



PATHWAYS MODULATING AGING: APPROACHES TO EXTEND HEALTHSPAN?

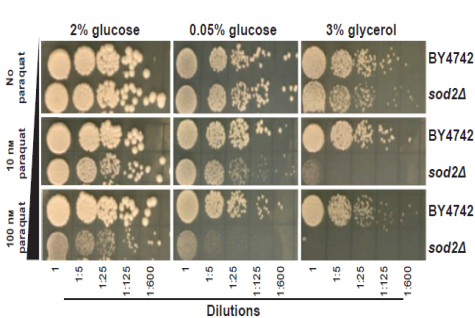
GUEST LECTURE by



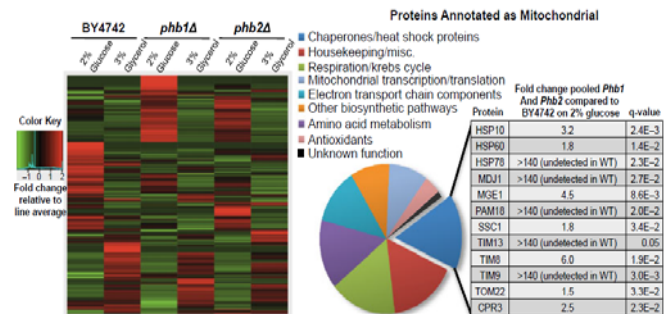
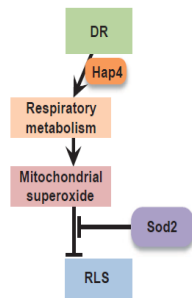
Prof. Brian K. Kennedy, PhD, CEO
Buck Institute for Research on Ageing,
Novato, USA

Friday, 10.01.2014
13:00

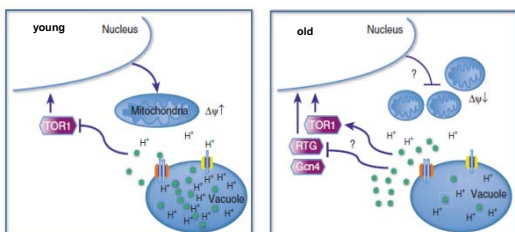
SR 44.22, ZMB-Centre of Molecular Biosciences
Humboldtstrasse 48, 2nd floor, KFUG



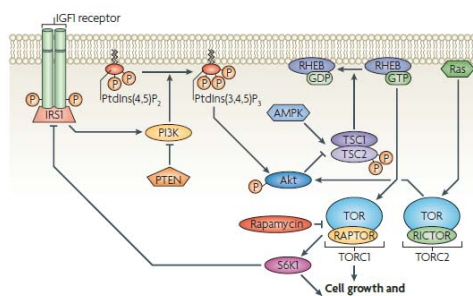
Dietary restriction (DR) shortens the RLS of *sod2Δ* cells through the induction of respiratory metabolism. Schleit et al. (2013) *Aging Cell* 12:1050–1061



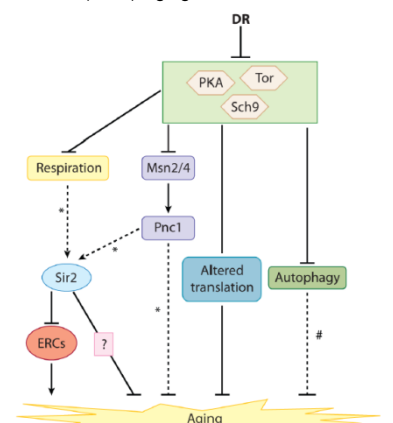
The DR-mediated increase in RLS in *phbD* cells is not a result of increased respiration or autophagy, and *phbD* cells show markers of mitochondrial proteotoxic stress, which is attenuated by DR. Schleit et al. (2013) *Aging Cell* 12:1050–1061



Possible models for vacuole-dependent mitochondrial deterioration in aging yeast cells. Schmidt & Kennedy (2012) *Curr Biol.* 22(24):R1048-51



Crosstalk between insulin or IGF1 signalling and the nutrient-sensing TOR kinase pathway. Burtner & Kennedy (2010) *Nat Rev Mol Cell Biol.* 11(8):567-78



Model for the mechanism of dietary restriction. Steinkraus et al. (2012) *Annu Rev Cell Dev Biol.* 2008 ; 24: 29–54

