

CURRICULUM VITAE

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PLACE OF BIRTH: Seattle, Washington

EDUCATION AND TRAINING:

- 1975 B.S. Microbiology, University of Washington, Seattle, Washington
- 1975 B.S. Psychology, University of Washington, Seattle, Washington
- 1980 Ph.D. Immunology, Microbiology Department, University of Texas Southwestern Medical Center, Dallas, Texas, Advisor: Ellen Vitetta
- 1980-82 Postdoctoral Fellow, Microbiology Department, Columbia University College of Physicians and Surgeons, New York, New York, Laboratory of Benvenuto Pernis
- 1982-84 Postdoctoral Fellow, Institute of Cancer Research, Columbia University College of Physicians and Surgeons, New York, New York, Laboratory of Richard Axel
- 1984-91 Associate, Howard Hughes Medical Institute, Columbia University College of Physicians and Surgeons, New York, New York, Laboratory of Richard Axel

ACADEMIC APPOINTMENTS:

- 1991-1996 Assistant Professor, Department of Neurobiology, Harvard Medical School, Boston, Massachusetts
- 1994- Investigator, Howard Hughes Medical Institute
- 1996-2001 Associate Professor, Department of Neurobiology, Harvard Medical School, Boston, Massachusetts
- 2001-2002 Professor, Department of Neurobiology, Harvard Medical School, Boston, Massachusetts
- 2002- Full Member, Division of Basic Sciences, Fred Hutchinson Cancer Research Center, Seattle, Washington

- 2003- Affiliate Professor, Department of Physiology and Biophysics, University of Washington, Seattle, Washington
- 2004-2007 Associate Director, Division of Basic Sciences, Fred Hutchinson Cancer Research Center, Seattle, Washington

OTHER APPOINTMENTS:

- 1997-2016 Editorial Board, Current Opinion in Neurobiology
- 2000-2003 Scientific Advisor, Primal, Inc., Seattle, WA
- 2002- Editorial Board, Molecular and Cellular Neuroscience
- 2003-2013 Editorial Board, Developmental Neurobiology
- 2003-2006 Scientific Advisory Board, Nura Inc., Seattle, WA
- 2004-2008 Scientific Advisory Board, Center for Molecular Medicine, Karolinska Hospital, Stockholm, Sweden
- 2005-2013 Medical Advisory Board, The Gairdner Foundation, Toronto, Canada
- 2005- Advisory Committee, March of Dimes Prize in Developmental Biology
- 2005- President's Council, New York Academy of Sciences
- 2005- Editorial Advisory Council, HFSP Journal
- 2005-2009 Advisory Board, Peter Gruber Foundation Neuroscience Prize
- 2006- Founding Board, Rosalind Franklin Society
- 2007- Consultant, Omeros Corp., Seattle, WA
- 2007- Board of Directors, International Flavors & Fragrances, Inc., New York
- 2007 Committee Member, Unilever Science Prize
- 2008 Committee Member, Kavli Prize in Neuroscience
- 2009 Committee Member, The Royal Swedish Academy of Sciences Göran Gustafsson Prize
- 2010-2013 Committee Member, Shaw Prize in Life Science and Medicine
- 2011,13, 15 Committee Member, Eric Kandel Young Neuroscientists Prize, The Foundation
- 2012- International Advisory Panel, Knut and Alice Wallenberg Foundation, Sweden

2015- Scientific Advisory Board, The MIT Picower Institute for Learning and Memory

SELECTED HONORS:

1992 McKnight Scholar Award from The McKnight Endowment Fund for Neuroscience

1992 Alfred P. Sloan Research Fellowship Award

1993 John Merck Scholarship in the Biology of Developmental Disabilities in Children

1995 The 1995 Distinguished Alumnus, Graduate School, University of Texas Southwestern Medical Center

2000 Senior Scholar Award in Aging, The Ellison Medical Foundation

2002 Elected Fellow, the American Association for the Advancement of Science

2003 Elected Member, the National Academy of Sciences

2005 Golden Plate Award, The Academy of Achievement

2005 Distinguished Alumnus Award, University of Washington

2005 Brava Award, Women's University Club

2006 The International Hall of Fame, International Women's Forum

2006 Alumna Summa Laude Dignata, University of Washington

2006 Elected Member, the National Academy of Medicine

2007 The Medal of Merit, State of Washington

2008 Member, the American Academy of Arts & Sciences

2009 Elected Member, the European Academy of Sciences

2011 Doctor of Science, honoris causa, Rockefeller University

2015 Doctor of Science, honoris causa, Harvard University

2015 Doctor of Science, honoris causa, University College London

2015 Elected Foreign Member, The Royal Society

SELECTED AWARDS:

1992	The Takasago Award for Research in Olfaction
1992	The LVMH Moët Hennessy Louis Vuitton Science for Art Prize
1992	The Sense of Smell Award, The Fragrance Foundation
1996	The Unilever Science Award
1996	The R.H. Wright Award in Olfactory Research
1997	The Lewis S. Rosenstiel Award for Distinguished Work in Basic Medical Research
2003	Perl/UNC Neuroscience Prize
2003	The Gairdner Foundation International Award
2004	The Nobel Prize in Physiology or Medicine

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Buck LB, Yuan D and Vitetta ES (1979) A dichotomy between the expression of IgD on B cells and its requirement for triggering such cells with two T-independent antigens. *J. Exp. Med.* 149:987-992.

