

**COLLEGE OF MEDICINE  
CURRICULUM VITAE**

Jeffrey E. Pessin

February 17, 2012

PERSONAL DATA

Citizenship Status            United States

EDUCATION

1975            B.A.            Brooklyn College, City University of New  
York, Brooklyn, NY

1975            M.A.            Department of Chemistry, Brooklyn College,  
City University of New York, Brooklyn, NY

1980            Ph.D.            Department of Biochemistry, University of  
Illinois, Urbana, IL

POST-GRADUATE EDUCATION

1980-83            Post-Doctoral Fellow, University of  
Massachusetts Medical Center, Worcester,  
MA (Dr. Michael P. Czech). Regulation of  
hexose transport by hormones and cellular  
nutritional states; purification and  
characterization of an integral membrane  
protein.

ACADEMIC APPOINTMENTS

1975-80            Graduate Research Assistant, University of  
Illinois, Urbana, IL (Dr. Michael Glaser).  
Membrane structure and function of normal  
and transformed chicken embryo fibroblasts  
viral envelope morphogenesis and assembly.

1983-1988            Assistant Professor, Department of  
Physiology and Biophysics, The University  
of Iowa, Iowa City, IA 52242.

1988-1991            Associate Professor, Department of  
Physiology and Biophysics, The University  
of Iowa, Iowa City, IA 52242.

1991-2003	Professor, Department of Physiology and Biophysics, The University of Iowa, Iowa City, IA 52242.
2001-2003	The University of Iowa Foundation Distinguished Professor of Physiology & Biophysics
2003-2007	Chair, Department of Pharmacological Sciences, Stony Brook University, Stony Brook, NY 11794.
2005-2007	William and Jane Knapp Professor of Pharmacological Sciences
2008-present	Director, Diabetes Research Center, Albert Einstein College of Medicine Bronx, NY 10461
2008-present	Judy R. and Alfred A. Rosenberg Professorial Chair in Diabetes Research

OTHER EMPLOYMENT PERTAINING TO CURRENT PROFESSIONAL APPOINTMENTS

None

CERTIFICATION AND LICENSURE

None

PROFESSIONAL AFFILIATIONS

1975-present	Membership, American Chemical Society
1975-present	Membership, Sigma Xi Scientific Research Society of North America
1981-present	Membership, American Association for the Advancement of Science
1985-present	Membership, American Diabetes Association
1985-present	Membership, American Physiological Society
1985-present	Membership, Endocrine Society

1987-present                      Membership, American Society of  
Biochemistry and Molecular Biology

#### AREAS OF RESEARCH INTEREST

Mechanisms of peptide hormone action  
Hormone receptor function  
Regulation of glucose transport  
Structure and function of the glucose transport system  
Cellular control of gene transcription  
Intracellular signaling cascades  
Trafficking of intracellular vesicles  
Cellular compartmentalization  
Integrative metabolic signaling

#### CURRENT PROJECTS

Regulation of the insulin receptor binding and kinase activities  
Regulation of the facilitative D-glucose transport system  
Transmembrane signaling of the insulin and IGF-1 receptors  
Intracellular targets of insulin action  
Intracellular trafficking of the GLUT4 glucose transporter  
Biogenesis of regulated exocytotic compartments  
Integrative physiology  
Programmed cell death and inflammation

#### UNIVERSITY SERVICES

1984-1988                      Chairman, Departmental Resource Committee

1984-1989                      Member, University Biomedical Research  
Subcommittee

1985-1985                      Member, Departmental ad hoc Curriculum  
Committee

1986-1988                      Member, Departmental Computer Committee

1986-1989                      Member, University Protein Chemistry  
Committee

1986-2002                      Member, Diabetes & Endocrine Research  
Center Executive Committee

1989-2002                      Member, Diabetes & Endocrine Research  
Pilot and Feasibility Program Committee

1987-1989 Chairman, Departmental Seminar Program

1987-1989 Member, Cellular and Molecular Biology Training Grant Executive Committee

1987-2000 Associate Director, Endocrinology NRSA Training Grant

1988-1991 Member, College of Medicine Lecture Committee

1989-1992 Member, College of Medicine Executive Committee

1989-1994 Course Director, Medical Physiology

1989-1990 Member, Department of Pharmacology Ad Hoc Review Committee

1989-1990 Member, MSTP Advisory Committee

1990-1993 Member, College of Medicine Transgenic Animal Facility Committee

1990-1991 Chairman, Department of Physiology & Biophysics Faculty Search Committee

1991-1993 Course Director, Human Physiology

1991-1994 Member, College of Medicine Seed Grant Review Committee

1991-2003 Associate Director, University of Iowa Diabetes & Endocrinology Research Center

1992-1993 Member, College of Medicine Comprehensive Cancer Center Planning Committee

1993-1998 Chairman, College of Medicine Transgenic Animal Facility Advisory Committee

1993-1998 Member, Molecular Biology Program Executive Committee

1993-1994 Member, Department of Biochemistry Ad Hoc Review Committee

1995-1996 Member, Advisory Committee for the Cardiovascular Division, Department Internal Medicine

1995-1996 Member, Planning Council for Howard Hughes Medical Institute Research Resource Program Grant (HHMI-RRPG)

