

## Curriculum Vitae

March 3, 2020

### Kevin A. Morano, Ph.D.

**PRESENT TITLE:** Professor  
Roger J. Bulger, MD, Distinguished Professor  
University of Texas Distinguished Teaching Professor

Department of Microbiology and Molecular Genetics  
John P. and Kathrine G. McGovern Medical School

Associate Dean for Faculty Affairs  
John P. and Kathrine G. McGovern Medical School

Associate Vice-President for Faculty Affairs and Development  
University of Texas Health Science Center at Houston (UTHealth)

**WORK ADDRESS:** Department of Microbiology and Molecular Genetics,  
John P. and Kathrine G. McGovern Medical School,  
MSB G.420  
6431 Fannin St., Houston, TX 77030

**PHONE:** (713) 500-5890

**EMAIL:** kevin.a.morano@uth.tmc.edu

**HOME ADDRESS:** 3246 Forrester Dr., Pearland, TX 77584

**CITIZENSHIP:** U.S.A.

**MARITAL STATUS:** Married, September 8, 1991

**SPOUSE:** Lisa Morano, Ph.D.

**CHILDREN:** Alex Aeneas, 9/11/1995  
Isabel Sara, 8/16/1997

**UNDERGRADUATE EDUCATION:**

B.S., Biological Sciences, 1990  
University of California, Irvine  
Laboratory of Dr. Stephen Weller and Dr. Ann Sakai  
Thesis title: *Evolution of dioecy in Schiedia globosa*

**GRADUATE EDUCATION:**

Ph.D, Microbiology, 1996  
University of California, Davis, Dept. of Microbiology  
Laboratory of Dr. Daniel J. Klionsky  
Thesis title: *Structural and functional analysis of the yeast vacuolar ATPase*

**POSTGRADUATE TRAINING:**

Postdoctoral fellow, 1996-2000  
University of Michigan, Ann Arbor, Dept. of Biological Chemistry  
Laboratory of Dr. Dennis Thiele

**ACADEMIC APPOINTMENTS:**

Associate Vice-President for Faculty Affairs and Development, 2016-present  
University of Texas Health Science Center at Houston (UTHealth)

Associate Dean for Faculty Affairs, 2015-present  
University of Texas McGovern Medical School at Houston

Professor, 2013-present  
Microbiology and Molecular Genetics,  
University of Texas McGovern Medical School at Houston

Associate Professor, 2007-2013  
Microbiology and Molecular Genetics,  
University of Texas McGovern Medical School at Houston

Assistant Professor, 2000-2007  
Microbiology and Molecular Genetics,  
University of Texas McGovern Medical School at Houston

Appointed at MD Anderson UTHealth Graduate School of Biomedical Sciences at Houston, 2000-2003

Re-appointed indefinitely, 2018-

Re-appointed with *very highest* commendation, 2013-2018

Re-appointed with *highest* commendation, 2007-2013

Re-appointed with commendation, 2003-2007

#### **PROFESSIONAL ORGANIZATIONS:**

Texas Consortium for Faculty Success, 2016-present

American Association of Medical Colleges, Group of Faculty Affairs, 2015-present

American Society for Biochemistry and Molecular Biology, 2012-present

American Society of Cell Biology, 2010-present

Cell Stress Society International, 2003-present

Genetics Society of America, 2000-present

American Association for the Advancement of Science, 1991-present

American Society for Microbiology, 1991-present

#### **HONORS AND AWARDS:**

Holder of Roger J. Bulger, MD, Distinguished Professorship, 2018-present

Named Minnie Stevens Piper Distinguished Professor, 2015

Elected to the Kenneth L. Shine UT Academy of Health Science Education, 2014

University of Texas Regents' Outstanding Teaching Award, 2014

Elected Fellow, American Association for the Advancement of Science, 2013

John P. McGovern Outstanding Teacher Award, GSBS, 2007 and 2013

Paul E. Darlington Mentoring Award, GSBS, 2013

Rice University Institute of Biosciences & Bioengineering Medical Innovation Award, 2010

Dean's Teaching Excellence Award, Medical School 2006, 2008, 2010

American Cancer Society Research Scholar, 2003

Lyndon B. Johnson Research Award, American Heart Association, TX Affiliate, 2001

UT-Houston Nominee for the Searle Scholars Program, 2000

UT-Houston Nominee for the Burroughs-Wellcome Fellowship, 2000

National Institutes of Health Postdoctoral Fellowship, 1998-2000

University of Michigan Cancer Biology Postdoctoral Fellowship, 1997-1998

Jastro-Shields Graduate Research Scholarship, UC Davis, 1992-1995

President's Undergraduate Research Fellowship, UC Irvine, 1989-1990

## **EDITORIAL POSITIONS:**

Editorial Board and Associate Editor, *Heat Shock Proteins*, SpringerNature, 2020-present  
Editorial Board, *Frontiers in Molecular Biosciences*, 2014-present  
Editorial Board, *Microbial Cell*, 2014-2018  
Editorial Board, *Eukaryotic Cell*, 2006-2014  
Editorial Board, *The Journal of Biological Chemistry*, 2012-2022  
Invited Guest Editor, *PLoS Genetics*, 2013  
Invited Guest Editor, *mBio*, 2012

## **SERVICE ON NATIONAL/INTERNATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES:**

Ad hoc consultant, Google Docs, 2019  
Ad hoc reviewer, National Science Centre-Preludium Program, Poland, 2019  
Ad hoc reviewer, Israel Science Foundation, 2019  
Ad hoc reviewer and chair, NIH ZRG1 CB-H (02) M Study Section, 2018  
Ad hoc reviewer, Biotechnology and Biological Sciences Research Council, UK, 2018  
Ad hoc reviewer, Israel Science Foundation, 2018  
Ad hoc reviewer, University of Nebraska Collaborative Grants Program, 2018  
Ad hoc member, Council on Extramural Grants, American Cancer Society, 2017  
Ad hoc reviewer, National Science Centre, Poland, 2016  
Ad hoc reviewer, Partnerships for International Research and Education, The City University of New York, 2016  
Ad hoc reviewer, Canada Research Chairs Program, 2016  
Reviewer, Meeting Proposals, Gordon Research Conference Board of Trustees, 2015-present  
Ad hoc reviewer, NSERC Discovery Grants, (Canada), 2015  
Ad hoc reviewer, FWO (Research Foundation-Flanders), 2015  
Chair, Cell and Molecular Biology Review Panel Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Program, 2015  
Ad hoc reviewer, NIH ZRG1 MDCN-N (03)M Study Section, 2015  
Ad hoc member, Council on Extramural Grants, American Cancer Society, March, 2015  
Ad hoc reviewer, German-Israeli Foundation for Scientific Research and Development, 2014, 2015  
Ad hoc reviewer, Human Frontier Science Program, France, 2014  
Ad hoc reviewer, CEA Enhanced Eurotalents Program, France, 2014  
Member, Cell Biology review panel Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Program, 2014  
Ad hoc reviewer, NIGMS ZGM1 TWD-9 (SC) Study Section, 2013