- | SIRT6 ↓ | SIRT6 ↑ |
|---|---|
| <ul style="list-style-type: none"> • Genome instability (defects in DNA repair) • Defects in telomere maintenance • Metabolic defects • Progeria phenotypes | <ul style="list-style-type: none"> • Prevention of diet-induced obesity • Suppression of inflammation • Enhanced DNA repair • Reduced IGF signaling • Lifespan extension |

SIRT6 expression and longevity. Liao & Kennedy (2012) *Cell Res* 22:1215-1217

CURRICULUM VITAE

Brian K. Kennedy

Work Address

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Novato, CA 94945
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Email – bkennedy@buckinstitute.org

Biographical Data

Birthplace: Louisville, Kentucky Citizenship: U.S.A.
Birthdate: January 30, 1967

Education/Training

Ph.D. in Biology, Massachusetts Institute of Technology
Cambridge, Massachusetts, June 1996
Doctoral Dissertation: Genetic and Molecular Analysis of Aging in Yeast

B.A. in Mathematics and BMBCB (Biochemistry, Molecular Biology and Cellular
Biology) Northwestern University, Evanston, Illinois, June 1989
Undergraduate Thesis on Ergosterol function in yeast

Research Positions

2010 – present	President and CEO, Buck Institute for Age Research, Novato, CA
2010 – present	Affiliate Professor, Department of Biochemistry, University of Washington, Seattle, Washington
2009 – present	Visiting Professor in Aging Research, Guangdong Medical College, Guangdong Province, China
2007 – 2010	Associate Professor, Department of Biochemistry, University of Washington, Seattle, Washington
2001 – 2007	Assistant Professor, Department of Biochemistry, University of Washington, Seattle, Washington

1996 – 2001 Postdoctoral Fellowship, Massachusetts General Hospital Cancer Center, Charlestown, Massachusetts (Dr. Ed Harlow)

Honors

1997 – 2000 Postdoctoral Fellow, The Leukemia Society

2003 – 2004 American Federation for Aging Research Junior Faculty Research Grant

2003 – 2006 Searle Scholar, The Chicago Community Trust

2008 Julie Martin Mid-Career Award in Aging Research

2009 Kavli Fellow

2009 Vincent Cristofalo Rising Star in Aging Research Award

2010 National Institute of Aging Nathan Shock Award

2012 Ellison Medical Foundation Senior Scholar Award

Professional Societies

American Association for the Advancement of Science
American Society of Cell Biology
American Society of Microbiology
Genetics Society of America
Gerontological Society of America

Invited Seminars

September 2001, AACR Conference: Cancer and Chromosomal Organization, Palm Desert, California

September 2002, Fred Hutchinson Cancer Research Center, Seattle, Washington

September 2002, CSHL Meeting: Dynamic Organization of Nuclear Function, Cold Spring Harbor, New York

April 2004, Functional Genomics of Ageing Meeting, Crete, Greece

August 2004, Gordon Research Conference: Intermediate Filaments, Oxford, UK

October 2004, CSHL Meeting: The Molecular Genetics of Aging, Cold Spring Harbor, New York

April 2005, Ninth Annual BCMB Research Symposium, Emory University, Atlanta, Georgia

April 2005, Department of Biochemistry, University of Hong Kong, Hong Kong, China

April 2005, World DNA and Genome Day Conference, Dalian, China

May 2005, Department of Biochemistry and Molecular Genetics, University of Illinois

May 2005, Department of Pathology Biology of Aging Series, University of Washington

July 2005, ASCB Meeting: Nuclear Architecture and Disease, Ames, Iowa

July 2005, Department of Physiology and Biophysics, University of Iowa, Iowa City, Iowa

September 2005, EMBO Conference: Nuclear Structure and Dynamics, Montpellier, France