1995-1998 Chairman, Task Force for the Implementation of a Combined Biomedical Sciences Graduate Program

1995-1997 Member, Departmental Review and Search Committee for the Chair of Preventive Medicine

1995-1996 Chairman, Department of Physiology & Biophysics Faculty Search Committee

1996-1999 Member, Department of Physiology & Biophysics Renovation Committee

1997-2000 Director, ORBS program (Opportunities for interdisciplinary Research in the Biomolecular Sciences)

1998-2000 Member, Biomedical Graduate Student Recruiting Oversight Committee

1999-2003 Member, MSTP Student Affairs Committee

1999-2003 Member, Planning Committee for Mouse-Related Research

2000-2003 Member, Task Force on Non-Invasive Animal Imaging

2003 Chair, TRO proteomics pilot grant review committee

2003-2007 Chair, Proteomics/Diagnostic Facility Advisory Committee

2004-2007 Member, Advisory Group for The University Transgenic Mouse Facility

2004-2007 Member, Provost's Chairs Advisory Group

2004-2006 University Strategic Planning Task Force

2005-2006 Chair, Search committee for the Director of Computational Neurosciences and Chair

	of the Department of Neurobiology & Behavior
2006-2007	Member, Dean's Kitchen Cabinet
2007-2007	Member, Gyrodyne Development Board
2007	Chair, Search committee for the Chair of the Department of Biochemistry and Cell Biology
2008- present	Member, Committee for Scientific Resources
2008- present	Member, Deans Scientific Council
2008- present	Member, Faculty Recruitment Committee
2009- present	Member, Gruss Magnetic Resonance Research Center (MMRC) Oversight Committee

#### TEACHING ACTIVITIES

<u>Year</u>	<u>Course Title &amp; No.</u>	<u>No. Reg.</u>	<u>Length</u>	<u>%Effort</u>
1984-1995	Medical Physiology (72:212)	~200/sem	12 sem.	15%
1984-1986	Graduate Physiology (72:214)	~12/sem	3 sem.	15%
1985-1987	Cell Biology (72:211)	~16/sem	3 sem.	5%
1985-1991	Molecular Endocrinology (72:203)	~14/sem	7 sem.	15%
1986	Advanced Biomedical Studies (50:199)	26/sem	1 sem.	5%
1986	Regulation of Intermediary Metabolism (99:228)	14/sem	1 sem.	5%
1987	Biochemical Pharmacology (71:206)	9/sem	1 sem.	10%
1989-1990	Human Physiology for Physician's Assistant (72:164)	~25/sem	2 sem.	10%
1990	Cell Biology I	35/sem	1 sem.	5%

	(142:220)			
1990	Cell Biology II (142:225)	15/sem	1 sem.	5%
1991-1993	Human Physiology (72:130)	~230/sem	1 sem.	15%
1992-2000	Receptors & Signal Transduction (71/72:209)	~20/sem	8 sem.	5%
1997-2000	Intermediate Physiology (72:150/72:151)	~200/sem	4 sem.	15%
2000-2003	Human Structure and Function (50:115/116)	~ 60/sem	1 sem.	15%
2000-2003	Principals in Molecular Biology (156:201)	~ 75/sem	1 sem.	10%
2003-2007	Medical Pharmacology (HBH531)	~100/sem	3 sem.	5%
2003-2007	Drug Metabolism (BCP401)	~30/sem	3 sem.	5%
2003-2007	Ethics (GRD500)	~50/sem	3 sem.	5%
2005-2007	Nursing Pharmacology (HBH331)	~100/sem	3 sem.	5%

#### OTHER PROFESSIONAL ACTIVITIES

1992-present	Ad hoc Abstract Reviewer for the Annual ADA National Symposium Meeting
1994-1997	Member, American Diabetes Association Scientific Sessions Meeting Committee
1995	Co-Chair, ASBMB Fall Research Conference on Determinants of Specificity in Growth Factor Signaling (1995) Granlibakken, Lake Tahoe, California
1995-1999	External Consultant for the Joslin Diabetes Center, DERC

- 1996 Co-Chair, ASBMB Fall Research Conference on Integration of Growth Factor Signals (1996) Granlibakken, Lake Tahoe, California
- 1997 Task Force on Diabetes Mellitus: Challenges and Opportunities, Natcher Conference Center, NIH
- 1997-1999 NIH Diabetes Research Working Group
- 1998 Ad hoc Counselor for the NIH Diabetes Branch Intramural Review
- 1999-2000 Co-Chair, Fuller Symposium on Cellular Mechanisms of Insulin Resistance in Diabetes and Hypertension and Novel Therapeutic Strategies. London, Ontario, Canada
- 1999-2001 Co-Chair, FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology. Snowmass, Colorado
- 2001 61<sup>st</sup> American Diabetes Association Scientific Sessions Planning Subcommittee on Insulin Action and Signal Transduction
- 2001-2003 Chair, FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology. Snowmass, Colorado
- 2002 62<sup>nd</sup> American Diabetes Association Scientific Sessions Planning Subcommittee on Adipocyte Biology
- 2003 12<sup>th</sup> International Congress of Endocrinology Program Organizing Committee
- 2004-2007 Endocrine Society Journals Operating Subcommittee
- 2005 65<sup>th</sup> American Diabetes Association Scientific Sessions Planning Subcommittee on Adipocyte Biology
- 2007 67<sup>th</sup> American Diabetes Association Scientific Sessions Planning Subcommittee on Insulin Action/Signaling/Adipocytes



