

Susan Lee Lindquist

Curriculum Vitae

CONTACT INFORMATION

Whitehead Institute for Biomedical Research
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EDUCATION

- 1976-1978 Postdoctoral Fellow
The University of Chicago, Chicago, Illinois
Advisor: Hewson Swift, American Cancer Society Fellowship
- 1976 Ph.D. in Biology
Harvard University, Cambridge, Massachusetts
Thesis Advisor: Matthew Meselson
- 1971 B.A. in Microbiology with High Honors
University of Illinois, Champaign-Urbana, Illinois
Research Advisor: Jan Drake, NSF Undergraduate Fellowship

ACADEMIC APPOINTMENTS

- 2007-present Associate Member, David H. Koch Institute for Integrative Cancer Research at MIT
- 2006-present Investigator, Howard Hughes Medical Institute
Whitehead Institute for Biomedical Research and MIT
- 2005-present Senior Associate Member, Broad Institute of MIT and Harvard
Associate Member, Broad Institute, 2005-2010
- 2001-present Member, Whitehead Institute for Biomedical Research
Director, Whitehead Institute for Biomedical Research, 2001-2004
Professor of Biology, Massachusetts Institute of Technology
Cambridge, Massachusetts
- 1988-2001 Professor, Department of Molecular Genetics & Cell Biology
Investigator, Howard Hughes Medical Institute
Member, The Committee on Genetics
Member, The Committee on Developmental Biology
Member, Cancer Research Center
The University of Chicago, Chicago, Illinois
- 1978-1988 Assistant & Associate Professor, Department of Biology
The University of Chicago, Chicago, Illinois

INDUSTRY APPOINTMENTS

2004–present Member, Johnson & Johnson Board of Directors

2003 Co-Founder, FoldRx; Director 2003-2006; Advisor 2007

HONORS AND AWARDS

- 2013 DART/ New York University Biotechnology Award for Basic Biotechnology, New York University School of Medicine; Howard Taylor Ricketts Award, University of Chicago.
- 2012 Molecular, Cellular and Proteomics Award, Human Proteome Organization; E.B. Wilson Medal, American Society for Cell Biology
- 2011 Elected to European Molecular Biology Organization, Associate Member (USA)
- 2010 President's National Medal of Science (2009); Mendel Medal, Genetics Society UK; Max Delbrück Medal, Berlin; Doctor of Science *honoris causa*, Harvard University; International Union of Biochemistry and Molecular Biology Medal
- 2009 Federation of American Societies for Experimental Biology Excellence in Science Award
- 2008 Stein & Moore Award, Protein Society; Otto-Warburg-Prize, German Society for Biochemistry & Molecular Biology; Genetics Society of America Medal for Outstanding Contributions to the Field of Genetics; Harvard Centennial Medal for graduate alumni who have made exceptional contributions to society
- 2007-08 Fellow, Radcliffe Institute for Advanced Study
- 2007 Nevada Silver Medal for Scientific Achievement; Doctorate of Science *honoris causa*, Columbia University
- 2006 Elected to the Institute of Medicine of the National Academies; University of Illinois Alumni Achievement Award; Sigma Xi William Procter Prize for Academic Achievement; Emil Christian Hansen Gold Medal
- 2005 Radcliffe Graduate Alumnae Recognition Award; Alexander M. Cruickshank Lecture Award
- 2004 Elected to Leopoldina, German Academy of Natural Sciences; Senior Scientist Career Achievement Award, Women in Cell Biology
- 2003 Elected to the American Philosophical Society
- 2002-03 Dickson Prize in Medicine, Senior Career Recognition Award, University of Pittsburgh
- 2002 Doctor of Science *honoris causa*, Ursinus College, Collegeville PA; Doctor of Science *honoris causa*, Pine Manor College, Chestnut Hill MA
- 2000 Novartis/Drew Award in Biomedical Research
- 1999-2001 Albert D Lasker Professor of Medical Sciences, The University of Chicago
- 1997 MERIT Award, NIH, NIGMS
- 1997 Elected to the National Academy of Sciences
- 1997 Elected to the American Academy of Microbiology
- 1996 Elected to the American Academy of Arts & Sciences