Ad hoc reviewer, NIGMS ZRG1 MDCN-G(02) Study Section, 2013  
Ad hoc reviewer, Department of Defense Injury Prevention, Physiological and Environmental Health Award Program, 2013  
Member, Biochemistry review panel Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Program, 2013  
Ad hoc reviewer, The City University of New York Collaborative Incentive Research Grant Program, 2013  
Organizer, 18<sup>th</sup> Annual Midwest Stress Response and Molecular Chaperone Meeting, 2013  
Ad hoc reviewer, ZRG1 BBBP-E Study Section, NIH Director's Early Independence Award, 2013  
Ad hoc reviewer, Volkswagen Foundation (Germany), 2012  
Ad hoc member, ZRG1 MBRS-2 Study Section, NIH Genetics and Cell Biology, 2011  
Ad hoc reviewer, Natural Sciences and Engineering Research Council of Canada (NSERC) 2010, 2013  
Ad hoc reviewer, French National Research Agency (ANR), 2010, 2012  
Faculty opponent, Julius Anckar Ph.D. defense, Abo Academi, Turku, Finland June 2009  
Ad hoc member, ZRG1 Study Section, July 2009  
Ad hoc member, NIH study section Membrane Biology and Protein Processing, June 2009  
Ad hoc member, NIH Special Emphasis Panel GGG-N, February 2010  
Chair, American Cancer Society DNA Mechanisms in Cancer grants panel, 2010-2011  
Vice-chair, American Cancer Society DNA Mechanisms in Cancer grants panel, 2009-2010  
Member, American Cancer Society, Molecular & Cellular Biology Study Section, 2006-2008, converted to DNA Mechanisms in Cancer, 2008-2009  
Co-organizer, 11<sup>th</sup> and 16<sup>th</sup> Annual Midwest Stress Response and Molecular Chaperone Meetings, 2006, 2010  
Ad hoc reviewer, NSF, 2002-present  
Ad hoc member, American Cancer Society, Molecular & Cellular Biology Study Section, 2006  
Ad hoc reviewer, Wellcome Trust, 2004  
Ad hoc reviewer, Irish Board of Health, 2003  
Ad hoc reviewer, Indo-US Science and Technology Forum, 2002

Ad hoc manuscript reviewer:

*ACS Chemical Biology*  
*Biochemistry*  
*Biotechnology for Biofuels*  
*BMC Evolutionary Biology*  
*Cell Calcium*  
*Cell Death and Differentiation*

*Cell Stress and Chaperones*  
*Cellular and Molecular Life Sciences*  
*Current Biology*  
*Current Genetics*  
*eLife*  
*Elsevier Books*  
*EMBO Journal*  
*Eukaryotic Cell*  
*Expert Review of Proteomics*  
*F1000*  
*FEBS Letters*  
*Folia Microbiologica*  
*Frontiers in Molecular Biosciences*  
*G3: Genes, Genomes, Genetics*  
*Gene*  
*Genetics*  
*HealthCare, Bioorganic and Medicinal Chemistry*  
*Human Genetics*  
*Journal of Bacteriology*  
*Journal of Biological Chemistry*  
*Minireviews in Medicinal Chemistry*  
*Molecular and Cellular Biology*  
*Molecular Biology of the Cell*  
*Molecular BioSystems*  
*Molecular Cell*  
*Molecular Microbiology*  
*Nature Reviews Microbiology*  
*Nature Structural and Molecular Biology*  
*Nature*  
*Oncotarget*  
*PLoS Biology*  
*PLoS Genetics*  
*PLoS One*  
*Science*  
*Trends in Pharmacological Sciences*

**SERVICE ON THE UNIVERSITY OF TEXAS SYSTEM COMMITTEES:**

Member, UT Physician Burnout and Resilience Working Group, 2018-present

**SERVICE ON THE UNIVERSITY OF TEXAS-HOUSTON HEALTH SCIENCE CENTER COMMITTEES:**

Member, UT School of Dentistry Associate Dean of Faculty Affairs and Development Search Committee, 2016-2017  
Member, AVP Procurement Search Committee, 2016  
Member, UTHealth Strategic Planning Committee, 2012-2013  
Member, 40<sup>th</sup> Anniversary Faculty Giving Planning Committee, 2012  
Member, GSBS Dean Search Committee, 2011-2012  
Director, New Investigator Development Program, UTHealth 2006-present  
Director, Postdoctoral Fellowship Workshop, UTHealth, 2012-2017  
Faculty representative, UT Procurement Supply Mall Reconfiguration Committee, 2012  
Faculty Advisor, UTHealth Postdoctoral Association, 2009-present  
Faculty representative, UT Procurement Supply Mall Planning Committee 2004-2005  
Faculty representative, UT Procurement Advisory Committee 2005-2008  
New Investigator Development Program Advisory Committee, 2005  
New Investigator Development Program Steering Committee, 2004