CLINICAL ACTIVITIES

None

COLLEGIATE, UNIVERSITY, UNIVERSITY HOSPITAL AND NATIONAL COMMITTEES

As above

HONORS AND AWARDS

1971-1975	B.A./M.A. Program - Brooklyn College
1975	Graduated cum laude in Chemistry, Brooklyn College
1973-1975	Honorary Membership, American Chemical Society
1977-1979	NIH Predoctoral Fellowship, Department of Biochemistry, University of Illinois
1981-1983	NIH Postdoctoral Fellowship, Department of Biochemistry, University of Massachusetts Medical School
1985-1987	Recipient of a Research and Development Award from the American Diabetes Association
1987-1990	Recipient of a Basil O'Connor Research Scholars Award from the March of Dimes Birth Defects Foundation
1988-1993	Recipient of a Research Career and Development Award from the National Institutes of Health
1996	Recipient of the Eli Lilly Outstanding Scientific Achievement Award from the American Diabetes Association
1997	Novo Nordisk Lecturer, University of Toronto, Ontario, Canada
1998	Recipient of the Mary Jane Kugel Award from the Juvenile Diabetes Foundation, International
2000	Recipient of The University of Iowa Foundation Distinguished Professorship of Physiology & Biophysics

2001 Recipient of The University of Iowa Regents Award for Faculty Excellence

2005 Recipient of William and Jane Knapp Endowed Professorship in Pharmacological Sciences

2008 Recipient of Judy R. and Alfred A. Rosenberg Professorial Chair in Diabetes Research

#### GRANT REVIEWS

NIH Site Visit Team (1985) for R01 AM12865-18, Purdue University, West Lafayette, IN.

NSF Ad hoc reviewer, 1986-1996

NIH Site Visit Team (1987) for P01-DK38985-01, Mount Zion Hospital, San Francisco, CA.

NIH Site Visit Team (1988) for P01-DK38983-01A1, Bethesda, MD.

ADA Research Grant Review Committee, 1987-1990

JDF Medical Science Review Committee, 1988-1991

NIH Metabolism Study Section, 1989-1993

NIH Ad hoc Special Reviewer, 1994-1999

JDF Medical Science Review Committee, 1995-1999

ADA Special Ad hoc Reviewer for Grant Review Committee, 1996

Wellcome Trust Special Ad hoc Reviewer, 1996-2005

BSF Ad hoc Reviewer for the Binational Science Foundation, 1998

ADA Special Ad hoc Reviewer for Grant Review Committee, 1998

Joslin Diabetes Center Ad hoc Pilot and Feasibility Grant Reviewer 1995-1999

UMMC Diabetes Center Ad hoc Pilot and Feasibility Grant Reviewer 1998-2000

ADA Special Ad hoc Reviewer for Mentor-based postdoctoral fellowship awards, 1998

NIH Metabolism Study Section, 1999-2002

NIH Ad hoc Endocrinology Study Section, 2000-2006

Medical Research Council of Canada Ad hoc Reviewer for Individual Grants and Special Programs, 1998-present

JDF Ad hoc Medical Science Review Committee, 2000-present

NIH Ad hoc reviewer for NRSA fellowships 2003-2007

NIH Ad hoc Molecular and Cellular Endocrinology Study Section, 2008

#### EDITORIALSHIPS

Associate Editor, Endocrinology	1987-1992
Editor, American Journal of Physiology (Endocrinology/Metabolism)	1994-2000
Editor-In-Chief, Endocrinology	2003-2007
Editor, Diabetes	2009-present

#### EDITORIAL BOARDS

Arch. Biochem. Biophys.	1992-1998
Endocrinology	1992-1995
J. Biol. Chem.	1996-2001
Mol. Endo.	2000-2003
Advisory Board-The Year in Diabetes and Obesity Annals of the New York Academy of Sciences	2010

#### MANUSCRIPT REVIEWS (Ad hoc)

J. Biol. Chem.	1983-1996
J. Biol. Chem.	2001-present
Biochemistry	1983-present
Biochem. Biophys. Acta	1986-present
Endocrinology	1983-1987
Endocrinology	1992-2003
Am. J. Physiol.	1988-1994
Am. J. Physiol.	2000-present
J. Clin. Invest.	1989-present
Mol. Endocrinology	1988-2000
Mol Endocrinology	2005-present
Diabetes	1989-present
Proc. Natl. Acad. Sci. USA	1990-present
J. Cir. Res.	1993-present
Metabolism	1993-present
Mol. Cell. Biol.	1993-present
FASEB J.	1993-present
J. Cell Biol.	1995-present
Science	1995-present
Oncogene	1995-present
Molecular Medicine	1995-present
Cell Growth & Differentiation	1997-present
J. Endocrinology	2000-present
Diabetic Medicine	2000-present
J. Cell Sci.	2001-present
Molecular Cell	2003-present
Cell Metabolism	2004-present
Blood	2005-present
EMBO J	2005-present
Nature Medicine	2005-present

Mol Memb Biol	2006-present
Nature Cell Biology	2007-present
PLoS One	2008-present
Human Molecular Genetics	2009-present

#### CURRENT FINANCIAL RESOURCES (Direct Costs)

NIH R37 DK33823-27: Intracellular Signaling by the Insulin Receptor Kinase. 4/1/05-3/31/10; Total Direct Costs \$1,175,000. Merit extension through 3/31/15.