RECENT HONORARY LECTURES

- 2013 Keynote Address, Keystone Symposium Santa Fe, NM; James F "Paulo" Dice Memorial Lecture, Tufts Medical School; DART/ New York University Biotechnology Award Lecture for Basic Biotechnology, New York University School of Medicine; Howard Taylor Ricketts Award Lecture, University of Chicago; 2013 Chicago Symposium on Translational Neuroscience: Protein Misfolding in Neurodegenerative Disease: From Basic to Translational, University of Chicago; Keynote Lecture, 8th Protein Kinases In Drug Discovery, Boston; 27th

- Symposium of the Protein Society; Plenary lecture, 11th International Conference on Advancing the Chemical Sciences.
- 2012 Plenary Lecture, Norwegian Biochemical Society; Linné Lecture, Uppsala University; Rosalind Franklin Lecture, King's College, London; Keynote Address, Keystone Symposium Stockholm, Sweden; Keynote Lecture, Life Science Institute Symposium, University of Michigan; Chemical Methodology and Library Development Symposium, Boston University; Keynote Lecture, Human Proteome Organization, Boston; Frontier Symposium, American Society for Cell Biology Annual Meeting, San Francisco, CA.
- 2011 WTMA Roy E. Moon Distinguished Lectureship, San Angelo TX; U Penn Institute on Aging Visiting Scholars Series; NYU School Med Honors Lecture
- 2010 Vanderbilt Lamson/Discovery Lecture; Centennial Symposium, Wash U., St. Louis; David S Sigman Symposium Memorial Lecture, UCLA; David L Weaver Endowed Lecture in Biophysics & Computational Biology, UC Davis Genome Center; IUBMB Plenary Lecture, FEBS 2010, Gothenberg Sweden; N. Ronald Morris Lecture, R. Wood Johnson Med School.
- 2009 Ralph & Helen Oesper Symposium, University of Cincinnati; NIH Director's Pittman lecture; Molecular Frontiers, Stockholm Sweden; Raymond and Beverly Sackler Visiting Lectureship, Univ. of Toronto; Cosloy-Blank Memorial Lecture, The City College of NY; Dorfman Lecture, Stanford Univ.
- 2008 Radcliffe Institute Fellows Lecture; Stars of Science Seminar, Qiagen, Heidelberg Germany; Otto Warburg Prize Award Lecture, Heidelberg Germany; Keynote Address, Vincent duVegneaud Memorial Research Symposium, Cornell Univ; Stein & Moore Award Lecture, 22nd Symposium of the Protein Society; Andrew Mark Lippard Memorial Lecture, Columbia Univ., NY.
- 2007 Grass Lecture, Society for Neuroscience; Perlman Lecture, American Chemical Society; Knudsen Lecture, Oregon State Univ; Kensal E van Holde Lectureship; Nobel Forum, Karolinska Institute, Stockholm, Sweden; Volwiler Lecture, Lake Forest College; Richard Scott Lecture, Northwestern Univ; Carter-Wallace Lectures, Princeton Univ; Nordin Lecture, U Mass, Amherst
- 2006 European Molecular Biology Laboratory Distinguished Visitor Lecture, Heidelberg, Germany; Speaker of the Year Award Lectures Dutch Society for Biochemistry & Molecular Biology, The Netherlands; Sanger Distinguished Lecture Series, Sanger Institute, Cambridge UK; Emil Christian Hansen Gold Medal Award Lecture, Copenhagen, Denmark; Landmark Seminars in Biology Inaugural Lectures, Boston College; Johns Hopkins Univ Distinguished Lecture; Keynote Lecture, New England Pharmacologists Meeting; Nobel Forum, Karolinska Institute, Stockholm, Sweden.
- 2005 Priscilla Connell Lecture, U Michigan; Mary Ellen Jones Lecture, U North Carolina Chapel Hill School of Medicine; Berta V. Scharrer Lecture, Albert Einstein College of Medicine; Lefler Symposium, Harvard Medical School Department of Neurobiology; Annual Science in Medicine Lecture, U Washington School of Medicine; Verna & Marrs McLean Lectures in Biochemistry, Baylor College of Medicine.
- 2004 Hartwell Lecture, Yeast Genetics & Molecular Biology Meeting; Breitman Lecture, International Symposium on Molecular Evolution, Toronto, Canada; Ada Doisy Lecture in Biochemistry, U Illinois Urbana-Champaign; Bidwell Lecture, Department of Brain & Cognitive Sciences, MIT; Mildred Trotter Lecture, Wash U St. Louis.
- 2003 Hewson Swift Lecture, U Chicago; Dickson Prize Lecture, U Pittsburgh; Harvey Lecture, Rockefeller Univ; Keynote Address, Gordon Conference on Triplet Repeat Disorders, Lucca, Italy; Keynote Address, U Penn Cancer Center; The Gladstone Institute Distinguished Visiting Scholar Lectures, San Francisco CA; Fae Golden Kass Lecture, Harvard Medical School; Roger Herriott Lecture, Johns Hopkins Bloomberg School of Public Health; Evans Medicine/Research Seminar Series, Boston Univ Medical Center

