Department of Physiology,
Faculty of Medicine,
University of Toronto
Oct 1, 2007 – July 2014

Assistant Professor, Department of Physiology,
Faculty of Medicine,
University of Toronto
Oct 1, 2001 – August 2006

CURRICULUM VITAE -Qinghua Wang

Assistant Professor, Department of Medicine,
Faculty of Medicine,
University of Toronto
August 1, 2002 – August 2006

Postdoctoral Fellow, University of Toronto
Department of Physiology
July 2000 - Aug 2002

Postdoctoral Fellow, University of Toronto
Department of Laboratory Medicine and Pathobiology
April 1999 - June 2000

Postdoctoral Fellow, the Hospital for Sick Children, Toronto
Division of Cell Biology
September 1995 – April 1999

Visiting Scientist, University of British Columbia
Department of Surgery and Ophthalmology
May 1995 – August 1995

Affiliated Appointment(s)

Member, Endocrinology and Diabetes Research Group (EDRG)
University of Toronto
Oct 2001 - present

Member, Banting and Best Diabetes Centre (BBDC)
University of Toronto
Oct 2001 - present

3. Honours and Awards (total value)

National

MRC Fellowship Award (\$35,000)
Medical Research Council
1999 - 2000

CIHR Senior Research Fellowship Award (Phase I) (\$110,000)
Canadian Institute of Health Research
2000-2002

CIHR Senior Research Fellowship Award (Phase II) (\$180,000)
Canadian Institute of Health Research
2002-2004

CDA Scholarship Award (\$250,000)

CURRICULUM VITAE -Qinghua Wang

Canadian Diabetes Association (CDA)
2002-2007

CFI Researcher (\$78,000)
Canadian Foundation for Innovation
2002-2007

CIHR New Investigator (\$300,000)
Canadian Institute of Health Research
2007-2012

Local

Restracom Postdoctoral Fellowship Award (\$33,000)
The Hospital for Sick Children (University of Toronto)
1995-1998

BBDC Postdoctoral Fellowship Award (\$38,000)
Eli Lilly/Banting and Best Diabetes Research Centre (University of Toronto)
1998 – 1999

First Prize for Outstanding Paper (\$200)
“4th Annual Symposium on Advances in Laboratory Medicine”
University of Toronto
2000

Banting and Best Diabetes Centre Trainee Travel Award (\$1,000)
University of Toronto
2001

New Investigator Award (\$40,000)
Banting and Best Diabetes Centre (University of Toronto)
2002 - 2004

Reuben & Helene Dennis Scholar (\$20,000)
Banting and Best Diabetes Centre (University of Toronto)
2002 -2004

Dean’s Fund Award (\$10,000).
University of Toronto
2002 - 2007

Oversea

Graduate Studentship Award (960,000 BF)
University of Antwerp, Belgium.
1990-1995

4. Professional Affiliations and Activities

Member of Editorial Board

American Journal of Physiology: Endocrinology and Metabolism (2009- present)
Frontiers in Physiology (2010- present)
Frontiers Endocrinology (2011- present)
Journal of Diabetes Research and Therapy (2014-present)
Journal of Diabetes, Endocrinology and Metabolic Disorders (2017-present)

Invited Reviewer for Scientific Journals

Acta Oceanologica Sinica, American Journal of Physiology, Cell Proliferation, Canadian J Diabetes, J Biological Chemistry, J Molecular Endocrinology, J of Physiology, Diabetes, Diabetes Care, Diabetes, Diabetes-Metabolic Syndrome and Obesity: Targets and Therapy. Obesity and Metabolism, Diabetologia, Endocrinology, Gene Therapy, Immunological Investigations, J Clini Endocrinol Metab, J Cell Mol Med, J Diabetes, J Endocrinology, J Gene Medicine, Molecular Therapy, Neuropeptides, Proc Natl Acad Sci U S A, Regulatory Peptides

External Reviewer for Scientific Grants

Banting and Best Diabetes Research Centre
Canadian Institute of Health Research
Canadian Diabetes Association
Diabetes UK (The British Diabetic Association)
Alberta Heritage Foundation for Medical Research (AHFMR)

Committee Membership/Administration

Director,
UROP Summer Program
Department of Physiology
University of Toronto
2012-2014

Panel member,
Ontario Graduate Scholarship (OGS) selection panel
Ministry of Training Colleges and Universities
2010-2013

Panel member
Annual Activity Assessment Committee, Department of Physiology, University of Toronto (2010-2014)

Panel member
Personal Award Committee
Canadian Diabetes Association
2002 - 2005

Panel member
Grant Peer Review Committee (A)
Canadian Diabetes Association
2005 – 2006

Panel member
Peer Review Committee (Metabolism)
Canadian Institute of Health Research
2006-2007

Panel member
Research Committee
Banting and Best Diabetes Centre (University of Toronto)
2006 – 2010

Membership and Scientific Societies:

- 1) America Diabetes Association
- 2) Canadian Diabetes Association
- 3) Endocrinology Society
- 4) European Association for Study of Diabetes

C. ACADEMIC HISTORY

1. Research Endeavors

- Characterization of insulin and insulin-like growth factor signaling in glial cells
- Molecular mechanism of insulin action on glucose transport
- Insulin signaling in neuron and its impact on synaptic strength
- islet physiology and diabetes pathogenesis
- GLP-1 signaling in regulation of islet beta cell proliferation and apoptosis
- Molecular and cellular mechanism underlies islet hormonal secretion
- Regeneration and immunoregulation islet beta cells
- Development of novel therapies for prevention and treatment of diabetes

2. Research Grants

Previous

JDRF Grant Number: 17-2012-38 GABAergic signaling a potential new target for human beta-cell regeneration. Apr 2012-Mar 2014 (\$500,000USD). Role: Principal Investigator.

JDRF Grant Number: 17-2013-499, The Pharmacokinetics of gamma-aminobutyric acid in Healthy Volunteers. June 2013-May 2015 (\$191,390USD). Role: Principal Investigator.

CURRICULUM VITAE -Qinghua Wang

CIHR Operating grant (bridging) Mechanism(s) of glucose-induced suppression of glucagon secretion in pancreatic α -cells. 2011-2012 (\$50,000) Role: Principal Investigator.

Novo Nordisk Research Grant, "Effect of detemir/Levemir insulin on bodyweight gain". 2007-2009 (\$200,000). Role: Principal Investigator.

CDA Operating Grant, "Study the role of ALK7 in modulating islet beta cell function" 2007-2010 (\$290,000). Role: Principal Investigator.

CIHR Operating Grant, "Mechanisms of glucose induced inhibition of glucagon secretion in pancreatic alpha cells". 2006 – 2011 (\$529,465). Role: Principal Investigator.

JDRF Operating Grant, "Regeneration and immunoregulation of islet beta cells for treatment of type 1 diabetes". 2006 – 2009 (\$495,000USD). Role: Principal Investigator.

CIHR Canada-China Initiative Operating Grant "Role of ALK7, a new islet pro-apoptotic protein in modulating beta-cell mass under diabetic conditions" 2007-2010 (\$90,000). Role: Principal Investigator (co- Principal Investigator: R HU - Fudan University, China).

BBDC Equipment Grant," Identification of novel proteins in regulating beta cell mass by GLP-1". 2002 (\$54,263, with SMH Matching fund \$35,000). Role: Principal Investigator.

CFI New Opportunities, "Intra-islet hormonal regulation and islet hormone secretion" 2002 – 2007 (\$78,000). Role: Principal Investigator.

CIHR Operating Grant "Mechanism(s) of glucose-induced suppression of glucagon secretion in pancreatic alpha cells". 2002 – 2005 (\$263,406). Role: Principal Investigator.

St. Michael's Hospital Start Fund, "Islet cell secretion and regulation". 2002 - 2005 (\$150,000). Role: Principal Investigator.

BBDC Research Operating, "Proteomic approaches: identification of novel islet protein in regulating islet beta cell mass". 2003 – 2004 (\$20,000). Role: Principal Investigator.

BBDC-Pilot and Feasibility, "ALK7, a Novel pancreatic beta cell pro-apoptotic protein?" 2005 (\$30,000). Role: Principal Investigator.

Current

CDA operating grant, Novel glucagon-like peptide-1 (GLP-1) receptor agonists: their efficacy, potency, immunogenicity and mechanism underlying their post-receptor interaction. 2014-2017 (\$300,000). Role: Principal Investigator (granted).

JDRF operating grant, Effects of GABA and GLP-1 combined therapy in promoting regeneration and survival of human islet beta cells. June 2015- May 2017 (\$500,000 USD), Role Principal Investigator (granted).

CURRICULUM VITAE -Qinghua Wang

NSFC Operating grant, Mar 2014. Role of nodal in the regulation of islet beta cell function. 2014-2018 (rmb 710,000): Principal Investigator (granted).

NSFC Operating grant, Mar 2015. Effects GABA on the prevention and treatment of NASH in diet induced obesity in mice. 2015-2019 (rmb700,000): Principal Investigator. (granted)

NSFC Monumental Project Role of GABA in the regulation of islet beta cell function and glucose hemostasis. Jan 2017-Dec 2021. 2.75 million RMB (816300202017)

State major project-innovative drug R&D Supaglutide, long-acting anti-diabetic recombinant protein for the treatment of type 2 diabetes. Jan 2017-Dec 2020 499.66 millionRMB(2017ZX09303001)

Trainee Awards

Graduate Students (Department of Physiology, University of Toronto)

Rui Liu, One of the Top Four abstracts selected for oral presentation (\$500 cash award The 3rd Annual University of Toronto Symposium on Incretin Biology 2009.