NIH R01 DK55811-09: Intracellular Trafficking of GLUT4-containing Vesicles. 2/1/05-1/1/10; Total Direct Costs \$1,175,000.

NIH P60 DK020541: Diabetes Research and Training Center. 12/1/07-11/30/09; Total Direct Costs \$1,490,000. Competitive renewal received a score of 14 and will be funded for an additional 5 years.

American Diabetes Association: Regulation of insulin sensitivity and metabolism by the non-receptor tyrosine kinase Fyn. 1/15/07-1/14/10: Total Direct Costs \$260,868.

American Diabetes Association: Mentor-based Postdoctoral Fellowship Award. 7/1/09-6/30/13; Total Direct Costs \$180,000.

NY State Stem Cell Initiative - N08G-347: Identification of adipocyte progenitor cells during adipose tissue turnover and obesity. 9/1/09-12/31/12; Total Direct Costs \$1,080,000.

#### PHYSICAL FACILITIES

Faculty Office	200 sq ft
Laboratory Space	1800 sq ft

#### LABORATORY TECHNICIANS CURRENTLY SUPERVISED

Mila Losev	2009-present
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#### GRADUATE STUDENT TRAINING

Peter Wilden, Ph.D.	1985-1988
Patricia Walker, M.D./Ph.D.	1986-1989
Kurt Stevenson, M.D.	1987-1989
Chiling Bahns, M.D.	1988-1990
Jeanne Richardson, M.D./Ph.D.	1989-1993
Anne Frattali, M.D./Ph.D.	1989-1993

Min-Ling Liu, Ph.D.	1990-1994
Daniel Short, M.D./Ph.D.	1992-1997
Kathleen Holt, Ph.D.	1993-1996
Dong Chen, Ph.D.	1994-1999
Aimee Kao, M.D./Ph.D.	1995-1999
Edith Tseng, M.S.	1996-1998
Ray Fucini, M.S.	1996-1999
Chunmei Yang, Ph.D.	1997-2001
Robert Watson, Ph.D.	1998-2001
Ahmir Khan, M.D./Ph.D.	1998-2002
Jennifer Pfaffly, Ph.D.	2001-2005
Rana Dajani, Ph.D.	2001-2003
Bennett Caces, Ph.D.	2003-2007
Dumaine Williams, Ph.D.	2004-2007
Daniel Vollenweider	2004-2006

#### VISITING SCIENTISTS:

Geoffrey Holman, Ph.D.	2006
Danijela Markovic, Ph.D.	2007
Manu Vatish, M.D.	2008-2009

#### POST-DOCTORAL FELLOWS

Laurel J. Sweet, Ph.D.	1985-1987
David Dudley, Ph.D.	1986-1987
William Sivitz, M.D.	1987-1989
Judith L. Treadway, Ph.D.	1989-1992
Maria Rojas, M.D.	1990-1993
Ann Louise Olson, Ph.D.	1990-1994
Peter Gerrits, M.D.	1991-1993
Keishi Yamauchi, M.D.	1991-1995
Maleah-Grover McKay, M.D.	1992-1995
Steven Waters, Ph.D.	1992-1996
John Knight, Ph.D.	1993-1996
Shuichi Okada, M.D./Ph.D.	1994-1999
Brian Ceresa, Ph.D.	1995-1998
Jeffrey Elmendorf, Ph.D.	1996-1999
Kenneth Coker, Ph.D.	1996-2000
Debbie Thurmond, Ph.D.	1997-2001
Silvia Mora, Ph.D.	1998-2003
Makoto Kanzaki, Ph.D.	1998-2004
Satoshi Shigematsu, M.D.	1999-2002
Gang (Billy) Liu, M.D./Ph.D.	2000-2003
Robert Watson, Ph.D.	2001-2002
June Hou, M.D.	2001-2006
Megumi (Meg) Furukawa, M.D./Ph.D.	2001-2004
Le Min, M.D.	2002-2004

Encarnacion Capilla, Ph.D.	2002-2007
Fumihiko Hakuno, M.D.	2002-2003
Haihong Zong, M.D.	2003-2006
Guiseppe Procino, Ph.D.	2003-2005
Jerome Vicogne, Ph.D.	2003-2007
Claire Bastie, Ph.D.	2004-2007
Naoko Suzuki, M.D./Ph.D.	2004-2007
Igor Kravets, M.D.	2005-2007
Eijiro Yamada, M.D./Ph.D.	2006-present
Dumaine Williams, Ph.D.	2008-2009
Daorong Feng, Ph.D.	2008-present
Ting-Wen Ann Lee, M.D.	2008-present
Yen Kim Luu, Ph.D.	2008-present
Yan Tang, Ph.D.	2008-present
Hyokjoon Kwon, Ph.D.	2009-present
Nicola Kreglinger, M.D.	2009-present

#### RESEARCH ASSISTANT PROFESSORS

Robert Watson, Ph.D.	2005-2007
June Hou, M.D.	2006-2007
Claire Bastie, Ph.D.	2007-present
Haihong Zong, M.D.	2007-present