- 2002 Efraim Racker Lectureship in Biology & Medicine, Cornell University; Allan C. Wilson Memorial Lectures, U of CA at Berkeley; Don W. Fawcett Lectures, Harvard Medical School; Arthur M. Sackler Lecture, National Academy of Sciences; Institute for Systems Biology Inaugural Symposium, Seattle, WA; Carnegie Institution Capital Science Lecture, Washington DC; Cambridge University (UK)-MIT Institute Distinguished Lecture Series
- 2001 Burroughs Wellcome Foundation Visiting Professorship, U Arizona; McKusick-Nathans Institute of Genetic Medicine Inaugural Symposium; Keith Porter Lecture, ASCB Annual Meeting; Katharine Dexter McCormick Lecture, Stanford Univ; C.B. Van Neil Lecture, Hopkins Marine Station, Stanford Univ; Searle Forum Lecture, Northwestern Univ; Burroughs Wellcome Fund Lectures, U Arizona; Francis Schmitt Lecture/Department of Biology, MIT; Juanita Greer White Distinguished Lecture, U Nevada; University Lecture Series, U Texas Southwestern Medical Center; BASF Lecture, Brandeis Univ; Keynote Address, EuroConference & EMBO Workshop, Molecular Chaperones, Spain.
- 2000 Biosciences Distinguished Lecturer, Lawrence Berkeley National Laboratory; Women Leaders in Science Seminar, UCSF; Kenneth Sparks-Julia Fisher Memorial Lecture, U Connecticut; Robert & Esther Stadtler Lecture, U Texas MD Anderson Cancer Center; Research School of Biosciences Annual Lecture, Univ Kent, England; John S. Colter Lecture in Biochemistry, U Alberta, Canada; Novartis/Drew Award Lecture, Drew Univ; Fritz-Lippman-Lecture, German Society of Biochemistry & Molecular Biology, Munich; Dean's Lecture, Mount Sinai School of Medicine; University Lecture, Rockefeller Univ.

SELECTED SERVICE TO THE SCIENCE COMMUNITY

Representative Service on Boards and Committees

- Chair, Science, Technology & Sustainability Committee, Johnson & Johnson, 2012- present
Inaugurated Whitehead Institute, Girls Guide to Science Program, 2010 - present
Member, Scientific Advisory Board, IMBA, 2007-2012
Chair, Richard Lounsbery Award Selection Committee, 2011
Member, Science Advisory Council, The MacArthur Foundation, 2007-2010
Member, Scientific Review Board, Chicago Biomedical Consortium, 2006-2010
Member, Scientific Advisory Board, MIT Computational & Systems Biology Institute, 2002–2007
Member, Scientific Advisory Board, Stowers Institute for Medical Research, 2000–2010
Member, Scientific Advisory Committee, Massachusetts General Hospital, 2003–2006
Member, Board of Trustees, Cold Spring Harbor Laboratory's, 2002-2005
Member, Scientific Advisory Board, Arrayx, Inc., 2001–2005
Member, Scientific Advisory Board, Radcliffe Institute for Advanced Study, Harvard, 2002, 2004
Member, Health Science Partnership Advisory Board, Boston Museum of Science, 2002–2003
Member, American Society of Cell Biology Council, 2001–2002
Member, ScienceYear Board of Advisors, Worldbook Encyclopedia, 2001–2002
Member, Government-University-Industry Research Roundtable of the National Academy of Sciences, National Academy of Engineering & the Institute of Medicine. 2000–2002
Member, American Academy of Arts & Sciences, Midwest Council, 1998–2002
Member, Scientific Advisory Board, Neogenesis, 1998–2001
Secretary, Genetics Society of America, 1998-2000
Member, American Society for Cell Biology, Resource Bureau, 1998–present
Board of Directors, Genetics Society of America, 1995-1998