**SERVICE ON THE UNIVERSITY OF TEXAS-HOUSTON MEDICAL SCHOOL COMMITTEES:**

LCME Self-Study Task Force, 2018-2020  
Member, Administrative Council, 2015-present  
Faculty interviewer, MD/PhD Program, 2014-2015  
Faculty Reviewer, Dean's Postdoctoral Research Awards, 2014  
Chair, Graduate Recruiting, Micro. and Mol. Genet., 2013-2014  
Member, Faculty Appointments and Tenure Committee, 2013-2016  
Member, Search Committee for Director of Management Operations, Department of Microbiology and Molecular Genetics, 2013  
Member, Cadre for Mentoring, 2012-present  
Chair, Medical School Committee on Committees, 2012  
Member, Medical School Committee on Committees, 2011  
Member, Examination Committee, Biochemistry and Molecular Biology, 2005-2007  
Member, Advisory Committee on Resource Development and Utilization, 2007  
Faculty Senator representing Microbiology and Mol. Genet., 2001-2004  
Chair, Admissions and Recruiting, Micro. and Mol. Genet., 2003-2005  
Vice-chair, Admissions and Recruiting, Micro. and Mol. Genet., 2001-2003

## **SERVICE ON GRADUATE SCHOOL COMMITTEES:**

Member, GSBS Program Revision Team, 2015  
Member, GSBS Dean's Advisory Council, 2013-present  
Member, President's Research Awards Review Committee, 2013  
Chair, Recruitment Committee Microbiology & Molecular Genetics Graduate Program, 2013-2014  
Internal reviewer and chair, Molecular Carcinogenesis Program Review, 2013  
Re-elected President of the GSBS Faculty, 2012-2013  
President of the GSBS Faculty, 2011-2012  
Vice-president/President-Elect of the GSBS Faculty, 2010-2011  
Chair, GSBS Executive Committee, 2010-2011  
Subcommittee on Divisional Structure of the GSBS, 2009-2010  
Ad hoc member, GSBS Executive Committee, 2008-2010  
Ad hoc reviewer, Hearst Foundation Award, Genes Dev. Program, GSBS, 2007, 2008, 2011  
Internal reviewer, Human and Molecular Genetics Program, 2007  
Admissions Committee, Chair, GSBS, 2005-2006  
Admissions Committee, Member, GSBS, 2003-2006

## **GSBS Advisory/Supervisory Committees**

1. Luisa Coronel	2018-
2. Celso Catumbela	2018-
3. Jennifer Hurtig	2018-
4. Katherine Do	2018-2019
5. Laurel Thompson	2017
6. Rajan Dasgupta	2014-2018
7. Sara Siegel	2014-2018
8. Belkys Sanchez	2015-2018
9. Chris Evans	2014-2018
10. Elisa Vesely	2014-2018
11. Surabhi Tyagi	2014-2016
12. Yi Liu	2013-2018
13. Jillian Losh	2013-2018
14. Uffaf Khan	2013-2016
15. Katie McCallum	2013-2016
16. Melissa Robinson	2013-2015
17. Rebecca Dunbar	2012-2013
18. Ryan Singer	2012-2014
19. Alexandra Marshall	2012-2018



20. Denisse Meza	2012-2013
21. Joseph Alcorn	2012-2015
22. Arely Gonzalez	2012-2012
23. Luis Acero	2011-2012
24. Christa Manton	2011-2014
25. Malik Raynor	2011-2018
26. Lin Chen	2011-2012
27. Heather Danhof	2011-2016
28. Sangita Pal	2011-2017
29. Jay Gordon	2011-2014
30. Veronica Rowlett	2011-2016
31. Matthew White	2011-2013
32. Jennifer Herricks	2010-2014
33. Claudia Jimenez-Lopez	2010-2014
34. Arely Gonzalez	2009-2012
35. Bryan Hansen	2009-2012
36. Taylor Schoberle	2009-2013
37. Kimberly Busiek	2009-2014
38. Andria Schibler	2008-2010
39. Alejandra Klauer King	2008-2012
40. Victoria Mdoe	2007-2009
41. Lauren Wiggins	2007-2009
42. Borislava Tsanova	2007-2009
43. Erin Windsor	2007-2010
44. Fabiola Gomez	2006-2008
45. John Latham	2006-2011
46. Xi Mo	2005-2007
47. Brandi Baird	2005-2006
48. Daneen Schaeffer	2005-2010
49. Diego Gutnisky	2005-2007
50. Bridgette Parish	2004-2005
51. Marena Wilson-Pham	2003-2005
52. Melissa Adams-Singh	2003-2003
53. Stacie Meaux	2003-2005
54. Tatianna Robles	2003-2006
55. Jill Roberts	2003-2003
56. Mei Zhang	2003-2004
57. Maria Hadjifrangiskou	2002-2004
58. Mark Hickman	2002-2008
59. Xi Zhou	2002-2003
60. Julio Morales	2002-2005
61. Brett Geissler	2001-2006

62. Karen Shumway	2001-2003
63. Brian Corbin	2001-2006
64. Jose Rivera	2001-2004
65. Nicole Baldwin	2001-2001

### **GSBS Examination Committees**

(12 as chair, 32 as member)

1. Alexandra Berroyer	Member	2018
2. Minseon Kim	Member	2016
3. Elisa Vesely	Member	2015
4. Sara Siegel	Member	2015
5. Chris Evans	Member	2015
6. Jillian Losh	Chair	2014
7. Yi Liu	Chair	2014
8. Muge Sertel	Member (Outside Area)	2014
9. Jaeil Han	Member	2014
10. Ariana Andrei	Member (Outside Area)	2013
11. Alexandra Marshall	Member	2013
12. Charles Beaman	Member (Outside Area)	2013
13. Jonathan Flynn	Member (Outside Area)	2013
14. Monica Gireud	Member (Outside Area)	2013
15. Heather Danhof	Chair	2012
16. Sangita Pal	Member (Outside Area)	2012
17. Veronica Rowlett	Chair	2012
18. Katie McCallum	Chair	2012
19. Melissa Robinson	Chair	2012
20. Shih-Shin Chang	Member (Outside Area)	2011
21. Christa Manton	Member	2011
22. Claudia Jimenez-Lopez	Member	2011
23. Arely Gonzalez	Chair	2010
24. Matthew White	Member (Outside Area)	2010
25. Jennifer Herricks	Chair	2009
26. Alejandra Klauer King	Member	2009
27. Amanda Clark	Chair	2008
28. Diego Gutnisky	Member (Outside Area)	2007
29. Dinghai Zheng	Member	2006
30. Kimberly Mankiewicz	Member (Outside Area)	2006
31. Xi Mo	Member	2006
32. Melanie Hargrove	Chair	2005
33. Julio Morales	Member	2004

