Curriculum Vitae

# Michael J. Quon, M.D., Ph.D.

**Date: August 14, 2017**

**Contact Information:**
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## Education:

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| 1978-1982 | **B.S.** | Northwestern University, Evanston, IL<br>(Biomedical Engineering) |
| 1984-1987 | **Ph.D.** | Northwestern University, Evanston, IL<br>(Biomedical Engineering)<br>Thesis: A Mathematical Modeling and Computer Simulation Approach to the Study of Insulin Mediated Glucose Uptake.<br>Thesis Advisor: L. Arthur Campfield, Ph.D. |
| 1982-1984<br>1987-1988 | **M.D.** | Northwestern University, Chicago, IL |

## Post Graduate Education and Training:

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| 1988 – 1990 | Internal Medicine Residency Program, University of Chicago, Chicago, IL |
| 1990 – 1993 | Clinical Associate (Endocrinology)<br>Inter-institute Endocrine Training Program, NIH, Bethseda, MD<br>Mentor: Simeon I. Taylor, M.D., Ph.D |
| 1993 – 1995 | Senior Clinical Investigator, Diabetes Branch, NIDDK, NIH<br>Mentor: Simeon I. Taylor, M.D., Ph.D |

## Certifications:

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| 1989 | Diplomate of the National Board of Medical Examiners |
| 1993 | Diplomate, American Board of Internal Medicine |
| 1993 | Board Eligible in Endocrinology and Metabolism |

## Medical Licensure:

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| 1990 - Present | State of Maryland Medical License (Active) |

## Military Service:

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| 1990 – 2010 | Captain (O-6), United States Public Health Service, NIH |

## Employment History:

**Academic Appointments**:

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| 1995 – 2002 | Investigator (Tenure-Track)<br>Hypertension-Endocrine Branch, NHLBI, NIH, Bethesda, MD (Assistant Professor Tenure-Track equivalent based on nationwide search) |

2002 – 2010 Chief, Diabetes Unit and Tenured Senior Investigator
NCCAM, National Institutes of Health, Bethesda, MD
**Tenure awarded in 2002**
(Tenured Full Professor equivalent; based on uniform NIH-wide standards regarding international scientific reputation, substantially moving field forward, excellence in mentoring, and scientific service)

2011 – 2015 Professor of Medicine (with Tenure)
Department of Medicine, Division of Endocrinology, Diabetes & Nutrition
University of Maryland School of Medicine

2011 – 2015 Professor, Department of Physiology
University of Maryland School of Medicine

2011 – 2015 Professor, Graduate Program in Life Sciences, Molecular Medicine Program
University of Maryland School of Medicine

2011 – 2015 Member, Mid-Atlantic Nutrition Obesity Research Center

2012 – 2015 Associate Member, Greenbaum Cancer Center, Experimental Therapeutics Program

**Professional Society Memberships**:

1990 – present American Diabetes Association
1995 – present Council for High Blood Pressure Research, American Heart Association
1995 – present American Association for the Advancement of Science
2001 – 2007 Endocrine Society
2007 – 2011 New York Academy of Sciences

**Honors and Awards**:

1978 National Merit Scholar
1984 Walter P. Murphy Fellowship
1986 American Diabetes Association Student Research Award
1987 Juvenile Diabetes Foundation Medical Student Workshop VI (invited)
1987 1st place, Sigma Xi 12th Annual Graduate Student Research Symposium (Northwestern Chapter)
1987 Dean's Alpha Omega Alpha Student Research Award (Northwestern Chapter)
1992 Symposium on Endocrinology Under 35, Award for best oral presentation
1994 Travel Grant, 15th International Diabetes Federation Congress, Kobe, Japan
1996 Travel Grant, American Diabetes Association 56th Annual Scientific Sessions
1998 - present Fellow of the Council for High Blood Pressure Research
2001 - present Fellow of the American Heart Association
2001 American Diabetes Association Mentor Award
2003 American Diabetes Association (Takeda) Minority Mentor Award
2004 NIH Director's Award for Mentoring
2007 American Diabetes Association (Takeda) Minority Mentor Award
April 2010 K.P. Stephen Chang Visiting Professor, Department of Medicine
University of Hong Kong

**Administrative Service:**

**Local, National, and International Service**:

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| 2011 – 2015 | Member, General Clinical Research Center Advisory Committee<br>University of Maryland School of Medicine |
| 2010 - 2011 | ADA Scientific Sessions Meeting Planning Committee |
| 2010 - 2014 | Mid-Atlantic Diabetes Research Symposium Planning Committee |
| 2012 | International Scientific Advisory Board, 1st International Congress of Lipid Metabolism & Atherosclerosis |

**Editorial Service:**

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| 2001 – 2010 | Co-Editor-in-Chief, *Current Drug Targets - Immune, Endocrine, and Metabolic Disorders* |
| 2001 – 2004 | Editorial Board, *Journal of Clinical Endocrinology and Metabolism* |
| 2003 | Editorial Advisory Board, *Current Trends in Endocrinology* |
| 2004 – 2016 | Associate Editor, *Am. J. Physiol.: Endocrinology and Metabolism* |
| 2005 – 2011 | Editorial Board, *Journal of Biological Chemistry* |
| 2006 – 2010 | Editorial Board, *Journal of the Cardiometabolic Syndrome* |
| 2012 – present | Editorial Board, *CardioRenal Medicine* |
| 2012 - 2014 | Editor-in-Chief, *Reviews in Endocrine and Metabolic Disorders* |
| 2013 – present | Editorial Board, *Frontiers in Endocrinology* |
| 2014 – present | Associate Editor, *Frontiers in Cardiovascular Medicine* |

**Grant Review Service:**

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| 1994 – 2011 | American Diabetes Association (ADA) Research Grant Review Panel |
| 2015 – 2017 | American Diabetes Association (ADA) Research Grant Review Panel |
| 1995 – 2011 | Ad Hoc Reviewer for NIH, VA Merit Review, NIST, JDRF, Wellcome Trust, Israel Science Foundation, Endocrine Fellows Foundation |
| 2014 | NIH, NIMHD, Special Emphasis Panel, Biological and Genetic Research and Clinical and Translational Research Related Health Disparities Research (R01) |
| 2014 | CIDO, NIDDK, ad hoc reviewer, October |
| 2015 | Department of Defense, Peer Reviewed Medical Research Program, reviewer, March 12 |
| 2015 | CIDO, NIDDK, special emphasis section (ZRG1 EMNR-P 03), reviewer, March 13 |
| 2015 | SBIR Special Emphasis Panel (ZRG1 EMNR-W (10), reviewer, July 8 |

**Journal Ad Hoc Peer Review (1994 – present):**

*American Journal of Clinical Nutrition*
*American Journal of Physiology*
*Arteriosclerosis, Thromb., and Vascular Biology*
*Biochemistry*
*Biophysical Journal*
*Cell Signaling*
*Circulation Research*
*Circulation*
*Diabetes*
*Diabetes Care*
*Endocrinology*
*Endocrine Reviews*
*International Journal of Cardiology*
*Journal of the American College of Cardiology*
*Journal of Biological Chemistry*
*Journal of Clinical Endocrinology & Metabolism*
*Journal of Clinical Investigation*
*Journal of Theoretical Biology*
*Molecular and Cellular Biology*
*Molecular Endocrinology*
*Molecular Pharmacology*
*Nature Medicine*
*Trends in Endocrinology and Metabolism*