Elaine Xu, Best Paper Award, Society of Chinese BioMedical Scientists in North America (SCBA), Feb 2007.

Oral Presentation Award (Second Place), Frontier in Physiology (FIP) Department of Physiology, University of Toronto, May 2003.

Abstract Competition Honorary Mention, Banting and Best Diabetes Centre (BBDC), Faculty of Medicine, University of Toronto, May 2003.

BBDC Trainee Travel Award, University of Toronto, June 2003, \$1,000.

BBDC Trainee Travel Award, University of Toronto, June 2004, \$1,000.

Karena Huang BBDC Trainee Travel Award, University of Toronto, June 2006, \$1,000.

Amin Maharaj Keenan Collaborative Research Award, St Michael's Hospital, August, 2006, \$15,000

Rohit Sheshgirl BBDC Graduate Studentship Award, University of Toronto, June 2005, \$12,000 (declined).

Undergraduate Students (Department of Physiology, University of Toronto)

CURRICULUM VITAE -Qinghua Wang

- Lorraine Chow BBDC Summer Research Program Award, 2002
- James Kuo BBDC Summer Research Program Award, 2003
- Rami Bishay St. Michael's Hospital Summer Research Program Award, 2004
- Van Cabrera St. Michael's Hospital Summer Research Program Award, 2004
- Stephanie Siu BBDC Summer Research Program Award, 2004
- Shiyong Liu BBDC Summer Research Program Award, 2005
- Keran Ma St. Michael's Hospital Summer Research Program Award, 2006
- Jenny Limcangco Life Science Summer Research Program (Physiology, U of T), 2006
- Tugba Demirci IMS International Summer Program, U of T 2007
- Jane Meng BBDC Summer Research Program Award, 2008
- Joy Qu St. Michael's Hospital Summer Research Program Award, 2009
- Min Nie Shantou University, University of Toronto Summer Exchange Program.
2009
- Cynthia Chan BBDC Summer Research Program Award, 2010
- Amy Yuan St. Michael's Hospital Summer Research Program Award, 2010
- Jennifer Chen St. Michael's Hospital Summer Research Program Award, 2010
- Anjali Lobo St. Michael's Hospital Summer Research Program Award, 2011
- Akshay Tadkase St. Michael's Hospital Summer Research Program Award, 2012
- Xinyun Liang UROP Summer Program Award (Physiology, U of T), 2012
- Xin Xing IMS International Summer Program, Medical School, Sandong Uni
2012
- Zhilong Cao IMS International Summer Program, Medical School, Sandong Uni
2012
- Susanne Wang BBDC Charles Hollenberg Summer Studentships 2013
- Eddie Shen UROP Summer Program Award (Physiology, U of T), 2014

CURRICULUM VITAE -Qinghua Wang

Richard Yang UROP Summer Program Award (Physiology, U of T), 2015

Postdoctoral Fellow ((Department of Physiology, University of Toronto)

Zhaoxia Wang, BBDC Trainee Travel Awards 2012/2013 (Period 1)

Indri Nuryani Purwana,

Banting best Diabetes research Centre Post Doctoral Fellowship Apr 2012-2013, \$40,000.

Kui Chen, One of the Top Four abstracts selected for oral presentation (\$500 cash award The 3rd Annual University of Toronto Symposium on Incretin Biology 2009.

Yi Zhang Department of Medicine Fellowship, 2007-2008, \$35,000

Hongmin Qiu China Scholarship Council, 2006-2008, \$24,000

Mohan Kumar, CDA (Canadian Diabetes Association) Postdoctoral Fellowship, 2003-2005, \$70,000.

Postgraduate Fellowship Award, Department of Medicine, University of Toronto, 2003-2005, \$40,000.

BBDC Trainee Travel Award, University of Toronto, June 2004, \$1,000 (declined).

BBDC Trainee Travel Award, University of Toronto, June 2006, \$1,000 (declined).

William Ju CIHR Postdoctoral Fellowship, 2005. \$38,000.

3. Patent granted : 4 (Pending)

1) **Wang Q** and Prud'homme G. "GLP1/Exendin4/IgG-Fc fusion construct for treatment of diabetes". USPTO July 2005 (US 60/595689); PCT Application WO/2007/012188 (Publication date: Feb 1, 2007). European Patent Office July 2008 (EP1920061).

In this patent, novel fusion proteins are described for the use of prevention and treatment of type 1 and type 2 diabetes.

2) **Wang Q** and Prud'homme, "Composition and method for prevention and treatment of type 1 diabetes." USPTO Aug 2005 (US 60/595803, 2005-08-06); PCT Application: WO/2007/016764 (Publication date: Feb 15, 2007).

In this patent, novel fusion proteins and DNA vaccines are described for the use of prevention and treatment of type 1 diabetes.

3) **Wang Q**, Soltani N “Pharmaceutical composition for the treatment of type 1 diabetes”. US Patent Office Jan 2009 (US 61/138,957, 02/23/2009). Publication date: 07/01/2010.

In this patent, natural small molecule was identified as endogenous islet beta-cell modulator in a prospect of promotion of beta-cell growth and suppression of islet beta-cell autoimmunity.

D. PUBLICATIONS

1. Refereed Publications (names of trainees are underlined; * senior correspondence author)

95. Li J, Wang Z, Ren L, Fan L, Liu W, Jiang Y, Lau HK, Liu R, **Wang Q**. Antagonistic interaction between nodal and insulin modulates pancreatic β -cell proliferation and survival. **Cell Commun Signal**. 2018 Nov 8;16(1):79. doi: 10.1186/s12964-018-0288-0

94. Shen Q, Yang Y, Liu W, Wang M, Shao Y, Xu B, Zhao X, Zhu J, Hua R, Jin W, Hu Z, Kim JB, **Wang Q**, Li Y, Zang M, Yao Q, Zhang Z. Organ-specific alterations in circadian genes by vertical sleeve gastrectomy in an obese diabetic mouse model. **Sci Bull (Beijing)**. 2017 Apr 15;62(7):467-469. doi: 10.1016/j.scib.2017.03.014.

93. Prud'homme GJ, Glinka Y, Kurt M, Liu W, and **Wang Q** The anti-aging protein Klotho is induced by GABA therapy and exerts protective and stimulatory effects on pancreatic beta cells. **Biochem. Biophys. Res. Commun**. 2017 Dec 2;493(4):1542-1547.

92. Liu T, Sun L, Jiang B, Li L, Cen J, Chen X, Zhang Z, **Wang Q**, Cheng X, Shi Y, Hui L. Lineage conversion of mouse fibroblasts to pancreatic α -cells. **Exp Mol Med**. 2017 Jun 30;49(6):e350. doi: 10.1038/emm.2017.84.

91. Cui X, Yao Lu, Yang X, Gao Y, Fang F, Zhang J, **Wang Q**, Chang Y. SIRT6 regulates metabolic homeostasis in skeletal muscle through activation of AMPK. **Am J Physiol Endocrinol Metab**. 2017 Oct 1;313(4):E493-E505. doi: 10.1152/ajpendo.00122.2017.

90. Liu W, Son DK, Lau HK, ZhouYH Prud'homme GJ, Jin T, and **Wang Q*** Combined oral administration of GABA and DPP-4 inhibitor prevents beta cell damage and promotes beta cell regeneration in mice. **Front Pharmacol**. 2017Jul DOI: 10.3389/fphar.2017.00362.

83. Wan Y, Bao X, Huang J, Zhang X, Liu W, Cui Q, Jiang D, Wang Z, Liu R, **Wang Q***. Novel GLP-1 Analog Supaglutide Reduces HFD-Induced Obesity Associated with Increased Ucp-1 in White Adipose Tissue in Mice. **Front Physiol**. 2017 May 15;8:294. doi: 10.3389/fphys.2017.00294.

82. Li J, Zheng J, Wang S, Lau HK, Fathi A, **Wang Q*** Cardiovascular benefits of native GLP-1 and its metabolites: an indicator 1 for GLP-1-therapy strategies. **Front Physiol**. 2017 Jan 30;8:15. doi: 10.3389/fphys.2017.00015.