34. Mark Hickman	Member	2004
35. Raegan Hunt	Member	2003
36. Brian Corbin	Chair	2003
37. Brett Geissler	Chair	2003
38. Maria Hadjifrangiskou	Member	2003
39. Janci Chunn	Member	2003
40. Helen Huang	Member	2003
41. Xinpu Chen	Member	2002
42. Simon Jakubowski	Member	2002
43. Melissa Drysdale	Member	2001
44. Nicole Baldwin	Member	2001

**SERVICE TO THE COMMUNITY, PROFESSIONAL:**

**MEETING ORGANIZATION**

Co-organizer, Jiler Professors and Fellows Conference, American Cancer Society, Minneapolis, MN, September, 2018

Session Chair, 8<sup>th</sup> International Congress on Stress Responses in Biology and Medicine, Turku, Finland, August, 2017

Chair, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Sunday River, ME, July 2017

Co-organizer, Jiler Professors and Fellows Conference, American Cancer Society, Salt Lake City, UT, September, 2016

Panel member, "Negotiation," Association for Women in Science, November, 2105

Co-chair, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Il Ciocco, Italy, July, 2015

Co-organizer, 20<sup>th</sup> Annual Midwest Stress Response and Chaperones Meeting, Northwestern University, IL, January, 2015

Co-organizer and speaker, Workshop of Heat Shock Factor 1, University of Paris-Diderot, Paris, France, 4/23, 2014

Co-organizer, 16<sup>th</sup> Annual Midwest Stress Response and Molecular Chaperone Meeting, 2011

Co-organizer, 11<sup>th</sup> Annual Midwest Stress Response and Protein Chaperones Meeting, Northwestern University, January 14, 2006

## POPULAR MEDIA

- Interview, US News & World Report, "Can intestinal parasites be good for you?", December 2016
- Interview, KTRH NewsRadio 740AM/iHeart Radio "Study about bearded men yields surprising results", August, 2016
- Interview, KTRH NewsRadio 740AM "Are beards good for your health?", January 2016
- Interview, MedPage Today, "Catastrophic viral outbreaks possible?", July, 2014
- Interview, KTRH NewsRadio 740AM, "The five-second rule," March, 2014
- Interview, KTRH NewsRadio 740AM, "Mitochondrial flashes have an amazing power to predict longevity," February, 2014
- Interview, KTRH NewsRadio 740AM, "Germs on Cell Phones," January, 2014
- Interviews, FOX News Radio Affiliates: Davenport, WOC Davenport, IA, WNDB Daytona Beach, FL, KCOL Fort Collins, CO, WILM Wilmington, DE, "Sprite Cures Hangovers?", October, 2013
- Interview, HealthDay News, "Handwashing: Getting Rid of Germs", October, 2013
- Interview, KTRH NewsRadio 740AM, "Lobsters Live Forever," August 2013
- Interview, Freelance Writer Linda Melone, "Grocery Store Germs," August, 2013

## OTHER

- Faculty Mentor, Dr. Sandy Westerheide, University of South Florida, 2013-2017
- Mentor, American Cancer Society Postdoctoral Fellow Symposium, Boston, MA, October, 2011
- Sabbatical host for Dr. James West, Assistant professor in the Departments of Biology and Chemistry at the College of Wooster, OH. Summer, 2011, 2016
- Relay for Life Annual Kickoff Campaign, American Cancer Society, Houston, TX, July 2010
- External mentor for Dr. Jill Johnson, COBRE Project Faculty, University of Idaho, 2005-2007
- Judge, Poster competition, UT Research Day, 2004
- Relay for Life, American Cancer Society Fundraiser, Groveton, TX, May 2, 2003
- Expert panel, "Yeast Genomic Technologies and Application in Human Biomedical Research", Eukaryotic Molecular Biology (JLM 349), University of Toronto, Canada, April, 2002
- Relay for Life, American Cancer Society Fundraiser, Univ, Houston, April 27-28, 2002
- Pride in Progress American Cancer Society Donor Outreach, Houston City Club, April 2, 2002
- Victory Group, American Cancer Society Donor Outreach, Baron's Breakfast, Brennan's Restaurant, March 1<sup>st</sup>, 2002
- Career Day, Silverlake Elementary School, Pearland ISD, February 26, 2002

**SERVICE TO THE COMMUNITY, LEADERSHIP, PERSONAL:**

River Oaks Dance Club (social ballroom dance/dinner club, Houston, TX, 150 members)  
President, 2013-2015  
Board Member, 2012-2013

Parent Director, TakeFlight Band/Color Guard Contest Pearland, TX, (high school band event, 1,000 participants, 2011-2013)

Pearland Aquatics, Pearland, TX (USA Swimming Club Team, 250 members)  
President, 2010-2012  
Swim Meet Director and Official, 2011-2014  
Vice-President, 2009-2010  
Board Member, 2007-2009

Pearland Pirates, Pearland, TX (summer swim team, 400 members)  
President, 2006-2008  
Vice-President, 2005-2006  
Board Member, 2004-2005

**SPONSORSHIP OF POSTDOCTORAL FELLOWS:**

1. Davi Goncalves, 2017-current

**SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE:**

1. Alec Santiago, 2018-current
2. Unekwu Yakubu, 2016-current
3. Amy Ford, 2014-2019
4. Sara Peffer, 2013-2019
5. Veronica Garcia, 2012-2017
6. Kimberly Cope, (MS) 2010-2014
7. Jennifer Abrams, (PhD) 2008-2014
8. Yanyu Wang, (PhD) 2007-2012
9. Jacob Verghese, (PhD) 2007-2012
10. Hugo Tapia, (PhD) 2005-2010
11. Patrick Gibney, (PhD) 2004-2009
12. Lance Shaner, (PhD) 2002-2006
13. Amy Trott, (PhD), 2001-2006

