



Boston University Medical Center

75 East Newton Street
Boston, Massachusetts 02118
617/247-5212

Radiation Protection Office

June 7, 1985

U.S. Nuclear Regulatory Commission
Region I, 631 Park Ave.
King of Prussia, PA 19406

Gentlemen:

Please amend license no 20-02215-01 to reflect the following changes.

1) Membership change Radioisotope Committee

Delete G. Krithivas PhD from the committee and add Paul Pilch PhD, one of our authorized users from the Biochemistry Department. CV enclosed.

2) Sealed Source

Please add an Ionization Chamber check source of 900uCi ^{90}Sr ^{90}Y . This is manufactured by PTW and sold through Nuclear Association of New York model PTW-09. This source is currently housed at Boston City Hospital #20-00275-08. It will be transferred according to DOT regulation to BUMC where it will be kept in the Radiation Physics Department of University Hospital. As with the sealed sources, leak tests will be performed in accordance with NRC regulations.

Regards

Victor N. Evdokimoff
Radiation Protection Officer, BUMC

June - 16 - I

Applicant	65-7279
Check No.	4/30
Amount, Fee Category	70,36
Type of Fee	Change
Date Check Rec'd	6/25/85
Received By	Jacques

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20-02215-01 PDR

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JUN 12 1985

CURRICULUM VITAE

Name: Paul F. Pilch, Ph.D.
Title: Associate Professor of Biochemistry
Birthdate: July 29, 1943

EDUCATION:

<u>Institution and Location</u>	<u>Degree</u>	<u>Year</u>	<u>Field</u>
Temple University, Philadelphia, PA	B.A.	1972	Chemistry
Purdue University, W. Lafayette, IND	Ph.D.	1977	Biochemistry

RESEARCH POSITIONS:

1977-1980 Postdoctoral Fellow, Brown University,
Providence, RI, with Dr. Michael P. Czech.

1981-1984 Assistant Professor of Biochemistry, Department of
Biochemistry, Boston University School of Medicine.

1984-present Associate Professor of Biochemistry, B.U.S.M.

HONORS:

David Ross Predoctoral Fellowship (Purdue University Research
Foundation) 1974-1976.

USPHS Postdoctoral Fellowship, 1978-1980.

Recipient of the Elliot P. Joslin Research and Development Award
of the American Diabetes Association, 7/1/81-6/30/83.

Member, Scientific Advisory Panel, Cell Physiology Section,
National Science Foundation, 1983-present.

Recipient of a Research Career Development Award from the USPHS,
7/1/84-6/30/89.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:

American Society of Biological Chemists
American Academy for the Advancement of Science
American Chemical Society
American Diabetes Association.

REVIEWER FOR THE FOLLOWING JOURNALS:

Biochemistry
Cellular and Molecular Biochemistry
Diabetes
J. Biol. Chem.
J. Clin. Invest.
J. Lipid Research
Proceedings of the National Academy of Science
Science

PUBLICATIONS

1. Pilch, P.F. and Somerville, R.L. (1976) Fluorine-containing analogues of intermediates in the shikimate pathway, *Biochemistry* 15, 5315-5320.
2. Pilch, P.F. and Somerville, R.L. (1977) Periodate oxidation of vicinal hydroxyls, *J. Chem. Ed.* 54, 449.
3. Pilch, P.F. and Czech, M.P. (1979) Interaction of cross-linking agents with the insulin effector system of isolated fat cells, *J. Biol. chem.*, 254, 3375-3381.
4. Pilch, P.F. and Czech, M.P. (1980) The subunit structure of the high-affinity insulin receptor, *J. Biol. Chem.*, 255: 1722-1731.
5. Heinrich, J., Pilch, P.F. and Czech, M.P. (1980) Purification of the adipocyte insulin receptor by immunoaffinity chromatography, *J. Biol. Chem.*, 255: 1732-1737.
6. Pilch, P.F., Thompson, P.A. and Czech, M.P. (1980) Coordinate modulation of D-glucose transport activity and bilayer fluidity in plasma membranes derived from control and insulin-treated adipocytes, *Proc. Natl. Acad. Sci. USA*, 77, 915-918.
7. Czech, M.P., Malbon, C.C., Kerman, K., Gitomer, W. and Pilch, P.F. (1980) Effect of thyroid status on insulin action in rat adipocytes and skeletal muscle, *J. Clin. Invest.*, 66, 574-582.
8. Pillion, D.J., Carter-Su, C.A., Pilch, P.F. and Czech, M.P. (1980) Isolation of adipocyte plasma membrane antigens by immunoaffinity chromatography, *J. Biol. Chem.*, 255: 9168-9176.
9. Pilch, P.F. and Czech, M.P. (1980) Hormone binding alters insulin receptor conformation, *Science* 210: 1152-1153.
10. Massague, J., Pilch, P.F. and Czech, M.P. (1980) Electrophoretic resolution of three major insulin receptor structures with unique subunit stoichiometries, *Proc. Nat. Acad. Sci.*, 77: 7137-7141.
11. Czech, M.P., Melchior, D.L., Thompson, P.A., Pilch, P.F. and Carter-Su, C. (1980) A possible role of membrane fluidity in the regulation of adipocyte hexose transport, in Proceedings of the 10th Congress of the International Diabetes Federation, Vienna, Austria. September 9-14, 1979, W.K. Waldhausl, ed. (Excerpta Medica, Amsterdam), 191-196.
12. Czech, M.P., Carter-Su, C. and Pilch, P.F. (1980) Chromatographic properties of the adipocyte transport system in detergent solution and its resolution from the insulin receptor, in Insulin Chemistry, Structure and Function of Insulin and Related Hormones, D. Brandenburg and A. Wallmer eds.
13. Czech, M.P., Massague, J., Pilch, P.F. and Carter-Su, C. (1981) Structural features of the insulin effector system; relation to hexose transport activation, *Ann. N.Y. Acad. Sci.*, 358: 282-291.

