

<b>BIOGRAPHICAL SKETCH</b>			
<b>NAME</b> Flier, Jeffrey Scott, M.D.		<b>POSITION TITLE</b> Chief Academic Officer, BIDH	
<b>EDUCATION/TRAINING</b>			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
City College of New York, New York, NY	B.S.	1968	Biology
Mount Sinai School of Medicine, New York, NY	M.D.	1972	Medicine

**A. Positions and Honors.****Experience**

- 1972-1974 Intern and Assistant Resident in Medicine, Mt. Sinai Hospital, New York
- 1974-1978 Clinical Associate, Diabetes Branch, National Institutes of Health, National Institute of Arthritis, Metabolism and Digestive Diseases, Bethesda, MD
- 1978-1982 Assistant Professor of Medicine, Harvard Medical School, Boston, MA
- 1978-1990 Chief, Diabetes Unit, Beth Israel Hospital, Boston, MA
- 1985-1986 Visiting Scientist, Whitehead Institute, Massachusetts Institute of Technology, Cambridge, MA
- 1982-1993 Associate Professor of Medicine, Harvard Medical School, Boston, MA
- 1993- Professor of Medicine, Harvard Medical School, Boston, MA
- 1990-2000 Chief, Division of Endocrinology, Beth Israel Hospital, Boston, MA
- 1998-2002 Vice Chair for Research, Department of Medicine, Beth Israel Deaconess Medical Center, Boston, MA
- 1999 - Chair, Research Strategy Committee, Beth Israel Deaconess Medical Center, Boston, MA
- 2002 Chief Academic Officer, Beth Israel Deaconess Medical Center, Boston, MA

**Awards and Honors:**

- 1991 Eli Lilly Award for Outstanding Scientific Achievement, American Diabetes Association
- 2000 Elected Fellow, American Association for the Advancement of Science
- 2001 Elected Fellow, American Academy of Arts and Sciences

**B. Selected peer-reviewed publications and manuscripts in press (in chronological order)**

(Selected from a total of 157)

1. Flier JS, Kahn CR, Roth J, Bar RS. Antibodies that impair insulin receptor binding in an unusual diabetic syndrome with severe insulin resistance. *Science* 190:63-65, 1975.
2. Moller DE, Flier JS. Detection of insulin receptor mutations with the polymerase chain reaction technique. Application to the Type A syndrome of insulin resistance. *New Eng J. of Medicine* 319: 1526, 1988.
3. Moller DE, Caro JF, Flier JS. Tissue Specific expression of two alternatively spliced insulin receptor mRNA's in man. *Molecular Endocrinology* 3:1263-1269, 1989.
4. Lowell BB, S-Susulic V, Hamann A, Lawitts JA, Himms-Hagen J, Boyer BB, Kozak LP, Flier JS. Development of Obesity in Transgenic Mice Following the Genetic Ablation of Brown Adipose Tissue. *Nature* 366:740-743, 1993.
5. Frederich RC, Hamann A, Anderson S, L Ilmann B, Lowell BB, Flier JS. Leptin Levels Reflect Body Lipid Content in Mice: Evidence for Diet-Induced Resistance to Leptin Action. *Nature Medicine*. 1:1311-1314, 1995.

6. Ahima RS, Prabakaran D, Mantzoros, Qu D, Lowell BB, Maratos-Flier E, Flier JS. Role of leptin in the neuroendocrine response to fasting. *Nature* 382:250-252,1996.
7. Ahima RS, Dushay J, Flier SN, Prabakaran D, Flier JS. Leptin accelerates the onset of puberty in normal female mice. *J Clin Invest.* 99:391-395, 1997.
8. Björk C, da Silva B, Uotani S, Flier JS. Divergent Signaling Capacities of the Long and Short Isoforms of the Leptin Receptor. *J Biol Chem.* 272:32686-32695,1997.
9. Björk C, Elmquist JK, Frantz JD, Shoelson SE, Flier JS. Identification of SOCS-3 as a Potential Mediator of Central Leptin Resistance. *Mol Cell.* 1:619-625, 1998.
10. Uotani S, Björk C, Tornøe, Flier JS. Functional properties of leptin receptor isoforms: Internalization and degradation of leptin and ligand-induced receptor down-regulation. *Diabetes.* 48:279-286, 1999.
11. Björk C, El-Haschimi K, Frantz JD, Flier JS. The Role of SOCS-3 in Leptin Signaling and Leptin Resistance. *J Biol Chem.* 274:30059-30065, 1999
12. Hileman SM, Tornøe J, Flier JS, Björk CB. Transcellular Transport of Leptin by the Short Leptin Receptor Isoform ObRa in Madin-Darby Canine Kidney Cells. *Endocrinology.* 141:1942-1950, 2000.
13. El-Haschimi K, Pierroz DD, Hileman SM, Björk C, Flier JS. Two defects contribute to hypothalamic leptin resistance in mice with diet induced obesity. *J Clin Invest.* 105:1827-1832, 2000.
14. Björk C, Buchholz RM, Davis SM, Bates SH, Pierroz DD, Gu H, Neel BG, Myers MG, Jr, Flier JS. The role of SHP-2 in MAPK activation by leptin receptors. *J Biol Chem* (In Press).
15. Ludwig DS, Tritos NA, Mastaitis JW, Kulkarni R, Kokkotou E, Elmquist J, Lowell B, Flier JS, Maratos-Flier E. Melanin-concentrating hormone overexpression in transgenic mice leads to obesity and insulin resistance. *J Clin Invest* 107(3):379-86, 2001
16. Masuzaki H, Paterson J, Shinyama H, Morton NM, Mullins JJ, Seckl JR, Flier JS. A Transgenic Model of Visceral Obesity and the Metabolic Syndrome. *Science* 294: 2166-2170, 2001

### **C. Research Support.**

#### **Ongoing Research Support**

NIH NIDDK 2 R37 DK28082 (Jeffrey S. Flier, MD) 03/01/81—11/30/04

National Institutes of Health / NIDDK

Insulin and IGF receptors / action in insulin resistance

This grant studies leptin action and signal transduction as they relate to the biology of obesity.

Role: Principal Investigator

NIH NIDDK R01 DK46930 (Jeffrey S. Flier, MD) 08/01/99—07/31/03

National Institutes of Health / NIDDK

Brown Fat and the Central Control of Energy Balance

The goal of this grant is to study the phenotype of UCP-DTA mice with brown fat deficiency to better understand the function of BAT and to establish their utility as a model for obesity and NIDDM.

Role: Principal Investigator

NIH NIDDK P01DK56116 (Jeffrey S. Flier, MD) 08/01/99 — 07/31/04

National Institutes of Health / NIDDK

Peripheral and Central Interactions in Energy Balance

The overall goal is to understand the molecular mechanisms underlying the effect of leptin to rapidly enhance insulin sensitivity independent of its effects on food intake and body weight.

Role: Principal Investigator