

CURRICULUM VITAE

1. NAME, POSITION, ACADEMIC DEPARTMENT

Stephen L. Helfand
Professor
Department of Genetics and Developmental Biology
University of Connecticut Health Center

2. EDUCATION

1971-73 SUNY Binghamton; Binghamton, NY.
1974-75 Stanford University; Stanford, CA. B. Sc.
1976-79 Albert Einstein College of Medicine; Bronx, NY. M.D.

3. PROFESSIONAL APPOINTMENTS

1980 Medical Intern, Department of Internal Medicine,
Montefiore Hospital and Medical Center, Bronx, NY
1980-83 Clinical Resident, Neurology, Massachusetts General Hospital
Clinical Fellow, Neurology, Harvard Medical School, Boston, MA
1981 Visiting Scholar, Neuroimmunology, Queens University, Canada
1983-84 Postdoctoral fellow, Department of Biological Sciences, Stanford University, Stanford, CA
1984-85 Postdoctoral fellow, Department of Biochemistry, Stanford University, Stanford, CA
1985-90 Associate Research Scientist, Department of Biology, Yale University, New Haven, CT
1990- Assistant Professor, Department of BioStructure and Function, School of Dental Medicine,
UConn Health Center, (UCHC), CT
1991- Member, Oral Biology Graduate Faculty, UConn Health Center, CT
1991- Member, Developmental Biology Graduate Faculty, UConn Health Center, CT
1991- Member, Neuroscience Graduate Faculty, UConn Health Center, CT
1993- Member, Core Faculty of UConn Center on Aging, UConn Health Center, CT
1996-2005 Director, Genetics and Developmental Biology Graduate Program, UConn Health Center,
CT
1997- Associate Professor with Tenure, Department of BioStructure and Function, School of
Dental Medicine, UConn Health Center, CT
1998- Acting Head Department BioStructure and Function--August , 1998
1999- Acting Head Department BioStructure and Function—March8; May 10-12, Aug. 9-13,
1999
1999-2003 Associate Professor with Tenure, Department of Genetics and Developmental Biology,
School of Medicine, UCHC, CT
2000 Visiting Professor, University College London, Department of Biology (August-December)
2003-2005 Professor with Tenure, Department of Genetics and
Developmental Biology, School of Medicine, UCHC, CT
2005- Clinical Professor, Department of Genetics and Developmental Biology, School of
Medicine, UCHC, CT
2005- Professor with Tenure, Department of Molecular Biology, Cell Biology and Biochemistry,
Division of Biology and Medicine, Brown University, RI

4. COMPLETED PUBLICATIONS

Chapters in books

Helfand, S.L., Werkmeister, J., and Roder, J.C. (1982) The role of free oxygen radicals in the activation of the NK cytolytic pathway. *In: Herberman, R., Editor, NK Cells and Other Natural Effector Cells.* Academic Press. Page: 1011-1020.

Werkmeister, J., Helfand, S.L., Haliotis, T., Pross, H., and Roder, J.C. (1982) Specificity of natural killer (NK) cells: nature of target cell structure. *In: Herberman, R., Editor, NK Cells and Other Effector Cells.* Academic Press. Page: 743-750.

Refereed journal articles

- 1) Helfand, S.L., Smith, G.A., and Wessells, N.K. (1976) Survival and development in culture of dissociated parasympathetic neurons from ciliary ganglia. *Dev. Biol.* **50**: 541-547.
- 2) Helfand, S.L., Riopelle, R.J., and Wessells, N.K. (1978) Non-equivalence of conditioned medium and nerve growth factor for sympathetic, parasympathetic and sensory neurons. *Exp. Cell Res.* **113**: 39-45.
- 3) Helfand, S.L., Werkmeister, J., and Roder, J.C. (1982) The relationship between target cell binding, chemiluminescence and cytotoxicity. *J. Exp. Med.* **156**: 492-505.
- 4) Roder, J.C., Helfand, S.L., Werkmeister, J., McGarry, R., Beaumont, T.J., and Duwe, A. (1982) Oxygen intermediates are triggered early in the cytotoxic pathway of human NK cells. *Nature* **298**: 569-572.
- 5) Werkmeister, J.A., Helfand, S.L., Rubin, P., Haliotis, T., Pross, H., and Roder, J.C. (1982) Tumor cell differentiation modulates susceptibility to natural killer cells. *Cell. Immun.* **69**: 122-127.
- 6) Roder, J.C., Todd, R.F., Rubin, P., Haliotis, T., Helfand, S.L., Werkmeister, J., Pross, H.F., Boxer, L.A., Schlossman, S.F., and Fauci, A.S. (1983) The Chediak-Higashi gene in humans III. Studies on the mechanism of NK impairment. *Clinical Exp. Immunol.* **51**: 359-368.
- 7) Helfand, S.L., Werkmeister, J., Pross, H., and Roder, J.C. (1983) Oxygen intermediates are required for interferon activation of NK cells. *J. Interferon Res.* **2**: 143-151.
- 8) Werkmeister, J., Helfand, S.L., Roder, J., and Pross, H. (1983) The chemiluminescence response of human natural killer cells. II. Association of a decreased response with low natural killer activity. *Eur. J. Immunol.* **13**: 514-520.
- 9) McGarry, R.C., Helfand, S.L., Quarles, R.H., and Roder, J.C. (1983) Recognition of myelin-associated glycoprotein by the monoclonal antibody HNK-1. *Nature* **306**: 376-378.
- 10) Goodman, C.S., Bastiani, M.M., Doe, C.Q., du Lac, S., Helfand, S.L., Kuwada, K.Y., Thomas, J.B. (1984) Neuronal recognition during development: cellular and molecular approaches. *Science* **225**: 1271-1279.