**Teaching Service**:

1985 – 1987 Teaching Fellow, Biomedical Engineering Department, Northwestern University
Courses in: Neurophysiology, Metabolic Physiology Laboratory, Renal, GI, and Metabolic Physiology

2003 – 2007 Foundation for Advanced Education in the Sciences (FAES)
Bioc 533M – The Molecular and Cellular Basis of Intercellular Communication. (Post-graduate level semester course given yearly at NIH with 15-20 students. I gave 2 hour lectures on "Receptor Tyrosine Kinase Signaling" each year for 5 years with excellent student feedback)

2004 Ross University School of Medicine, 1 day course "Update on Diabetes"
(I gave 1 hour lecture on "Assessing Insulin Sensitivity and Insulin Resistance in Humans" to entire medical school class)

2006 Catholic University of Chile
"Molecular and Physiological Mechanisms Underlying Vascular Complications of Diabetes" (1 week course completely designed and implemented by me. Seven full days of my lectures combined with my practical lab sessions. Administrative assistance of local faculty; 20 graduate students attending).

2006 National Cheng-Kung University Hospital, Division of Endocrinology, Tainan, Taiwan.
"Molecular and Physiological Mechanisms Underlying Metabolic and Vascular Actions of Insulin" (1 full week course completely designed and implemented by me. Seven full days of my lectures, supervised journal article presentations and discussions, and practical lab sessions. Administrative assistance of local faculty; 20 medical fellows attending).

2011 University of Maryland School of Medicine, Division of Endocrinology, Diabetes and Nutrition. Mini-course on "Methods for Measuring Insulin Sensitivity/Resistance in Humans, Animals, and Cells: advantages, limitations, and appropriate usage". 6 lectures given during 6 sequential Endocrine Grand Rounds for students, fellows, post-docs and faculty with attendance of approximately 50.CME credit given.

University of Maryland School of Medicine, Department of Physiology.
Membrane Biology Professor Rounds. December 2, 2011.

2012 University of Maryland School of Medicine, Department of Physiology.
Cell and Systems Physiology Course (GPILS 645). Lecture on Integrative Physiology – Reciprocal Relationships between Insulin Resistance and Endothelial Dysfunction. 1.5 h lecture, May 7, 2012.

University of Maryland School of Medicine, Professional and Career Development Workshops: Scientific Leadership and Project Management Seminars: Focus on Mentoring. Lecture and interactive discussion on "Optimizing your mentoring approach to match trainee character, talent, experience, and goals. 1 h session, October 10, 2012

University of Maryland School of Medicine, Department of Physiology.
Facilitator for GPILS Metabolism paper student presentation (Student Conference section 5). Facilitated discussion of student presentation of Science paper for 9 students. 1 h session, October 23, 2012.

2013 University of Maryland School of Medicine, Department of Physiology.
Cell and Systems Physiology Course (GPILS 645). Lecture on homeostasis: Glucose Homeostasis: Physiology, Pathophysiology, and Measurement Tools. 1.5 h lecture, May 7, 2013.

University of Maryland School of Medicine, Department of Physiology.
Cell and Systems Physiology Course (GPILS 645). Lecture on Integrative Physiology: Functional Cross-talk between Glucose Homeostasis and Hemodynamic Homeostasis in Health and Disease: Therapeutic Implications. 1.5 h lecture

2014 University of Maryland School of Medicine, Department of Physiology
Cell and Systems Physiology Course (GPLS 645). Lecture on Integrative Physiology: Functional Cross-talk between Glucose Homeostasis and Hemodynamic Homeostasis in Health and Disease: Therapeutic Implications. 1.5 h lecture

University of Maryland School of Medicine Summer 2014 Research Seminar
1 h lecture on diabetes and insulin resistance

2015 University of Maryland School of Medicine, MD, PhD Seminar Series
1 h lecture on insulin resistance and endothelial dysfunction related to diabetes

**Graduate Student Committees, Summer Students, Lab Rotation Students, Endocrine Fellows**

2011 Sruti Chandrasekeran, Endocrine Fellow
2012 – 2015 Jennifer Fox, Molecular Medicine, Cancer Biology
2013 –2014 Robert Wimmer, Biochemistry and Molecular Biology
2013 – 2015 Adam Fisch (MD/PhD program)
2013 Jan – Mar Dianaly Au, Molecular Medicine, Molecular Physiology and Pharmacology, lab rotation
2013 summer Kirsten LoGrange (SPORT program)
2014 Dec – Feb Amber Mueller, Molecular Medicine, lab rotation
2014 summer Sam Gangne SPORT program
2014 summer Albert Zhou (MD, PhD program) Molecular Medicine, lab rotation
2015 Chaoneng Wu, post-doctoral support for AHA

**Faculty Mentoring (publicactions, grants, etc.)**

Carissa Baker-Smith, Assistant Professor (K award; co-mentor)
Mao Fu, Assistant Professor (ADA grant; co-I)
Kashif Munir, Assistant Professor (publications, clinical protocols, grant proposal)
Nanette Steinle, Assistant Professor (grant proposals)
Xiao Jian Sun, Assistant Professor (ADA grant; co-I)
Zhekang Ying, Assistant Professor (NIH RO1; co-I)
Aiping Zhao, Assistant Professor (Novo Nordisk; co-I))
Jixin Zhong, Assistant Professor (NIH K01; co-mentor)
Kristi Silver, Associate Professor (publications)
Jeff Deiuliis, Assistant Professor (K01; co-mentor)

**Patents:**

PCT Application Serial No. PCT/US2011/045898, filed July 29, 2011, entitled, "Treatment of Metabolic Syndrome and Insulin Resistance with Citrus Flavanones".
US Patent Application No. 13/813,072, filed January 29, 2013

**Grant Support:**
**Active Grants**:

7/01/15 – 6/30/20 (Co-PI ; Co-PD, 20%)
NIH 1T32DK098107-01A1 Taylor (Lead PI) ; Quon (Co-PI, Co-PD)
Diabetes and its Metabolic Complications
Annual Direct Costs : $200,670
Total Direct Costs : $1,036,375

7/1/14 – 6/30/19 (Co-I, 10%)
NIH 1 R01 ES024516-01 Ying (PI)
Hypothalamic Inflammation and PM2.5 Exposure-Induced Insulin Resistance
Annual Direct Costs: $250,000
Total Direct Costs: $1,250,000

9/1/13 - 8/31/18 (co-PI, 20%)
NIH 1R01 DK096388-01A1 Gower (PI); Quon (Co-PI)
Race - adiposity interactions regulate mechanisms determining insulin sensitivity
Annual Direct Costs: $465,532
Total Direct Costs: $2,186,180

4/1/13 - 3/30/18 (co-I, 5%)
NIH 1RO1 DK093950-01A1 Albrecht (PI)
Primate Fetal Adrenal development: Impact on Physiological Processes After Birth
Total Direct Costs: $1,577,007