### **SPONSORSHIP OF TUTORIALS:**

1. Lee-Ann Notice, 2019
2. Alex Santiago, 2018
3. Safia Essein, 2018
4. Laurel Thompson, 2017
5. Unekwu Yakubu, 2016
6. Robert Williams, 2015
7. Christopher Evans, 2014
8. Michael McCarthy, 2014
9. Amy Ford, 2013
10. Sara Peffer, 2013
11. Jillian Morin, 2013
12. Naomi Biers, 2012
13. Emily Stinemetz, 2012
14. Veronica Wells, 2011
15. Katie McCallum, 2011
16. Kimberly Cope, 2009
17. Jennifer Abrams, 2008
18. Yanyu Wang, 2007
19. Jacob Verghese, 2007
20. Kevin Cole, 2006
21. Sarah Myers, 2006
22. Hugo Tapia, 2005
23. Patrick Gibney, 2003
24. Jeremias Alves de Siquieria, 2002
25. Lance Shaner, 2001
26. Brett Geissler, 2001
27. Karen LaFollette-Shumway, 2000
28. Amy Trott, 2000

### **SPONSORSHIP OF UNDERGRADUATE RESEARCH:**

1. Zachary Bull, Bennington College, Winter, 2020
2. Stephen McGarry, Wooster College, Summer, 2019
3. Nhung Nguyen, Tan Tao University, Vietnam, Fall, 2018
4. Jennifer Hurtig, Wooster College, OH, Summer, 2016
5. John Buchan, Wooster College, OH, Summer, 2016
6. Afton Widdershin, Wooster College, OH, Summer, 2016
7. Cody Jacobs, Bennington College, VT, Spring 2016
8. Catherine Wu, MIT, 2015

9. Julie Heffler, University of Houston, Undergraduate Honors Thesis Project 2013-2014
10. Kirsten Trudeau, Bennington College, VT, Spring 2012
11. Evelin Vaquiz, University of Houston, Downtown, Fall 2009
12. Dulce Carbajal, University of Houston, Downtown, Fall 2005
13. Carmen Galvan, University of Houston, Downtown, Summer 2003
14. Patrick Gibney, University of Northern Iowa, Summer 2002
15. Shail Govani, Rice University, 2001

#### **SPONSORSHIP OF MEDICAL STUDENT RESEARCH:**

1. Justin Nguyen, MSI, 2015
2. Scott Louis, MSI, 2006

#### **TEACHING RESPONSIBILITIES:**

##### **Current (18 contact hours/year)**

- 1 contact hour, Foundations in Biomedical Science (GSBS, 2014-present)
- 2 contact hours, Scientific Writing, (GSBS, Fall and Spring courses, 2016-present)
- 3 contact hours, Microbial Genetics and Physiology (GSBS/MID, 2015-present)
- 8 contact hours, Fluorescence and Electron Microscopy: Imaging Cells and Molecules (GSBS/MID, 2014-present)
- 3 contact hours, Postdoctoral Certificate Program (UTHealth, 2007-present)
- 1 contact hour, Current Methods in Biochemistry and Cell Biology (GSBS, Biochemistry and Cell Biology 2007-present)

##### **Past**

- 1 contact hour, Emerging Fields in Biochemistry and Molecular Biology: RNA Biology (GSBS/BMB, 2014-present)
- 1 contact hour, Emerging Fields in Biochemistry and Molecular Biology: Translational Biology (GSBS/BMB, 2014-2015)
- 8 contact hours, Medical Microbiology Laboratory (Medical School, 2003-2014)
- 7 contact hours, Microbiology and Molecular Genetics I and II (2001-2014)
- 6 contact hours, Microbial Sensing and Signal Transduction (2001-2014)
- 2 contact hours, Current Methods in Molecular Research (Biochem. Mol. Biol., 2002-2014)
- 4 contact hours, Topics in Biochemistry (Biochem Mol. Biol., 2006-2012)
- 3 contact hours, Seminar in Regulatory Biology (GS040751), (Cell Reg. Biology, 2003)
- 2 contact hours, Dental Microbiology (Dental School, 2006-2011)
- Discussion leader, Ethical Dimensions of the Biomedical Sciences (GSBS, 2006-2008)
- Lab leader, Medical Microbiology Laboratory (Medical School, 2003-2011)
- Course director, Microbial Sensing and Signal Transduction, (2004-2012)

**CURRENT GRANT SUPPORT:**

Mechanisms of cytosolic proteostasis in yeast  
P.I. Kevin A. Morano  
NIH/NIGMS R01-GM127287  
04/16/2018-03/31/2022  
\$206,000/year direct costs

Research Supplement to Promote Diversity in Health-Related Research  
Alec Santiago, Trainee  
P.I. Kevin A. Morano  
NIGMS, R01-GM127287-01S1  
12/01/2018-11/30/2020  
\$49,461/year direct costs

**PAST GRANT SUPPORT:**

Roles of heat shock protein 110 (Hsp110) in modulating amyloid neurotoxicity  
Multi-PI Kevin A. Morano, Ph.D. and Sheng Zhang, Ph.D.  
NIA, R21-AG051046  
7/01/2016-6/30/2018  
\$275,000/two-year period, direct costs to be shared among PI laboratories

2017 Stress Proteins in Growth, Development and Disease GRS/GRC  
P.I. Kevin A. Morano  
NIA R13-AG057030-01  
07/08/2017-07/14/2017  
\$15,000 direct costs, no IDC

Defining the mechanism of substrate binding by the Hsp110 molecular chaperone  
P.I. Veronica M. Garcia, Sponsor: Kevin A. Morano, Ph.D.  
NIGMS, F31-GM113521  
07/01/2015-6/30/2017  
\$29,451/year direct costs

Hsp110 protein chaperone function in yeast  
P.I. Kevin A. Morano, Ph.D.  
NIGMS, R01-GM074696-09  
04/01/06-12/31/16 (NCE)  
\$200,000/year direct costs



Bayesian methods in signal transduction network analysis,  
Co-investigator, P.I. Yin Liu, Ph.D.  
NLM, R01-LM010022-04  
3/15/2011-03/14/2016 (NCE)  
\$40,351/year direct costs (5% PI effort)

Research Supplement to Promote Diversity in Health-Related Research  
Veronica Garcia, Trainee  
P.I. Kevin A. Morano, Ph.D.  
NIGMS, GM074696-06S1  
09/01/12-08/30/14  
\$43,240/year direct costs

The Deg-On system: generation of a chemical and genetic high throughput assay for  
proteasome activation  
Co-P.I. Kevin A. Morano, Ph.D. and Laura Segatori, Ph.D. (Rice U.)  
Institute of Biosciences and Bioengineering, Rice University  
9/1/2010-8/31/2011  
\$12,500/year direct costs