- 11) Bastiani, M.J., Doe, C.Q., Helfand, S.L., and Goodman, C.S. (1985) Neuronal specificity and growth cone guidance in grasshopper and *Drosophila* embryos. *Trends in Neuroscience* **84**: 257-266.
- 12) Beachy, P.A., Helfand, S.L. Hogness, D.S. (1985) Segmental distribution of bithorax complex proteins during *Drosophila* development. *Nature* **313**: 545-551.
- 13) Hogness, D.S., Lipshitz, H.D., Beachy, P.A., Peattie, D.A., Saint, R.A., Goldschmidt-Clermont, M., Harte, P.J., Gavis, E.R., and Helfand, S.L. (1985) Regulation and products of the *Ubx* domain of the bithorax complex. *Cold Spring Harbor Symp. Quant. Biol.* **50**: 181-194.
- 14) Helfand, S.L. and Carlson, J. (1989) Isolation and characterization of an olfactory mutant in *Drosophila* with a chemically specific defect. *Proc. Natl. Acad. Sci. USA* **86**: 2908-2912.
- 15) Woodward, C., Huang, T., Sun, H., Helfand, S.L., and Carlson, J. (1989) Genetic analysis of olfactory behavior in *Drosophila*: A new screen yields the *ota* mutants. *Genetics*. **123**: 315-326.
- 16) McKenna, M., Monte, P., Helfand, S.L., Woodard, C., and Carlson, J. A novel chemosensory response in *Drosophila* and the isolation of the *acj* mutations which affect it. (1989) *Proc. Natl. Acad. Sci. USA* **86**: 8118-8122.
- 17) Irvine, K.D., Helfand, S.L. and Hogness, D.S. The large upstream control region of the *Drosophila* homeotic gene *Ultrabithorax*. (1991) *Development* **111**: 407-424.
- 18) *Helfand, S.L., Blake, K.J., Rogina, B., Stracks, M.D., Centurion, A. and Naprta, B. Temporal patterns of gene expression in the antenna of the adult *Drosophila melanogaster*. (1995) *Genetics* **140**: 549-555.
- 19) Blake, K.J., Rogina, B., Centurion, A. and *Helfand, S. L. Changes in gene expression during post-eclosional development in the olfactory system of *Drosophila melanogaster*. (1995) *Mechanisms of Development* **52**: 179-185.
- 20) Rogina, B. and *Helfand, S. L. Regulation of gene expression is linked to life span in the adult *Drosophila*. (1995) *Genetics* **141**: 1043-1048.
- 21) Blake, K. J., Hoopengardner, B., Centurion, A. and *Helfand, S. L. A molecular marker shows that adult maturation is independent of the rate of pre-adult development in *Drosophila melanogaster*. (1996) *Developmental Genetics* **18**: 125-130.
- 22) *Helfand, S. L. and Naprta, B.. The expression of a reporter protein, β -galactosidase, is preserved during maturation and aging in some cells of the adult *Drosophila melanogaster*. (1996) *Mechanisms of Development* **55**:45-51.
- 23) Rogina, B. and *Helfand, S. L. Timing of expression of a gene in the adult *Drosophila* is regulated by mechanisms independent of temperature and metabolic rate. (1996) *Genetics* **143**: 1643-1651
- 24) Rogina, B. and *Helfand, S. L. Spatial and temporal pattern of expression of the *wingless* and *engrailed* genes in the adult antenna is regulated by age-dependent mechanisms. (1997) *Mechanisms of Development* **63**: 89 - 97.

- 25) Rogina, B., Benzer, S., and *Helfand, S. L. *Drosophila drop-dead* mutations accelerate the time course of age-related markers. (1997) *Proc. Natl. Acad. Sci. (USA)*, **94**: 6303-6306.
- 26) Rogina, B., Vaupel, J. W., Partridge, L., *Helfand, S. L. Regulation of gene expression is preserved in aging *Drosophila melanogaster*. (1998) *Current Biology*, **8**: 475-478.
- 27) Rogina, B. and *Helfand, S.L. Cu, Zn superoxide dismutase deficiency accelerates the time course of an age-related marker in *Drosophila melanogaster*. (2000) *Biogerontology* 1: 161-167.
- 28) Rogina, B. Reenan, R. A., Nilsen S. P. and *Helfand, S. L. Extended life-span conferred by cotransporter gene mutations in *Drosophila*. (2000) *Science*, **290**: 2137-40.
- 29) *Helfand, S. L. and Rogina, B. Regulation of gene expression during aging. (2000) In “Molecular Genetics of Aging” Pages 67-80 Results and Problems in Cell Differentiation, Vol. 29, ed. Siegfried Hekimi, Springer-Verlag, Germany.
- 30) *Helfand, S.L. and Inouye, S.K. Rejuvenating views of the aging process. (2002) *Nature Reviews Genetics*, 3: 149-153.
- 31) Hoopengardner, B and *Helfand, S. L. Temperature Compensation and Temporal Expression Mediated by an Enhancer Element in *Drosophila*. (2002) *Mechanisms of Development*, **110**: 27-37.
- 32) Knauf, F., Rogina, B., Jiang, Z., Aronson, P. A., and *Helfand, S. L. (2002) Functional Characterization and Immunolocalization of the Novel Transporter Encoded by the Life-Extending Gene *Indy*. *Proc. Natl. Acad. Sci. (USA)*, **99**:14315-14319.
- 33) Rogina, B., Helfand, S. L. and Frankel, S. (2002) Longevity regulation by *Drosophila* Rpd3 deacetylase and caloric restriction, *Science*, **298**: 1745.
- 34) *Helfand, S. L. and Rogina, B. “From genes to aging in the *Drosophila*”(2003) *Advances in Genetics*, Vol. 49, pp 67-109. Edited by J. C. Hall, J. C. Dunlap and T. Friedman, Academic Press, San Diego.
- 35) Marden, J.H., Rogina, B., Montooth, K.L. and *Helfand, S. L. (2003) Conditional tradeoffs between aging and organismal performance of *Indy* long-lived mutant flies. . *Proc. Natl. Acad. Sci. (USA)*, **100**: 3369-3373.
- 36) *Helfand, S. L. and Rogina, B. Molecular genetics of aging: Is this the end of the beginning? (2003) *BioEssays* 25: 134-141.
- 37) Fridell, Y-W., Sánchez-Blanco, Silvia, B. A. and *Helfand, S. L., (2004) Functional Characterization of a *Drosophila* Mitochondrial Uncoupling Protein. *Journal of Bioenergetics and Biomembranes*, 36 (3): 219-228.
- 38) Woods, J, Rogina, B, Lavu, S., Howitz, K., *Helfand, S. L., *Tatar, M., and *Sinclair, D. (2004) Sirtuin activators mimic calorie restriction and delay aging in metazoans. *Nature*, 430 (7000): 686-9.

- 39) Bauer, J., Goupil, S., Garber, G., and *Helfand, S. L. (2004) An accelerated assay for the identification of life span extending interventions in *Drosophila melanogaster*. *Proc. Natl. Acad. Sci. (USA)*, **101**:12980-12985.
- 40) Rogina, B. and *Helfand, S. L. (2004) Sir2 mediates longevity in the fly through a pathway related to calorie restriction. *Proc. Natl. Acad. Sci. (USA)*, **101**: 15998-16003.
- 41) Fridell, Y-W, Sanchez-Blanco, A., Silvia, B. and *Helfand, S. L. (2005) Targeted Expression of the Human Uncoupling Protein 2 (hUCP2) to Adult Neurons Extends Life Span in the Fly. ." *Cell Metabolism* **1**: 145-152.
- 42) Zheng, J-Y, Mutcherson, R, and *Helfand, S. L. (2005) Calorie restriction delays lipid oxidative damage in *Drosophila melanogaster*. *Aging Cell*. **4**: 209-16.
- 43) Bross, TG, Rogina, and *Helfand SL. (2005) Behavioral, physical, and demographic changes in *Drosophila* populations through dietary restriction. *Aging Cell*. **4**: 309-17. (Cover picture)
- 44) Bauer JH, Poon PC, Glatt-Deeley H, Abrams JM, and *Helfand S.L. (2005) Neuronal Expression of p53 Dominant-Negative Proteins in Adult *Drosophila melanogaster* Extends Life Span. *Curr Biol*. **15**:2063-8.
- 45) Sanchez-Blanco A, Fridell YW, and *Helfand SL (2006) Involvement of *Drosophila* Uncoupling Protein 5 in Metabolism and Aging. *Genetics* **172**:1-12.
- 45) Knauf F, Mohebbi N, Teichert C, Herold D, Rogina B, Helfand SL, Gollasch M, Luft FC, and Aronson, PA. The life-extending gene Indy encodes an exchanger for Krebs-cycle intermediates. *Biochemical Journal*, In Press

Non-refereed journal articles

- 1) *Helfand, S. L. Chaperones Take Flight. (2002) *Science*, **295**: 809-810.
- 2) *Helfand, S. L. and Rogina, B. Genetics of aging in the fruit fly, *Drosophila melanogaster*. (2003) *Annual Review of Genetics*, **37**: 329-48.
- 3) *Helfand, S. L. and Inouye, S. L. Aging, life span, genetics and the fruit fly. (2003) *Clinical Neuroscience Research*, **2**: 270-278.