**Completed Grants:**
1/1/15 – 12/31/16 (Co-I, 10%)
Novo Nordisk Proof of Principle Diabetes Innovation Award Zhao (PI)
Characterization and validation of IL-25 as a biologic therapy for diabetes
Annual Direct Costs: $250,000
Total Direct Costs: $500,000

1/1/13 - 12/31/15 (PI, 7%)
ADA Basic Science Award 1-13-BS-150 Quon (PI)
Phosphorylation of $Ser^{24}$ in IRS-1 by IRAK-1 promotes insulin resistance in mice
Annual Direct Costs: $100,000
Total Direct Costs: $300,000

7/1/12 - 6/30/15 (Co-I, 3%)
ADA Clinical Translational Research Award 7-12-CT-26 Fu (PI)
Genetic determinants of Lipoprotein (a) levels related to risk of atherosclerosis
Annual Direct Costs: $200,000
Total Direct Costs: $600,000

1/1/14 – 12/31/16 (Co-I, 7%)
ADA Basic Science Award 1-14-BS-198 Sun (PI)
Repurposing the anti-Alzheimer drug donepezil for treatment of metabolic and cardiovascular pathophysiology in metabolic syndrome.
Annual Direct Costs: $100,000
Total Direct Costs: $300,000

07/01/08 – 06/30/11 (PI, 20%)
ADA Clinical Research Award 7-08-CR-48 Quon (PI)
Evaluation of epigallocatechin gallate to simultaneously improve metabolic and cardiovascular actions of insulin in obese, hypertensive, or diabetic subjects
Annual Direct Costs: $200,000
Total Direct Costs: $600,000
No cost extension through 12/31/2012

1/1/13 – 12/31/13 (Co-I, 5%) Civin (PI)
UMB Greenbaum Cancer Center Pilot Grant
Annual Direct Costs: $125,000
Total Direct Costs: $125,000

01/01/10 – 12/31/10 (PI, 10 %)
NIH Inter-agency Agreement to from Office of Dietary Supplements, NIH to Diabetes Unit, NCCAM, NIH Quon (PI)
Vascular Actions of the Green Tea Polyphenol EGCG
Annual Direct Costs: $100,000
Total Direct Costs: $100,000

07/01/05 – 06/30/08 (PI, 20%)
ADA Research Award 7-05-RA-115 Quon (PI)
Cross-talk between inflammatory and metabolic signaling pathways involving serine phosphorylation of IRS-1
Annual Direct Costs: $100,000
Total Direct Costs: $300,000

06/01/04 – 06/01/08 (PI, 15%) Quon (PI)
NIH Inter-agency Agreement to from Office of Dietary Supplements, NIH to Diabetes Unit, NCCAM, NIH
Clinical Efficacy of the Green Tea Polyphenol EGCG to Improve Blood Pressure, Insulin Sensitivity, and Endothelial Dysfunction
Annual Direct Costs: $100,000
Total Direct Costs: $400,000

07/01/03 – 06/30/05 (PI, 5%) Quon (PI)
ADA Mentor-based Minority Post-doctoral Fellowship Award
Annual Direct Costs: $45,000
Total Direct Costs: $90,000

07/01/02 – 06/30/05 (PI, 20%)
ADA Research Award 7-02-RA-100 Quon (PI)
Insulin Signaling Pathways in Vascular Endothelium Related to Activation of Endothelial Nitric Oxide Synthase
Annual Direct Costs: $100,000
Total Direct Costs: $300,000

07/01/01 – 06/30/05 (PI, 10%) Quon (PI)
ADA Mentor-based Post-doctoral Fellowship Award
Total Direct Costs: $170,000

06/01/01 – 08/30/01 (PI, 2%)
ADA Mentor-based Student Award Quon (PI)
Annual Direct Costs: $3,000
Total Direct Costs: $3,000

07/01/99 – 06/30/02 (PI, 20%)
ADA Research Award 99-RA-0069 Quon (PI)
Elucidation of Insulin Signaling Pathways Mediating Production of Nitric Oxide in Vascular Endothelium
Annual Direct Costs: $100,000
Total Direct Costs: $300,000

07/01/96 – 06/30/99 (PI, 20%) Quon (PI)
ADA Research Award 96-RA
Molecular Mechanisms of Insulin-Stimulated Nitric Oxide Production in Vascular Endothelial Cells
Annual Direct Costs: $40,000
Total Direct Costs: $120,000

02/01/96 – 02/01/98 (PI, 5%)
Hoffman-LaRoche, Inc.
Roles of Protein Tyrosine Phosphatases in Insulin-stimulated Glucose Uptake
Total Direct Costs: $35,000

07/01/94 – 06/30/96 (PI, 5%)
ADA Research Award 94-RA
Molecular Mechanisms of Insulin-Stimulated Glucose Transport: transfection studies in isolated rat adipose cells
Annual Direct costs $38,000
Total Direct Costs: $76,000