October 2005, Gerontological Society of America Annual Meeting, Orlando, Florida

January 2006, Gordon Research Conference: Biology of Aging, Ventura, California
 February 2006, Seminar in Molecular Medicine, University of Texas at San Antonio
 March 2006, IFOM – The FIRC Institute for Molecular Oncology, Milan, Italy
 April 2006, Functional Genomics of Ageing Meeting, Palermo, Italy
 April 2006, Searle Scholars Meeting, Chicago, Illinois
 July 2006, Seminar, Buck Institute for Age Research, Novato, California
 July 2006, Ellison Biology of Aging Course, Marine Biological Laboratories, Woods Hole, Massachusetts
 September 2006, American Federation for Aging Research Annual Meeting, Santa Barbara, California
 October 2006, Annual Fascioscapulohumeral muscular dystrophy (FSHD) International Research Consortium, New Orleans, Louisiana
 October 2006, Nathan Shock Center Conference on Aging: Nutrient Signaling and Aging, Bandera, Texas
 January 2007, Seminar, Ben May Institute for Cancer Research, University of Chicago
 January 2007, Nutrition, Exercise and Neurodegeneration, Verbier, Switzerland
 February 2007, Seminar, Department of Biochemistry, University of Utah School of Medicine
 February 2007, Seminar, Department of Cell Biology, Johns Hopkins Medical Institute
 April 2007, Seminar, Department of Biochemistry and Biophysics, Texas A&M, College Station, Texas
 June 2007, AGE Meeting, San Antonio, Texas
 June 2007, FASEB Meeting on Histone Deacetylases, Snowmass, Colorado
 July 2007, International NGFN Symposium – Inflammatory Diseases of Barrier Organs, Kiel, Germany
 August 2007, International Chromosome Conference, Amsterdam, The Netherlands
 August 2007, Seminar at Friedrich Miescher Institute, Basel, Switzerland
 September 2007, 3rd Fabisch Symposium – Nuclear envelope in Aging, Cancer and Disease, Berlin, Germany
 September 2007, Biology of Ageing, Stockholm, Sweden
 November 2007, Nutrient Signaling and Aging, Buck Institute for Age Research, Novato, CA
 January 2008, Seminar, Huffington Center on Aging, Baylor College of Medicine, Houston, Texas
 February 2008, Seminar at Department of Bioengineering, UC Berkeley,
 February 2008, Seminar at Department of Medicine, UCLA
 March 2008, Seminar at Department of Biochemistry, Albert Einstein College of Medicine
 April 2008, Metabolic Pathways of Longevity, Copper Mountain, Colorado
 May 2008, Seminar at the Wistar Institute, Philadelphia
 May 2008, Seminar at the University of Rochester
 June 2008, Cell Growth and the TOR Pathway, Les Treilles, France
 July 2008, International Congress on Genetics, Berlin, Germany
 September 2008, 12th Evolutionary Biology Meeting, Marseille, France
 December 2008, American Society of Cell Biology Meeting, San Francisco
 January 2009, EMBO Workshop - The Multiple Faces of Lamins in Ageing and Disease, Vienna
 January 2009, Salk/Nature/Ipsen Symposium on Biological Complexity: Processes of Aging, La Jolla, California
 February 2009, Seminar at the University of Colorado School of Medicine, Denver
 March 2009, Seminar at Fox Chase Cancer Center, Philadelphia
 March 2009, Seminar at Jackson Labs, Bar Harbor, Maine
 April 2009, Seminar at the University of Washington Department of Pharmacology
 April 2009, ASBMB Meeting, New Orleans