Commentary, Communication and Public Affairs

- 2012 Celebration of Science, “ The Protein Folding Problem” NIH Day, Bethesda, MD; Whitehead Institute High School Teacher Program: “ Can Simple Cells Model Complex Neurodegenerative Diseases?”; Whitehead Institute public outreach, “Alzheimer's and Parkinson's Disease: A Revolutionary New Point of Attack”, New York.
- 2011 Whitehead Institute BOA Colloquium “Alzheimer's Disease: A Revolutionary New Point of Attack”; *Futures in Biotech* 77: “How The Environment And A Single Protein Influence Evolution”; "Using Simple Cells to Attack Complex Diseases" in *Leaders in Science and Engineering: The Women of MIT*, A MIT150 Symposium; “Heat Shock Proteins and Their Implications” in *Paradigm Shifts: From Biology to Technology to Medical Applications: Conquering Cancer through the Convergence of Science and Engineering Symposium - A MIT150 Symposium*;
Featured in MIT Museum 150 years outstanding achievements at MIT
- 2010 *Futures in Biotech* 57: “Mechanisms of Non-Mendelian Inheritance In Evolution”
- 2009 MIT TechTV Documentaries on Parkinson’s Disease Research;
“Perspectives from the NIH 2009 Pittman Lecturer,” *Perspectives on Women in Science*, NIH, Bethesda MD
- 2008 Presented “New Clues to Parkinson’s Disease from an Unlikely Source” to Congressional Biomedical Research Caucus, Washington, DC; American Society for Cell Biology *iBioSeminars* Lectures, “The Surprising World of Prion Biology”; MIT *Technology Review*, Women & Innovation panel
- 2007 Harvard University Women in Science Panel Discussion, Cambridge MA;
Organized and/or participated in biology sessions at the Davos World Economic Forum 2007: Stem Cells, The Fight against Cancer, Simple Solutions to Complex Problems, and Genetic Screening Seeing the Future; Museum of Science, *The House that Darwin Built*, Boston MA
- 2006 Inaugurated *Futures in Biotech* Podcast on TWiT Network (#1 science podcast in its first week; downloaded over 37,000 times); Featured by Massachusetts Society for Medical Research in *What a Year!*; British-North American Committee; Free University the Netherlands, FEBS Working Group on Women in Science (WISE); Rockefeller University, Women & Science
- 2005 Johnson & Johnson, Women in Leadership Anniversary Conference
- 2004 Chosen as one of six MIT Professors to have their work highlighted in an internet video documentary “High-Throughput Drug Discovery” <http://www.uplandproductions.com/> ; Trinity University, Public Lecture & Distinguished Scientist Lecture; BioIT World Conference, Keynote Speaker; Bristol-Myers Squibb, Women in Science & Technology at BMS; Brigham & Women’s Hospital, Lecture for Partners Office for Women’s Careers at BWH
- 2003-09 Whitehead Partner High School Teachers Program Lectures, communicating the newest concepts in biology, Cambridge MA
- 2003-06 MIT Independent Activities Period Forums: Advancing the Careers of Women in Science, & Balancing Career and Family, Cambridge MA
- 2003-04 Lectures to Biology students, Brookline High School, Brookline MA
- 2003 Museum of Science, *Celebrating DNA 50 Years*, Boston MA; AP Biology Faculty Lecture for teachers & students from greater Boston area high schools; MIT Sloan School Management Conference, *Driving Innovation Through Technology*; Woods Hole, Friday Evening Lectures, Televised on FCTV 13; Gladstone Institute, lectures to general scientific community & roundtable with postdocs
- 2002-04 MIT Knights Fellows Program, Science Bootcamp for journalists, Cambridge MA
- 2002 Museum of Science, Women in Science Lecture, Boston MA
- 2001-07 Yearly Whitehead Press Seminars aimed at educating journalists on key advances in biological sciences & medicine, from evolution to human disease, Cambridge MA

- 1999 Lindquist S, Strong Unity, Rich Diversity: The Human Genome. September 2000. *The HHMI Bulletin*. 1: 14-15. Reprinted in *Black Issues in Higher Education*. December 2000. Vol. 17: 104. Modified from The University of Chicago convocation address, 1999.
- 1985 Consultant and principal in "Lights Breaking", a film on recombinant DNA technology, which received the Gold Medal for best short science film at the San Francisco Film Festival and the Silver Medal for Best Short Science Film at the New York Film Festival
- 1983-87 Consultant to the Museum of Science and Industry, Chicago, for exhibits on cell biology and genetics