Research Supplement to Promote Diversity in Health-Related Research  
Jennifer Abrams, Trainee  
P.I. Kevin A. Morano, Ph.D.  
NIGMS, GM074696-04S1  
07/01/08-06/30/10  
\$40,531/year direct costs

ARRA Research Supplement  
P.I. Kevin A. Morano, Ph.D.  
NIGMS, GM074696-04S1  
07/15/09-03/31/2010  
\$44,415/year direct cost

Research Supplement to Promote Diversity in Health-Related Research  
P.I. Kevin A. Morano, Ph.D.  
Hugo Tapia, Trainee  
NIGMS, GM074696  
07/01/06-06/30/07  
\$33,837/year direct costs

Cellular Regulation of the Hsp90 Molecular Chaperone, MBC-103134

P.I. Kevin A. Morano, Ph.D.  
American Cancer Society  
01/01/02-12/31/06  
\$170,000/year direct costs

Identification and characterization of new heat shock genes in yeast, 0160113Y  
Kevin A. Morano, Ph.D.  
American Heart Association, Texas Affiliate  
07/01/01-12/31/03  
\$56,000/year direct costs

## **PUBLICATIONS:**

**A. Abstracts** (available upon request)

**B. Refereed Original Articles in Journals** (35 total; Citations: 3,998, H-index: 30, i10-index: 38)  
**PubMed Search:** <https://www.ncbi.nlm.nih.gov/pubmed/?term=morano+ka>

1. Peffer S, Goncalves, D and **Morano KA** (2019) Regulation of the Hsf1-dependent transcriptome via conserved bipartite contacts with Hsp70 promotes survival in yeast. *J. Biol. Chem.* 294(32):12191-12202.
2. Loberg MA, Hurtig JE, Graff AH, Allan KM, Buchan JA, Spencer MK, Kelly JE, Clodfelter JE, **Morano KA**, Lowther WT, West JD. (2019) Aromatic residues at the dimer-dimer interface in the peroxiredoxin Tsa1 facilitate decamer formation and biological function. *Chem. Res. Toxicol.*, 18;32(3): 474-483.
3. Ford, AE, Denicourt, C and **Morano KA** (2019) Thiol stress-dependent aggregation of the glycolytic enzyme triose phosphate isomerase in yeast and human cells. *Mol. Biol. Cell* 30(5):554-565.
4. Garcia VM, Nillegoda, N, Bukau B and **Morano KA**. (2017) Substrate binding by the yeast Hsp110 nucleotide exchange factor and molecular chaperone Sse1 is not obligate for its biological activities. *Mol. Biol. Cell* 28(15):2066-2075.
5. Allan KM, Loberg MA, Chepngeno J, Hurtig JE, Tripathi S, Kang MG, Allotey JK, Widdershins AH, Pilat JM, Sizek HJ, Murphy WJ, Naticchia MR, David JB, **Morano KA**, West JD. (2016) Trapping redox partnerships in oxidant-sensitive proteins with a small, thiol-reactive crosslinker. *Free Radic Biol. Med.* 101:356-366.

6. Garcia V, Rowlett VW, Margolin W and **Morano KA**. (2016) Semi-automated microplate monitoring of protein polymerization and aggregation. *Anal. Biochem.* 508:9-11.
7. Abrams J, Verghese J, Gibney P and **Morano KA**. (2014) Hierarchical functional specificity of cytosolic heat shock protein 70 (Hsp70) nucleotide exchange factors in yeast. *J. Biol. Chem.* 289:13555-13167.
8. Abrams J and **Morano KA**. (2013) Coupled assays for monitoring protein refolding in *Saccharomyces cerevisiae*. *J. Visual. Exp.* (77) e50432.
9. Naticchia MR, Brown HA, Garcia FJ, Lamade AM, Justice SL, Herrin RP, **Morano KA** and West JD. (2013) Bifunctional electrophiles cross-link thioredoxins with redox relay partners in cells. *Chem. Res. Toxicol.*, 26(3): 490-497.
10. \*Wang Y, Gibney PA, West JD and **Morano KA**. (2012) The yeast Hsp70 Ssa1 is a sensor for activation of the heat shock response by thiol reactive compounds. *Mol. Biol. Cell*, 23(17): 3290-3298.  
\* *Chosen as an MBoC Highlight Article*
11. Verghese J and **Morano KA**. (2012) A lysine-rich region within fungal BAG domain-containing proteins mediates a novel association with ribosomes. *Euk. Cell*, 11:1157-1003-1011.
12. West JD, Stamm CE, Brown HA, Justice SL and **Morano KA**. (2011) Enhanced toxicity of the protein cross-linkers divinyl sulfone and diethyl acetylenedicarboxylate in comparison to related monofunctional electrophiles. *Chem. Res. Toxicol.* 24:1457-1459.
13. Mandal AK\*, Gibney PA\*, Nillegoda, NB, Theodoraki MA, Caplan AJ and **Morano KA**. (2010) Hsp110 chaperones control client fate determination in the Hsp70/Hsp90 chaperone system. *Mol. Biol. Cell* 21:1439-1448.
14. Tapia H and **Morano KA**. (2010) Hsp90 nuclear accumulation in quiescence is linked to chaperone function and spore development in yeast. *Mol. Biol. Cell* 21: 63-72.
15. Schuermann JP, Jiang J, Cuellar J, Llorca O, Wang L, Gimenez LE, Jin S, Taylor AB, Demeler B, **Morano KA**, Hart PJ, Valpuesta JM, Lafer EM, Sousa R. (2008) Structure of the Hsp110:Hsc70 nucleotide exchange machine. *Mol. Cell* 31(2):232-43.
16. Shaner L\*, Gibney PA\*, **Morano KA**, (2008) The Hsp110 protein chaperone Sse1 is required for yeast cell integrity and morphogenesis. *Curr. Genet.* 54(1): 1-11.