*** Contributing author**

ABSTRACTS (since 1991)

- 1) **S. L. Helfand**. Molecular genetics of olfaction: *pentagon* is a gene required for response to a specific odorant. Cold Spring Harbor meeting on Molecular neurobiology of *Drosophila*. September 1991.
- 2) **S. L. Helfand**. Molecular genetics of olfaction: *pentagon* is a gene required for response to a specific odorant. Association for Chemoreception Sciences 14th Annual meeting 1992 (*Chemical Senses*, vol **17**, issue 5, 1992).

- 3) **S. L. Helfand.** A molecular biology primer for the chemical sense. Enhancer trap technique: A simple means of identifying genes by visualizing their anatomic pattern of expression. Invited lecture at Association for Chemoreception Sciences 14th Annual meeting 1992.
- 4) **S. L. Helfand.** Molecular genetics of olfaction: *pentagon* is a gene required for response to a specific odorant. 33rd Annual Drosophila Research Conference 1992.
- 5) **S. L. Helfand.** A novel approach for visualizing gene regulation during aging. Cold Spring Harbor meeting on Biology of Aging, Chaired by C. E. Finch and S. Prusiner, April 1992.
- 6) B. G. Grimwade and **S. L. Helfand.** Molecular genetics of olfaction: Towards cloning *pentagon*, a Drosophila gene required for response to a specific odorant. Association for Chemoreception Sciences 15th Annual meeting 1993 (*Chemical Senses*, vol **18**, issue 5, 1993).
- 7) B. G. Grimwade and **S. L. Helfand.** Molecular genetics of olfaction: An analysis of *pentagon*, a mutation resulting in anosmia to a specific odorant. Cold Spring Harbor Neurobiology of Drosophila meeting. 1993.
- 8) **S. L. Helfand.** Regulation of gene expression during aging. American Federation for Aging Research Sixth Annual Grantee Conference, May 1993.
- 9) K.J. Blake, B. Rogina, and **S. L. Helfand.** Age-associated changes in adult *D. melanogaster*. American Society for Cell Biology 1993 (*Molecular Biology of the Cell* **4**: 368a, Oct. 1993).
- 10) K.J. Blake, M. D. Stracks and **S. L. Helfand.** Gene regulation during adult life in *Drosophila melanogaster*. Society for Developmental Biology 52nd Annual Meeting. 1993.
- 11) **S. L. Helfand**, K.J. Blake, A. Centurion, B. Grimwade, B. Naprta, B. Rogina, & M.D. Stracks. Regulation of gene expression in adult *D. melanogaster*. 35th Annual Drosophila Research Conference 1994.
- 12) B. Rogina, K. J. Blake, and **S. L. Helfand.** Age-associated changes in adult *Drosophila melanogaster*. The 1994 Northeast Regional Developmental Biology Meeting. 1994.
- 13) **S. L. Helfand**, K. J. Blake, B. Rogina, M.D. Stracks, A. Centurion, S. Mallya, and B. Naprta. Regulation of gene expression during aging. 47th Annual Scientific Meeting, The Gerontological Society of America 1994 (*The Gerontologist*, vol.**34**, issue1, October 1994).
- 14) K. Blake, B. Rogina, A. Centurion, S. Mallya, B. Grimwade, and **S. L. Helfand.** Maturation and aging in adult *D. melanogaster*. 47th Annual Scientific Meeting, The Gerontological Society of America 1994 (*The Gerontologist*, vol.**34**, issue1, October 1994).
- 15) B. Rogina, K. J. Blake, A. Centurion, S. Mallya, and **S. L. Helfand.** Regulation of segment polarity genes during aging in *Drosophila melanogaster*. 47th Annual Scientific Meeting, The Gerontological Society of America 1994 (*The Gerontologist*, vol.**34**, issue1, October 1994).
- 16) **S. L. Helfand**, K. J. Blake, B. Naprta, M. Stracks, and B. Rogina. Age-dependent gene regulation in the adult fly. 36th Annual Drosophila Research Conference 1995.

- 17) B. Rogina, K. J. Blake, and **S. L. Helfand**. Regulation of gene expression during aging. Northeast Regional Developmental Biology Conference. April 1995.
- 18) K.J Blake, B. Rogina, and **S. L. Helfand**. Maturation and aging in adult *Drosophila melanogaster*. Northeast Regional Developmental Biology Conference. April 1995.
- 19) **S. L. Helfand** and B. Rogina. Age-dependent gene regulation in the adult fly. Gordon Conference, Biology of Aging, May 1995.
- 20) **S. L. Helfand**. Age-dependent gene regulation in the adult fly. 1995 Summer Training Course in Experimental Aging Research sponsored by the National Institute on Aging.
- 21) **S. L. Helfand** and B. Rogina. Gene expression is regulated by age-dependent mechanisms in the aging fly. 48th Annual Scientific Meeting, Gerontological Society of America, November, 1995.
- 22) B. Rogina and **S. L. Helfand**. *wingless* gene expression is regulated by age-dependent mechanisms. The American Society for Cell Biology Annual meeting 1995 (*Molecular Biology of the Cell* **6**: 93a, 1995).
- 23) **S. L. Helfand** and B. Rogina. *wingless* gene expression is regulated by age-dependent mechanisms. 37th Annual Drosophila Research Conference, April 1996.
- 24) B. Rogina and **S. L. Helfand**. A gene whose temporal expression is regulated by mechanisms independent of temperature and metabolic rate. 37th Annual Drosophila Research Conference, April 1996.
- 25) B. Rogina, **S. L. Helfand**, and T. Kuwada. Effects of increased O₂ levels on *Drosophila melanogaster* life span and pattern of gene expression. American Geriatrics Society. May 1996.
- 26) Rogina, B. and **S. L. Helfand**. Regulation of 2216 gene expression is independent of temperature and metabolic rate, In : Northeast Regional Developmental Biology Conference, Woods Hole, May 1996.
- 27) **S. L. Helfand**, B. Hoopengardner, and B. Rogina. Control of gene expression during aging. American Federation for Aging Research Ninth Annual Grantee Conference, May 1996.
- 28) **S. L. Helfand** and B. Rogina. Age-dependent gene regulation. 49th Annual Scientific Meeting of the Gerontological Society of America, November 1996.
- 29) B. Rogina and **S. L. Helfand**. *wingless* gene expression is regulated by age-dependent mechanisms. 49th Annual Scientific Meeting of the Gerontological Society of America, November 1996.
- 30) **S. L. Helfand** and B. Rogina. Age-dependent regulation of *wingless* and *engrailed* gene expression. 38th Annual Drosophila Research Conference, April 1997.
- 31) B. Rogina and **S. L. Helfand**. Age-dependent regulation of *wingless* and *engrailed* gene expression 1997 Gordon Conference on Biology of Aging, January 1997, Ventura California