Meetings Organized

- Co-Organizer, Protein- Folding Diseases: Models & Mechanisms Symposium (with Vivian Siegel), Sponsored by Disease Models & Mechanisms, The Broad Institute, 2012.
- Co- Chair (with Jeffery Kelly), Keystone Symposium on Protein Misfolding Diseases: Mechanisms of Misfolding, Pathology & Therapeutic Strategies, Breckenridge, Colorado, 2006.
- Chair, Whitehead Institute Annual Symposium: Biological Challenges to Humanity: Emerging & Re-Emerging Pathogens, 2002.
- Co-Organizer (with Helen Blau, Rudolf Jaenisch & Harvey Lodish) Catherine A. Stratton Lectures on Critical Issues, sponsored by the MIT Women's League, 2002.
- Co-Organizer (with Steven Henikoff) National Academy of Sciences, Arthur M. Sackler Symposium: Self-Perpetuating Structural States in Biology, Disease & Genetics, 2002.
- Co-Organizer (with Didier Picard & Johannes Buchner) 1st International Conference on The Hsp90 Chaperone Machine, Arolla, Switzerland, 2002.
- Co-Organizer (with Susan Marqusee & Greg Petsko), Protein Society Annual Meeting, Philadelphia, Pennsylvania, 2001.
- Co-Chair & organizer (with Paul Fraser), FASEB Symposium on Amyloid Proteins, Copper Mountain, Colorado, 2000.
- Co-Chair & organizer (with Art Horwich & Carol Gross), Heat Shock Proteins & Molecular Chaperones, sponsored by Cold Spring Harbor Laboratories, 1998.
- Co-Chair & organizer, (with Ralph Isberg) Gordon Conference on Biological Regulatory Mechanisms, Plymouth, New Hampshire, 1996.
- Co-Organizer, Heat Shock Proteins & Stress Responses (with Costa Georgopolous & Rick Morimoto), Sponsored by Cold Spring Harbor Laboratories, 1994 & 1996.
- Co-Organizer, Rinshoken International Conference on Heat Shock Proteins & Chaperones (with I. Yahara, K. Nagata, & R. Morimoto), Chiba, Japan, 1995.
- Co-Organizer, International Symposium on the Function & Regulation of Heat Shock Proteins & Molecular Chaperones (with I. Yahara & K. Nagata), Sponsored by Kyoto University, 1993.
- Co-Chair & organizer, Heat Shock Proteins International Symposium (with Bruno Maresca), Sponsored by the Instituti Genetica i Biophysica, Ravello, Italy, 1990.
- Program Chair, Annual Meeting of the Genetics Society of America & the Genetics Society of Canada, San Francisco, California, 1990.
- Co-Chair & organizer, UCLA Symposium on Heat Shock Proteins, Keystone, Colorado (with M. L. Pardue & J. Feramisco), 1988.
- Co-Chair & organizer, Gordon Conference on Biological Regulatory Mechanisms, Plymouth, New Hampshire (with Nigel Grindley), 1985.
- Founded and organized the first three meetings of the Midwest Drosophila Conference, Monticello, Illinois, 1982, 1983, & 1984. Meetings have continued on a yearly basis since.
- Founded & Co-organized the first two meetings of the Chicago Molecular Biology Symposium, Chicago, Illinois, 1980 & 1981.

Editorial Boards and Professional Societies

Advisory Editorial Board: *EMBO reports*, 2009-present.
Editorial Board: *Disease Models and Mechanisms*, 2008-present.
Editorial Board: *Public Library of Science*, 2003-present.
Editorial Academy: *Int. Journal of Molecular Medicine*, 1998-present.
Editorial Board: *Molecular Biology of the Cell*, 1996-2001.
Editorial Board: *Current Biology*, 1996-2003.
Editorial Board: *Cell Stress and Chaperones*, 1995-present.
Editorial Board: *Gene Expression*, 1994-present.
Editorial Board: *Molecular and Cellular Biology*, 1984-2000.
Monitoring Editor: *Journal of Cell Biology*, 1993-1998.
Associate Editor: *The New Biologist*, 1991-1993.