81. Liu W, Yang Y, Liu Y, Lu X, Guo S, Wu M, Wang M, Yan L, **Wang Q**, Zhao X, Tong X, Hu J, Li Y, Hu R, Stanton RC, Zhang Z. Exogenous kallikrein protects against diabetic nephropathy. **Kidney Int.** 2016 Nov;90(5):1023-1036. doi: 10.1016/j.kint.2016.06.018. Epub 2016 Aug 18.
80. Liu R, Li N, Lin Y, Wang M, Peng Y, Lewi K, **Wang Q**. Glucagon Like Peptide-1 Promotes Adipocyte Differentiation via the Wnt4 Mediated Sequestering of Beta-Catenin. **PLoS One.** 2016 Aug 9;11(8):e0160212. doi: 10.1371/journal.pone.0160212.
79. Li J, Zhang Z, Liu X, Wang Y, Mao F, Mao J, Lu X, Jiang D, Wan Y, Lv JY, Cao GY, Zhang J, Zhao NQ, Atkinson M, Greiner DL, Prud'homme GJ, Jiao Z, Li Y* and **Wang Q***, Study of GABA in healthy volunteers: pharmacokinetics and pharmacodynamics. **Front Pharmacol.** 2015 Nov 10;6:260. doi: 10.3389/fphar.2015.00260. eCollection 2015.
78. Prud'homme GJ, Glinka Y, **Wang Q**. Immunological GABAergic interactions and therapeutic applications in autoimmune diseases. **Autoimmun Rev.** 2015 Nov;14(11):1048-56. doi: 10.1016/j.autrev.2015.07.011. Epub 2015 Jul 29.
77. Gagnon J, Zhu L, Anini Y*, **Wang Q*** Neutralizing Circulating Ghrelin by Expressing a Growth Hormone Secretagogue Receptor Based Protein Protects Against High-Fat Diet Induced Obesity in Mice. **Gene Ther** 2015 Sep;22(9):750-7. doi: 10.1038/gt.2015.38. Epub 2015 Jun 25.
76. Zheng J, Chen T, Zhu Y, Li HQ, Deng XL, **Wang Q**, Zhang JY, Chen LL. Liraglutide prevents fast weight gain and β -cell dysfunction in male catch-up growth rats. **Exp Biol Med** (Maywood). 2015 Sep;240(9):1165-76.
75. Wan Y, **Wang Q***, Prud'homme GJ. GABAergic system in the endocrine pancreas: a new target for diabetes treatment. **Diabetes Metab Syndr Obes.** 2015 Feb 3;8:79-87. doi: 10.2147/DMSO.S50642. eCollection 2015. Review.
74. Prud'homme GJ, Glinka Y, Udovyk O, Hasilo C, Paraskevas S, **Wang Q**. GABA protects pancreatic beta cells against apoptosis by increasing SIRT1 expression and activity. **Biochem Biophys Res Commun.** 2014 Sep 26;452(3):649-54. doi: 10.1016/j.bbrc.2014.08.135. Epub 2014 Sep 1.
73. Purwana I, Zheng J, Li X, Deurloo M, Son DO, Zhang ZY, Liang C, Shen E, Tadmase1 A, Feng ZP, Li YM, Hasilo C, Paraskevas S, Bortell R, Greiner DL, Atkinson M, Prud'homme GJ, **Wang Q** GABA promotes human beta-cell proliferation and modulates glucose homeostasis. **Diabetes** 2014 Dec;63(12):4197-205. doi: 10.2337/db14-0153. Epub 2014 Jul 9
72. Liu R, Ma D, Li YM, Hu RM, Peng Y, **Wang Q** The anorexic effect of Ex4/Fc through GLP-1 receptor activation in high-fat diet fed mice. **Acta Biochimica et Biophysica Sinica** 2014 Aug;46(8):675-81. doi: 10.1093/abbs/gmu044.

71. Solaimani H, Soltani N, Malekzadeh K, Sohrabipour S, Zhang N, Nasri S, **Wang Q**. Modulation of GLUT4 expression by oral administration of Mg(2+) to control sugar levels in STZ-induced diabetic rats. **Can J Physiol Pharmacol**. 2014 Jun;92(6):438-44. doi: 10.1139/cjpp-2013-0403. Epub 2014 Feb 24.
70. Prud'homme GJ, Glinka Y, Hasilo C, Paraskevas S, Li X, **Wang Q**. GABA Protects Human Islet Cells Against the Deleterious Effects of Immunosuppressive Drugs and Exerts Immunoinhibitory Effects Alone. **Transplantation**. 2013 Oct 15;96(7):616-23
69. Wu L, Zhai YJ, Lu JW, Wang Q* Sun F.* Expression, purification and preliminary characterization of glucagon receptor extracellular domain. **Protein Expr Purif** 2013 Apr 15;89(2):232-240
68. Shao W, Wang Z, Ip W, Chiang YT, Xiong X, Chai T, Xu C, **Wang Q**, and Jin T. GLP-1(28-36) improves β -cell mass and glucose disposal in streptozotocin induced diabetes mice and activates PKA- β -catenin signaling in beta-cells in vitro **Am J Physiol Endocrinol Metab**. 2013 Jun 15;304(12):E1263-72.
67. Zhao F, **Wang Q**.* The protective effect of peroxiredoxin II on oxidative stress induced apoptosis in pancreatic β -cells. **Cell Biosci**. 2012 Jun 18;2(1):22
66. **Wang Q**.* Liang X, Wang S. Intra-islet glucagon secretion and action in the regulation of glucose homeostasis. **Front Physiol**. 2012;3:485. doi: 10.3389/fphys.2012.00485. Epub 2013 Jan 3
65. Wang Z, Purwana I, Zhao F, Zhao S, Chan K, He B, Soukhov L, Korytnikov R, Li X, **Wang Q**.* beta-cell proliferation is associated with increased GABAA receptor expression in pancreatomized mice. **Pancreas** 2013 Apr;42(3):545-548.
64. Shao W, Wang D, Chiang YT, Ip W, Zhu L, Xu F, Columbus J, Belsham DD, Irwin DM, Zhang H, Wen X, Wang Q, Jin T. The Wnt Signaling Pathway Effector TCF7L2 Controls Gut and Brain Proglucagon Gene Expression and Glucose Homeostasis. **Diabetes**. 2013 Mar;62(3):789-800
63. Liu S, Liu R, Chiang YT, Song L, Jin T, and **Wang Q**.* Insulin detemir enhances proglucagon gene expression in the intestinal L cells via stimulating β -catenin and CREB activities. **Am J Physiol Endocrinol Metab**. 2012 Sep 15;303(6):E740-51.
62. Zhao F, Huang F, Tang M, Li X, Zhang N, Amfilochiadis A, Li Y, Hu R, Jin T, Peng C, **Wang Q**.* Nodal induces apoptosis through activation of the ALK7 signaling pathway in pancreatic INS-1 β -cells. **Am J Physiol Endocrinol Metab**. 2012 Jul;303(1):E132-43.
61. Maharaj A., Zhu L., Qiu H., Qu J., Li H., Wang Y., Chen K., Zhang C-Y, Jin T., and **Wang Q*** Ectopic expression of glucagon receptor in skeletal muscle improves glucose homeostasis in diabetic animal models. **Diabetologia** (2012) 55(5):1458-68.
60. Liang Y, Qiu H, Glinka Y, Lazarus AH, Ni H, Prud'homme GJ, **Wang Q***.

Immunity against a therapeutic xenoprotein/Fc construct delivered by gene transfer is reduced through binding to the inhibitory receptor FcγRIIb. **J Gene Med.** 2011 Sep;13(9):470-7.

59. Soltani N, Qiu H, Aleksic M, Glinka Y, Zhao F, Liu R, Zhang N, Chakrabarti R, Ng T, Jin T, Zhang H, Lu W-L, Feng Z-P, Prud'homme GJ, and **Wang Q**.* GABA exerts protective and regenerative effects on islet beta cells and reverses diabetes. **Proc Natl Acad Sci U S A** 2011 Jul 12;108(28):11692-7.

58. Bansal P, Wang S, Zhang N, Xiang Y.Y., Lu W. Y*., and **Wang Q*** GABA coordinates with insulin in regulating secretory function in pancreatic INS-1 β-cells. **PLoS ONE** (2011) 6(10): e26225.

57. Liu R, Li Y, Hu R, Jin T, Deng S, Liang W, Zhang N, Chen J, Prud'homme G, Jia WW, Ma D, and **Wang Q**.* A site-specific genomic integration strategies for sustained glucagon-like peptide-1 receptor-dependent control of energy and glucose homeostasis. **Biochem Biophys Res Commun.** 2010 403(2): 172-177

56. **Wang Q**.* Chen K, Liu R, Liu R, Fang Z, Gupta S, Zhang N, and Prud'homme G. Novel GLP-1 fusion chimera as potent long acting GLP-1 receptor agonist. **PLoS ONE** Sept 2010 Volume 5 | Issue 9 | e12734

55. Columbus J, Chiang YT, Shao W, Zhang N, Wang D, Gaisano HY, Wang Q, Irwin DM, and Jin T. Insulin treatment and high fat diet feeding reduces the expression of three Tcf genes in rodent pancreas. **J Endocrinol.** 2010 Oct;207(1):77-86.

54. Liu R, Hu R, **Wang Q**. Insulin resistance of β cells contributes to the pathogenesis of diabetes. *Chinese Journal of Diabetes.* 2010 18(8):634-36.

53. **Wang Q***, Jin T. The role of insulin signaling in the development of beta-cell dysfunction and diabetes. **Islet** 2009 1(2):1-7.

52. Islam D., Zhang N., Lam P., Wang P., Li H., Brubaker, P., Gaisano H., **Wang Q**., Jin T. EpacII pathway stimulates proglucagon gene expression but not glucagon secretion in pancreatic A cell lines. **Am J Physiol** 2009 Jan;296(1):E174-81.

51. Wang P, **Wang Q**, Sun J, Wu J, Li H, Zhang N, Huang Y, Su B, Li RK, Liu L, Zhang Y, Elsholtz HP, Hu J, Gaisano HY, Jin T. POU homeodomain protein oct-1 functions as a sensor for both cyclic AMP and oxidative stress **J Biol Chem** 2009 Sep 25;284(39):26456-65

50. Zhang Y, Qu J, Zhang N, Diao J, Gao X, Strijbos PJ, Gaisano HY, Robinson RB, Tsushima R, Wang Q*, Wheeler MB. Functional characterization of hyperpolarization-activated cyclic nucleotide-gated channels in rat pancreatic beta cells. **J Endocrinology.** 2009 Oct;203(1):45-53. (*senior co-correspondence author).

49. Zhang Y, Zhang N, Gyulkhandanyan AV, Xu E, Gaisano HY, Wheeler1 MB*, **Wang Q***. Presence of functional hyperpolarisation-activated cyclic nucleotide-gated channels

in clonal alpha cell lines and rat islet alpha cells. **Diabetologia** 2008 Dec;51(12):2290-8. (*senior co-correspondence author).