Vitetta E, Pure E, Isakson P, Buck LB and Uhr J (1980) The activation of murine B cells: the role of surface immunoglobulins. *Immunol. Rev.* 52:211-231.

Vitetta ES, Cambier JC, Kettman JR, Ligler FS, Yuan D, Buck LB, Zan-Bar I, Strober S, and Uhr J (1980) The role of receptor IgM and IgD in determining triggering and induction of tolerance in murine B cells. In: *The Biological Basis of Immunodeficiency.* (E.L. Gelfand and H.M. Dosch, eds.) Raven Press, New York, p. 189.

Roberts JM, Buck LB and Axel R (1983) A structure for amplified DNA. *Cell* 33:53-63.

Buck LB, Stein R, Palazzolo M, Anderson DJ and Axel R (1983) Gene expression and the diversity of identified neurons. *Cold Spring Harbor Symp. Quant. Biol.* 48: 485-492.

Buck LB, Bigelow JM and Axel R (1987) Alternative splicing in individual *Aplysia* neurons generates neuropeptide diversity. *Cell* 51:127-133.

Weiss KR, Bayley H, Lloyd PE, Tenenbaum R, Gawinowicz-Kolks MA, Buck L, Cropper EC and Kupfermann I (1989) Purification and sequencing of neuropeptides contained in neuron R15 of *Aplysia californica*. *Proc. Natl. Acad. Sci.* 86:2913-2917.

Hynes MA, Buck LB, Gitt M, Barondes S, Dodd J and Jessell TM (1989) Carbohydrate recognition in neuronal development: structure and expression of surface oligosaccharides and beta-galactoside-binding lectins. In: *Carbohydrate Recognition in Cellular Function.* Ciba Found. Sympos. 145. New York: John Wiley and Sons, pp 189-

209.

Hynes MA, Gitt MA, Barondes SH, Jessell TM and Buck LB (1990) Selective expression of a lactose-binding lectin gene in subsets of central and peripheral neurons. *J. Neurosci.* 10:1001-1013.

Weber DA, Buck LB, Delohery TM, Agostino N and Pernis B (1990) Class II MHC molecules are spontaneously internalized in acidic endosomes by activated B cells. *J. Mol. Cell. Immunol.* 4:255-268.

Alevizos A, Karagogeos D, Weiss KR, Buck LB and Koester J (1991) R15 alpha 1 and R15 alpha 2 peptides from *Aplysia*: comparison of bioactivity, distribution, and function of two peptides generated by alternative splicing. *J. Neurobiol.* 22:405-417.

Buck L and Axel R (1991) A novel multigene family may encode odorant receptors: a molecular basis for odor recognition. *Cell* 65:175-187. PMID: 1840504.

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Buck LB (1992) The olfactory multigene family. *Curr. Opin. Neurobiol.* 2:282-288 and *Curr. Opin. Genet. and Dev.* 2:467-473. PMID: 1643410.

Ngai J, Dowling MM, Buck L, Axel R and Chess A (1993) The family of genes encoding odorant receptors in the channel catfish. *Cell* 72:657-666.

Ressler KJ, Sullivan SL and Buck LB (1993) A zonal organization of odorant receptor gene expression in the olfactory epithelium. *Cell* 73:597-609. PMID: 7683976.

Buck L (1993) Identification and analysis of a multigene family encoding odorant receptors: implications for mechanisms underlying olfactory information processing. *Chem. Senses* 18:203-208.

Buck LB (1993) Receptor diversity and spatial patterning in the mammalian olfactory system. In: *The Molecular Basis of Smell and Taste Transduction*. Ciba Found. Sympos. 179. New York: John Wiley and Sons, pp. 51-67.

Buck LB, Firestein S, and Margolskee R (1994) Olfaction and taste in vertebrates: molecular and organizational strategies underlying chemosensory perception. In: *Basic Neurochemistry* (fifth edition). (Siegel GJ, Agranoff BW, Albers RW and Molinoff PB, eds.) New York: Raven Press, pp. 157-177.

Sullivan SL, Ressler KJ, Buck LB (1994) Odorant receptor diversity and patterned gene expression in the mammalian olfactory epithelium. *Prog. Clin. Biol. Res.* 390:75-84.

Ressler KJ, Sullivan SL, and Buck LB (1994) A molecular dissection of spatial patterning in the olfactory system. *Curr. Opin. Neurobiol.* 4:588-596. PMID: 7812149.

Ressler KJ, Sullivan SL, and Buck LB (1994) Information coding in the olfactory system: evidence for a stereotyped and highly organized epitope map in the olfactory bulb. *Cell* 79:1245-1255. PMID: 7528109.

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in human and mouse. *Nature* 404: 601-604. PMID: 10766242.

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