American Chemical Society
American Society for Biochemistry and Molecular Biology
American Society for Cell Biology
American Society for Microbiology
American Society of Plant Biologists
American Association for the Advancement of Science
Federation of American Scientists for Experimental Biology
Genetics Society of America
Molecular Medicine Society
Cell Stress and Chaperone Society

Grants and Sponsored Programs

Ad Hoc reviews for: The National Science Foundation, The National Institutes of Health, The Department of Energy, The Department of Agriculture, The March of Dimes Foundation, Human Frontiers in Science Program, The Wellcome Fund, The Keck Foundation, Hereditary Disease Foundation, Burroughs Wellcome Foundation.
Harvard Molecules, Cells & Organisms (MCO) Interdisciplinary Training Program Review, 2010.
Argonne National Laboratories, Mechanistic Biology and Biotechnology Review Committee, 98-00.
Helen Hay Whitney Postdoctoral Fellowship Review Committee & Scientific Advisory Board, 97-02.
Member, Biomedical Sciences Study Section, Subcommittee 3, National Institutes of Health.
Member, Site visit team for the MacArthur Foundation Program for Parasite Biology, 88-89.
Member, Special Study Section for Project Center Grants: Stressors, Responders & the Cellular Basis of Disease, National Institutes of Health, 1983.
Member, Genetic Basis of Disease Study Section, National Institutes of Health, 1982.

PUBLICATIONS

Peer-Reviewed Research

1. Lambert JP, Ivosev G, Couzens AL, Larsen B, Taipale M, Lin ZY, Zhong Q, Lindquist S, Vidal M, Aebersold R, Pawson T, Bonner R, Tate S, Gingras AC, 2013. Rapid identification of differential interactomes by affinity purification coupled with data independent mass spectrometry acquisition *Nat Meth*, in press

2. Jackson WS, Borkowski AW, Watson NE, King OD, Faas H, Jasanoff A, Lindquist S, 2013. Profoundly different prion diseases in knock-in mice carrying single PrP codon substitutions associated with human diseases. *Proc Natl Acad Sci*, doi: 10.1073/pnas.1312006110.
3. Santagata S, Mendillo ML, Tang Y, Subramanian A, Perley CC, Roche SP, Wong B, Narayan R, Kwon H, Koeva M, Amon A, Golub TR, Porco JA Jr, Whitesell L, Lindquist S, 2013. Tight coordination of protein translation and heat shock factor 1 activation supports the anabolic malignant state. *Science*, doi:10.1126/science.1238303.
4. Vincent BM, Lancaster AK, Scherz-Shouval R, Whitesell L, Lindquist S, 2013. Fitness trade-offs restrict the evolution of resistance to Amphotericin B. *PLoS Biol*, in press.
5. Taipale M, Krykbaeva I, Whitesell L, Santagata S, Zhang J, Liu Q, Gray NS, Lindquist S, 2013. Chaperones as thermodynamic sensors of drug::target interactions in living cells. *Nat Biotech*, 31(7): 630-637.
6. Holmes DL, Lancaster AK, Lindquist S, Halfmann R, 2013. Heritable remodeling of yeast multicellularity by an environmentally responsive prion. *Cell*, 153(1): 153-165.
7. Shalgi R, Hurt JA, Krykbaeva I, Taipale M, Lindquist S, Burge CB, 2012. Widespread regulation of translation by elongation pausing in heat shock. *Mol Cell* 49(3): 439-452.
8. Muralidharan V, Oksman A, Pal P, Lindquist S, Goldberg DE, 2012. *Plasmodium falciparum* heat shock protein 110 stabilizes the asparagine repeat-rich parasite proteome during malarial fevers. *Nat Commun* 3:1310.
9. Dai C, Santagata S, Tang Z, Shi J, Cao J, Kwon H, Bronson RT, Whitesell L, Lindquist S, 2012. Loss of tumor suppressor NF1 activates HSF1 to promote carcinogenesis. *J Clin Invest* 122(10):3742-3754.
10. Saibil, HR, Seybert A, Habermann A, Winkler J, Eltsov M, Perkovic M, Castaño-Diez D, Scheffer MP, Haselmann U, Chlanda P, Lindquist S, Tyedmers J, Frangakis AS, 2012. Heritable yeast prions have a highly organized 3-dimensional architecture with inter-fiber structures. *Proc Natl Acad Sci* 109(37): 14906-14911.
11. Taipale M, Krykbaeva I, Koeva M, Kayatekin C, Westover KD, Karras GI, Lindquist S. Quantitative analysis of hsp90-client interactions reveals principles of substrate recognition. *Cell* 150(5): 987-1001. PMID: 22939624
12. Mendillo ML, Santagata S, Koeva M, Bell G, Hu R, Tamimi RM, Fraenkel E, Ince TA, Whitesell L, Lindquist S, 2012. HSF1 drives a transcriptional program distinct from heat shock to support highly malignant human cancers. *Cell* 150(3): 549-562. PMID: 22863008
13. Krishnan R, Goodman JL, Mukhopadhyay S, Pacheco CD, Lemke EA, Deniz AA, Lindquist S, 2012. Conserved features of intermediates in amyloid assembly determine their benign or toxic states. *Proc*

Natl Acad Sci 109(28): 11172-11177.