April 2009, Seminar at the University of Colorado, Boulder
 May 2009, The Future of Aging Research – Aging 2020: Just Around the Corner, Nathan Shock Center Symposium, Ann Arbor, Michigan
 May 2009, Vincent Cristofalo Rising Star in Aging Research Award Lecture, American Aging Association, Phoenix
 June 2009, Sigrid Juselius Foundation Symposium, Aging, Neurodegeneration and Mitochondria, Helsinki, Finland
 September 2009, Epigenetic Regulation of Aging and Functional Consequences, Santa Barbara, California
 September 2009, Seminar at the Department of Biochemistry and Molecular Biology, SUNY Upstate Medical University, New York
 September 2009, National Advisory Council on Aging, National Institute of Aging, Bethesda, Maryland
 October 2009, Symposium of the Biology of Aging, Guangdong Medical College, Dongguan, China
 October 2009, KRIBB Conference – Current Topics in Aging Research, Korea Research Institute of Bioscience and Biotechnology, Daejeon, Korea
 October 2009, SNU Global Research Frontiership, Path-breaking Discovery and Technology for Human Longevity, Seoul National University, Seoul, Korea
 November 2009, Buck Symposia, Systems Biology of Aging, Novato, California
 February 2010, Barshop Institute for Longevity and Aging Studies, San Antonio, Texas
 March 2010, Department of Genetics, Yale University, Connecticut
 April 2010, Département de biochimie, Montreal, Quebec
 May 2010, The New Science of Ageing, The Royal Society, London
 May 2010, Mini-symposium on Chromatin and Epigenetics, Shanghai Institute of Biochemistry and Cell Biology, Chinese Academy of Sciences
 May 2010, Guangdong Medical College, Zhanjiang, China
 May 2010, The Cutting Edge Science in Aging Research, Seoul, Korea
 June 2010, American Aging Association meeting, Portland, OR
 June 2010, AFAR Grantee Conference, Santa Barbara, CA
 June 2010, Glenn Meeting, Santa Barbara, CA
 July 2010, Systems Biology of Cancer and Aging, Beijing, China
 July 2010, Chinese Academy of Sciences, Beijing, China
 July 2010, Guangdong Medical College, Dongguan, China
 July 2010, Tenth International Symposium on Neurobiology and Neuroendocrinology of Aging, Bregenz, Austria
 September 2010, NIA Nathan Shock Award lecture, Baltimore, MD
 September 2010, Johns Hopkins Medical School Department of Physiology, Baltimore, MD
 September 2010, National Institute on Aging Symposium - Genetic and Molecular Basis of Longevity: Past, Present and Future, Bethesda, MD
 September 2010, MYOAGE Conference, Split, Croatia
 September 2010, CSHL Meeting: The Molecular Genetics of Aging, Cold Spring Harbor, New York
 October 2010, San Antonio Nathan Shock Aging Center Conferences on Aging – mTOR in Aging and Aging-related Diseases
 November 2010, Yonsei University – Systems Biology of Aging Research, Seoul, Korea
 November 2010, Korean Federation of Science and Technology – Translational Approaches to Aging, Puyo, Korea

November 2010, Radboud University Nijmegen Medical Centre – New Frontiers in Bioenergetics, Nijmegen, The Netherlands
 November 2010, 9th Annual Sanford-Burnham Poster Symposium Keynote Speaker, San Diego, CA
 December 2010, Salk Institute / Glenn Foundation for Aging Research – Using Aging Research to Explore New Biology, San Diego, CA.
 December 2010, American Society of Cell Biology Annual Meeting, Philadelphia, PA
 December 2010, Andrus Gerontology Center, USC, Los Angeles, CA
 January 2011, The Croucher Advanced Study Institute – Fundamental Biology of Aging and Aging Disorders, Hong Kong, China
 January 2011, Power-Aging Symposium, Seoul, Korea
 February 2011, Genomics Research Institute of the Novartis Foundation, San Diego, CA
 February 2011, Department of Medicine, Washington University, St. Louis
 March 2011, Department of Genetics, Stanford University, Palo Alto, CA
 March 2011, Cell Symposium – Metabolism and Aging, Hyannis, MA
 March 2011, Model Systems of Ageing, CECAD Cologne, Germany
 April 2011, Trinations Aging Symposium, Dongguan, China
 April 2011, Department of Nutritional Science and Toxicology, UC Berkeley, CA
 May 2011, Symposium on Epigenetics and Aging, University of Pennsylvania, Philadelphia, PA
 July 2011, The Science of Ageing – Global Progress, Brighton, UK
 September 2011, Molecular mechanisms of muscle growth and wasting in health and Disease, Ascona, Switzerland
 October 2011, Symposium on Genetics of Aging and Life History, POSTECH, Korea
 October 2011, CAS International Symposium of Developmental Systems Biology on Gene Regulation and Aging, Shanghai, China
 January 2012, Genetic Analysis of Functional Aging Symposium, Sanford-Burnham Institute, La Jolla, CA
 February 2012, Session Chair, Gordon Research Conference on Biology of Aging, Ventura, CA
 March 2012, Department of Biochemistry and Molecular Biology, Baylor School of Medicine, Houston, TX
 March 2012 Nathan Shock Center Symposium, Biogerontology with a Backbone: Jumping Up from the Shoulders of Invertebrates, Ann Arbor, Michigan
 April 2012, 2nd International Conference on the Genetics of Aging and Longevity, Moscow, Russia
 May 2012, 15th Annual Brown Colloquium on the Biology of Human Aging, Brown University, Providence, Rhode Island
 May 2012, Symposium, Personalized Medicine 5.0: The Role of Epigenetics, San Francisco State University, San Francisco, CA
 June 2012, 41st American Aging Association Meeting, Ft. Worth, TX
 June 2012, Novartis Scientific Seminar Series, Boston, MA
 July 2012, Minisymposium, Aging and Vascular Aging, Peking University, Beijing, China
 August 2012, Scientific Symposium in Honor of Leonard Guarente, Cambridge, MA
 September 2012, Dept. of Physiology, University of Kentucky College of Medicine, Lexington, KY
 October 2012, EMBO Symposium: Germline Immortality through Totipotency, Heidelberg, Germany
 December 2012, Gladstone Institutes, San Francisco, CA
 December 2012, Moscow Institute of Physics and Technology, Moscow, Russia
 January 2013, International Workshop on the “Challenges Facing Chile Due to its Accelerated Aging Population, Santiago, Chile