- 32) B. Hoopengardner and **S. L. Helfand**. Identification of a Temporally-responsive Region in the Genome of *Drosophila melanogaster*. Northeast Regional Developmental Biology Conference, Woods Hole, April, 1997
- 33) B. Rogina, J.W. Vaupel, L. Partridge and **S. L. Helfand**: Regulation of gene expression is preserved in aging *Drosophila melanogaster*. Northeast Regional Developmental Biology Conference, Woods Hole, April, 1998.
- 34) B. Hoopengardner and **S. L. Helfand**. Temporal and age responsiveness of the epidermal enhancer of the Deformed gene in *Drosophila melanogaster*. Northeast Regional Developmental Biology Conference, Woods Hole, April, 1998
- 35) B. Rogina, J.W. Vaupel, L. Partridge and **S. L. Helfand**: Regulation of gene expression is preserved in aging *Drosophila melanogaster* Gordon Conference, Biology of Aging, Il Ciocco, Italy, May, 1998.
- 36) B. Rogina and **S.L. Helfand**: Cloning Two Genes with Different Regulation of Expression During Aging, American Federation of Aging Research Annual Grantee Conference, Santa Barbara, CA, 1999.
- 37) B. Hoopengardner and **S. L. Helfand**: Temporal-responsiveness of the epidermal enhancer of the Deformed gene in the adult *Drosophila melanogaster*. Gordon Conference on Biology of Aging, January 2000, Ventura California
- 38) B. Hoopengardner and **S. L. Helfand**: Temporal-responsiveness of the epidermal enhancer of the Deformed gene in the adult *Drosophila melanogaster*. 41st Annual Drosophila Research Conference, March 2000
- 39) B. Rogina, J. Carey, H. G. Muller, D. Love and **S. L. Helfand**: The effect of mating on egg production and mortality of female *Drosophila melanogaster*. Annual Pepper Center meeting, March 2000, Santa Barbara, CA.
- 40) B. Rogina, J. Carey, H. G. Muller, and **S. L. Helfand**: The effect of mating on egg production and mortality of female *Drosophila melanogaster*. 41st Annual Drosophila Research Conference, March 2000
- 41) **S. L. Helfand**: Molecular Genetics of aging in the fly. British Society of Cell Biology, July 3-5, 2002
- 42) B. Rogina, F. Knauf, P.A. Aronson and **S. L Helfand**: The *Drosophila* life-extending gene *Indy* is a new type of Krebs cycle intermediate transporter. Cold Spring Harbor Meeting on Molecular Genetics of Aging, October, 2002.
- 43) R. J. Mutcherson, II and **S. L. Helfand**: Long-lived *Indy* mutant *Drosophila melanogaster* accumulate mitochondrial lipid peroxidation products at a slower rate than wild type flies. Cold Spring Harbor Meeting on Molecular Genetics of Aging, October, 2002.
- 44) J. Bauer , R. A. .Reenan, and **S. L. Helfand**: . Overexpression of the novel protein *hitzschlag* in *D. melanogaster*. 44th Annual Drosophila Research Conference, March 2003.

- 45) B. Silvia, and **S. L. Helfand**: Identification of putative malate/oxyglutarate carrier proteins and implications for longevity. 44th Annual Drosophila Research Conference, March 2003.
- 46) A. Sanchez-Blanco, B. Silvia, Y-W. Fridell, and **S. L. Helfand**: Mitochondrial uncoupling and aging. 44th Annual Drosophila Research Conference, March 2003
- 47) B. Rogina, P. A. Marden, K. L. Montooth, and **S. L. Helfand**: Conditional tradeoffs between aging and organismal performance of *Indy* long-lived mutant flies. Gordon Conference on Biology of Aging, January 2003, Ventura California
- 48) S. Frankel, **S. L. Helfand**, and B. Rogina: Longevity regulation by *Drosophila* Rpd3 deacetylase and caloric restriction. Gordon Conference on Biology of Aging, January 2003, Ventura, California
- 49) G. Garber and **S. L. Helfand**: The Involvement of Beta-catenin in *Drosophila* Longevity. 45th Annual Drosophila Research Conference, March 2003, Washington DC
- 50) P. Poon, J. Bauer, and **S. L. Helfand**: Overexpression of Proapoptotic Genes in Adult *Drosophila Melanogaster*. 45th Annual Drosophila Research Conference, March 2003, Washington DC
- 51) A. Sanchez-Blanco, Y.-W. Fridell, B. A. Silvia, and **S. L. Helfand**: The Newly Characterized *Drosophila* Uncoupling Protein 5 and its Involvement in Aging. 45th Annual Drosophila Research Conference, March 2003, Washington DC
- 52) R.J. Mutcherson, II, J. Zheng, and **S. L. Helfand**: Comprehensive Characterization of Oxidative Damage and Aging in *Drosophila melanogaster*. 45th Annual Drosophila Research Conference, March 2003, Washington DC
- 53) S. Goupil, S. J. Bauer, and **S. L. Helfand**: A rapid assay for identifying life span extension in the fly. Northeast Regional Developmental Biology 2004 Woods Hole, MA
- 54) T. Bross, B. Rogina, and **S. L. Helfand**: Diet and longevity in the fly. Northeast Regional Developmental Biology 2004 Woods Hole, MA
- 55) B. Rogina and **S. L. Helfand**: Lifespan extension in *Indy* mutant flies is associated with Sir2 and the calorie restriction pathway, CSHL Oct, 2004
- 56) J. H. Bauer, S. Goupil, G. Garber, and **S. L. Helfand**: An accelerated assay for the identification of life span extending interventions in *Drosophila melanogaster*, CSHL Oct, 2004
- 57) A. Sanchez-Blanco, Y.-W. Fridell, and **S. L. Helfand**: Involvement of *Drosophila* uncoupling protein 5 in metabolism and aging, CSHL Oct, 2004
- 58) J. Zheng, R. J. Mutcherson,II and **S. L. Helfand**: Caloric restriction delays accumulation of lipid-related oxidative damage in adult *Drosophila*, CSHL Oct, 2004
- 59) B. Silvia and **S. L. Helfand**: Uncoupling, Mitochondria, and Aging: Identification and Characterization of Uncoupling Proteins in the Fruit Fly *Drosophila melanogaster*. GSA, Nov, 2004

- 60) Y.-W. Fridell, A. Sanchez-Blanco, B. Silvia, and **S. L. Helfand**: Targeted adult neuronal expression of hUPC2 extends life span in *Drosophila melanogaster*. GSA, Nov, 2004.
- 61) Goupil, S; Bauer, J H; Garber, G B and Helfand, S L “Using a Biomarker of Aging Based Screening System to Identify Pharmacological Agents that Extend Life Span in *Drosophila melanogaster*”, *46th Annual Drosophila Research Conference* (2005)
- 62) Bauer, J.H., Poon, P.C., Glatt-Deeley, H., Abrams, J.M. and Helfand, S.L. ‘Neuronal expression of p53 dominant-negative proteins in adult *Drosophila melanogaster* extends life span.’, *Gerontological Society of America Meeting* (2005)
- 63) Bauer, J.H., Poon, P.C., Glatt-Deeley, H., Abrams, J.M. and Helfand, S.L. ‘Neuronal expression of p53 dominant-negative proteins in adult *Drosophila melanogaster* extends life span.’, *Gordon Research Conference: The Biology of Aging* (2006); Best Poster Award

INVITED ORAL PRESENTATIONS (since 1991)