#### MASTERS' AND PH.D. THESIS COMMITTEES

Jerry Donovan	1984-1986
Alan Sharp	1985-1988
Anu Battacharya	1985-1990
David Dudley	1986-1987
Albert Leung	1986-1989
Vinghe Hui	1986-1990
William Huckle	1987-1988
Michael Knudson	1987-1991
Tom McDowell	1988-1990
Lewis Roberts	1988-1992
Scott Jay	1988-1991
William Schoderbek	1988-1992
Rebecca Baillie	1989-1993
Andrew Meyer	1989-1993
John McCann	1989-1992
David Mitchell	1990-1995
Lois Tverberg	1991-1993
John Wemmie	1992-1995
Diana Thomas	1993-1994
David Motto	1993-1995
Sally Hoelscher	1993-1995
David Davis	1993-1996

Bin Yang	1993-1995
Amy Abell	1993-1998
Hongyan Lui	1994-2000
David Katzman	1994-1998
Haoran Zhao	1995-1998
Qi Shi	1995-2000
Michael Musci	1995-1997
Sean Coleman	1996-2000
Nathan Hellyer	1997-1998
Eric Epping	1998-2002
Jinwoong Bok	1998-2003
Peggy Myung	1998-2000
Myoung-Goo Kang	1999-2003
Alexey Granovsky	1999-2003
Dimple Bansal	1999-2003
Robert Walters	1999-2002
Nam Lee	2000-2002
Michael Feigin	2004-2008
Elizabeth Scotto-Lavino	2004-2007
Wenjun Su	2004-2009
Daniel Barr	2005-2008
Diego Miranda	2008-present
Rory Flinn	2008-present
David Gross	2009-present
Aliki Kosteli	2009

## BIBLIOGRAPHY

### **Peer Reviewed Publications:**

1. Haberfield, P. and Pessin, J.E. Anhydrocholine. *J. Org. Chem.* 41:3773-3774, 1976.
2. Hale, A., Pessin, J.E., Palmer, F., Weber, M. and Glaser, M. Modification of the lipid composition of normal and rous sarcoma virus infected cells. *J. Biol. Chem.* 252:6190-6200, 1977.
3. Pessin, J.E., Salter, D. and Glaser, M. Use of a fluorescent probe to compare the plasma membrane properties in normal and transformed cells. *Biochemistry* 17:1997-2004, 1978.
4. Gidwitz, S., Pessin, J.E., Weber, M., Glaser, M. and Storm, D. Effect of membrane phospholipid composition changes on adenylate cyclase activity in normal and rous sarcoma transformed chicken embryo fibroblasts. *Biochim. Biophys. Acta* 628:263-276, 1980.
5. Pessin, J.E. and Glaser, M. Budding of Rous sarcoma virus and vesicular stomatitis virus from localized lipid regions in the plasma membrane of chicken embryo fibroblasts. *J. Biol. Chem.* 255:9044-9050, 1980.

6. Omann, G.E., Cimino, J., Pessin, J.E. and Glaser, M. Formation of the envelope of rous sarcoma virus and vesicular stomatitis virus from localized lipid regions in the plasma membrane. *Biophys. J.* 37:135-136, 1982.
7. Carter-Su, C., Pessin, J.E., Mora, R., Gitomer, W. and Czech, M.P. Photoaffinity labeling of the human erythrocyte D-glucose transporter. *J. Biol. Chem.* 257:5419-5425, 1982.
8. Pessin, J.E., Tillotson, L.G., Yamada, K., Gitomer, W., Carter-Su, C., Mora, R., Isselbacher, K.J. and Czech, M.P. Identification of the stereospecific hexose transporter from starved and fed chicken embryo fibroblasts. *Proc. Natl. Acad. Sci. USA* 79:2286-2290, 1982.
9. Haberfield, P. and Pessin, J.E. Proximate charge effects. Enthalpies of solvent transfer in the choline-hydrocholine equilibrium. *J. Am. Chem. Soc.* 104:6191-6194, 1982.
10. Oppenheimer, C., Pessin, J.E., Massague, J., Gitomer, W. and Czech, M.P. Insulin action rapidly modulates the apparent affinity of the insulin-like growth factor II receptor. *J. Biol. Chem.* 258:4824-4830, 1983.
11. Pessin, J.E., Gitomer, W., Oka, Y., Oppenheimer, C. and Czech, M.P.  $\beta$ -adrenergic regulation of insulin and epidermal growth factor receptors in rat adipocytes. *J. Biol. Chem.* 258:7386-7394, 1983.
12. Chlapowski, F.J., Bertrand, B.K., Pessin, J.E., Oka, Y. and Czech, M.P. The relationship of microvesicles to the plasmalemma of rat adipocytes. *Eur. J. Cell Biol.* 32:24-30, 1983.
13. Pessin, J.E., Tillotson, L.G., Isselbacher, K.J. and Czech, M.P. Photoaffinity labeling of the stereospecific D-glucose transport system with cytochalasin B. *Fed. Proc.* 43:2259-2261, 1984.
14. Kelleher, D.J., Pessin, J.E., Ruoho, A.E., and Johnson, G.L. Phorbol ester induces desensitization of adenylate cyclase and phosphorylation of the  $\beta$ -adrenergic receptor in turkey erythrocytes. *Proc. Natl. Acad. Sci. USA*, 81:4316-4320, 1984.
15. Boyle, T.R., Campana, J., Sweet, L.J., and Pessin, J.E. Subunit structure of the purified human placental insulin receptor: Intramolecular subunit dissociation by sodium dodecylsulfate polyacrylamide gel electrophoresis. *J. Biol. Chem.* 260:8593-8600, 1985.