February 2013 Netherlands Consortium for Healthy Ageing: Adding healthy years to the human lifespan, The Hague, Netherlands
 February 2013, Kazakhstan National Medical University, Almaty, Kazakhstan
 March 2013, Department of Internal Medicine Grand Rounds, Southern Illinois University School of Medicine, Springfield, IL
 March 2013, Bay Area Yeast and Other Fungi Symposium, Berkeley, CA
 April 2013, Progeria Research Foundation Workshop, Bethesda, MD
 May 2013, Pontifica Universidad Catolica de Chile, Santiago, Chile
 May 2013, Universidad de Chile, Santiago, Chile
 May 2013, UMMC Health, Ekaterinburg, Russia
 June 2013, Paul F. Glynn Symposium of the Biology of Aging, Santa Barbara, CA
 June 2013, Joint British Atherosclerosis Society and the British Society of Cardiovascular Research Meeting: New Frontiers in Cardiovascular Science, London, UK.
 June 2013, Keynote Lecture, The 20th World Congress on Gerontology and Geriatrics, Seoul, Korea
 June 2013, Korea Research Institute of Bioscience and Biotechnology, Daejeon, Korea
 July 2013, Gordon Research Conference – Stress Proteins in Growth, Development and Disease, West Dover, VT.
 August 2013, Keynote Lecture, Swedish American Life Science Summit 2013, Stockholm, Sweden
 September 2013, The Croucher Advanced Study Institute – The Biology of Aging, Hong Kong, China
 September 2013, Cold Spring Harbor Meeting – The Molecular Biology of Aging, Suzhou, China
 October 2013, Keynote Lecture, Ettore Majorana Foundation International School of Pharmacology, Erice, Sicily, Italy.

Public Lectures

November 2010, Buck Institute Community Lecture Series, Novato CA
 March 2011, Commonwealth Club, Novato, CA
 March 2011, Buck Institute Science in the City Lecture Series, San Francisco, CA
 May 2011, TEDx Antananarivo: 4AWOMAN: CANCER PROTECTION FOR AFRICAN WOMEN, Madagascar
 November 2011, Buck Institute Science in the City Lecture Series, Seattle, WA
 December 2011, Buck Institute Community Seminar, Mill Valley, CA
 January 2012, Aging and Preventative Medicine, San Salvador, El Salvador
 March 2012, Hadassah San Francisco Chapter, Novato, CA
 November 2012, Buck Advisory Council Meeting, Muscat, Oman
 December 2012, Buck Institute Community Seminar, *From the Lab to the Bedside: What's new in the quest for healthy aging.* Mill Valley, CA
 December 2012, Buck Institute Seminar, *Aging and Alzheimer's Disease A Path to a Cure by 2025.* Novato, CA
 January 2013, TEDx Maui, *Live Healthy Longer: Healthspan vs. Lifespan*, Hawaii
 April 2013, Chicago Council for Global Affairs, Chicago, IL
 May 2013, The Burrill and Buck Aging Meeting, The Sciences of Aging, Novato, CA
 September 2013, Knowledge Stream Lectures Online, Russia – Forecast for Tomorrow - *Aging 2.0*
 October 2013, Buck Advisory Council Meeting, Lisbon, Portugal

Participation in Grant Review Panels

2006 - 2012 Cellular Mechanisms of Aging and Development Study Section, NIH/CSR
 2006 - 2012 American Federation for Aging Research Grants
 2007 NIH R13 Conference Grants Study Section
 2008 American Federation for Aging Research Postdoctoral grants
 2009 NIH Grand Opportunity Applications
 2010 - 2012 Chair, Cellular Mechanisms of Aging and Development Study Section, NIH/CSR
 2010 - NIA Interventions Testing Program Access Committee
 2012 NIA Program Project Review Panel
 2012 NHLBI-DIR, Board of Scientific Counselors Scientific Review
 2012 NIH SBIR Small Business: Cell, Computational, and Molecular Biology Review Panel

Ad Hoc review for 14 other funding agencies.