48. Liu R, Li Y, **Wang Q**. The role of declined islet β cell mass in the development of diabetes. *International Journal of Internal Medicine*. 2008, 35(5):265-268.

47. Liu R, Hu R, **Wang Q**. Dysregulation of glucagon secretion in the pathogenesis of diabetes. *Chinese Journal of Diabetes*. 2008, 16(11): 704-706.

46. Bensal P **Wang Q***, Insulin as a physiological modulator of glucagon secretion. **Am J Physiol Endocrinol Metab**. 2008 Oct;295(4):E751-61.

45. Zhao J, Zhang N, He M, Yang Z.H, Tong W, **Wang Q***, Hu R*. Increased β -Cell Apoptosis and Impaired Insulin Signaling Pathway Contributes to the Onset of Diabetes in OLETF Rats. **Cell Physiol Biochem** 2008;21:445-454 (*senior co-correspondence author)

44. Li J, Zhang N, Ye B, Ju W, Orser B, Manning Fox JE, Wheeler M, **Wang Q** and Lu WY. Non-steroidal Anti-inflammatory Drugs Increase Insulin Release from β -Cells by Inhibiting ATP-Sensitive Potassium Channel. **Br J Pharmacol** 2007 Jun;151(4):483-93.

43. Prud'homme G.J., Draghia-Akli R., **Wang Q**. Plasmid-based gene therapy of diabetes mellitus. **Gene Ther**. 14, 553–564, 2007

42. Soltani N., Kumar M., Glinka Y., Prud'homme G.J., **Wang Q***. In vivo expression of GLP-1/IgG-Fc fusion protein enhances beta cell mass and protects against streptozotocin-induced diabetes. **Gene Ther**. 2007 Jun 14(12):981-8.

41. Kumar M, Hunag K, Glinka Y, Prud'homme GJ, **Wang Q***. Gene Therapy of diabetes using a novel GLP-1/IgG-FC fusion construct normalizes glucose levels in db/db mice. **Gene Ther**. 2007 Jan 14(2):162-72.

40. Dai FF, Zhang Y, Kang Y, **Wang Q**, Gaisano HY, Braunewell KH, Chan CB, Wheeler MB. The neuronal Ca^{2+} -sensor protein visinin-like-protein-1 (VILIP-1) is expressed in pancreatic islets and regulates insulin secretion. **J Biol Chem**. 2006 Aug 4; 281(31):21942-53.

39. Zhao J, Wang D, Hu R, Zhang S, Wang D, Zhou L, Wu Y, **Wang Q**, Hu R. The impact of exercise on the function and mass of islet β cells in type 2 diabetes OLETF mice. *Chinese Journal of Endocrinology and Metabolism*. 2006 22(4) i004-i005.

38. Xu G, Zhou H, **Wang Q**, Auersperg N, Peng C. Activin receptor-like kinase 7 induces apoptosis through up-regulation of Bax and down-regulation of Xiap in normal and malignant ovarian epithelial cell lines. **Mol Cancer Res**. 2006 Apr;4(4):235-46.

CURRICULUM VITAE -Qinghua Wang

37. Dong H, Kumar M, Zhang Y, Gyulkhandanyan A, Xiang YY, Ye B, Perrella J, Hyder A, Zhang N, Wheeler M, Lu WY, **Wang Q***. GABA up- and down-regulates insulin secretion from β -cells in concert with changes in glucose concentration. **Diabetologia**. 2006 Apr;49(4):697-705.
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Activin receptor-like kinase 7 induces apoptosis of pancreatic beta cells and beta cell lines. **Diabetologia**, 2006 27:506-18.
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4. Jia, W, **Wang, Q**, Cui, RJ, Gu, ZZ. Changes in ICP of conscious rabbits at various oxygen pressure. **J. Chinese Neurol.** 18(1), 17-20, 1985.
3. Cui, RJ, Jia, W, **Wang, Q**, Gu, ZZ. Effect of hyperbaric-oxygen exposure on intracranial pressure in anaesthetized rabbits. **Chinese Sci. Bull.** 29(1), 1551-1554, 1984.

2. Book Chapters and/or Reviews

3. Wang, Q*.

Expression of glucose transporter isoform GLUT4 in the brain: does insulin play a role in glucose transport in the CNS? **Recent Res. Devel. Mol. Cell. Biol.** 2: 41-56, 2001.

2. Bilan, J., **Wang, Q.**, Taha, C., Klip, A.

Insulin signaling in the control of glucose transport. **Canadian J. Diabetes Care** 22:S41-51, 1998.

1. Tsakiridis, T., **Wang, Q.**, Taha, C., Grinstein, S., Downey, G., Klip, A.

Involvement of the actin network in insulin signaling. **Soc. Gen. Physiol. Ser.** 52:257-271, 1997.

3. Manuscripts Submitted or in Preparation

1. Huang K., Kumar M., Oudit G., Backx P., **Wang Q***.

Glucagon-like peptide-1-induced suppression of glucagon secretion from pancreatic alpha cells: studies using PI3Kgamma knockout mice.

2. Dong H., Hyder A., Zhang N., **Wang Q.**, Lu W.Y.

Propofol increases insulin secretion from pancreatic β -cells by blocking Ca^{2+} -activated potassium channels.

E. PRESENTATIONS AND LECTURES

1. Papers Presented at Meetings and Symposia (names of trainees are underlined)

48. Li X, Sun W, Wang Y, Zhou J, Xing J, Wen X, Wang Q. Novel Glucagon-Like Peptide-1(9-37) fusion Proteins suppress Hepatic Gluconeogenesis in Zebrafish Larva and Mice. **Diabetes** June (Supplement 1) 1925-P, 2015

47. Li X, Sun W, Wang Y, Zhou Y, Xing J, Wen X, **Wang Q.** Glucagon-Like Peptide-1(9-37) Fusion Proteins Suppress Hepatic Gluconeogenesis in Zebrafish Larva and Mice **Can J Diabetes** October 2014Volume 38, Issue 5, Supplement, Page S67.

46. Prud'homme JG, Glinka Y, Purwana IN, Li X, Hasilo G, Paraskevas S, and **Wang Q.** Gamma-aminobutyric acid (GABA) ameliorates human islet-cell survival. The Annual Meeting of the Islet Society, Vancouver, July 2013

45. Prud'homme GJ, Glinka Y, and **Wang Q.** GABA exerts anti-inflammatory and immunosuppressive effects. The American Association of Immunologists Annual Meeting, Honolulu, Hawaii, May 3-7, 2013

44. Wang Z, Purwana I, Zhao F, Zhao S, Chan K, He B, Soukhov L, Korytnikov R, Li X, Wang Q. Beta-cell Proliferation is Associated with Increased GABAA Receptor Expression in Pancreatomized Mice. Can Diabetes Association Annual Meeting, Vancouver BC, Oct, 2012

43. Zhao F, Huang F, Li X, **Wang Q** Nodal Induces Apoptosis Through the Activation of ALK7 Signaling Pathway in Pancreatic β -cells. **Can J Diabetes** October 2012(Vol. 36, Issue 5,Page S64)

42. Soltani N, Qiu H, Aleksic M, Glinka Y, Jin T, Zhang H, Lu W-L, Feng Z-P, Prud'homme GJ, and **Wang Q**. A novel therapeutic strategy for the treatment of type 1 diabetes in mice **Can J Diabetes** 2011 Sept 35(4) 39.
41. Shao W, Wang D, Chiang A, Ip W, Xu F, Wang Q, and Jin T. Functional knockdown of TCF7L2 in brain and gut proglucagon-expressing cells impairs glucose disposal and food intake. **Can J Diabetes** 2011 Sept 35(4) 417.
40. Wang D, Zhu L, Shao W, Chiang A, Zhang N, Columbus J, Wen X, Wang Q, and Jin T. Knockdown the function of TCF7L2 in transgenic mice leads to impaired glucose tolerance after high fat diet feeding. **Diabetes** June (Supplement 1) 2026–P, 2010.
39. Columbus J, Jiang A, Wang D, Zhang N, Shao W, Gaisano HY, Wang Q, Irwin DM, and Jin T. Insulin treatment and high fat diet feeding reduces the expression of three TCF genes in rodent pancreas. **Diabetes** June (Supplement 1) 1242–P, 2010.
- 38, Liu R, Xue J, Jia W. W, Ma D, and **Wang Q**
Site-specific genomic integration strategies for sustained glucagon-like peptide-1 receptor-dependent control of energy and glucose homeostasis. **Diabetes** June (Supplement 1) 1662–P, 2010.
- 37, Bansal P, Wang S, Zhang N, Xiang Y.Y, Lu W.Y. and **Wang Q**.
Insulin down-regulates the GABA-GABA_AR signalling in beta-cells. **Diabetes** June (Supplement 1) 1432-P, 2010.
- 36, Tang M, Zhao F, Zhang N, Chen K, Amfilochiadis A, Hu R, Jin T, Peng C, and **Wang Q**. Nodal induces apoptosis, suppresses proliferation through the activation of ALK7 and multiple downstream signaling pathways in pancreatic β -cells. **Diabetes** June (Supplement 1) 456–PP, 2010.
- 35, Zhao F, Zhang N, Wang Q. The Effect of Peroxiredoxin II on the Modulation of beta-Cell Apoptosis. **Diabetes** June (Supplement 1) 1679-P, 2010.
- 34, Chen K, Gupta S, Zhang N, Prud'homme G and **Wang Q**.
GLP-1/hIgG2 Fc fusion chimera as potent long acting GLP-1 receptor agonist. **Diabetes** June (Supplement 1) 1632-P, 2010.
- 33, Liang Y, Gupta S, Chen K, Ni H, and **Wang Q**.
Exendin-4/IgG-Fc fusion protein, a GLP-1 receptor agonist, has reduced immunogenicity by binding inhibitory Fc γ RIIb. **Diabetes** June (Supplement 1) 1652-P, 2010.
- 32, Liu S, Zhao F, Chiang A, Jin T, and **Wang Q**.
Insulin-detemir stimulates cAMP-response element-binding protein (CREB) phosphorylation through the activation of ERK1/2 in GLP-1 secreting gut cells. **Diabetes** June (Supplement 1) 1433-P, 2010.