- 1) Dental Dean's Seminar Series, School of Dental Medicine, University of Connecticut Health Center, hosted by Dean James E. Kennedy, January 1991. Molecular Genetics of Olfaction.
- 2) Invited speaker at a workshop: The process and promise of molecular biology for the chemical senses: A primer. At the Fourteenth annual meeting of the Association for Chemoreception Sciences, 1992.
- 3) Department of Biochemistry and Microbiology Seminar series, University of Connecticut Health Center, hosted by Larry Klobutcher. September 30, 1992. Molecular genetics of olfaction: An analysis of *pentagon*, a mutation resulting in anosmia to a specific odorant.
- 4) Cold Spring Harbor meeting on Biology of Aging, arranged by C. E. Finch and S. Prusiner, April 1992. A novel approach for visualizing gene regulation during aging.
- 5) Department of Endocrinology, University of Connecticut Health Center, hosted by Dr. Barbara Kream. December 1994. Molecular genetics of aging: Temporal patterns of gene expression during aging.
- 6) Division of Biology, California Institute of Technology, hosted by Prof. Seymour Benzer, December 1994. Molecular genetics of aging: Temporal patterns of gene expression.
- 7) Geriatrics Grand Rounds, University of Connecticut Health Center, hosted by Dr. Richard Besdine. December 1994. Molecular genetics of aging: Gene regulation during aging.
- 8) Department of Biology, University of Pennsylvania, hosted by Dr. Nancy Bonini, March 1995. Molecular genetics of aging: Temporal patterns of gene expression in the adult fly.
- 9) Department of Biology, Southern Methodist University, hosted by Dr. William Orr, March 1995. Molecular genetics of aging: Temporal patterns of gene expression in the adult fly.
- 10) Huffington Center on Aging, hosted by Dr. Olivia Pereria-Smith, April 1995. Molecular genetics of aging: Temporal patterns of gene expression in the adult fly.

- 11) Gerontology Research Center of the National Institute on Aging, hosted by Dr. George Baker, III, May 1995. Molecular genetics of aging: Temporal patterns of gene expression.
- 12) Department of Genetics, Harvard Medical School, hosted by Dr. C. - Ting Wu, May 1995. Molecular genetics of aging: Temporal patterns of gene expression in the adult fly.
- 13) Department of Biochemistry, Stanford University Medical Center, hosted by Drs. Robert Lehman and Mark Krasnow. October 24, 1995. Molecular genetics of aging: Temporal patterns of gene expression in the adult fly.
- 14) Division of Biology, California Institute of Technology, hosted by Prof. Seymour Benzer, November 14, 1995. Molecular genetics of aging: Temporal patterns of gene expression and the effect of *drop-dead*.
- 15) Dental Dean's Seminar Series, School of Dental Medicine, University of Connecticut Health Center, hosted by Dean James E. Kennedy, November 28, 1995. Molecular genetics of aging.
- 16) Department of Molecular Biology, Princeton University, hosted by Dr. Elizabeth Gavis, February 9, 1996. Molecular genetics of aging: Temporal patterns of gene expression in the adult fly.
- 17) Institute on Aging, University of Pennsylvania Medical School, hosted by Dr. Risa Lavizzo-Mourey, March 4, 1996. Molecular genetics of aging: Regulation of gene expression is linked to life span.
- 18) Aging and Stress Workshop at the 37th Annual Drosophila Meeting, sponsored by the National Institute on Aging, April 30th, 1996. Temporal patterns of gene expression in the adult fly.
- 19) Department of Biochemistry and Biophysics, University of California San Francisco, hosted by Dr. Regis Kelly. May 3, 1996. Molecular genetics of aging: Regulation of gene expression is linked to life span.
- 20) Division of Public Health Biology and Epidemiology, University of California, Berkeley, hosted by Dr. Arthur Reingold. May 3, 1996. Molecular genetics of aging: Regulation of gene expression is linked to life span.
- 21) Department of Developmental Biology, Stanford University, hosted by Dr. Matthew Scott. June 12, 1996. Molecular genetics of aging: Temporal patterns of gene expression in the adult fly.
- 22) Traveler's Center on Aging, University of Connecticut Health Center. June 21, 1996. Molecular genetics of aging: Regulation of gene expression is linked to life span.
- 23) 1997 Gordon Conference on Biology of Aging, January 1997. Molecular genetics of aging: Temporal patterns of gene expression in the adult fly.
- 24) National Institute on Aging, Bethesda, MD, March 6, 1997. Molecular genetics of aging: Regulation of gene expression is linked to life span
- 25) Organizer and Chairman of workshop on Aging and Stress at the 38th Annual Drosophila Meeting, Chicago April, 1997.

- 26) Invited lecture at Second Annual Meeting of the Danish Centre for Molecular Gerontology-Nov, 1998.
- 27) Invited lecture at the Annual Gerontology Society of America meeting, Nov. 1998
- 28) Invited lecture at the 1999 Summer Research Institute sponsored by the NIA and Brookdale Foundation, July 1999.
- 29) Chair of session on Genes that affect longevity at the Third European-American Research Colloquium on Social and Biological Determinants of Longevity August, 1999.
- 30) Invited lecture Yale Medical School, Lecture to first year Medical Students on “Aging and its molecular basis”—Oct. 5, 1999.
- 31) Invited lecture HHMI, NIH/HHMI sponsored seminar Drosophila: Direct flight to understanding Human disease and behavior-“Aging: time flies, fruit flies” September 6, 2000.
- 32) Invited lecture MRC LMCB, UC London, Molecular genetics of aging: temporal patterns of gene expression in the adult fly. (Martin Raff host) October 31, 2000.
- 33) Invited lecture Department of Biology, UC London, , Molecular genetics of aging: temporal patterns of gene expression in the adult fly. (Linda Partridge host) November 13, 2000.
- 34) Invited Panel member, Talk Magazine/PaineWebber conference “Navigators and Innovators”, Santa Barbara, March 2001.
- 35) Invited lecture at GMBB retreat, University of Connecticut Health Center, April 2001
- 36) Invited lecture at GMBB faculty seminar, University of Connecticut Health Center, May 2001
- 37) Invited lecture at Annual Donaghue Foundation meeting, May 2001.
- 38) Invited speaker, Developmental Biology Gordon Conference, “Molecular genetics of aging”, NewHampshire, June 2001.
- 39) Invited speaker, Biology of Aging Gordon Conference, “Mutations in the Indy gene extend life span in fruitflies.”, Oxford, July 2001.
- 40) Invited lecturer, Molecular Biology of Aging Course, Marine Biology Laboratory, Woods Hole, sponsored by Ellison Medical Foundation, August, 2001.
- 41) Invited participant and speaker, Longevity Genes: From primitive organisms to man., International Longevity Center and American Federation for Aging Research, Arizona, October 2001.
- 42) Invited lecture, Department of Physiology, Uconn Storrs, October 25th, 2001
- 43) Invited lecture Department of Cellular and Structural Biology, UT San Antonio, November 7th, 2001, Molecular genetics of aging: temporal patterns of gene expression and a gene that doubles the life span of the fruit fly.