14. McLellan CA, Whitesell L, King OD, Lancaster AK, Mazitschek R, Lindquist S, 2012. Inhibiting GPI Anchor Biosynthesis in Fungi Stresses the Endoplasmic Reticulum and Enhances Immunogenicity. *ACS Chem Biol* 7(9):1520-1528. PMID: 22724584
15. Halfmann R, Wright JR, Simon Alberti S, Lindquist S, Rexach M, 2012. Prion formation by a yeast GLFG nucleoporin. *Prion* 6(4): 391-399.
16. Treusch S, Lindquist S, 2012. An intrinsically disordered yeast prion arrests the cell cycle by sequestering a spindle pole body component. *J Cell Biol* 197(3): 369-79.
17. Youngsaye W, Dockendorff C, Vincent B, Hartland CL, Bittker JA, Dandapani S, Palmer M, Whitesell L, Lindquist S, Schreiber SL, Munoz B, 2012. Overcoming fluconazole resistance in *Candida albicans* clinical isolates with tetracyclic indoles. *Bioorg Med Chem Lett* 22(9): 3362-5.
18. Halfmann R, Jarosz DF, Jones SK, Chang A, Lancaster AK, Lindquist S, 2012. Prions are a common mechanism for phenotypic inheritance in wild yeasts. *Nature* 482 (7385): 363-368. PMID: 22337956
19. Tardiff DF, Tucci ML, Caldwell KA, Caldwell GA, Lindquist S, 2012. Different 8-hydroxyquinolines Protect Models of TDP-43, α -synuclein, and Polyglutamine Proteotoxicity through Distinct Mechanisms. *J Biol Chem* 287(6): 4107-4120. PMID: 22147697
20. Santagata S, Xu Y, Wijeratne EMK, Kontnik R, Rooney C, Perley CC, Kwon H, Clardy J, Kesari S, Whitesell L, Lindquist S, Gunatilaka AAL, 2012. Using the Heat-Shock Response to Discover Compounds that Target the Malignant Phenotype by Disrupting Protein Homeostasis. *ACS Chem Biol* 7(2): 340-9.
21. Donmez G, Arun A, Chung CY, McLean P, Lindquist S, Guarente L, 2012. SIRT1 protects against α -synuclein aggregation by activating molecular chaperones. *J Neurosci* 32(1): 124-32.
22. Bryan AW Jr, O'Donnell CW, Menke M, Cowen LJ, Lindquist S, Berger, B, 2012. STITCHER: Dynamic assembly of likely amyloid and prion beta-structures from secondary structure predictions. *Proteins* 80(2):410-420.
23. Santagata S, Hu R, Lin NU, Mendillo ML, Collins LC, Hankinson SE, Schnitt SJ, Whitesell W, Tamimi RM, Lindquist S, Ince TA, 2011. High levels of nuclear HSF1 are associated with poor prognosis in breast cancer. *Proc Natl Acad Sci USA* 108(45): 18378-83.
24. Treusch S, Hamamichi S, Goodman JL, Matlack KES, Chung CY, Baru V, Shulman JM, Parrado A, Bevis BJ, Valastyan JS, Han H, Lindhagen-Persson M, Reiman EM, Evans DA, Bennett DA, Olofsson A, DeJager PL, Tanzi RE, Caldwell KA, Caldwell, Lindquist S, 2011. Functional links between A β toxicity, endocytic trafficking and Alzheimer's Disease risk factors in yeast. *Science* 334(6060): 1241-5. PMID: 22147697.
25. Valastyan JS, Lindquist S, 2011. Expression of TorsinA and its Cofactor Printor is not Sufficient to Recapitulate Their Cellular Functions in Yeast. *PLoS ONE* 6(7): e22744.