17. Gibney PA, Fries T, Bailer SM, **Morano KA** (2008) Rtr1 is the yeast homolog of a novel family of RNA polymerase II-binding proteins. *Eukaryot. Cell* 7(6): 938-948.
18. Trott, A, West JD, Klaic L, Westerheide SD, Silverman RB, Morimoto RI, **Morano KA** (2008) Activation of heat shock and antioxidant responses by the natural product celastrol: transcriptional signatures of a thiol-targeted molecule. *Mol. Biol. Cell* 19:1104-1112.
19. Fan, Q, Park KW, Du Z, **Morano KA**, Li L (2007) The role of Sse1 in the de novo formation and variant determination of the [PSI<sup>+</sup>] prion. *Genetics* 177:1583-1593.
20. Shaner, L., Sousa, R. and **Morano, K.A.**, (2006) Characterization of Hsp70 binding and nucleotide exchange by the yeast Hsp110 chaperone Sse1. *Biochemistry* 45:15075-15084,.
21. Shaner, L., Wegele, H., Buchner, J. and **Morano, K.A.**, (2005) Sse1 functionally interacts with the Hsp70 chaperones Ssa and Ssb. *J. Biol. Chem.*, 280(50), 41262-41269.
22. Trott, A., Shaner, L. and **Morano, K.A.**, (2005) The molecular chaperone Sse1 and the growth control protein kinase Sch9 collaborate to regulate protein kinase A activity in *Saccharomyces cerevisiae*. *Genetics*, 170(3):1009-1021.
23. Pelletier, B., Trott, A., **Morano, K.A.** and Labbe, S. (2004) Functional Characterization of the iron-regulatory transcription factor Fep1 from *Schizosaccharomyces pombe*. *J. Biol. Chem.*, 280(26): 25146-25161.
24. Carbajal, D., **Morano, K.A.** and Morano, L.D., (2004) Indirect Immunofluorescence Microscopy for Direct Detection of *Xylella fastidiosa* in Xylem Sap. *Curr. Microbiol.*, 49: 372-375.
25. Trott, A. and **Morano, K.A.**, (2004) *SYM1* is the stress-induced *Saccharomyces cerevisiae* ortholog of the mammalian kidney disease gene Mpv17 and is required for ethanol metabolism and tolerance during heat shock. *Euk. Cell*, 3(3): 620-631.
26. Shaner, L., Trott, A., Goeckeler, J.L., Brodsky, J.L. and **Morano, K.A.** (2004) The function of the yeast molecular chaperone Sse1 is mechanistically distinct from the closely related hsp70 family. *J. Biol. Chem.*, 279 (21): 21992-22001.
27. Bali, M., Zhang, B., **Morano, K.A.**, Michels, C.A. (2003) The Hsp90 molecular chaperone complex regulates maltose induction and stability of the *Saccharomyces MAL* gene transcription activator Mal63p. *J. Biol. Chem.*, 278 (48): 47441-47448.

28. Bellemare, D.R., Shaner, L., **Morano, K.A.**, Beaudoin, J., Langlois, R., Labbe, S. (2002) Ctr6, a vacuolar membrane copper transporter in *Schizosaccharomyces pombe*. J. Biol. Chem. 277(48):46676-46686.
29. **Morano, K.A.** and Thiele, D.J. (1999) The Sch9 protein kinase regulates Hsp90 chaperone complex signal transduction activity in vivo. EMBO J. 18(21): 5953-5962.
30. Liu, X.-D.\*, **Morano, K.A.\***, and Thiele, D.J. (1999) The yeast Hsp110 family member, Sse1, is an Hsp90 cochaperone. J. Biol. Chem. 274: 26654-26660.
31. **Morano, K. A.**, Santoro, N., Koch, K.A., and Thiele, D.J. (1999) A trans-activation domain in yeast heat shock transcription factor is essential for cell cycle progression during stress. Mol. Cell. Biol. 19(1): 402-411.
32. Matoba, S., **Morano, K.A.**, Klionsky, D.J., Kim, K. and Ogrzydziak, D.M. (1997) Dipeptidyl aminopeptidase processing and biosynthesis of alkaline extracellular protease from *Yarrowia lipolytica*. Microbiology 143: 3263-3272.
33. Scott, S.V., Hefner-Gravink, A., **Morano, K.A.**, Ohsumi, Y. and Klionsky, D.J. (1996) Cytoplasm-to-vacuole targeting and autophagy employ the same machinery to deliver proteins to the yeast vacuole. Proc. Natl. Acad. Sci. 93: 12304-12308.
34. Harding, T.M., **Morano, K.A.**, Scott, S.V. and Klionsky, D.J. (1995) Isolation and characterization of yeast mutants in the cytoplasm to vacuole protein targeting pathway. J. Cell Biol. 131: 591-602.
35. **Morano, K.A.** and Klionsky, D.J. (1994) Differential effects of compartment deacidification on the targeting of membrane and soluble proteins to the vacuole in yeast. J. Cell Sci. 107: 2813-2824.

\* denotes equal contribution

**C. Invited Articles (Reviews, Editorials, etc.) in Journals** (8 total; 6 as independent investigator)

1. Yakubu, UM and Morano, K.A. (2018) Roles of the nucleotide exchange factor and chaperone Hsp110 in cellular proteostasis and diseases of protein misfolding. Biol. Chem. June 1, ePub doi: 10.1515/hsz-2018-0209.
2. Pepper, S., Cope, K., and **Morano, K.A.** (2015) Unraveling protein misfolding diseases using model systems. Future Sci. OA: 10.4155/FSO.15.41.

3. West JD, Wang Y, **Morano KA** (2012) Small molecule activators of the heat shock response: chemical properties, molecular targets and therapeutic promise. *Chem Res. Toxicol.* 25(10): 2036-2053.
4. Verghese, J.\*, Abrams, J.\*, Wang, Y. and **Morano, K.A.** (2012) Biology of the heat shock response and protein chaperones: budding yeast as a model system. *Microbiol. Mol. Biol. Rev.* 76:115-158.
5. **Morano, K.A.**, (2007) New tricks for an old dog: the evolving world of Hsp70. *Ann NY Acad. Sci.* 1113: 1-14.
6. **Shaner, L. and Morano, K.A.** (2007). All in the family: atypical Hsp70 chaperones are conserved modulators of Hsp70 activity. *Cell Stress Chaperones* 12(1):1-8.
7. **Morano, K. A.** and Thiele, D. J., (1999) Heat shock factor function and regulation in response to cellular stress, growth and differentiation signals. *Gene Expr.* 7:271-282.
8. **Morano, K.A.**, Liu, Phillip C.C. and Thiele, D.J., Protein chaperones and the heat shock response in *Saccharomyces cerevisiae*. *Curr. Opin. Microbiol.* 1:197-203, 1998.