- 44) Invited lecturer, Metabolic Disorders, Merck Research Laboratories, Rahway, NJ November 28, 2001
- 45) Invited speaker, "I'm not dead yet" Symposium on dedication of new Biology building Southern Methodist University, Dallas, TX December 8, 2001.
- 46) Invited seminar, Yale Medical School, Dept of Genetics, New Haven, CT Feb 12, 2002
- 47) Invited seminar, Cornell Medical School, Dept of Neurology, March 7, 2002.
- 48) Invited seminar, Albert Einstein College of Medicine, Department of Molecular Genetics, Bronx, NY October 17, 2002.
- 49) Invited seminar, Indiana University, Dept of Biology, Indianapolis, IN, November 14, 2002.
- 50) Invited seminar, Association Research Neurological and Mental Disorders, NYC, December 6, 2002.
- 51) Invited seminar, Washington University, Department of Genetics, St. Louis, MO, April 14, 2003.
- 52) Invited seminar, Pennington Biomedical Research Center. LSU, Baton Rouge, LA, May 5, 2003.
- 53) Invited Seminar, Dartmouth Medical School, Dept of Genetics, August 7, 2003
- 54) Invited Seminar, Univ Mass, Amherst, Dept of Biology, October 7, 2003
- 55) Invited Seminar, Trinity College, Department of Biology, October 23, 2003
- 56) Invited Seminar, Univ Pennsylvania, Sleep research group, Dec 9th, 2003.
- 57) Invited Seminar, Georgia Medical School, Department of Biochemistry, March 30, 2004
- 58) Invited Seminar, Hartford Foundation seminar hosted by Department of Cell Biology, the Department of Biological Chemistry and Molecular Pharmacology and the Division on Aging at Harvard Medical School, May 10, 2004.
- 59) Invited Seminar, Mt. Sinai, Department of Pharmacology and Biological Chemistry, June 3, 2004 (Calorie reduction and life span extension: a genetic pathway in the fly).
- 60) Invited Seminar, Case Western Reserve Medical Center, Department of Genetics, June 30, 2004 (Calorie reduction and life span extension: a genetic pathway in the fly).
- 61) Presentation and Chair of session, Molecular Genetics of Aging, CSHL, October , 2004.
- 62) Invited Seminar, Tufts Medical Center, Department of Anatomy and Cell Biology, October 14, 2004 (Calorie reduction and life span extension: a genetic pathway in the fly).
- 63) Presentation and Chair of Symposium, Gerontology Society of America Annual Meeting, Nov, 2004

- 64) Invited Seminar, Wesleyan University, Department of Biology, December 2, 2004 (Calorie reduction and life span extension: a genetic pathway in the fly).
- 65) Invited Seminar, The Scripps Research Institute, December 9, 2004 (Calorie reduction and life span extension: a genetic pathway in the fly).
- 66) Invited Seminar, Brown University, Department of Molecular, Cellular and Biochemistry, December 14, 2004 (Calorie reduction and life span extension: a genetic pathway in the fly).
- 67) Invited Speaker, Sam Luenfeld Research Institute, Mt Sinai Hospital, Toronto, Canada, June 25, 2005 (Calorie restriction and life span extension: a molecular genetic pathway in the fly)
- 68) Chair and speaker in session at Gordon Conference Biology of Aging, January 2006
- 69) Invited Seminar, University of Arkansas for Medical Sciences, Department of Neurobiology and Developmental Sciences, March 6, 2006 (Calorie reduction and life span extension: a genetic pathway in the fly).
- 70) Invited Speaker, Annual Drosophila Conference, Workshop on Aging, Houston, TX March 31, 2006 (Calorie reduction and life span extension: a genetic pathway in the fly).
- 71) Invited Speaker, Theoretical Physics Conference “Determination of Longevity”, Institute for Advanced Studies, Princeton, NJ IAS Center for Systems Biology & Kavli Institute, Princeton, NJ (“*Biomarkers of Aging and Molecules That Mediate Calorie Reduction Life Span Extension in Flies*”)
- 72) Invited Speaker, American Aging Association meeting, Boston, MA June 2, 2006 (A Biochemical/Genetic Pathway for the Life Span Extending Effects of Calorie Restriction in the Fly)
- 73) Invited Speaker, The 2006 Harvard/Paul F. Glenn, Symposium on Aging, June 5, 2006 (I’m Not Dead Yet!)
- 74) Invited Speaker, Marine Biology Laboratory course on the Molecular Biology of Aging, August 4, 2006.
- 75) Invited Speaker, Ellison Medical Foundation Meeting August 17-19, 2006

WORK IN PROGRESS

6. RESEARCH GRANTS

a. Current grants

AG-SS-0716 (Helfand), PI	10/1/01-9/30/06	5%
Ellison Foundation		\$848,000
Isolation of Single Gene Mutations in <i>Drosophila Melanogaster</i>		

1R01 AG025277 (Helfand), PI NIH/NIA “Oxidative Damage, Aging and Life Span”	9/30/05-6/30/10	15% \$1,548,446
2 R37 AG16667-06 (Helfand), PI NIH/NIA Single Gene Mutant that Confer Longevity in Drosophila	4/1/04--3/31/09	15% \$1,803,500
1R01 AGO224353 (Helfand), PI NIH/NIA Control of Gene Expression and Life Span	9/30/04-7/31/09	15% \$1,655,131

b. Completed grants

University of Connecticut Research Initiation Program Grant (PI) (1/1/91-1/192)		\$25,000
Genetic Studies of Signal Transduction in Olfaction. (PI) American Cancer Society Institutional Research Grant Award (5/15/91-8/31/92)		\$10,000
Molecular and Genetic Analysis of Olfaction.(PI) University of Connecticut Faculty Research Award (2/28/92-2/28/94)		\$29,000
Regulation of Gene Expression During Aging (PI) American Federation for Aging Research (7/1/92-6/30/94)		\$32,000
Gene regulation during aging (PI) Sandoz (5/1/93-10/31/94)		\$25,000
Regulation of Gene Expression During Aging (PI) University of Connecticut Faculty Research Award (2/15/94-2/14/96)		\$28,958
Molecular and Genetic Analysis of Olfaction in Drosophila (PI) NSF (3/15/92-8/31/96)		\$300,072
Control of Gene Expression During Aging (PI) American Federation for Aging Research (8/1/95-8/1/96)		\$40,000
Nathan W. and Margaret T. Shock Aging Research Foundation Award (PI)		\$10,000
The Patrick & Catherine Weldon Donaghue Medical Research Foundation Award (PI) Mentor for Dr. Blanka Rogina (7/1/94-6/30/96)		\$55,000
Control of Gene Expression During Aging (PI) American Federation for Aging Research (7/10/97 – 8/30/98)		\$40,000
Genetics of Aging in the Olfactory System of Drosophila Melanogaster (PI) University of Connecticut Interim HCRAC Award (4/1/97 – 9/30/98)		\$74,654

			Helfand, Stephen, L.
Burroughs Wellcome Research Travel Grant (8/1/00-1/1/01) (PI)			\$15,000
5R01 AG16667 (Helfand), PI	4/1/99-3/31/04		30%
NIH/NIA		\$1,291,044	
Single Gene Mutant that Confer Longevity in Drosophila			
The major goals are to study molecular genetic mechanisms of the Indy gene.			
DF 99-134 (Helfand), PI	1/1/00-12/31/04		5%
Donaghue Foundation		\$595,791	
Molecular Genetics of Aging			

c. Proposals submitted

7. SERVICE

(i) To the University

UNIVERSITY COMMITTEES

Senior Appointments and Promotions Committee (School of Dental Medicine) 1999-2002

Director of Genetics and Developmental Biology Graduate Program 1996-2005

Active member of Graduate Program Committee 1996-2005

LCME Re-accreditation 2002

University Committee on Research Conflicts of Interest 2002

MSTP Steering Committee 2003-present

(ii) To the profession

EDITORIAL BOARD

Ageing Cell

Faculty of 1000

SAGE KE (Contributing Editor of Science of Aging Knowledge Environment a Science magazine web site for researchers in the field of aging)