14. Carter-Su, C., Pilch, P.F. and Czech, M.P. (1981) Chromatographic resolution of the high affinity insulin receptor from the insulin-sensitive D-glucose transporter of adipocyte plasma membranes, *Biochemistry*, 20, 216-221.
15. Pilch, P.F., Axelrod, J.D., Colello, J. and Czech, M.P. (1981) Unimpaired signal transduction by the adipocyte insulin receptor following its partial proteolytic fragmentation, *J. Biol. Chem.* 256: 1570-1575.
16. Massague, J., Pilch, P.F. and Czech, M.P. (1981) A unique proteolytic cleavage site on the subunit of the insulin receptor, *J. Biol. Chem.*, 256: 3182-3190.
17. Johnson, G.L., MacAndrew, V.I. and Pilch, P.F. (1981) Identification of the glucagon receptor in rat liver plasma membranes by photoaffinity crosslinking, *Proc. Nat. Acad. Sci.*, 78: 875-878.
18. Czech, M.P., Massague, J. and Pilch, P.F. (1981) The insulin receptor: Structural features, *Trends in biochem. Sci.* 6: 222-225.
19. Pilch, P.F., Axelrod, J.D. and Czech, M.P. (1981) Biological properties of a proteolytically altered insulin receptor, in Current Views on Insulin Receptors, Serono Symposium, Vol. 41, edited by D. Andreani, R. DePirro, R. Lauro, J.M. Olefsky and J. Roth, Academic Press, pp. 255-260.
20. Pilch, P.F. (1982) Modification of the insulin receptor by diethyl pyrocarbonate: effect on insulin binding and action. *Biochemistry* 21: 5638-5644.
21. Pilch, P.F., Shia, M.A., Benson, R.J.J. and Fine, R.E. (1983) Coated vesicles participate in the receptor-mediated endocytosis of insulin. *J. Cell Biol.*, 96: 133-138.
22. Shia, M.A. and Pilch, P.F. (1983) The subunit of the insulin receptor is an insulin-activated protein kinase. *Biochemistry*, 22: 717-721.
23. Axelrod, J. and Pilch, P.F. (1983) Unique cytochalasin B binding characteristics of the hepatic glucose carrier. *Biochemistry*, 22, 2222-2227.
24. Rubin, J.B., Shia, M.A. and Pilch, P.F. (1983) Tyrosine-specific phosphorylation is stimulated in vitro by insulin-like growth factor one. *Nature*, 305: 438-440.
25. Shia, M.A., Rubin, J.B. and Pilch, P.F. (1983) The insulin receptor protein kinase: physicochemical requirements for activity. *J. Biol. Chem.* 258, 14450-14455.
26. Wessling, M. and Pilch, P.F. (1984) Characterization and solubilization of the cytochalasin B binding component from human placental microsomes. *Biochim. Biophys. Acta*, 777, 123-132.

27. Campbell, C., Squicciarini, J., Shia, M., Pilch, P.F. and Fine, R.E. (1984) Identification of a protein kinase as intrinsic component of rat liver coated vesicles. Biochemistry 23, 4420-4426.
28. Pilch, P.F. and Czech, M.P. (1984) Affinity cross-linking of peptide hormones and their receptors. in Receptor Biochemistry and Methodology, Volume 1. J.C. Venter and L.C. Harrison, eds., Alan R. Liss, Inc., New York, pp. 161-175.
29. Pilch, P.F. (1985) Insulin Receptor Purification in Handbook on Receptor Research R. DePirro and R. Lauro, eds. in press.
30. Pilch, P.F. (1985) The Insulin Receptor as a Protein Kinase in Molecular Basis of Insulin Action, M. Czech, ed. Plenum Press, in press.
31. Aiello, L.P., Wessling, M. and Pilch, P.F. (1985) Metalloendoprotease substrates are glucose transport inhibitors and membrane structure perturbants., submitted for publication.
32. Cousin, J.-L. and Pilch, P.F. (1985) Recycling of insulin receptors in the human hepatoma line, HepG2, submitted for publication.
33. Shia, M.A., Aiello, L.P., Pilch, P.F. and Farmer, S.R. (1985). The insulin receptor gene: cDNA cloning and superabundant expression in rat hepatic tissue, submitted for publication.

BETWEEN: William O. Miller, Chief
License Fee Management Branch
Office of Administration

John E. Glenn, Chief
Nuclear Materials Section B
Division of Engineering and
Technical Programs

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: Boston University Medical Center

Application Dated: 6/7/85

Control No.: 03954

License No.: 20-02215-01

2. FEE ATTACHED

Amount: \$ 120.00

Check No.: 657279

3. COMMENTS

Signed Brenda Platchek

Date 6/14/85

02110

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount: 7B 3E - 120

2. Correct Fee Paid. Application may be processed for:

Amendment ✓

Renewal

License

Signed P Jackson

Date 6/27/85

4/88

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