- 31, Maharaj A, Zhu L, Li H, Chen K, Zhang C-Y, Jin T and **Wang Q**.
Effects of expression of exogenous glucagon receptor in the skeletal muscle on glucose homeostasis. **Diabetes** June (Supplement 1) 2573-PO, 2010.
- 30, Zhao F, Wang Q. The role of peroxiredoxin II in the modulation of beta-cell apoptosis".The 3rd International Conference on Advanced Technologies & Treatments for Diabetes (ATTD). Oct 20, 2009
- 29, Song L, Chiang A, Sun J, Jin T, **Wang Q**
Comparison of the effect of human insulin and insulin-detemir on proglucagon gene expression via cross-talking with β -catenin, an effector of the Wnt signaling pathway. 91th Annual Meeting Endo 2009
- 28, Soltani N, Ng T, Qiu H, Zhang H, **Wang Q**.
GABA improves diabetic symptoms in streptozotocin-induced hyperglycemic mice through attenuation of the inflammatory immune response and enhancing islet beta-cell mass. 90th Annual Meeting Endo 2008
27. Soltani N., **Wang Q**.
GLP-1/IgG-Fc Fusion Protein Enhances beta-Cell Mass and Improves Diabetic Symptoms in Type 1 and Type 2 Diabetes Mouse Models. Oral presentation at 89th Annual Meeting Endo 2007 Page OR-35-5, 2007.
26. Xu G, Zhou H, **Wang Q**, Auersperg N, Peng C
The Nodal-ALK7 pathway induces apoptosis through up-regulation of Bax and down-regulation of Xiap in normal and malignant ovarian epithelial cell lines. The 3rd National Conference on Ovarian Cancer Research, page 19, 3-3, 2006.
25. Kumar M, Zhang N, Xu X, Gaisano H, Peng C, **Wang Q** (oral presentation)
Elevation of ALK7 induces beta cell apoptosis via suppression of Akt activation and the activation of the Smad2-caspase-3 cascade. **Diabetes** June (Supplement 1) 251-OR, 2006.
24. Huang K, Oudit G, Backx P. **Wang Q**
Phosphatidylinositol 3-Kinase- γ Mediates Glucagon-Like Peptide-1-Induced Inhibition of Glucagon Secretion in Mice. **Diabetes** June (Supplement 1) 1620-P, 2006.
23. El-kholy W, Xue T, Diao J, **Wang Q**, Stieber J, Li RA, Tsushima RG, Wheeler MB
Hyperpolarization-activated cyclic-nucleotide-modulated channels in the B-Cell. **Diabetes** June (Supplement 1) 1688-P, 2005.
22. Dong H, Hyder A, **Wang Q**, Lu WY.
Propofol enhances insulin secretion in INS-1 cells. **Canadian Journal of Anesthesia** 51:A66, 2004

21. Kumar M, El-kholy W, Hyder A, Deng S, Wheeler M, and **Wang Q**. (oral presentation)
Expression of functional HCN channels in the pancreatic alpha cells. **Diabetes June** (Supplement 1) 345-OR, 2004.
20. Hyder A, Dong H, Kumar M, Lu WY, **Wang Q**.
Regulation of Insulin Secretion by GABA in INS-1 Cells. **Diabetes June** (Supplement 1) A-357, 2004.
- 19 Xu E, Zhang N, Obata Y, Ebina Y, **Wang Q**.
The Involvement of Akt in Modulating Glucagon Release from INR1-G9 Cells. **Diabetes June** (Supplement 1) A-360, 2004.
18. Xu E, Chow L, Zhang N, Giacca A, **Wang Q**.
Inhibition of glucagon secretion by glucose via insulin-PI3K/Akt-GABA_AR pathway. **Diabetes June** 52 (Supplement 1) A-339, 2003.
17. Li L, **Wang Q**, Rhodes CJ, Brubaker PL.
Role of Akt in the stimulation of beta- (INS-1) cell proliferation by glucagon-like peptide -1. **Diabetes June** 52 (Supplement 1) A-360, 2003.
16. El-Kholy W, MacDonald P, Lin JH, Wang J, Fox J, Light P, **Wang Q**, Tsushima R Wheeler M.
The phosphatidylinositol 3-kinase inhibitor LY294002 potently blocks K(V) currents in beta cells via a direct mechanism. **Diabetes June** 52 (Supplement 1) A368, 2003.
15. **Wang Q**, Brubaker L.
Akt1 mediates GLP-1-stimulated β cell proliferation and protection from apoptosis in INS-1 cells. **Diabetes June** (supplement) 2002
14. **Wang Q**, Brubaker L. (oral presentation)
GLP-1 treatment prevents the onset of diabetes in young db/db mice. **Diabetes June** (supplement) 123-OR, 2001.
13. **Wang Q**, Liu L., Ahmadian G., Ju W., Wang Y.T.
Akt phosphorylates the GABA_A receptor and hence regulates its subcellular distribution. **Proce. 6th Chinese Peptide Symp.** P46 June 2000. Shanghai, China.
12. Liu L. **Wang Q**, Man H.Y., Wang Y.T.
Activation of calcineurin phosphatase mediated both insulin and low frequency stimulation induced LTD in hippocampal neuron. **Neurosci. Abs.** 2000.
11. Man H.Y., **Wang Q**, Lu W.Y., Lu Y.M., Ahmadian G., Becker L.E., Wymman M., Roder J., MacDonald J.F., Wang Y.T.
Long-term potentiation of excitatory synaptic transmission through activation of AMPA receptor-associated PI3-kinase. **Neurosci. Abs.** 2000.

10. **Wang, Q.**, Liu, Z, and Klip, A.
Cloning and characterization of GFP and myc tagged GLUT4 in L6 muscle cells: A new model for biochemical and morphological studies of insulin action on glucose transport. **Canadian J. Diabetes Care** 23(3), 124, 1999.
9. **Wang, Q.**, Bilan, PJ, Somwar, R, Liu, Z, Jing, J, Ebina, Y, Woodgett, J, and Klip, A
Protein kinase B α is (PKB α) is necessary for insulin stimulated GLUT4 translocation in L6 muscle cells. **Mol. Biol. Cell** (supplement): 1183, 1998.
8. **Wang, Q.**, Khayat, Z, Kishi, K, Ebina, Y, Klip, A
The actin cytoskeleton participates in translocation of GLUT1 and GLUT4 by insulin in fat and muscle cells. **Diabetes** 47(supplement 1) 249A, 1998
7. Somwar, R, **Wang, Q.**, Klip, A
Translocation of glucose transporters and stimulation of glucose transport require an intact cytoskeleton and a PLA activity. **Proce. Int. Res. Sympo. Diabetes** P62 Oct. 1996. Toronto, Canada.
6. **Wang, Q.**, Klip, A
Opposite insulin action on focal adhesion kinase in wild type and insulin receptor overexpressing cells. **Diabetes** 46 (supplement 1) 202A, 1997
5. Tsakiridis, T, **Wang, Q.**, Taha, C, Grinstein, S, and Klip, A
Involvement of the actin network in the propagation of the insulin signaling cascade. **Soc. Gen. Physiol. Ser.** P49a, 1996.
4. **Wang, Q.**, Tsakiridis, T, and Klip, A
Cytochalasin D inhibits the insulin-stimulated glucose transport and glucose transport translocation to the plasma membrane in 3T3-L1 adipocytes. **FASEB J.** 10 (3) A536, 1996
3. Volchuk A, **Wang Q.**, Bennet MK, Klip A
Syntaxin 4 participates in insulin-dependent glucose transport and is phosphorylated in 3T3-L1 adipocytes. **Mol. Biol. Cell** 7: 2609-2609, Suppl. 1996.
2. **Wang, Q.**, Aerts, T, and Clauwaert, J
Expression of the insulin-like growth factors type I and type II receptors in rat glial cells as a function of the growth phase. **Proce. Sympo. 6th FAOB** (Federation of Asian and Oceanian Biochemists) P68(II-33). Shanghai, China 1992.
- 1, Gu, ZZ, Jia, W, Cui, RJ, **Wang, Q.**, and Wu, W
The effect of high oxygen tension on diameter of pial arterial and its possible receptor mechanism. **Proce. Symp. Chinese Physiol. Soc.** Shanghai, China 1985.