#### **D. Chapters**

1. Ford, A.E. and Morano, K.A. (2018) Thiol-based redox signaling: impacts on molecular chaperones and cellular proteostasis. In *Heat Shock Proteins in Signaling*. Ed., Asea, A.A. and Kaur, P., Springer Nature Publishers.
2. Garcia, V.M. and **Morano, K.A.** (2014) The chaperone networks: an Hsp70 perspective. In *The Molecular Chaperones: Interaction networks in protein folding and degradation*. Ed., Houry, W., Springer.
3. **Morano, K.A.**, Grant, C., and Moye-Rowley, W. S. (2012) The response to heat shock and oxidative stress in *Saccharomyces cerevisiae*. In *YeastBook: Cell Signaling and Development*, Genetics (189) 1-39.
4. Trott, A. and **Morano, K.A.**: The yeast heat shock response, in *Yeast Stress Responses*, eds. Stefan Hohmann and Willem Mager. Springer-Verlag: Heidelberg, 2002, pp. 71-119.

#### **E. Other Professional Communications**

1. **Morano, K.A.** (2015) Groupthink: chromosomal clustering during transcriptional memory. *Microbial Cell*, 2(12): 454-457.

2. **Morano, K.A.** (2014) Anhydrobiosis: drying out with sugar. *Curr. Biol.* (24):R1121-1123.
3. **Morano, K.A.**, Sistonen, L. and Mezger, V. (2014) Heat shock in the springtime. *Cell Stress Chaperones.* (19): 753-761.

## **INVITED RESEARCH PRESENTATIONS**

### **2001**

M.D. Anderson Cancer Center, Dept. of Molecular Genetics, 3/14

Rice University, Dept. of Biochemistry and Cell Biology, 11/5

### **2002**

UTHSC, Dept. Internal Medicine, Division of Cardiology, 1/31

Invited speaker, First international conference on the Hsp90 chaperone machine, Arolla, Switzerland, 8/24-8/28

UTHSC, Dept. Biochemistry and Molecular Biology, 9/16

Texas A&M University, Genetics Graduate Program, 9/19

University of Houston, Downtown, Natural Sciences, 10/18

### **2003**

Invited speaker, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Oxford, UK 7/27-8/1

University of Sherbrooke, QC, CA, Department of Biochemistry, 9/14

### **2005**

Invited speaker, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Salve Regina University, RI, 7/17-7/22

### **2006**

UTHSC, Dept. Pathology, 5/26

**2007**

Northwestern University Medical School, Molecular Pharm. Biological Chemistry, 4/16

Duke University School of Medicine, Pharmacology and Cancer Biology, 4/26

Invited speaker, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Oxford, UK 8/19-8/23

Invited speaker and symposium chair, Second World Congress on Stress, Budapest, Hungary, 8/23-26

University of Idaho, Microbiology, Molecular Biology and Biochemistry, 10/13

Invited speaker, Korean-American Biomedical Scientists Symposium, Houston, TX 11/3

UTHSC, Dept. Internal Medicine, Division of Cardiology, 11/15

**2008**

University of Houston, Downtown, Natural Sciences Department, 3/26

University of St. Thomas, Biology Honors Society, 4/17

**2009**

BioCity Turku/Univ. Turku/Abo Academi, Turku, Finland, 5/28

Invited speaker, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Proctor Academy, NH, 6/28-7/3

The Ohio State University, Dept. Molecular Genetics, 10/6

Brown University, Dept. Molecular Biology, Cell Biology & Biochemistry, 11/17

**2010**

University of California, Berkeley, Dept. Molecular and Cell Biology, 2/24

University of Miami, Miller School of Medicine, Dept. Cell Biology and Anatomy, 3/9

University of South Florida, College of Medicine, Department of Molecular Medicine, 3/26

**2011**

Invited speaker, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Il Ciocco, Italy 7/17-7/22



**2012**

Invited plenary speaker, 17<sup>th</sup> Annual Midwest Stress Response and Chaperones Meeting 1/15

University of Nebraska, Department of Biochemistry and Redox Biology Center, 10/2

**2013**

Invited Speaker, Protein Quality Control Mini-symposium, American Society for Cell Biology Meeting, 7/14-7/18

Gulf Coast Consortium, Keck Fellows Meeting, 10/25

University of South Florida, Department of Cell Biology, Microbiology and Molecular Biology, 11/7

**2014**

Co-organizer and speaker, Workshop of Heat Shock Factor 1, University of Paris-Diderot, Paris, France, 4/23

Invited Discussion Leader, Gordon Research Conference on Thiol-Based Redox Regulation and Signaling, Girona, Spain, 7/20-7/25

Northwestern University, Department of Molecular Biosciences, 11/13

**2015**

Co-organizer, 20<sup>th</sup> Annual Midwest Stress Response and Chaperones Meeting, Northwestern University, IL, 1/17

Co-chair, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Il Ciocco, Barga, Italy, 7/5-7/10

Invited speaker, James T. Willerson, MD Cardiovascular Seminar, Texas Heart Institute, Houston, TX 2/5

Invited Speaker, Gulf Coast Consortium, Houston, TX, 10/23

Invited Speaker and session leader, TX Branch American Society for Microbiology Fall Meeting, Huntsville, TX 10/29

**2016**

UTHealth Institute for Molecular Medicine, 1/29

Invited Keynote Lecture, TX Branch American Society for Microbiology Spring Meeting, New Braunfels, TX, 4/1

Texas Woman's University, Department of Biology, Denton, TX, 10/7

**2017**

Session chair and invited speaker, 8<sup>th</sup> International Congress on Stress Responses in Biology and Medicine, Turku, Finland, 8/14-8/18

Invited speaker, Korean-American Scientists and Engineers Association Young Generation Forum, 9/9

**2018**

Invited speaker, University of Gdansk Department of Biotechnology, Gdansk, Poland, 10/12

**2019**

Invited Speaker, Gulf Coast Consortium, Houston, 1/10

Invited speaker, Gordon Research Conference on Stress Proteins in Growth, Development and Disease, 6/23-6/28