**Publications**:

**Peer-reviewed Journal Articles**:

1. Chen, W.T., Ing, T.S., Daugirdas, J.T., Brescia, D.J., Humayan, H., Gandhi, V.C., Hano, J.E.,**Quon, M.J.**: A method of delivering dialysate of constantly decreasing osmolality during dialysis. *Artif. Organs* **3**:377-379, 1979.
2. Ing, T.S., Daugirdas, J.T., Chen, W.T., **Quon, M.J.**, Perry, C.V.: Delivering dialysate of constantly decreasing sodium concentration using an automated dialysate delivery machine. *Int. J. Artif. Organs* **3**:124, 1980.
3. Ing, T.S., **Quon, M.J.**, Daugirdas, J.T., Gandhi, V.C., Epstein, M.B.: Preparation of bicarbonate-containing peritoneal dialysate using an automated dialysate delivery system. *Int. J. Artif. Organs* **4**:148-149, 1981.
4. Ing, T.S., **Quon, M.J.**, Daugirdas, J.T., Liu, P., Gandhi, V.C., Reid, R.R.: "On-line" preparation of bicarbonate-containing dialysate for use in peritoneal dialysis. *Int. J. Artif. Organs* **4**:308-309, 1981.
5. Ing, T.S., Gandhi, V.C., Daugirdas, J.T., Hunt, J., **Quon, M.J.**, Popli, S: Peritoneal dialysis using bicarbonate-containing dialysate produced by automated dialysate delivery machine: acute studies in man. *Artif. Organs* **6**:67-69, 1982.
6. **Quon, M.J.**, Campfield, L.A.: A mathematical modeling and computer simulation study of insulin receptor regulation. *J. Theor. Biol.* **150**:59-72, 1991. PMID: 1890848.
7. **Quon, M.J.**, Campfield, L.A.: A mathematical modeling and computer simulation study of insulin sensitive glucose transporter regulation. *J. Theor. Biol.* **150**:93-107, 1991. PMID: 1890850.
8. Cama, A., **Quon, M.J.**, Sierra, M.L., Taylor, S.I.: Substitution of isoleucine for methionine at position 1153 in the ß-subunit of the human insulin receptor: a mutation that impairs receptor tyrosine kinase activity, receptor endocytosis, and insulin action. *J. Biol. Chem.* **267**:8383-8389, 1992.
9. Taylor, S.I., Cama, A., Accili, D., Barbetti, F., **Quon, M.J.**, Sierra, M.L., Suzuki, Y., Koller, E., Levy-Toledano, R., Wertheimer, E., Moncada, V.Y., Kadowaki, H., Kadowaki, T.: Mutations in the insulin receptor gene. *Endocrine Rev.* **13**:566-595, 1992.
10. **Quon, M.J.**, Cama, A., Taylor, S.I.: Post-binding characterization of five naturally occurring mutations in the human insulin receptor gene: impaired insulin-stimulated c-jun expression and thymidine incorporation despite normal autophosphorylation. *Biochemistry* **31**:9947-9954, 1992.
11. Cama, A., Sierra, M.L., **Quon, M.J.**, Ottini, L., Gorden, P., Taylor, S.I.: Substitution of glutamic acid for alanine-1135 in the putative "catalytic loop" of the tyrosine kinase domain of the human insulin receptor: a mutation that impairs proteolytic processing into subunits and inhibits receptor tyrosine kinase activity. *J. Biol. Chem.* **268**:8060-8069, 1993.
12. **Quon, M.J.**, Zarnowski, M.J., Guerre-Millo, M., Sierra, M.L., Taylor, S.I., Cushman, S.W.: Transfection of DNA into isolated rat adipose cells by electroporation: evaluation of promoter activity in transfected adipose cells which are highly responsive to insulin after one day in culture. *Biochem. Biophys. Res. Commun.* **194**:338-346, 1993.
13. Satoh, S., Nishimura, H., Clark, A.E., Kozka, I.J., Vannucci, S.J., Simpson, I.A., **Quon, M.J.**, Cushman, S.W., Holman, G.D.: Use of bismannose photolabel to elucidate insulin-regulated GLUT4 subcellular trafficking kinetics in rat adipose cells: evidence that exocytosis is a critical site of hormone action. *J. Biol. Chem.* **268**:17820-17829, 1993.
14. **Quon, M.J.**: Advances in kinetic analysis of insulin stimulated GLUT4 translocation in adipose cells. *Am. J. Physiol.* **266**:E144-E150, 1994. PMID: 8304439
15. **Quon, M.J.**, Guerre-Millo, M., Zarnowski, M.J., Butte, A.J., Em, M., Cushman, S.W., Taylor, S.I.: Tyrosine-kinase deficient mutant human insulin receptors ($Met^{1153}$ --> Ile) overexpressed in transfected rat adipose cells fail to mediate translocation of epitope-tagged GLUT4. *Proc. Natl. Acad. Sci. U.S.A.* **91**:5587-5591, 1994. PMCID: PMC44041.
16. **Quon, M.J.**, Cochran, C., Taylor, S.I., Eastman, R.C.: Non-insulin mediated glucose disappearance in subjects with insulin-dependent diabetes mellitus: discordance between experimental results and minimal model analysis. *Diabetes* **43**:890-896, 1994. PMID: 8013753

17. **Quon, M.J.**, Butte, A.J., Zarnowski, M.J., Sesti, G., Cushman, S.W., Taylor, S.I.: Insulin receptor substrate 1 (IRS-1) mediates the stimulatory effect of insulin on GLUT4 translocation in transfected rat adipose cells. *J. Biol. Chem*. **269**:27920-27924, 1994.
18. **Quon, M.J.**, Butte, A.J., Taylor, S.I.: Insulin signal transduction pathways. *Trends Endocrin. Met*. **5**:369-376, 1994.
19. **Quon, M.J.**, Cochran, C., Taylor, S.I., Eastman, R.C.: Direct comparison of standard and insulin modified protocols for minimal model estimation of insulin sensitivity in normal subjects. *Diabetes Res. Clin. Ex.* **25**:139-149, 1994. PMID: 7648784.
20. Cama, A., Sierra, M.L., Kadowaki, T., Kadowaki, H., **Quon, M.J.**, Rüdiger, H.W., Dreyer, M., Taylor, S.I.: Two mutant alleles of the insulin receptor gene in a family with a genetic form of insulin resistance: a 10 base pair deletion in exon 1 and a mutation substituting serine for asparagine-462. *Hum. Genet.* **95**:174-182, 1995.
21. **Quon, M.J.**, Chen, H., Ing, B.L., Liu, M., Zarnowski, M.J., Yonezawa, K., Kasuga, M., Cushman, S.W., Taylor, S.I.: Roles of 1-phosphatidylinositol 3-kinase and ras in regulating the translocation of GLUT4 in transfected rat adipose cells. *Mol. Cell. Biol.* **15**:5403-5411, 1995. PMCID: PMC230790.
22. He, Y., Chen, H., **Quon, M.J.**, Reitman, M.: The mouse *obese* gene: genomic organization, promoter activity, and activation by C/EBPα. *J. Biol. Chem*. **270**:28887-28891, 1995.
23. Ing, B.L., Chen, H., Robinson, K.A., Buse, M.G., **Quon, M.J.**: Characterization of a mutant GLUT4 lacking the N-glycosylation site: studies in transfected rat adipose cells. *Biochem. Biophys. Res. Commun.* **218**:76-82, 1996.
24. Zeng, G., **Quon, M.J.**: Insulin-stimulated production of nitric oxide is inhibited by wortmannin: direct measurement in vascular endothelial cells. *J. Clin. Invest*. **98**:894-898, 1996. (Rapid Publication). PMCID: PMC507502.
25. **Quon, M.J.**, Chen, H., Lin, C.H., Zhou, L., Ing, B.L., Zarnowski, M.J., Klinghoffer, R., Kazlauskas, A., Cushman, S.W., Taylor, S.I.: Effects of overexpressing wild-type and mutant PDGF receptors on translocation of GLUT4 in transfected rat adipose cells. *Biochem. Biophys. Res. Commun.* **226**:587-594, 1996.
26. Chen, H., Wertheimer, S.J., Lin, C.H., Katz S.L., Amrein, K.E., Burn, P., **Quon, M.J.**: Protein tyrosine phosphatases PTP1B and Syp are modulators of insulin-stimulated translocation of GLUT4 in transfected rat adipose cells. *J. Biol. Chem*. **272**:8026-8031, 1997.
27. Zhou, L., Chen, H., Lin, C.H., Cong, L., McGibbon, M.A., Sciacchitano, S., Lesniak, M.A., **Quon, M.J.**, Taylor, S.I.: Insulin receptor substrate-2 (IRS-2) can mediate the action of insulin to stimulate translocation of GLUT4 to the cell surface in rat adipose cells. *J. Biol. Chem*. **272**:29829-29833, 1997.
28. Chen, H., Ing, B.L., Robinson, K.A., Feagin, A., Buse, M.G., **Quon, M.J.**: Overexpression of glutamine:fructose-6-phosphate amidotransferase (GFAT) in rat adipose cells does not alter recruitment of GLUT4 by acute insulin treatment. *Mol. Cell. Endocrinol*. **135**:67-77, 1997.
29. Cong, L. Chen, H., Li, Y., Zhou, L., McGibbon, M.A., Taylor, S.I., **Quon, M.J.**: Physiological role for Akt in insulin-stimulated translocation of GLUT4 in transfected rat adipose cells. *Mol. Endocrinol*. **11**:1881-1890, 1997.
30. Mason, M.M., He, Y., Chen, H., **Quon, M.J.**, Reitman, M.: Regulation of leptin promoter by Sp1, C/EBP, and a novel factor. *Endocrinology* **139**:1013-1022, 1998.
31. Chen, H., Srinivas, P.R., Cong, L., Li, Y., Grunberger, G., **Quon, M.J.**: $\alpha_2$-HSG inhibits insulin-stimulated Elk-1 phosphorylation but not glucose transport in rat adipose cells. *Endocrinology* **139**:4147-4154, 1998.
32. Cardillo, C., Kilcoyne, C.M., Nambi, S.S., Quyyumi, A.A., Cannon, R.O., **Quon, M.J.**, Panza, J.A.: Nitric oxide-dependent vasodilator response to systemic but not to local hyperinsulinemia in the human forearm. *Hypertension* **32**:740-745, 1998.
33. Cobelli, C., Bettini, F., Caumo, A., **Quon, M.J.**: Overestimation of minimal model glucose effectiveness in presence of insulin response is caused by undermodeling. *Am. J. Physiol*. **275**: E1031-E1036, 1998. PMID: 9843746.
34. Chen, H., Cong, L., Li, Y., Yao, Z., Zhang, Z., Burke, T.R.Jr., **Quon, M.J.**: A phosphotyrosyl of