16. Sweet, L.J., Wilden, P.A., Spector, A.A. and Pessin, J.E. Reconstitution of the purified insulin receptor into phospholipid vesicles. *Biochemistry* 24:6571-6580, 1985.
17. Yu, K-T., Pessin, J.E., and Czech, M.P. Regulation of insulin receptor/kinase by multisite phosphorylation, *Biochimie* 67:1081-1094, 1985.
18. Wilden, P.A., Boyle, T.R., Swanson, M.L., Sweet, L.J., and Pessin, J.E. Alteration of intramolecular disulfides in the insulin receptor/kinase by insulin and dithiothreitol: Insulin potentiates the apparent dithiothreitol-dependent subunit reduction of the insulin receptor, *Biochemistry*, 25:4381-4388, 1986.
19. Sweet, L.J., Wilden, P.A. and Pessin, J.E. Dithiothreitol activation of the insulin receptor/kinase does not involve subunit dissociation of the native  $\alpha_2\beta_2$  insulin receptor subunit complex, *Biochemistry*, 25: 7068-7074, 1986.
20. Morrison, B.D., and Pessin, J.E. Insulin stimulation of the insulin receptor kinase can occur in the complete absence of  $\beta$  subunit autophosphorylation. *J. Biol. Chem.* 262:2861-2868, 1987.
21. Sweet, L.J., Dudley, D.T., Pessin, J.E., and Spector, A.A. Phospholipid activation of the insulin receptor kinase: Regulation by phosphatidylinositol, *FASEB J.* 1:55-59, 1987.
22. Sweet, L.J., Morrison, B.D., and Pessin, J.E. Isolation of functional  $\alpha\beta$  heterodimers from the purified human placental  $\alpha_2\beta_2$  heterotetromeric insulin receptor complex: A structural basis for insulin binding heterogeneity, *J. Biol. Chem.* 262:6939-6942, 1987.
23. Wilden, P.A. and Pessin, J.E. Differential sensitivity of the insulin receptor kinase to thiol and oxidizing agents in the absence and presence of insulin. *Biochem. J.* 245:325-331, 1987.
24. Sweet, L.J., Morrison, B.D., Wilden, P.A. and Pessin, J.E. Insulin-dependent intermolecular subunit communication between isolated  $\alpha\beta$  heterodimeric insulin receptor complexes. *J. Biol. Chem.* 262:16730-16738, 1987.
25. Swanson, M.L., Dudley, D.T., Walker, P.S., Boyle, T.R. and Pessin, J.E. Functional differences between insulin receptors in rat adipocyte and human placenta membranes. *Endocrinology*, 122:967-975, 1988.
26. Morrison, B.D., Swanson, M.L., Sweet, L.J. and Pessin, J.E. Insulin-dependent covalent reassociation of isolated  $\alpha\beta$

heterodimeric insulin receptors into an  $\alpha_2\beta_2$  heterotetrameric disulfide-linked complex. *J. Biol. Chem.* 263:7806-7813, 1988.

27. Feltz, S.M., Swanson, M.L., Wemmie, J.A. and Pessin, J.E. Functional properties of an isolated  $\alpha\beta$  heterodimeric human placenta IGF-1 (Type 1) receptor complex. *Biochemistry* 27:3234-3242, 1988.

28. Hofmann, C., Thys, R., Sweet, L.J., Spector, A.A. and Pessin, J.E. Transfer of functional insulin receptors to receptor-deficient target cells. *Endocrinology*, 122:2865-2872, 1988.

29. Swanson, M.L., Keast, R.K., Jennings, M.L. and Pessin, J.E. Heterogeneity in the human erythrocyte band 3 anion transporter revealed by Triton X-114 phase partitioning. *Biochem. J.*, 255:229-234, 1988.

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54. Watson, R.T., Saltiel, A.R., Pessin, J.E. and Kanzaki, M. Subcellular Compartmentalization of Insulin Signaling Processes and GLUT4 Trafficking Events. In: *Mechanisms of Insulin Action,* AR Saltiel and JE Pessin, Ed., Landes BioScience, pp33-51, 2007.
55. Vicogne, J and Pessin, J.E. SNAREs mediated fusion of liposomes. *Methods in Molecular Biology,* 457:241-251, 2008.
56. Hou, J.C., Min, L. and Pessin, J.E. Insulin granule biogenesis, trafficking and exocytosis. *Vitamins and Hormones,* Ed. Gerry Litwack, 80:473-506, 2009.
57. Luu, Y.K, Pessin, J.E., Judex, S., Rubin, J. and Rubin, C.T. Mechanical signals as a non-invasive means to influence mesenchymal stem cell fate, promoting bone and suppressing the fat phenotype. *IBMS BoneKEy,* Submitted, 2009.
58. Vatish, M., Yamada, E., Pessin, J.E. and Bastie C. C. Fyn kinase function in lipid utilization: a new upstream regulator of AMPK activity? *Arch. Physiol. Biochem.* 115:191-8, 2009.