2. Invited Lectures

i) Invited Chair, Annual Scientific Symposium entitled “Cellular Metabolism: from molecular structure to diseases”, Society of Chinese Bioscientists in America. February 2008.

ii) Invited Chair Scientific Session 1 “20th Annual Scientific Day”, Banting and Best Diabetes Centre, Toronto, May 8, 2009.

iii) Invited to chair a symposium entitled: "The Glucagon Response to Hypoglycemia- Novel Regulators of Alpha Cell Function" at America Diabetes Association Annual Meeting (New Orleans, June 2009).

iv) Invited Session Chair. The Latest Breaking In Clinical Candidates Targeting Diabetes, Obesity and Lipid Disorders. 3rd Annual World Congress Annual World Congress of Endobolism-2013. Shaanxi, China. May 20-22, 2013

50. 人胰岛功能的调节及对血糖影响的机制. 中华医学会糖尿病学分会第十八次全国学术会议 Guangzhou, China November 5-8, 2014

49. 胰岛 α 细胞研究进展. 中华医学会糖尿病学分会第十八次全国学术会议 Guangzhou, China. November 5-8, 2014

48. Effects of GABA on human beta-cell regeneration: A road from mice to human. 中华医学会糖尿病学分会 1 型糖尿病学组 2014 年会 Nanjing, China, September 27-28, 2014.

47. Drug discovery in an academic setting: Translational diabetes research in the Wang lab. Banting and Best Diabetes Research Center—Eli Lilly Symposium. Toronto, November 9, 2015.

46. Effects of GABA on the endocrine system: islet cells and non-islet cells. Union Hospital Endocrinology Forum, Wuhan. July 4, 2015.

45. Effects of GABA on β -cell regeneration: A road from mice to men 2014 International Symposium on Clinical and Translational Medicine. Sub-session on “Translational Medicine for Metabolic Diseases”. Shanghai, China. May 30, 2014

44. Therapeutic strategies for type 2 diabetes: GLP-1 secretion and actions. 9th Jiaotong University Annual Diabetes Forum; Symposium topic: Gut and Diabetes; Shanghai, China. May 31, 2014

43. Effects of GABA on human beta cell regeneration: A road from mice to man. BIO-Tianfu International Symposium on Major Innovative Medicine R&D and Disease Model. Chendu, China. Nov 1, 2014.

42. Potential therapeutic effects of GLP-1 in cardiac diseases. University of Michigan Medical Center, Ann Arbor, MI, USA. May 17, 2014.

CURRICULUM VITAE -Qinghua Wang

41. Basic and clinical aspects of GABA in treating type 1 diabetes. Chinese Diabetes Society T1D Group Annual Meeting. Nanjing, China. September 27, 2014
40. Mouse model for the study of human islet beta cell regeneration. China-U.S Innovation Dialogue on Gene Engineering Animal Models and Medical Research Symposium. Dalian, China. Nov 23, 2014.
39. Role of glucagon secreting alpha cells in the regulation of islet beta cell function and glucose homeostasis. Chinese Diabetes Society Annual Meeting. Guanzhou, China. Nov. 6, 2014.
38. Mechanisms underlying the regulation of islet beta cell regeneration: Physiology and Pathology. Guanzhou, Chinese Diabetes Society Annual Meeting. China. Nov. 6, 2014.
37. Invited Speaker. Role of Intra-islet Cell Cross-talk in the Regulation of Glucose Homeostasis. 3rd Annual World Congress of Endobolism-2013. Shaanxi, China. May 20-22, 2013
36. Session Chair. The Latest Breaking In Clinical Candidates Targeting Diabetes, Obesity and Lipid Disorders. 3rd Annual World Congress Annual World Congress of Endobolism-2013. Shaanxi, China. May 20-22, 2013
35. GLP-1 based therapies: looking beyond glycemic control. Shanghai Science and Technology Council. Shanghai, China October 22, 2012.
34. Role of islet transmitter in regulating islet cell secretion and function. Beijing University Medical School. Beijing, China October 10, 2012.
33. GABA, New Avenue in Diabetes Research: Preclinical Evidence and Clinical Perspective. Invited Lecture at The Society of Chinese Bioscientists in America (SCBA), Toronto, Canada, June 26, 2012.
32. GABA is an Excitatory and Inhibitory Transmitter in the Regulation of Insulin and Glucagon Secretion. Featured speaker at 3rd Annual GNF-JDRF Diabetes Research Symposium, San Diego, California, April 25, 2012
31. GABA, the yin and yang of islet transmitter in regulating islet cell function. The University of Texas Southwestern Medical Center. Dallas, Texas. USA Nov 29 2011
30. Is GABA a potential therapy for type 1 diabetes? St Michael's Hospital Foundation August 17, 2011 (about 100 potential donors participated in the lecture)
29. Pharmacokinetics and pharmacodynamics of humanized GLP-1-IgG fusion proteins: their efficacy, potency, and immunity. Qingdao Medical School Hospital, Qingdao, China August 3, 2011.
28. The role of gut and pancreatic hormones in insulin resistance and diabetes treatment. 13th Society of Chinese Bio Scientist Association in North America (SCBA) International Conference, Guangzhou, China July 28, 2011 (Sponsored by CIHR funding).

27. Intra-islet cell interaction in the regulation of islet cell function and glucose homeostasis. Research Institute, St Michael's Hospital, Toronto. Dec. 17, 2010.
26. Islet transmitters and their roles in regulation of islet hormone secretion and glucose homeostasis. York University, Toronto, Canada, November 2, 2009
25. Intra-islet cross-talk: the role of islet transmitters. Dalhousie University, Halifax, Canada, May 4, 2009.
24. Development of long-acting GLP-1 analogues for treating diabetes. Toronto General Hospital, University Health Network Jul 16, 2008.
23. Intra-islet insulin action and insulin resistance. University of Western Ontario, Ontario, Canada. April 29, 2008
22. Mechanism of alpha cell dysfunction and diabetic hyperglycemia. Dalhousie University, Halifax, Canada, Mar 27, 2008.
21. GLP-1/IgG-Fc fusion protein enhances beta-cell mass and improves diabetic symptoms in diabetic mouse models. Lawson Health Research Institute, University of Western Ontario, London, Canada Oct 2, 2007.
20. Novel GLP-1 fusion peptides as potential therapies for the prevention and treatment of diabetes. Medical Rounds, St Michael's Hospital, Toronto, Canada July 18, 2007.
19. Strategy involving enhancement of beta cell mass in prevention and treatment of diabetes. 3rd International Diabetes Forum, Shanghai, China. May 18, 2007
18. New therapies for type 1 and type 2 diabetes using novel GLP-1/IgG-Fc fusion peptide. Sanofi Pasteur Canada. Toronto, Canada. Nov 14, 2006.
17. Development of novel glucagon-like peptide-1 (GLP-1) for the prevention and treatment of diabetes. Research Institute, St Michael's Hospital, Toronto. Nov 3, 2006.
16. Mechanism by which glucose inhibits glucagon secretion from pancreatic alpha cells. Institute for Enzyme Research, University of Tokushima. Tokushima, Japan (2006).
15. Is enhancement of beta cell mass the pathway curing diabetes? Society of Chinese Bio Scientist Association in North America (SCBA). Toronto (2006)
14. New insights on the regulation of glucagon secretion from islet alpha cells and its importance in diabetes. Endocrinology and Metabolism, St Michaels' Hospital. Toronto (2006).
13. Crosstalk between islet beta cells and alpha cells, how is this important to blood glucose homeostasis--insulin action, glucagon secretion and glycemic control. Faculty of Medicine, Tehran University. Tehran, Iran (2006).
12. The mechanism underlies regulation of glucagon secretion upon hyperglycemia. 11th National Congress of Physiology and Pharmacology. Kerman, Iran (2006).
11. Intra-islet hormonal regulation in controlling glucose homeostasis. Oxford Centre for Diabetes, Oxford, UK (2006).

10. Novel GLP-1 fusion peptide and its effect on normalization of glucose tolerance in db/db/mice. Novo Nordisk, Copenhagen, Demark. (2005). **Novel GLP-1 fusion peptides as potential therapies for the prevention and treatment of diabetes.**
9. New strategy for the Prevention and treatment of diabetes: enhancement of islet beta cells by novel GLP-1 peptides. Research Institute St. Michael's Hospital. University of Toronto. Toronto (2005).
8. GLP-1 action on body glycemic control. Institute of Endocrinology Research, Rui Jing Hospital. Shanghai, China (2004).
7. Novel mechanisms of suppression of glucagon secretion by glucose Research Institute St. Michael's Hospital. University of Toronto (2004).
6. The effects of enhancing beta cell mass in prevention of on set of type 2 diabetes. Endocrinology and Metabolism, St Michaels' Hospital. Toronto (2003).
5. Looking into Diabetes: from Peripheral to the beta cells. Department of Physiology (EDRG), University of Toronto (2002).
4. Glucose transporters and glycemic control. Julia McFarlane Diabetes Research Centre, University of Calgary, Calgary (2001).
3. Molecular mechanism of insulin action on GLUT4 translocation. Endocrinology and Metabolism, St Michaels' Hospital. Toronto (2001).
2. Role of Akt in the islet cells. Banting and Best Diabetes Centre Annual Meeting. Toronto (2001).
1. Akt phosphorylates the GABAA receptor and hence regulates its subcellular distribution. 6th International Peptide Symposium, Shanghai. June 2000.

F. TEACHING AND DESIGN

1. Undergraduate Courses Taught (University of Toronto)

PSL 320Y(Summer) Human Physiology (Cardiovascular System, 9 hours p.a.; 2001-2003. Designed 25 multiple choice. Course Coordinator: J. Winslow).

PSL 497H Scientific Communication (provided individual supervision, +10 hours; 2004. Course Coordinator: V.M. Watt).

PSL 372H Intra-Islet Hormonal Secretion and Regulation (1 hour lecture, 2003-2008. Course Coordinator: C.J. Perumalla).