mimetic peptide reverses impairment insulin-stimulated translocation of GLUT4 caused by overexpression of PTP1B in rat adipose cells. *Biochemistry* **38**:384-389, 1999.

35. Cong, L., Chen, H., Li, Y., Lin, C.H., Sap, J., **Quon, M.J.**: Overexpression of protein tyrosine phosphatase-α (PTP-α) but not PTP-κ inhibits insulin-stimulated translocation of GLUT4 in rat adipose cells. *Biochem. Biophys. Res. Commun.* **255**:200-207, 1999.
36. Zhou, L., Chen, H., Xu, P., Cong, L., Sciacchitano, S., Li, Y., Graham, D., Jacobs, A.R., Taylor, S.I., **Quon, M.J.**: Action of insulin receptor substrate-3 (IRS-3) and IRS-4 to stimulate translocation of GLUT4 in rat adipose cells. *Mol. Endocrinol*. **13**:505-514, 1999. PMID: 10077007.
37. Standaert, M.L., Bandyopadhyay, G., Sajan, M.P., Cong, L., **Quon, M.J.**, Farese, R.V.: Okadaic acid activates atypical PKCs (ζ/λ) in rat and 3T3-L1 adipocytes: an apparent requirement for activation of GLUT4 translocation and glucose transport. *J. Biol. Chem*. **274**:14074-14078, 1999.
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**Book Chapters**:

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**Selected Proceedings and Abstracts**:

~350 published abstracts presented in oral or poster form at various national and international meetings.

1. Taylor, S.I., Accili, D., Cama, A., Koller, E., Levy-Toledano, R., **Quon, M.J.**, Sierra, M.L., Wertheimer, E.: Mutations in the insulin receptor gene in insulin resistant patients. In: Proceedings of the Ninth International Congress of Endocrinology, 1992.
2. Taylor, S.I., Accili, D., Haft, C.R., Hone, J., Imai, Y., Levy-Toledano, R., **Quon, M.J.**, Suzuki, Y., Wertheimer, E.: Mechanisms of hormone resistance: lessons from insulin-resistant patients. *Acta Paediatr*. **83** (suppl 399):95-104, 1994.

3. **Quon, M.J.**: Insulin signaling and the link to endothelial dysfunction. *Endocr. Pract.* **9 (Suppl. 2)**:39-42, 2003.
4. Koh, K.K., **Quon, M.J.**, Han, S.H., Chung, W.J. Kim, J., Shin, E.K.: Vascular and metabolic effects of candesartan: insights from therapeutic interventions. *J. Hypertens*. **24** (**Suppl 1**):S31 - S38, 2006.
5. **Quon, M.J.**: Reciprocal relationships between insulin resistance and endothelial dysfunction: insights from therapeutic interventions. *Zhong Nan Da Xue Xue Bao Yi Xue Ban* **31**:305-312, 2006.

**Brief Communications**:

1. **Quon, M.J.**: Limitations of the fasting glucose to insulin ratio as an index of insulin sensitivity. *J Clin. Endocrinol. Metab*. **86**:4615-1617, 2001. (invited editorial)
2. **Quon, M.J.**: QUICKI is a useful and accurate index of insulin sensitivity. *J. Clin. Endocrinol. Metab*. **87**:949-950, 2002. (letter to the editor)
3. Karne, R.J., Chen, H., **Quon, M.J.**: Evaluating QUICKI as a surrogate index of insulin sensitivity. *Diabetes Care* **27**:1247-1248, 2004.
4. Kim, J., Koh, K.K., **Quon, M.J.**: The union of vascular and metabolic actions of insulin in sickness and in health. *Arterioscler. Thromb. Vasc. Biol*. **25**:889-891, 2005. (invited editorial)
5. Karne, R.J., Chen, H., Sullivan, G., **Quon, M.J.**: Proper evaluation of QUICKI as a surrogate index of insulin sensitivity. *J. Clin. Endocinrol. Metab.* **90**:4418-4419, 2005. (letter to the editor)
6. Muniyappa, R., **Quon, M.J.**: Is further research needed on glucosamine? *J. Fam. Pract*. **56**:192, 2007.
7. Koh, K.K., **Quon, M.J.**: Combination therapy for treatment or prevention of atherosclerosis. *Hypertension* **52**:e18, 2008. (letter to the editor)
8. Koh, K.K., **Quon, M.J.**: Importance of considering distinct strategies to lower LDL-C. *Circulation* **119**:e376, 2009. (letter to the editor)
9. Koh, K.K., Sakuma, I., **Quon, M.J**.: Role of rennin-angiotensin system blockades in reciprocal relationship between insulin resistance and endothelial dysfunction. *Hypertension* **56**:e169, 2010.
10. Munir, K.M., Chandrasekaran S., Gao, F., **Quon, M.J**.: Mechanisms for food polyphenols to ameliorate insulin resistance and endothelial dysfunction: therapeutic implications for diabetes and its cardiovascular complications. *World Biomedical Frontiers*, 2014. ISSN: 2328-0166. http://biomedfrontiers.org/diabetes-2014-1-18/.
11. Sarkar, G., Alattar, M., Brown, R.J., **Quon**, **M.J**., Harlan, D.M., Rother, K.I.: Response to comment on Sarkar et Al. Exenatide treatment for 6 months improves insulin sensitivity in adults with type 1 diabetes. *Diabetes Care* 2014;37:666-670. *Diabetes Care* **37**:e219-20, 2014.

## Invited Lectures:

**1988**

1. Insulin receptor regulation: modeling and simulation studies. Midwest Student Medical Research Forum XIX, Omaha, NE, February 9.