Ad Hoc Journal Review

Aging Cell	Journal Cell Biology
American Journal of Pathology	Journal of Cell Science
Biochemical Journal	Journal of Clinical Investigation
BMC Medical Genetics Cell	Journal of Gerontology
Cell and Molecular Life Sciences	Mechanisms of Ageing and Development
Cell Metabolism	Metabolism
Cell Stem Cell	Molecular & Cellular Biology
Circulation Research	Molecular Biology of the Cell
Clinical Genetics	Molecular Cell
Current Biology	Molecular Endocrinology
Developmental Biology	Molecular Therapy
Developmental Cell	Nature
eLife	Nature Cell Biology
EMBO Journal	Nature Protocols
Endocrine-Related Cancer	Nature Reviews MCB
Evolution	Neuroscience
Experimental Gerontology	Nucleic Acids Research
Experimental Cell Research	Nucleus
FASEB Journal	Oncogene
FEBS Journal	PLoS Biology
Food and Chemical Toxicity	PLoS Genetics
Frontiers in Bioscience	PLoS ONE
Genes & Development	Proc. Natl. Acad. Sci., USA
Genome Research	Proc. of the Indian Natl. Sci. Acad
Gerontology	Rejuvenation Research
Hormone Research	Science
Human Molecular Genetics	Science Translational Medicine
Immunology Letters	Trends in Cell Biology
Journal of Biological Chemistry	Trends in Molecular Medicine

Teaching – University of Washington

2002 – 2009	HuBio514 – Biochemistry for Medical students
2002 – 2009	Biochemistry 542 - Graduate literature review
2004 – 2005	BIOC533 – Minicourse on Nuclear Organization for graduate students

Other Professional Activities

2006,08,10,11	Lecturer, Molecular Biology of Aging Program, Woods Hole Marine Biological Laboratory
2006 -	Associate Editor, Journal of Gerontology: Biological Sciences
2007 - 2010	Executive Committee, Genetic Approaches to Aging Training Grant, University of Washington
2009	Genetics and Cell Biology Subcommittee, NIA Division of Aging Biology Report
2009 -	Editorial Board, <i>Cell Cycle</i>
2009 -	Editorial Board, <i>Aging Cell</i>
2011 -	co-Editor in Chief, <i>Aging Cell</i>
2011	co-Organizer, 1 st Trinations Aging Symposium, Dongguan, P.R. China
2011	co-Organizer, Power-Aging Symposium, Seoul, Korea
2012	co-Organizer, Stem Cell Research and Aging, Buck Institute, Novato, CA
2012 -	Scientific Advisory Board, CAS-MPG Partner Institute for Computational Biology, PICB, Shanghai
2012 -	Scientific Advisory Board, Akbaraly Foundation, Madagascar
2012 -	Scientific Advisory Board, Max Planck Institute for Biology of Ageing, Cologne, Germany
2012 -	Review Editor, <i>Frontiers in Genetics of Aging</i>
2013	co-Organizer, CSH Asia – Molecular Basis of Aging and Disease, Suzhou, China
2013 -	Scientific Advisory Committee, FSH Society – Facioscapulohumeral Muscular Dystrophy

Patents

U.S. Patent No. 7,622,271	Identification of Aging Genes Through Large-Scale Analysis
U.S. Patent No. 6,787,300	Identifying lifespan-altering agents
U.S. Patent Nos. 5,874,210, 5; 5,919,618; 6,218,512	Genes determining cellular senescence in yeast