CURRICULUM VITAE -Qinghua Wang

PSL 425H Integrative Metabolism and Its Endocrine Regulation (2 hours lecture, 2002, 2003. Designed 4 written exams. Course Coordinator: A. Giacca).

Life Science Summer Program Physiology (1 hour lecture, 2001).

BBDC Summer Research Program (1 hour lecture, 2002-2005, 2007, 2008).

Life Science Summer Program Physiology (1 hour lecture, 2006,2007).

2. Graduate Courses Taught (University of Toronto)

PSL 424H/1024S Endocrinology and Neuroendocrinology (Insulin Signaling and Actions, 2 hours lecture, 2003 -2004. Course Coordinator: D.D. Belsham).

PSL 1034H Advanced Topics in Physiology: Metabolic Disorders (2 hrs per week for 15 weeks, 2004, 2006. Course Coordinator: M.B. Wheeler).

PSL 374 Advanced Physiology Laboratory: Endocrine Molecular Biology (15 hrs total, Jan Feb 2008, Coordinator: C.J. Perumalla)

PSL 1048H Advanced Topics in Physiology: Translational Physiology (2 hrs per week for 15 weeks, 2011. Course Coordinator: L. Schlichter).

G. GRADUATE STUDENT THESIS SUPERVISION

1. Graduate Students

Elaine Xu (Primary Supervisor. M.Sc. “Glucose-inhibition of Glucagon Secretion via the Insulin-PI3K-Akt-GABA/GABAAR Pathway”. Supervised 2002-2004, Master Degree Awarded 2004).

Karena Huang (Primary Supervisor. M.Sc. Glucagon-like peptide 1 induced suppression of glucagons secretion from pancreatic alpha cells: studies using phosphoinositol 3-kinase knockout mice”. Supervised 2004-2006, Master Degree Awarded 2006).

Amin Marahaj (Primary Supervisor. M.Sc. “Role of glucagon in regulation of glucose homeostasis: study of transgenic mice”. Supervised 2006-2009, Jan 2009 Master Degree Awarded).

Paul Bansal (Primary Supervisor. M.Sc. “Electrophysiological study of islet alpha cell function and secretion”. Supervised 2006-2010, July 08, 2010, Master Degree Awarded).

Fang Zhao (Primary Supervisor. M.Sc. “ALK7 and beta cell death”. Supervised 2007-2011).

Nepton Soltani (Co-Supervisor. Ph.D. “Effect of oral magnesium sulfate administration on

CURRICULUM VITAE -Qinghua Wang

blood pressure and lipid profile in streptozotocin diabetic rat”. Co-Supervised 2003-2005. Tehran Medical Science University, Iran. I was the Primary Supervisor during her Foreign-training period from Feb 2005-Sept 2006. “Thesis title: Effect of in vivo expression of GLP-1/IgG-Fc fusion protein on regulation of beta-cell mass glucose homeostasis in type 1 diabetic mice”).

Lingyun Zhu (Primary Supervisor. Ph.D. “GLP-1 cell therapy in diabetic mice”. Sept 2007 - April 2010).

Alex Chiang (Co-Supervisor. Ph.D. “Insulin action and WNT pathway in GLP-1 production” Supervised 2008-present).

Qianyu Guo (Primary Supervisor. Ph.D. "Intra-islet cell interaction and glucose homeostasis" Supervised 2010-present)

2. Undergraduate Students

Project students:

Jeffery Ng (Sept 2002-Apr 2003, PSL498Y. “Localization of GABAA receptor in pancreatic tissues”).

Thomas Yoon (Sept 2002-Apr 2003, PSL498Y. “Localization of ALK7 in pancreatic tissues”).

Haya Sarras (Sept 2002-Dec 2002, PSL499Y. “GABA and glucagon secretion”).

Alice Park (Sept 2003-Apr 2004, PSL498Y. “Role of HCN in modulating glucagon secretion from the alpha cells”).

Chris Lam (Sept –Dec 2004, PSL497H. “Proteomics approaches to study GLP-1 action on islet beta cell function”).

Lesley-Ann Chung (Sept 2003-April 2004, NFS494Y1, “Lycopene and cell apoptosis” Co-Supervisors: Drs. A.V. Rao, L.G. Rao)

Roxabbe Labelle (Sept 2004-Apr 2005, NUT299Y. “Nonalcoholic steatohepatitis, ectopic fat, and the glycemic index”. Co-supervisor: Dr. D Jenkins)

Emily Pei'en Fan (Sept 2005-Apr 2006, PSL299Y. “islet cell mass measurement in PI3kgamma knockout mice”).

Tammy Lin (Sept 2005-Apr 2006, PSL299Y. “islet cell mass measurement in PI3kgamma knockout mice.

Tiffany Ng (Sept 2005-Apr 2006, PSL299Y. “Effect of GABA on modulating glucose

CURRICULUM VITAE -Qinghua Wang

levels in mice”).

John Kwok (Sept 2005-Apr 2006, PSL299Y. “Analysis of 2DG images using non-dynamic software”).

Jasmin Tong (Sept 2005-Apr 2006, PSL299Y. “Measurement of islet mass using immunostained pancreas sections”).

Amin Maharaj (Sept 2005-Jan 2006, PSL498Y. “Using pancreas perfusion technique to study glucagon secretion in mice”. Co-supervisor: Dr. M. Vranic)

Linan Chen (2006- 2007, PSL498Y. “Potential role of zinc finger proteins in regulating on beta-cell growth”).

Nestor Fernandez (2006- 2007, PSL498Y. “Role of heat shock protein in regulation of beta-cell growth”).

Fang Zhao (2006- 2007, HMB499Y. “Regulation of peroxiredoxin 2 on the beta-cells under oxidative stress”).

Wendy Li (Research Project, 299Y, “Quantitation of islet cell mass”, Department of Arts & Science, 2006-2007)

Olga Kciuk (Research Project, 299Y, Department of Arts & Science, 2006-2007)

Joyce Jeyaratnam (Sept 2007- Apr 2008, HMB499. Biophysical and biochemical studies of GPCR”)

Joyce Zhang (Research Project, PSL299Y, Department of Physiology, 2007-2008)

Jane Meng (Research Project, PSL299Y, Department of Physiology, 2007-2008)

Victor Lo (ESC 499, Department of Engineering Science 2008-2009)

Linda Lee (PSL498Y, Department of Physiology, 2008-2009).

Zhu Cui (PSL299/399Y, Department of Physiology, 2009-2010)

Janice Pan (PSL299/399Y, Department of Physiology, 2009-2010)

Natalie Yavorska (PSL299/399Y, Department of Physiology, 2009-2010)

Connie Wang (HMB499, Department of Human Biology, 2010-2011)

Amirah Momen (PSL299/399Y, Department of Physiology, 2010-2011)

CURRICULUM VITAE -Qinghua Wang

Jenniferpy Lee (PSL299/399Y, Department of Physiology, 2010-2011)

Tianjiao Tong (PSL299/399Y, Department of Physiology, 2010-2011)

Kenny Chan (HMB499, Department of Human Biology, 2011-2012)

Xiaoxuan Zhao (HMB499, Department of Human Biology, 2011-2012)

Betty He (PSL299/399Y, Department of Physiology, 2011-2012)

Lena Soukhov (PSL299/399Y, Department of Physiology, 2011-2012)

Roman Korytnikov (PSL299/399Y, Department of Physiology, 2011-2012)

Richard Yang (PSL299, Department of Physiology, 2012-2013)

Vincent Chan (PSL498Y, Department of Physiology, 2012-2013)

Eddie Shen (PSL498YY, Department of Physiology, 2013-2014)

Anmol Gupta (PCL297H, Pharmacology and Toxicology Department, UofT, 2013-2014)

Summer Students

Vid Thayalan (Summer student, Co-supervisor: YT Wang, 2000)

Andrea Tropea (Life Science Program Physiology, Co-supervisor: P Brubaker, 2001)

Lorraine Chow (BBDC Summer Research Program, 2002)

James Kuo (BBDC Summer Research Program, 2003)

Rami Bishay (St. Michael's Hospital, Endocrinology, 2004)

Van Cabrera (St. Michael's Hospital Research Institute, 2004)

Stephanie Siu (BBDC Summer Research Program, 2004)

Shiying Liu (BBDC Summer Research Program, 2005)

Keran Ma (St. Michael's Hospital Research Institute, 2006)

Jenny Limcangco (Life Science program Physiology, 2006)

Tugba Demirci (IMS International Summer Program, 2007)

Linan Chen (St Michael's Hospital Research Institute. 2007).

CURRICULUM VITAE -Qinghua Wang

Nestor Fernandez (Life Science Program Physiology, 2007).

Fang Zhao (St. Michael's Hospital, Endocrinology, 2007).

Jeffery Yu (BBDC Summer Research Program, 2007; co-supervisor: Dr. Xiao-Yan Wen)

Meng Li (BBDC Summer Research Program, 2008)

Joyce Jeyaratnam (SMH Summer Research Program, 2008).