26. Soldner F, Laganière J, Cheng AW, Hockemeyer D, Gao Q, Alagappan R, Khurana V, Golbe LI, Myers RH, Lindquist S, Zhang L, Guschin D, Fong LK, Vu BJ, Meng X, Urnov FD, Rebar EJ, Gregory PD, Zhang HS, Jaenisch R, 2011. Generation of isogenic pluripotent stem cells differing exclusively at two early onset Parkinson point mutations. *Cell* 146(2): 318-31.
27. Castro CE, Dong J, Boyce MC, Lindquist S, Lang MJ, 2011. Physical properties of polymorphic yeast prion amyloid fibers. *Biophys J* 101(2): 439-48.
28. Youngsaye W, Vincent B, Hartland CL, Morgan BJ, Buhrlage SJ, Johnston S, Bittker JA, MacPherson L, Dandapani S, Palmer M, Whitesell L, Lindquist S, Schreiber SL, Munoz B, 2011. Piperazinyl quinolines as chemosensitizers to increase fluconazole susceptibility of *Candida albicans* clinical isolates. *Bioorg Med Chem Lett*, 21(18): 5502-5.
29. Halfmann R, Alberti S, Krishnan R, Lyle N, O'Donnell CW, King OD, Berger B, Pappu RV, Lindquist S, 2011. Opposing effects of glutamine and asparagine govern prion formation by intrinsically disordered proteins. *Mol Cell* 43: 72-84.
30. O'Donnell CW, Waldispühl J, Lis M, Halfmann R, Devadas S, Lindquist S, Berger B, 2011. A method for probing the mutational landscape of amyloid structure. *Bioinformatics* 27: I34-I42.
31. Lan A, Smoly I, Rapaport G, Lindquist S, Fraenkel E, Yeger-Lotem E. ResponseNet: Revealing signaling and regulatory networks linking genetic and transcriptomic screening data, 2011. *Nuc Acids Res* 39(Web Server issue): W424-9.
32. Manogaran AL, Hong JY, Hufana J, Tyedmers J, Lindquist S, Liebman SW, 2011. Prion formation and polyglutamine aggregation are controlled by two classes of genes. *PLoS Genet* 7(5): e1001386.
33. Resenberger UK, Harmeier A, Woerner AC, Goodman JL, Müller V, Krishnan R, Vabulas RM, Kretschmar HA, Lindquist S, Hartl FU, Multhaup G, Winklhofer KF, Tatzelt J, 2011. The cellular prion protein mediates neurotoxic signaling of β -sheet-rich conformers independent of prion replication. *EMBO J* 30: 2057-70.
34. Ju S, Tardiff DF, Han H, Divya K, Zhong Q, Maquat LE, Bosco DA, Hayward LJ, Brown Jr. RH, Lindquist S, Ringe D, Petsko GA, 2011. A yeast model for FUS/TLS-dependent cytotoxicity. *PLoS Biol* 9(4): e1001052.
35. Heinrich SU, Lindquist S, 2011. Protein-only mechanism induces self-perpetuating changes in the activity of neuronal *Aplysia* cytoplasmic polyadenylation element binding protein (CPEB). *Proc Natl Acad Sci USA* 108: 2999-3004.
36. Dumitriu A, Pacheco CD, Wilk JB, Strathearn KE, Latourelle JC, Goldwurm S, Pezzoli G, Rochet J-C, Lindquist S, Myers RH, 2011. Cyclin-G associated Kinase Modifies α -Synuclein Expression and Toxicity in Parkinson's disease: Results from the GenePD Study. *Hum Mol Genet* 20: 1478-87.
37. Jarosz DF, Lindquist S, 2010. Hsp90 and environmental stress transform the adaptive value of natural genetic variation. *Science* 330: 1820-4.

38. Dong J, Castro CE, Boyce MC, Lang MJ, Lindquist S, 2010. Optical Trapping with High Forces Reveals Unexpected Behaviors of Prion Fibrils. *Nat Struct Mol Biol* 17: 1422-30.
39. Lewandowski NM, Ju S, Verbitsky M, Ross B, Geddie ML, Rockenstein E, Adame A, Muhammad A, Vonsattel JP, Ringe D, Cote L, Lindquist S, Masliah E, Petsko GA, Marder K, Clark LN, Small SA, 2010. Polyamine pathway contributes to the pathogenesis of Parkinson disease. *Proc Natl Acad Sci USA* 107: 16970-5.
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¹ *Early publications by S. Lindquist, providing the first molecular biological analysis of the heat shock response, were published under the name S. L. McKenzie.

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