**1992**

2. Post-binding studies of five naturally occurring mutations in the human insulin receptor gene: abnormal insulin-stimulated c-jun expression and thymidine incorporation despite normal receptor autophosphorylation. American Society for Clinical Investigation, Baltimore, MD, May 3.
3. Non-insulin mediated glucose disappearance during the frequently sampled intravenous glucose tolerance test (FSIVGTT) in subjects with insulin dependent diabetes mellitus (IDDM): discordance between experimental results and minimal model analysis. 52nd Annual Meeting and Scientific Sessions of the American Diabetes Association, San Antonio, TX, June 22, 1992.
4. Five mutations in the human insulin receptor gene: effects on insulin-stimulated c-jun expression and thymidine incorporation. 3rd International Symposium on Endocrinology Under 35, Rapallo, Italy, September 9.

**1994**

5. IRS-1 mediates insulin-stimulated GLUT4 translocation in transfected rat adipose cells. Mid-Atlantic Diabetes Research Symposium, Bethesda, MD, September 24.
6. Transfection of rat adipose cells with an antisense ribozyme against IRS-1 decreases the sensitivity of the GLUT4 recruitment response to insulin. 15th International Diabetes Federation Congress, Kobe, Japan, November 10.

**1995**

7. Constitutively active ras recruits GLUT4 to the cell surface by an insulin-independent pathway in transfected rat adipose cells. 55th Annual Meeting and Scientific Sessions of the American Diabetes Association, Atlanta, GA, June 11.
8. Characterization of a glycosylation deficient mutant GLUT4 in transfected rat adipose cells. Mid-Atlantic Diabetes Research Symposium, Bethesda, MD, September 23.
9. Molecular dissection of insulin signaling pathways involved in GLUT4 translocation in transfected rat adipose cells. Indiana University Symposium on Signal Transduction Pathways in Health and Disease, Indianapolis, IN, November 10.

**1996**

10. PDGF-stimulated translocation of GLUT4 in transfected rat adipose cells overexpressing wild-type or mutant PDGF receptors. 56th Annual Meeting and Scientific Sessions of the American Diabetes Association, San Francisco, CA, June 10.
11. Direct measurement of nitric oxide from endothelial cells in response to insulin. 50th Annual Fall Conference and Scientific Sessions of the Council for High Blood Pressure Research, Chicago, IL, September 19.

**1997**

12. Insulin signaling pathways related to production of nitric oxide in vascular endothelium. Symposium on Endothelial Function and Metabolic Regulation at the 57th Annual Meeting and Scientific Sessions of the American Diabetes Association, Boston, MA, June 22.
13. Roles of insulin receptor tyrosine kinase and PI 3-kinase in insulin-stimulated production of nitric oxide: direct measurement in transfected endothelial cells. Mid-Atlantic Diabetes Research Symposium, Bethesda, MD, September 13.

**1998**

14. IRS-3 is a major substrate mediating insulin-stimulated translocation of GLUT4 in rat adipose cells. 7th International Symposium on Insulin Receptors and Insulin Action: molecular and clinical aspects, Jerusalem, Israel, May 18.
15. Signal transduction pathways that may link insulin resistance with hypertension. Diabetes, Insulin Resistance, and Obesity, satellite symposium of the 7th International Symposium on Insulin Receptors and Insulin Action: molecular and clinical aspects, Jerusalem, Israel, May 21.
16. Insulin signaling pathways related to production of nitric oxide in vascular endothelium. International Motor City Diabetes Symposium, Detroit, MI, October 16-17.
17. Insulin-stimulated production of nitric oxide in vascular endothelium. Joint Symposium in Celebration of the Joslin Diabetes Center's 100th Anniversary. Boston, MA, October 25.
18. Insulin signaling pathways related to production of nitric oxide: link between insulin resistance and hypertension? 46th Annual Gerald Friedman Scientific Symposium: Mechanisms involved in the syndrome of insulin resistance. New York, NY, November 1.

**1999**

19. Mathematical modeling of insulin action and in vivo estimates of insulin sensitivity. Workshop on Endocrinology: Mechanisms of Hormone Secretion and Control, Mathematics in Biology Program of the Institute for Mathematics and its Applications, Minneapolis, MN, February 17.

20. Insulin signaling in endothelium related to production of nitric oxide: coupling of insulin resistance with hypertension? Symposium on Microvascular and Macrovascular Complications of Diabetes at the 59th Annual Meeting and Scientific Sessions of the American Diabetes Association, San Diego, CA, June 2.
21. Insulin-stimulated activation of PDK-1. FASEB Summer Conference on Glucose Transporter Biology, Snowmass, CO, July 21.
22. Molecular mechanisms of insulin action related to glucose transport. International Huaxia Congress of Endocrinology, Beijing, China, October 18.

**2000**

23. Insulin signaling in endothelium related to production of nitric oxide: potential mechanisms linking insulin resistance with hypertension. Clinical Center Grand Rounds, National Institutes of Health, Bethesda, MD, May 3.

**2002**

24. Insulin signaling in vascular endothelium. 2nd International Workshop on Insulin Resistance, San Diego, CA, February 13.
25. Insulin signaling pathways regulating production of nitric oxide in vascular endothelium. Symposium on Blood Flow, Insulin Action and Insulin Resistance at the 62nd Annual Meeting and Scientific Sessions of the American Diabetes Association, San Francisco, CA, June 15.
26. Insulin signaling and the link to endothelial dysfunction. American College of Endocrinology Insulin Resistance Syndrome Conference, Washington, D.C., August 25.
27. Insulin signaling pathways regulating production of nitric oxide in vascular endothelium. Korean Society of Lipidology and Atherosclerosis Annual Fall Conference, Seoul, Korea, September 7.

**2003**

28. Insulin signaling in vascular endothelium regulating production of nitric oxide. Symposium on Molecular Mechanisms of Insulin Signal Transduction at the 46th Annual Meeting of the Japan Diabetes Society, Toyama, Japan, May 22.
29. Insulin resistance and atherosclerosis: insights from cell signaling and QUICKI. Symposium on Insulin Resistance and Atherosclerosis at the 46th Annual Meeting of the Japan Diabetes Society, Toyama, Japan, May 22.
30. Insulin signaling in endothelium related to production of nitric oxide: potential mechanisms linking insulin resistance with hypertension. Workshop on the Insulin Resistance Syndrome and the Pathophysiology of Hypertension, Cardiovascular, and Renal Disease, 57th Annual Fall Conference of the Council for High Blood Pressure Research of the American Heart Association, Washington, D.C., September 23.

**2004**

31. Vascular actions of insulin. 3rd International Huaxia Congress of Endocrinology, Shanghai, China, May 24 - 28, 2004.
32. Overview, the NCCAM perspective on diabetes. Symposium on Complementary and Alternative Therapies for Diabetes at 64th Annual Meeting and Scientific Sessions of the American Diabetes Association, Orlando, FL, June 4.
33. Inflammation and vascular flow. Symposium on Mechanisms of Vascular Wall Damage at the 64th Annual Meeting and Scientific Sessions of the American Diabetes Association, Orlando, FL, June 6.
34. Mathematical modeling of metabolic insulin signaling pathways. IBC's Implementing Systems Biology, Boston, MA September 21.
35. Vascular actions of insulin and adiponectin to regulate production of NO in endothelium. Toronto Endocrine Summit: Pathophysiology and Treatment of Diabetes Complications, Toronto, Canada, November 17 - 19.
36. Vascular actions of insulin regulating production of NO. NIH Symposium on The Role of Insulin in the Critically Ill Patient: Basic and Clinical Evidence, Bethesda, MD, December 9.