INVITED SYMPOSIUM PRESENTATIONS

1. International Conference on Insulin Action and Diabetes (1987)  
Calgary, Alberta, Canada
2. Molecular Aspects of Membrane Transport (1987) Banff, Alberta,  
Canada
3. 20th Anniversary of Insulin Crystal Structure Determination -  
Conference on Insulin Structure, Chemistry and Biology (1989)  
University of York, York, England, UK
4. Molecular Targets in Diabetes: The Glucose Transporter (1989)  
The Jacob Javits Center - SUNY at Stony Brook, Stony Brook, New  
York
5. A Symposium on Non-Insulin Dependent Diabetes Mellitus (1990)  
The Milton S. Hershey Medical Center, Penn State University,  
Hershey, Pennsylvania
6. 3rd International Symposium on Molecular & Cellular Biology of  
Insulin & IGF's (1990) Health Science Center, University of  
Florida, Gainesville, Florida
7. Keystone Symposium meeting on Diabetes and Insulin Action  
(1991) Park City, Utah
8. Stony Brook Diabetes & Endocrinology Research Center Symposium  
on Mechanisms of Insulin Action (1991) Diabetes Research Center at  
Stony Brook, Stony Brook, New York
9. 14th International Diabetes Federation Congress, Symposium on  
Receptor Signalling (1991) Washington, DC
10. Satellite Symposium on the Mechanism of Insulin Action (1991)  
Arlie, Virginia
11. Annual EPSCoR Conference (1991) South Dakota State University,  
Brookings, South Dakota
12. "Konofest" Retirement Symposium for Dr. Tetsuro Kono (1992)  
Vanderbilt University, Nashville, Tennessee
13. Frontiers in Cerebral Vascular Biology: Transport and Its  
Regulation (1992) Duluth, Minnesota
14. International Congress on Intraovarian Regulators and  
Polycystic Ovarian Syndrome (1992) Athens, Greece



15. MCB/ISU Symposia on Insulin-like Growth Factors in Development (1992) Ames, Iowa
16. Physiology Council Minisymposium on Glucose Homeostasis-Revisited, (1992) Ames, Iowa
17. 4th International Symposium on Insulin, IGFs, and Their Receptors (1993) Woods Hole, Massachusetts
18. 5th International Symposium on Insulin Receptor and Insulin Action (1993) Munich, Germany
19. 75th Annual Meeting of the Endocrine Society on Cell Surface Receptor Interactions (1993) Las Vegas, Nevada
20. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (1993) Snowmass, Colorado
21. Keystone Symposium meeting on Molecular Mechanisms Common to Type I and II Diabetes (1994) Park City, Utah
22. 3rd International Symposium on Insulin-Like Growth Factors (1994) Sydney, Australia
23. 11th New England Conference on Insulin Action (1994) Dartmouth University, Dartmouth, New Hampshire
24. 15th International Diabetes Federation Congress (1994) Kobe, Japan
25. Nara Conference on Insulin Action and its Disorders (1994) Nara, Japan
26. 77th Annual Meeting of the Endocrine Society on Phosphatases in Signaling Pathways (1995) Washington, DC
27. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (1995) Snowmass, Colorado
28. ASBMB Fall Research Conference on Determinants of Specificity in Growth Factor Signaling (1995) Granlibakken, Lake Tahoe, California
29. Diabetes Research Institute Symposium on Novel Mechanisms of Insulin Resistance (1995) Dusseldorf, Germany
30. Eli Lilly Lecture (Outstanding Scientific Achievement Award) at the 56th Annual Meeting of the American Diabetes Association (1996) San Francisco, California

31. Celebrating the Discovery of Insulin: An International Research Symposium on Diabetes (1996) Toronto, Canada
32. ASBMB Fall Research Conference on Integration of Growth Factor Signals (1996) Granlibakken, Lake Tahoe, California
33. IBC Conference on Insulin Resistance (1996) Boston, Massachusetts
34. Keystone Symposium meeting on The Adipose Cell: Molecular Aspects of Differentiation, Gene Expression and Metabolic Regulation in the Normal Cell and Obese Models, (1997) Park City, Utah
35. 48th Mosbach Colloquium on Transport of Organic Solutes Across Membranes: Molecular, Physiological and Pathological Aspects (1997) Mosbach, Germany
36. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (1997) Copper Mountain, Colorado
37. 3rd Symposium on Insulin Resistance (1997) Osaka, Japan
38. Falk Foundation Workshop on Signaling in the Liver (1997) Freiburg, Germany
39. 6th Annual Novo Nordisk Lecture (1997) University of Toronto, Ontario, Canada
40. National Institutes of Health Conference on Diabetes Mellitus: Challenges and Opportunities (1997) Natcher Conference Center, Bethesda, Maryland
41. 10th Symposium on Growth Hormone and Related Peptides (1998) Tokyo, Japan
42. Seventh International Symposium on Insulin Receptor and Insulin Action: Molecular and Clinical Aspects (1998) Jerusalem, Israel
43. Annual Experimental Biology meeting for the American Society of Pharmacology and Experimental Therapeutics (1998) San Francisco, California
44. 80th Annual Meeting of the Endocrine Society on Insulin Action (1998) New Orleans, Louisiana
45. 58th Annual Meeting of the American Diabetes Association (1998), Chicago, Illinois