JOURNAL REVIEW

Biochemica et Biophysica Acta

Brain Research

Developmental Genetics

Evolution

Journal of Gerontology

Nature

Neurobiology of Aging

Trends in Genetics

Archives of Biochemistry and Biophysics

Genetics

Experimental Gerontology

FASEB Journal

Biotechnology

Biogerontology
Current Biology
Free Radical Biology
Science
Aging Cell
Cell
Nature Genetics
Nature Cell Biology

STUDY SECTION

1993 Ad hoc reviewer, Sensory Systems, National Science Foundation
1995 Ad hoc reviewer, Behavioral Neuroscience, National Science Foundation
1995 Ad hoc reviewer, Geriatrics and Rehabilitation Medicine, National Institute of Health
1997 Ad hoc reviewer, Minority Dissertation Ad hoc Review Group B, National Institute of Health
1999 Ad hoc reviewer, Geriatrics and Rehabilitation Medicine, National Institute of Health
1999 Ad hoc reviewer, Geriatrics and Rehabilitation Medicine, National Institute of Health
1999 Reviewer SEP Committee for Program Project, National Institute of Health
2000 Ad hoc reviewer, Geriatrics and Rehabilitation Medicine, National Institute of Health
2000 Ad hoc reviewer, Geriatrics and Rehabilitation Medicine, National Institute of Health
2002 Reviewer NIA Program Project Site visit (Brown University), National Institute of Health
2002 Ad hoc reviewer Child Development (CDF-5) National Institute of Health
2002 Ad hoc reviewer Geriatrics and Rehabilitation Medicine, National Institute of Health
2003- Charter member of Cellular Mechanisms in Aging and Development (CSR, NIH)
2004 Charter member of Cellular Mechanisms in Aging and Development (CSR, NIH)
2004 Reviewer SEP Committee for Program Project, National Institute of Health

SCIENTIFIC ACTIVITIES

1992 Chairperson, Section on Behavior, 33rd Annual Drosophila Research Conference
1992 Invited Lecturer, Association for Chemoreception Sciences, 14th Annual Meeting
1993 Ad hoc reviewer for Research Initiation Support and Enhancement Program, University of Connecticut Health Center, CT
1994 Reviewer, research grant applications in olfaction, Louisiana Sea Grant College Program
1994 Ad hoc reviewer for Faculty Research Grants, University of Connecticut Health Center, CT
1994 Reviewer, research grant applications in olfaction, State of Louisiana Board of Regents
1996 Ad hoc reviewer for Research Initiation Support and Enhancement Program, University of Connecticut Health Center, CT
1996 Interim Chair, Session on Gene Regulation, 1996 Gerontology Society of America Meeting
1996 Reviewer, Human Frontier Science Program, Strasbourg, France
1997 Invited Lecturer, 1997 Gordon Conference on Biology of Aging
1997 Chairperson and Workshop Organizer, Section on Aging and Stress, 38th Annual Drosophila Research Conference
1997 Review Board of the Medical and Scientific Advisory Council of the Alzheimer's Association, Ronald and Nancy Reagan Research Institute
1997- Reviewer for Life Sciences Foundation
1997- Reviewer for Research Development awards for the NIH Pepper Center at Yale University
1997-9 Reviewer for Allied Signal Award
1997-9 Reviewer for Brookdale Foundation Award
2000 Reviewer for Biotechnology and Biological Sciences Research Council, UK
2001 Reviewer for Biotechnology and Biological Sciences Research Council, UK

- 2001- Instructor, MBL course on Molecular Biology of Aging, yearly
- 2002 Reviewer for Alzheimer's Association
- 2003- Reviewer for American Federation of Aging Research
- 2003-2005 Internal Review Board, Ellison Medical Foundation
- 2004 Chairperson session at CSHL meeting on Molecular Biology of Aging
- 2004 Reviewer for National Science Foundation
- 2004 Chairperson for symposium at Gerontology Society of America Annual Meeting
- 2006-2008 Internal Review Board, Ellison Medical Foundation

(iii) To the community

- 2000 Work published in *Science* in December 2000 appeared in hundreds of papers world wide including several National News television stations, Fox network, Discovery station, etc.
- 2000 December 15, 2000 *The New York Times*: I'm Not Dead Yet: Stumbling on a Genetic Mutation That Lives Up to Its Name, National Report A 24.
- 2003 February 25, 2003 *The Hartford Courant*: "Mutant Flies Offer Lesson In Longevity", Front page
- 2004 July 14, 2004 *The Hartford Courant*: "In Wine, A Possible Key To A Long Life", Front page
- 2004 November 16, 2004 *The Hartford Courant*: "Adding Life to Years" page D3
- 2004 December 28, 2004 Television interview for *ScienCentral News* "Genetic Timeclock" has been shown on NBC stations and is on web at:
http://www.sciencentral.com/articles/view.php3?language=english&type=article&article_id=218392437
- 2004 Television interview for Jim Lehrer Newshour televised on PBS.

8. ACADEMIC HONORS, FELLOWSHIPS

- 1975 Distinction, Departmental Honors (Biology) Stanford University
- 1975 NSF Undergraduate Fellowship (Advisor: N.K. Wessells) Stanford University
- 1976 Predoctoral Trainee Fellowship (Advisor: D.P. Purpura and N.K. Wessells) Stanford University and Albert Einstein College of Medicine
- 1977 Roche Award in Neuroscience; American Medical Student Association-National Research Meeting Award
- 1978 Albert Cass Scholarship for Research in Neuroimmunology
- 1979 Medical Research Council Fellowship in Neuroimmunology (Advisor: M.C. Raff), Department of Zoology, University College, London
- 1981 Queen's University Development Fund Award-Neuroimmunology (Advisor: J.C. Roder), Department of Biology, Queen's University, Kingston, Ontario
- 1983 Boston Society of Psychiatry and Neurology Sandoz Award for Medical Research, Department of Neurology, Massachusetts General Hospital
- 1983-84 NIH Postdoctoral Fellowship (Advisor: C.S. Goodman) Stanford University
- 1984-89 NIH Physician Scientist Award (Advisors: C.S. Goodman, D.S. Hogness, J. Carlson, D. K. Kankel) Stanford University and Yale University
- 1986 Diplomate, American Board of Psychiatry and Neurology
- 1990 University of Connecticut Research Initiation Program Grant
- 1991 American Cancer Society Institutional Research Grant Award
- 1991 University of Connecticut Faculty Research Grant
- 1992-96 National Science Foundation Grant
- 1992 American Federation of Aging Research Award
- 1993 Sandoz Award for Gerontological Research
- 1993 University of Connecticut Faculty Research Grant

- 1994-96 The Patrick & Catherine Weldon Donaghue Medical Research Foundation Award, mentor for Dr. Blanka Rogina.
- 1995 Gordon Conference Travel Award
- 1995 1995 Summer Training Course in Experimental Aging Research, National Institutes on Aging
- 1995 American Federation of Aging Research Fellowship, mentor for Mr. Timothy Kuwada.
- 1995 American Federation of Aging Research Award
- 1995 Nathan W. and Margaret T. Shock Aging Research Foundation Award
- 1997 National Institutes on Aging-RO3
- 1998 University of Connecticut Faculty Research Grant
- 1999-2004 RO1 National Institutes on Aging
- 2000-2005 The Donaghue Foundation Investigator Program for Health-Related Research Award
- 2000 Burroughs Wellcome Travel Grant to study in UK
- 2001-2005 Ellison Medical Foundation Senior Investigator Award
- 2003 American Federation of Aging Research Fellowship, mentor for Mr. Brian Silvia.
- 2004 American Federation of Aging Research Fellowship, mentor for Mr. Sanchez-Blanco.
- 2004-2014 R-37 NIH MERIT Award, National Institutes on Aging
- 2004-2009 RO1 National Institutes on Aging