Company

2011	Co-Founder, NuVita Animal Health
2012	Co-Founder, Delos Pharmaceuticals

Student Training

Thesis students

Chris Burtner, 2005 – 2010 (Postdoctoral Fellow – Fred Hutchinson Cancer Research Center)
Steven Chen, 2007 – 2012 (Postdoctoral Fellow – UCSF)
Richard Frock, 2001 – 2009 (Postdoctoral Fellow – Harvard Medical School)
Brian Kudlow, 2002 – 2007 (Scientist – Thermo Fisher Scientific)
Damian Lee, 2001 – 2008 (Postdoctoral Fellow – University of British Columbia)
Ryan Nitta, 2001 – 2007 (Postdoctoral Fellow – Stanford University)
Tom Schmidlin, 2004 – 2012 (Postdoctoral Fellow – University of Washington)
Kristan Steffen, 2003 – 2009 (Postdoctoral Fellow – UC Berkeley)

Masters students

Christopher Pobre, 2011 – 2012
Denise Ortiz, 2012 -

Postdoctoral Fellows

Regina Brunauer, Ph.D., 2011 -
Lindus Conlan, Ph.D., 2004 – 2006 (Research Officer, St. Vincent's Institute of Medical Research Australia)
Mike Garelick, Ph.D., 2009 – 2012 (Postdoctoral Fellow, NYU)
Chong He, Ph.D., 2012 -
Katherine Hughes, Ph.D., 2009 –
Chen-Yu Liao, Ph.D., 2011 -
Mark McCormick, Ph.D., 2010 -
Joseph Marx, Ph.D., 2005 – 2007 (Employee – FBI)
Erica Smith, Ph.D., 2003 – 2006 (Research Assistant Professor – Northwestern University Med. School)
Monique Stanfel Ph.D., 2007 –
Shih-yin Tsai Ph.D., 2009 –

Publications (in reverse chronological order)

Cai, L., McCormick, M.A., **Kennedy, B.K.**, and Tu, B.P. 2013. Integration of multiple nutrient cues and regulation of lifespan by ribosomal transcription factor Ifh1p. *Cell Reports In press*.
Tsuchiyama, S., Kwan, E., Dang, W., Bedalov, A., and **Kennedy, B.K.** 2013. Sirtuins in yeast: phenotypes and tools. *Methods Mol. Biol.* 1077: 11-37. PMID: 24014397.
Kennedy, B.K. 2013. A new connection between VHL and cancer threads through progerin. *Cell Cycle.* 12: 2721-2722.
Garelick, M.G., MacKay, V.L., Yanagida, A., Academia, E.C., Ladiges, W.C., and **Kennedy, B.K.** Chronic rapamycin treatment or lack of *S6K1* does not reduce ribosome activity in vivo. *Cell Cycle* In press.
O'Leary, M.N., Schreiber, K.H., Zhang, Y., Duc, A.-C.E., Rao, S., Hale, J.S., Academia, E., Shah, S.R., Morton, J.F., Holstein, C.A., Martin, D.B., Kaeberlein, M., Ladiges, W.C., Fink, P.J., MacKay, V.L.,