Joy Qu (SMH Summer Research Program, 2009)

Min Nie (IMS International Summer Program, 2009)

Amy Yuan (SMH Summer Research Program, 2010)

Jeniffer Chen (SMH Summer Research Program, 2010)

Tai Ma (SMH Summer Research Program, 2011)

Anjali Lobo (SMH Summer research Program, 2011)

Akshaya Tatkase (SMH Summer research Program, 2011)

Hyun Ryu (SMH Summer research Program, 2011)

Akshay Tatkase St. Michael's Hospital Summer Research Program Award, 2012

Xinyun Liang UROP Summer Program Award (Physiology, U of T), 2012

Xin Xing IMS International Summer Program, Medical School, Sandong Uni
2012

Zhilong Cao IMS International Summer Program, Medical School, Sandong Uni

Maggie Zhou Volunteer, McMaster University, 2012

Susanne Wang Volunteer McGill University, 2012

Xinyun Liang UROP Summer Program Award (Physiology, U of T), 2013

Richard Yang (BBDC Summer Research Program, 20114)

Eddie Shen (UROP Summer Program Award, Physiology, U of T, 2014)

3. Postdoctoral Fellows

CURRICULUM VITAE -Qinghua Wang

Dr. Mohan Kumar (Mar 2003 – 2006, “Molecular mechanism of glucagon secretion”).

Dr. Ayman Hyder (Aug 2003 – Mar 2004, “Effect of GABA on insulin secretion”)

Dr. Kelly Zhang (Feb 2004 – Mar 2005, “Proteomic study of beta cell apoptosis”)

Dr. William Ju (July 2004- Feb 2005, “Molecular mechanism of glucagon secretion”)

Dr. Nepton Soltani (Feb 2006- 2009, “Mouse models of diabetes”)

Dr. Yi Zhang (Feb 2005-Apr 2008, Co-Supervisor: Dr. M. Wheeler. “Ion Channels and islet functions”)

Dr. Hongmin Qiu (Sept 2006-Aug 2009, “in vivo mouse models of insulin resistance and diabetes”)

Dr. Yaming Liang (June 2007- Aug 2008), “Efficacy and immunity of GLP-1/Fc fusion proteins”)

Dr. Kui Chen (June 2007- 2010, “Alpha cell therapy—novel strategy in preventing diabetes in diabetic mice”)

Dr. Tom Tang (Jan 2008- 2009, “Role of ALK7 in modulation of beta cell function”)

Dr. Tao Sun (Aug 2008-July 2009, “Non-serum mammalian cell culture system for upscale protein production”)

Dr. Shenghao Liu (July 2009- June 2010, “Molecular mechanism of islet cell secretion”)

Dr. Sandeep Gupta (July 2009- 2010, "immunity of GLP-1/Fc therapy")

Dr. Jihong Lian (Aug 2009-July 2010, "Novel nuclear protein in regulating beta-cell function")

Dr. Fengjie Huang (Sept 2010- Aug 2011, transgenic mouse models of diabetes)

Dr. Xiaoming Li (Oct 2010-present)

Dr. Zhaoxia Wang (Oct 2011-2012)

Dr. Indri Nuryani Purwana (Apr 2012-2014)

Dr. Dong Ok Son (July 2012-present)

Dr. Juan Zheng (December 2012-2014)

Dr. Wenjuan Liu (November 1, 2015-

4. Research Technologists

Jianxin Zhu (Supervised Aug 2002-Feb 2003, “Isolation of islet cells from the rat”)

Nina Zhang (Supervised Sept 2002-present. “Islet cell physiology”)

Lifang Song (Supervised Aug 2008-present. “Insulin action and GLP-1 production”)

5. Graduate Student Supervisory Committees

Zeenat Asghar (M.Sc. Department of Physiology, Supervisor: M. Wheeler. 2002-2004)

Holly Douglas (M.Sc. Department of Physiology, Supervisors: M. Vranic/S. Matthews 2002-2004)

Daphne Yau (M.Sc. Department of Physiology, Supervisor: M. Wheeler. 2002-2004)

Joel Perrella (M.Sc. Institute of Medical Science, Supervisor: B.R. Bhavnani. 2003-2005)

Gareth Lim (Ph.D. Department of Physiology, Supervisor: P. Brubaker. 2004-2007)

Diana Islam (M.Sc. Department of Medicine, Supervisor: T. Jin. 2005-2007)

Jassica Yao (Ph.D. Department of Physiology, Supervisors: M. Vranic/S. Matthews 2003-2010)

Michael Kiraly (Ph.D. Department of Physiology, Supervisor: M. Vranic 2006-2008)

Xiaomiao Lan (Ph.D. Department of Nutritional Science, Supervisor: Dr. T Wolever, 2007-2011)

Nathan Chang (M.Sc. Department of Physiology, Supervisor Dr H. Gaisano, 2009-present).

Joshua Columbus (M.Sc. Department of Physiology, Supervisor T Jin, 2008-present).

Alex Chiang, Insulin action and WNT pathway in GLP-1 production. (PhD. Department of Physiology, Supervisor T Jin, 2008-present)

Wilfred Ip, The hepatic role of TCF7L2/Wnt signalling in metabolic homeostasis (PhD. Department of Laboratory Medicine, Supervisor T Jin, 2010-present)

CURRICULUM VITAE -Qinghua Wang

Wing Hui, Development of a novel zebrafish system to screen for potential anti-diabetic drugs. (M.Sc. Department of Laboratory Medicine, Supervisor XY Wen, 2010-present)

Sarah Farr, The mechanism of glucagon-like peptide-1 (GLP-1) action on intestinal lipoprotein metabolism (MSc. Department of Laboratory Medicine, Supervisor K Adeli, 2011-present)

6. Graduate Student Thesis Examination Committees

Liang Chen (Chair, M.Sc. Aug 27, 2003. Institute of Medical Science. U of T, Supervisor: T. Jin).

Karen Inouye (Ph.D. Sept 10, 2003. Department of Physiology. U of T, Supervisor: M. Vranic).

Tao Liu (Ph.D. Sept. 14, 2004. Institute of Medical Science, U of T. Supervisor: T. Jin)

Jessica Yue (M.Sc. Nov 22, 2005. Department of Physiology, U of T. Supervisor: M. Vranic)

Nadeeja Wijeseekara (M.Sc. Sept 26, 2005. Department of Physiology, U of T. Supervisor: A. Klip)

Danitza Goche (Chair, M.Sc. Sept 26, 2005. Department of Physiology, U of T. Supervisor: M. Vranic)

Michael Kiraly (CIHR Grant Oral Defense, May 26, 2006. Department of Physiology, U of T. Supervisor: M. Vranic)

Wasim El-Kholy (CIHR Grant Oral Defense, Mar, 2005. Department of Physiology, U of T. Supervisor: M.B. Wheeler)

Holly Bates (CIHR Grant Oral Defense, Mar, 2005. Department of Physiology, U of T. Supervisor: M. Vranic).

Diana Islam (M.Sc. July 20, 2007. Department of Laboratory and Medicine, U of T. Supervisor: T. Jin).

Joanne Hsieh (M.Sc—PhD transfer. July 27, 2007. Department of Biochemistry, U of T. Supervisor: K Adeli).

Holly Bates (Ph.D. Oral Defense, Aug, 20, 2007. Department of Physiology, U of T. Supervisor: M. Vranic).

Alex Koshkina (M.Sc. Defense, Sept 30, 2008. Department of Biochemistry, U of T. Supervisor: A. Klip).

CURRICULUM VITAE -Qinghua Wang

Grace Chen (Chair, Ph.D. Defense. Nov 25, 2008. Thesis and Oral Defense, Department of Immunology, U of T. Supervisor: Dr R. Rottapel)

Niju Narayanan (External examiner, July 22, 2009. PhD Thesis and Oral Defense, Department of Chemical Engineering, U of Waterloo. Supervisor: Dr P. Chou)

Paul Bansal (M.Sc. Defense, June 30, 2010. Department of Physiology, U of T. Supervisor: Q Wang)

Nadeeja T Wijesekara (Ph.D. Thesis Defense, August 10, 2010. Graduate School, U of T. Supervisor: M Wheeler)

Jasmine Bahrami (Ph.D. Thesis Defense, August 16, 2010. Institute of Medical Science, U of T. Supervisor: D Drucker)

Jessica Yue (Ph.D Thesis Defense, Sept 27, 2010. Department of Physiology, U of T. Supervisor: M Vranic)

Fang Zhao (Msc thesis defense, Sept 16, 2011, Department of Physiology, U of T., Supervisor: Q Wang).

Marc Andrews (Msc thesis defense, December 6, 2011, Department of Physiology, U of T., Supervisor: H Ni).

7. Graduate Student Candidacy Examination Committees

Ryan Ting-A-Kee (Chair, Ph.D. Aug 27, 2004, Institute of Medical Science. U of T, Supervisor: Derek van der Kooy).

Edwin Kwan (Ph.D. Internal member, July 16, 2004, Department of Physiology, U of T. Supervisor: H. Gaisano).

Joanne Hsieh (Ph. D. External member, July 28, 2007, Department of Biochemistry, U of T. Supervisor: Khosrow Adeli).

Michael Kiraly (Ph.D. Departmental Defense, Internal member, Feb. 21, 2006. Department of Physiology, U of T. Supervisor: M. Vranic)

Xiomiao Lan (Msc-PhD program transfer defense, Mar 19, 2008, Department of Nutritional Sciences, U of T. Supervisor: T. Wolever)

Diana Choi (Msc-PhD program transfer defense, Mar 19, 2009, Institute of Medical Science, U of T, Supervisor: Minna Woo.

Xiomiao Lan (PhD thesis defense, May 31 2011, Department of Nutritional Sciences, U of T. Supervisor: T. Wolever)

Wilfred Ip (Msc-PhD program transfer defense, August 12, 2011, Department of Physiology, U of T. Supervisor: T. Jin)

8. Physiology Internal Review Committee (U of T)

Dr T Jin's CIHR grant (Sept 2007)

Dr. M Wheeler's CIHR grant (Sept 2008)