SOCIETIES

- 1980- American Academy of Neurology
- 1980- Massachusetts Medical Society
- 1985- New York Academy of Sciences
- 1985- American Association for the Advancement of Science
- 1985- Genetics Society of America
- 1994- Gerontological Society of America
- 1998- Society for Developmental Biology

LICENSURE AND CERTIFICATION

- National Board of Medical Examiners, No. 221305
- Diplomate, American Board of Psychiatry and Neurology
- Massachusetts Medical License, (inactive)
- California Medical License Registration (inactive), No. G 50787
- Connecticut Medical License Registration, No. 034003

PATENTS (Pending)

- | | |
|---|----------------------------------|
| Methods for Metabolic Maintenance Using Co transporters | 60/255,013 |
| Polynucleotides Encoding Cellular Transporters and Methods of Use Thereof | 10/017,479 and
PCT/US01/48130 |
| Transporter Protein | 10/167,994 |

9. TEACHING (last three years)

- 2002 Spring Co-Director MEDS 368 Current Topics in GMBB—Molecular Genetics of Aging.
- 2002 Spring MEDS 497 Introduction to Developmental Biology--2 lectures
- 2001-2003 Spring Yale Medical School Cell Biology Course—lecture on Biological determinants of Aging

2003-OS3 Human Genetics—small group sessions
2004- OS3 Human Genetics—small group sessions

GRADUATE STUDENTS

Thesis Students (Major advisor)

Health Center. Presently Postdoctoral Fellow, University of Connecticut Health Center
Steven Nilsen. 1999-2003. Presently Postdoctoral Fellow, Harvard Neurobiology.
Tyson Bross 2001-defended thesis now in D.M.D. program (DMD/PhD)
Brian Silvia 2001-defended thesis now in M.D. program (MD/PhD)
Raye Mutcherson 2001- to defend thesis Summer 2005, now in D.M.D. (DMD/PhD).
Santosha Oliver (Odoms) 2001- Thesis student in my laboratory.
Stephan Goupil 2002-Thesis student in my laboratory
Adolfo Sanchez-Blanco 2002- Thesis student in my laboratory
Peter Poon 2003—Thesis student in my laboratory
Graham Garber 2003—Thesis student in my laboratory

Graduate Student Laboratory Rotations.

Raye Mutcherson, 2001
Margaret Calciano, 2001
Stephan Goupil, 2001
Adolfo Sanchez-Blanco, 2002
Peter Poon, 2002
Graham Garber 2003
Li Chen, 2004

THESIS COMMITTEES

Steven Nilsen, (Chair of Thesis committee)-conferred 2002, postdoc Harvard
Daria Bansescu, (Chair of temporary Thesis committee)-conferred 2004 Postdoc Yale
Vihra Sotirova, (Chair of temporary Thesis committee)-presently a Thesis candidate
Dana Philipps, (Chair of temporary Thesis committee)-conferred 2004, Postdoc
Alicia Scillia, (Chair of temporary Thesis committee)-conferred 2002,postdoc U. Pittsburgh
Lee Ann Smith, (member of Thesis committee)-conferred 2004 Assistant Professor Benedictine College
Katherine Parisky, (member of Thesis committee)-conferred 2004 Postdoc Brandeis
Brian Silvia, (Chair of Thesis committee)-finished thesis, MD/PhD student
Tyson Bross, (Chair of Thesis committee)- finished thesis, DMD/PhD student
Tarun Bhalla, (member of Thesis committee)- finished thesis, MD/PhD student
Raye Mutcherson, (Chair of Thesis committee)-DMD/PhD student
Santosha Oliver, (Chair of Thesis committee)-presently a Thesis candidate
Stephan Goupil, (Chair of Thesis committee)-presently a Thesis candidate
Adolfo Sanchez-Blanco, (Chair of Thesis committee)-presently a Thesis candidate
Peter Poon, (Chair of Thesis committee)-presently a Thesis candidate
Graham Garber (Chair of Thesis committee)-presently a Thesis candidate

COMMITTEES FOR GENERAL EXAMINATION OF THESIS

Chair of General Examination for:

Steven Nilsen	Developmental Biology Program
Amed Despande	Developmental Biology Program
Thomas Wolverton	Developmental Biology Program
Daria Bansescu	Developmental Biology Program
Vihra Sotirova	Developmental Biology Program

Raye Mutcherson	Developmental Biology Program
Santosh Oliver	Developmental Biology Program
Jenny Webb	Genetics, Molecular Biology and Biochemistry Program
Dana Philipps	Genetics and Developmental Biology Program
Margaret Calciano	Genetics and Developmental Biology Program
Katherine Parisky	Genetics and Developmental Biology Program
Tyson Bross	Genetics and Developmental Biology Program
Brian Silvia	Genetics and Developmental Biology Program
Adolfo Sanchez-Blanco	Genetics and Developmental Biology Program
Stephan Goupil	Genetics and Developmental Biology Program
Taiwo Koyejo	Genetics and Developmental Biology Program
Joo Won Lee	Genetics and Developmental Biology Program

UNDERGRADUATES MENTORED

Danielle Rudich-2002 Summer Fellowship, Barnard College
Matthew Hall-Summer 2003-4 Wesleyan University
Dane Scantling-Summer 2004, University of Massachusetts
Sandra Andersen 2005- Brown University
Sarah Rodriguez 2005- Brown University
Siti Nur Sarah Morris 2005- Brown University
Daniel Lu 2005- Brown University
Matt Cohen 2005- Brown University
Kenneth Morales 2005- Brown University
Christine Livoti 2005- Brown University
Gillian O'Reilly 2005- Brown University
Josh Waitzman 2005- Brown University
Hieu Nguyen 2005- Brown University
Anita Mazloom 2005- Brown University
Angela Hua 2005- Brown University

Sandra Andersen, Siti Nur Sarah Morris, Josh Waitzman, and Hieu Nguyen were awarded Karen T. Romer Undergraduate Research Assistantships to work in my laboratory for the summer of 2006.

HIGH SCHOOL SUMMER MENTORING

Matthew Hall-Summer 2002 and Summer 2003
Dane Scantling-Summer 2003

POSTDOCTORAL FELLOWS

Kimberly Blake, Ph.D. 1992-1994. Assistant Professor, Department of Biology, Mitchell College.
Boris Naprta, M.D. June 1992-March 1994. Presently a Clinician in Oklahoma.
Brian Grimwade, Ph.D. March 1992-March 1995. Research Associate with Curagen Corporation.
Youxi Ai, M.D. September 28, 1992-March 14, 1993. Presently a Research Associate, Department of Pathology, University of Connecticut Health Center.
Blanka Rogina, Ph.D. June 1994-1996. Tenure track Assistant Professor, Dept of Genetics and Developmental Biology, University of Connecticut Health Center.
Barry Hoopengardner, Ph.D. September 1999-2001
Johannes Bauer, Ph.D. November 2001-present
Aaron Haselton, Ph.D. June 2004-present
Jason Wood, Ph.D. April 2006-present