- Wiest, D.L., and **Kennedy, B.K.** 2013. The ribosomal protein Rpl22 controls ribosome composition by directly repressing expression of its own paralog, Rpl22L1. *PLoS Genet.* 9: e1003708.
- Schleit, J., Johnson, S.C., Bennett, C.F., Simko, M., Throngtam, N., Castanza, A., Hsieh, E.J., Moller, R.M., Wasko, B.M., Delaney, J.R., Sutphin, G.L., Carr, D., Murakami, C.J., Tocchi, A., Xian, B., Chen, W., Yu, T., Goswami, S., Higgins, S., Holmberg, M., Jeong, K.-S., Kim, J.R., Klum, S., Liao, E., Lin, M.S., Lo, W., Millar, H., Olsen, B., Peng, Z.J., Pollard, T., Pradeep, P., Pruett, D., Rai, D., Ros, V., Singh, M., Spector, B.L., Vander Wende, H., An, E.H., Fletcher, M., Jelic, M., Rabinovitch, P.S., MacCoss, M.J., Han, J.-D.J., **Kennedy, B.K.**, and Kaerberlein, M. Molecular mechanisms underlying genotype-dependent responses to dietary restriction. *Aging Cell*, *In press*.
- Flynn, J.M. O'Leary, M.N., Zambataro, C.A., Academia, E.C., Garrett, B.J., Zykovich, A., Strong, R., Nelson, M.D., Kapahi, P., **Kennedy, B.K.** and Melov, S. 2013. Late-life rapamycin treatment reverses age-related heart dysfunction. *Aging Cell* 12: 851-862.
- McCormick, M.A. and **Kennedy, B.K.** 2013. Genome-scale studies of aging: challenges and opportunities. *Curr. Genomics* 13: 500-507. PMID: 23633910.
- Schreiber, K.H. and **Kennedy, B.K.** 2013. When lamins go bad: nuclear structure and disease. *Cell* 152: 1365-1375. PMID: 23498943.
- Delaney, J.R., Chou, A., Olsen, B., Carr, D., Murakami, C., Ahmed, U., Sim, S., An, E.H., Castanza, A.S., Fletcher, M., Higgins, S., Holmberg, M., Hui, J., Jelic, M., Jeong, K.S., Kim, J.R., Klum, S., Liao, E., Lin, M.S., Lo, W., Miller, H., Moller, R., Peng, Z.J., Pollard, T., Pradeep, P., Pruett, D., Rai, D., Ros, V., Schleit, J., Schuster, A., Singh, M., Spector, B.L., Sutphin, G.L., Wang, A.M., Wasko, B.M., Wende, H.V., **Kennedy, B.K.** and Kaerberlein, M. 2013. End-of-life cell cycle arrest contributes to stochasticity of yeast replicative aging. *FEMS Yeast Res.* 13: 267-276. PMID: 23336757.
- Kwan, E., Foss, E.J., Tsuchiyama, S., Alvino, G., Kruglyak, L., Kaerberlein, M., Raghuraman, M.K., Brewer, B.J., **Kennedy, B.K.**, and Bedalov, A. 2013. A natural polymorphism in rDNA replication origins links origin activation with calorie restriction and replicative lifespan. *PLoS Genet.* 9: e1003329.
- Chen, S.C., **Kennedy, B.K.** and Lampe, P.D. Phosphorylation of connexin43 on S279/282 may contribute to laminopathy-associated conduction defects. 2013. *Exp. Cell Res.* 319: 888-896.
- Longo, V.D., Shadel, G.S., Kaerberlein, M. and **Kennedy, B.** 2012. Replicative and chronological aging in *Saccharomyces cerevisiae*. *Cell Metab.* 16: 18-31. PMID: 22768836.
- Schmidt, M. and **Kennedy, B.K.** 2012. Aging: one thing leads to another. *Curr. Biol.* 22: R1048-R1051. PMID: 23257191.
- Liu, B., Ghosh, S., Yang, X., Zheng, H., Liu, X., Wang, Z., Jin, G., Zheng, B., **Kennedy, B.K.**, Suh, Y., Kaerberlein, M., Tryggvason, K., and Zhou, Z. 2012. Resveratrol rescues SIRT1-dependent adult stem cell decline and alleviates progeroid features in laminopathy-based progeria. *Cell Met.* 16: 738-750. PMID: 23020224.
- Delaney, J.R., Ahmed, U., Chou, A., Sim, S., Carr, D., Murakami, C.J., Schleit, J., An, E.H., Castanza, A., Fletcher, M., Higgins, S., Jelic, M., Klum, S., Muller, B., Peng, Z.J., Rai, D., Ros, V., Singh, M., Wende, H.V., **Kennedy, B.K.** and Kaerberlein, M. 2013. Stress profiling of longevity mutants identifies Afg3 as a mitochondrial determinant of cytoplasmic mRNA translation and aging. *Aging Cell* 12: 156-166. PMID: 23167605.
- Zhao, L., Yang, F., Xu, K., Cao, H., Zheng, G.Y., Li, J., Cui, H., Chen, X., Zhu, Z., He, H., Mo, X., **Kennedy, B.K.**, Suh, Y., Zeng, Y., Tian, X.L. 2012. Common genetic variants of the β_2 -adrenergic receptor affect its translational efficiency and are associated with human longevity. *Aging Cell*, 11: 1094-1101. PMID: 23020224.

- Lockshon, D., Olsen, C.P., Brett, C.L., Chertov, A., Merz, A.J., Lorenz, D.A., Van Gilst, M.R. and **Kennedy, B.K.** 2012. Rho signaling participates in membrane fluidity homeostasis. *PLoS ONE*, 7:e45049. PMID: 23071506.
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