**2005**

37. Insulin resistance and vascular complications of diabetes: from cells to humans. Keynote Address, American Diabetes Association Washington DC Affiliate Annual Meeting, January 13.
38. Vascular actions of insulin and adiponectin. Gachon International Symposium for Atherosclerosis, Hypertension, and Stem Cells, Incheon, Korea, May.
39. Vascular actions of insulin and adiponectin. 2nd International Conference on The Molecular Basis of Metabolic Regulation, Bari, Italy, June 24-25.
40. Endocrine Grand Rounds, University of Utah, September 22.
41. Medicine Grand Rounds, University of Missouri, Columbia, MO, October 13.

**2006**

42. Insulin resistance and vascular complications of diabetes: from cells to humans. Symposium on Molecular and Physiological Mechanisms Underlying Vascular Complications of Diabetes. Catholic University of Chile, Santiago, Chile, January 9.
43. Reciprocal relationships between insulin resistance and endothelial dysfunction in the metabolic syndrome: insights from therapeutic interventions. 1st International Xiangya Diabetes and Immunology Symposium, Changsha, China, April 28 - May 3.
44. Endocrine Grand Rounds, Mt. Sinai School of Medicine, New York, NY, May 18.
45. Effects of cocoa flavanols on insulin sensitivity in people with high blood pressure. Workshop on Recent Advances in the Vascular Effects of Cocoa Flavanols, Mars Nutrition Research Council, Brussels, Belgium, July 25.
46. Mathematical modeling of insulin action. CIIT Centers for Health Research Colloquium, Research Triangle Park, NC, July 28.
47. Mechanisms underlying beneficial effects of green tea polyphenols on metabolic and cardiovascular health. Pennington Scientific Symposium on Botanicals and Cardiometabolic Syndrome, Baton Rouge, LA, October 30.
48. Update on vascular actions of insulin. Endocrine Grand Rounds, University of Virginia, Charlottesville, VA, December 5.

**2007**

49. Novel vascular actions of ghrelin, DHEA, and EGCG that mimic insulin action. Nutritional Biology Seminar Series, Western Human Nutrition Research Center, UC Davis, January 29.
50. Novel vascular actions of ghrelin, DHEA, and EGCG that mimic insulin action. Endocrine Grand Rounds, Albert Einstein College of Medicine, NY, March 16.
51. Reciprocal relationships between insulin resistance and endothelial dysfunction. 2$^{nd}$ International GO AHEAD Symposium, Seoul, Korea, May 26.
52. Reciprocal relationships between insulin resistant and endothelial dysfunction. US-Korea Conference on Science Technology and Entrepreneurship, August 10, Reston VA, August 10.
53. Novel vascular actions of DHEA, and EGCG that mimic insulin action. Mexican Biochemical Society Symposium on Signal Transduction. Vera Cruz Mexico, September 2-6.
54. Inflammatory markers and the metabolic syndrome. New York Academy of Sciences Symposium on Targeting the Complications of Metabolic Syndrome, Diabetes, and Inflammation, New York, NY, October, 23.
55. Epigallocatechin gallate, a green tea polyphenol, ameliorates metabolic syndrome abnormalities. Society for Free Radical Biology & Medicine Symposium on Functional and Biological Activities of Natural and Synthetic Antioxidants, Washington, DC, November 14-18, 2007.
56. Effects of EGCG and DHEA to mimic vascular actions of insulin. Institute of Biomedical and Public Health Sciences, Virginia Tech, Blacksburg, VA, December 14.

**2008**

57. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: from cells to humans. USDA, Beltsville Human Nutrition Research Center, Beltsville, MD, March 11.

58. Novel vascular actions of DHEA and EGCG that mimic insulin action. Vascular Biology Center Research Seminar Series, Medical College of Georgia, Augusta, GA, April 30.
59. Reciprocal relationships between insulin resistance and endothelial dysfunction. Alumni Keynote Address. Northwestern University Medical Scientist Training Program Student-Faculty Retreat, Chicago, IL, July 26-27.
60. Reciprocal relationships between insulin resistance and endothelial dysfunction. 34th Autumn Conference of the Korean Diabetes Association, "Complications of Diabetes", Seoul, Korea, October 30 – November 1.

**2009**

61. Reciprocal relationships between insulin resistance and endothelial dysfunction: from cells to humans. Keystone Symposium on Complication of Diabetes and Obesity, Vancouver, Canada, February 25.
62. Green tea polyphenols for the treatment of diabetes and its cardiovascular complications. 4th Xiang-Ya Diabetes Immunology Symposium, Changsha, China, April 21 - 26.
63. Reciprocal relationships between endothelial dysfunction and insulin resistance: focus on molecular, cellular, physiological, and translational aspects. 3rd International GO AHEAD Symposium, Seoul, Korea, May 16.
64. An integrated view of insulin resistance and endothelial dysfunction. Symposium on Insulin Action and Vascular Function at 69th Annual Meeting and Scientific Sessions of the American Diabetes Association, New Orleans, LA, June 5.
65. Beneficial vascular and metabolic actions of the green tea polyphenol EGCG. 3rd Biennial Conference on Research Frontiers in Nutritional Sciences. University of Arizona, Tucson, AZ, October 8 – 9.

**2010**

66. Reciprocal relationships between insulin resistance and endothelial dysfunction: implications for therapeutic nutritional supplements and functional foods. Keynote Address, 3rd Annual Auburn University Diabetes Research Day. Auburn, AL, March 26.
67. Reciprocal relationships between insulin resistance and endothelial dysfunction: implications for therapeutic nutritional supplements and functional foods. 12th South China International Congress of Cardiology, Guangzhou, China, April 9.
68. Insulin resistance and endothelial dysfunction related to diabetes. 19th Annual Meeting of the Korean Diabetes Association, Seoul, Korea, August 14.
69. Reciprocal relationships between insulin resistance and endothelial dysfunction. Mid-Atlantic Diabetes Research Symposium, Bethesda, MD, October 1.

**2011**

70. Reciprocal relationships between insulin resistance and endothelial dysfunction. NGM Biopharmaceuticals, South San Francisco, March 3.
71. Reciprocal relationships between insulin resistance and endothelial dysfunction. 2011 American Society for Investigative Pathology Annual Meeting, Symposium on Metabolic Syndrome: Links Between Insulin Resistance, Inflammation, and Vascular Pathobiology, Washington D.C., April 11.
72. Reciprocal relationships between insulin resistance and endothelial dysfunction. University of Texas Health Sciences Center San Antonio, San Antonio, TX, Department of Cellular and Structural Biology, April 13.
73. Reciprocal relationships between insulin resistance and endothelial dysfunction. Nichols Institute, San Juan Capestrano, CA, May 2.
74. Merck Medical Forum on Cellular Pathophysiology Associated with Type 2 Diabetes, San Diego, CA, June 27.
75. Methods for Measuring Insulin Sensitivity/Resistance in Humans, Animals, and Cells: advantages, limitations, and appropriate usage. A 6 lecture minicourse conducted during 6 University of Maryland, Baltimore, Division of Endocrinology, Nutrition, and Diabetes Endocrine Grand Rounds, sessions from July 11 – Aug 29.