46. 5th Annual Michigan Diabetes Research and Training Center Winter Symposium (1999) Ann Arbor, Michigan
47. 27th Steenbock Symposium on Adipocyte Biology and Hormone Signaling (1999) Madison, Wisconsin
48. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (1999) Snowmass, Colorado
49. 5th International Symposium on Insulin-Like Growth Factors (1999) Brighton, England, UK
50. Fuller Symposium on Cellular Mechanisms of Insulin Resistance in Diabetes and Hypertension and Novel Therapeutic Strategies (2000) London, Ontario, Canada
51. 35th Annual Insulin Study Group Symposium (2000) Osaka, Japan
52. 82th Annual Meeting of the Endocrine Society on Insulin Signaling (2000) Toronto, Ontario, Canada
53. 17th International Diabetes Congress (2000) Mexico City, Mexico
54. 60th Annual Meeting of the American Diabetes Association (2000), San Antonio, Texas
55. Keystone Symposium on Diabetes Mellitus: Molecular Mechanisms, Genetics and Prospects for New Therapy (2000) Taos, New Mexico
- 673rd Biochemical Society Meeting: Insulin Action (2001) Bristol, England, UK
57. Gordon Research Conference on Mechanisms of Membrane Transport (2001) Holderness, New Hampshire
58. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (2001) Snowmass, Colorado
59. 37th Annual Meeting of the ADA/EASD: Regulation of Vesicular Traffic in Insulin-Sensitive and Insulin-Secreting Cells. (2001) Glasgow, Scotland
60. VIIIth International Symposium on Insulin Receptors and Insulin Action. (2001) Geneva, Switzerland
61. Keystone Symposium on Diabetes Mellitus: Molecular Mechanisms, Genetics and New Therapies (2002) Keystone, Colorado

62. COST B17 Symposium (2002) Bari, Italy
63. Keystone Symposium: Toward Understanding Islet Biology (2003) Keystone, Colorado
64. 18th International Diabetes Federation (2003) Paris, France
65. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (2003) Snowmass, Colorado
66. Novo Nordisk Lecture (2003) McGill University, Montreal, Canada
67. FASEB Summer Research Conference on Perspectives in Transport Biology (2003) Tucson, Arizona
68. 12<sup>th</sup> International Congress of Endocrinology (2004) Lisbon, Portugal
69. Gordon Conference on Growth Factor Signaling (2004) Oxford, England, UK
70. Keystone Symposium on Diabetes Mellitus: Molecular Mechanisms, Genetics and Prospects for New Therapy (2004) Banff, Alberta, Canada
71. 8<sup>th</sup> Canadian Diabetes Association National Conference (2004) Quebec City, Quebec, Canada
72. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (2005) Snowmass, Colorado
73. 2<sup>nd</sup> International Conference on Molecular Basis of Metabolic Regulation (2005) Bari, Italy
74. 2<sup>nd</sup> Russell Berrie Symposium on Diabetes and Atherosclerosis (2005) Jerusalem, Israel
75. 21<sup>st</sup> Center of Excellence (COE) Program on Signal Transduction and Metabolic Disorders, (2005) Sendai, Japan
76. Keystone Symposium on Lipid Rafts and Cell Function (2006) Steamboat Springs, Colorado
77. Keystone Symposium on Diabetes Mellitus and the Control of Cellular Energy Metabolism (2006) Vancouver, British Columbia, Canada
78. 5<sup>th</sup> Annual Life Sciences Institute Symposium on the

Molecular Mechanisms underlying Metabolic Regulation (2006) Ann Arbor, MI.

79. International Diabetes Federation Congress (2007) Sendai, Japan

80. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (2007) Snowmass, Colorado

81. Insulin Signaling Pathways Symposium Honoring William Benjamin (2007) Stony Brook University, Stony Brook, NY

82. 13<sup>th</sup> International Conference on second messengers and phosphoproteins (2007) San Diego California

83. 89<sup>th</sup> Annual Meeting of the Endocrine Society: Conversations with the Editor-in-Chief of Endocrinology (2007) Toronto, Ontario, Canada

84. 8<sup>th</sup> Symposium on Molecular and Physiological Aspects of Type 2 Diabetes and Obesity (2008) Karolinska Institute, Stockholm, Sweden

85. 3<sup>rd</sup> International Conference on Molecular Basis of Metabolic Regulation: Adipose Tissue Function and Dysfunction (2008) Bari, Italy

86. FASEB Summer Research Conference on Recent Advances in Glucose Transporter Biology (2009) Lucca, Italy

87. 4th Annual D-CURE Symposium on Diabetes-related Target Organ Damage: Mechanistic and Clinical Aspects (2009) Tel Aviv, Israel

88. First Annual CEPORTED Retreat on Diabetes and Obesity (2009) Mount Sinai Medical School, NY, New York, USA.

89. Life Sciences Summit - Diabesity Panel: Managing the Epidemic (2009) Hauppauge, New York, USA

#### OTHER COMMENTS

None