76. Guidelines for Preparing Fundable Competitive Research Grant Proposals. Brainstorming Workshop for the Research Centre of Heart, Brain, Hormone & Healthy Aging, The University of Hong Kong Li Ka Shing Faculty of Medicine, Hong Kong, August 7.
77. Reciprocal relationships between insulin resistance and endothelial dysfunction. The University of Hong Kong Li Ka Shing Faculty of Medicine, Hong Kong, August 9.
78. Everything You Wanted to Know about Glucose Clamps in Humans. Diabetes Branch Seminar, NIDDK, NIH, Bethesda, MD, September 19.
79. Everything You Wanted to Know about Minimal Model Analysis and Simple Surrogate Indexes for Insulin Sensitivity/Resistance in Humans. Diabetes Branch Seminar, NIDDK, NIH, Bethesda, MD, September 26.
80. Everything You Wanted to Know about Simple Surrogate Indexes for Insulin Sensitivity/Resistance in Humans. Welch Grand Rounds, Johns Hopkins University, Baltimore, MD, October 26.
81. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Endocrine Grand Rounds, Eastern Virginia Medical School, Norfolk, VA, November 9.
82. Novel Molecular Mechanisms of Action for the Green Tea Polyphenol EGCG. Medical Grand Rounds, University of Rome, Tor Vergata, Rome, Italy, November 14.
83. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Endocrine Grand Rounds, University of Bari, Bari, Italy, November 16.
84. Endothelial Dysfunction in Type 2 Diabetes. University of Chieti, Chieti, Italy, November 19.
85. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. University of Padova, Padova, Italy, November 21.

**2012**

86. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Endocrine Grand Rounds, Johns Hopkins University, Baltimore, MD, January 11.
87. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Endocrine Grand Rounds, Indiana University, Indianapolis, Indiana, February 13.
88. Everything You Wanted to Know About Glucose Clamps in Humans, Endocrine Grand Rounds, University of Colorado, Denver, CO, March 14.
89. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Endocrine Research Conference, University of Colorado, Denver, CO, March 14.
90. Novel Biological Actions of the Green Tea Polyphenol EGCG Related to Vascular and Metabolic Health, Endocrine Grand Rounds, University of Virginia, Charlottesville, VA, April 3.
91. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Diabetes Institute, Shanghai Municipal 6$^{th}$ People's Hospital, Shanghai Jiaotong University, April 9.
92. Beneficial Cardiovascular and Metabolic Actions of Polyphenols from Functional Foods Including Green Tea and Citrus. 14$^{th}$ South China International Congress of Cardiology, April 12.
93. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Endocrine Grand Rounds, University of Texas Southwestern, Dallas, TX, April 26.
94. Beneficial Cardiovascular and Metabolic Actions of Polyphenols from Functional Foods including Green Tea and Citrus. 1$^{st}$ International Congress of Lipid Metabolism & Atherosclerosis, Seoul, Korea, September 14.
95. Endothelial Dysfunction and Insulin Resistance: Combination Therapy Approaches, Endocrine Symposium, Gachon Medical School, Incheon, Korea, September 18.
96. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Research Seminar, Department of Human Nutrition, Virginia Tech, Blacksburg, VA, October 15.
97. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Renal Grand Rounds, University of Missouri, Columbia, MO, November 19.
98. Everything You Wanted to Know about Minimal Model Analysis and Simple Surrogate Indexes for Insulin Sensitivity/Resistance in Humans. Endocrine Grand Rounds, University of Missouri, Columbia, MO, November 20.

**2013**

99. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Roy H. Behnke, MD Medical Grand Rounds, University of South Florida, Tampa, FL, February 28.
100. Donepezil, an Acetylcholinesterase Inhibitor Used to Treat Alzheimer Dementia, Ameliorates Insulin Resistance in Spontaneously Hypertensive Rats (SHR). Cardiothoracic Surgery Grand Rounds, First Affiliated Hospital, Sun Yat-Sen University, Guangzhou, China, April 12.
101. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Seminar, Department of Physiology, Fourth Military Medical University, Xi'an, China, April 13.
102. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Seminar, Department of Physiology, Capital Medical University, Beijing, China, April 15.
103. Donepezil, an Acetylcholinesterase Inhibitor Used to Treat Alzheimer Dementia, Ameliorates Insulin Resistance in Spontaneously Hypertensive Rats (SHR). Symposium on Metabolic Syndrome, 6th Oriental Congress of Endocrinology and Metabolism, April 20.
104. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Endocrine Grand Rounds, Temple University, Philadelphia, PA, April 26.
105. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Seminar, Stedman Nutrition and Metabolism Center, Duke University, May 14.
106. Reciprocal Relationships Between Endothelial Dysfunction and Insulin Resistance: Therapeutic Implications. Seminar, Kosair Children's Hospital Research Institute, University of Louisville, KY, August 16.
107. Reciprocal Relationships Between Endothelial Dysfunction and Insulin Resistance: Therapeutic Implications. The Cardiovascular Forum Promoting Centers of Excellence and Young Investigators, International Academy of Cardiovascular Sciences, Louisville, KY, August 17.
108. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Medical Grand Rounds, Christiana Health Care System, Newark, DE, September 18.
109. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Diabetes and Obesity Research Institute Seminar, University of Southern California, September 26.
110. Novel biological actions of the green tea polyphenol EGCG related to vascular and metabolic health. 5th International Conference on O-CHA (tea), Culture and Science, Shizuoka, Japan, November 6.
111. Reciprocal Relationships Between Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. Medical Grand Rounds, University of Tokyo, Tokyo, Japan, November 8.

**2014**

112. Pathophysiology of Type 2 Diabetes. University of Rome, Tor Vergata, Rome, Italy March 21.
113. Methods for Measuring Insulin Sensitivity in Humans. Catholic University, Rome, Italy March 20.

**2015**

114. Insulin Resistance and Endothelial Dysfunction: Therapeutic Implications. International Conference on Diabetes and Metabolism of the Korean Diabetes Association. Jeju Island, Korea, October 15 - 17.
115. 14th International Osong Symposium on Diabetes and Dementia. Plenary Keynote speaker: Mathematical Modeling of Insulin Signaling in Vascular Endothelium Related to the Pathophysiology of Diabetes and its Cardiovascular Complications. Osong, Korea, October 22.
116. Reciprocal Relationships between Insulin Resistance and Endothelial Dysfunction: Therapeutic implications. Diabetes Seminar: Albert Einstein College of Medicine, December 14.

**2016**

117. Direct Vascular Actions of HDL. The 2nd International Symposium on High Density Lipoprotein Function and Cardiovascular Diseases, Guangzhou, China, November 4-6.