Kelly Wentz-Hunter

Professor of Biology
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Education:

Ph.D. 1997. Department of Pharmacology and Molecular Biology

Rosalind Franklin University of Medicine and Sciences Formally: Finch University of Health Sciences

B.S.

University of Saint Francis, Joliet, IL Formally: College of St. Francis
Major: Biology Minor: Chemistry

TEACHING

Teaching Experience:

2017-present Professor of Biology, Allied Health Coordinator, Pre-

professional Advisor, Director MA Biomedical Sciences

Program, Roosevelt University, Chicago, IL

2012-2017 Associate Professor of Biology, Allied Health Coordinator,

Pre-professional Advisor, Roosevelt University, Chicago, IL

2006-2012 Assistant Professor of Biology, Roosevelt University,

Chicago, IL

2006 Adjunct Faculty, Lewis University, Romeoville, IL

Taught Introduction to Toxicology for upper level majors.

2006 Adjunct Faculty, University of Saint Francis, Joliet, IL

Taught Human Biology and laboratory for non-majors.

2005- 2006 Adjunct Faculty, Triton College, Melrose Park, IL

Taught Biology 100 General Biology and laboratory and Biology 114 Human Genetics and laboratory for non-majors.

2004- 2006 Adjunct Faculty, Malcolm X College, Chicago, IL

Taught Biology 121, Molecular and Cellular Biology and

laboratory for majors.

Sheba Prasad [2014-2016] Dong-Jin Choi [2012-2015] Karina Valentin [2015] Eleanor McCree [2014] Conor Heffernan [2014] Shira Lambert [2012-2013] Janet Zayas [2012-2014] Chris Williams [2012] Richard Chan [2012] Irene Gallos [2011-2012] Hilal Gurler [2011-2012] Ruth Moser [2009-2010] Dinesh Veerapalli [2011] Sarah Bascharon [2010-2011] Johara Veal [2010-2011] Dunchao Xing [2009-2010] Dipti Panchal [2008-2009] Jennifer Vlk [2007-2008] Adam McKenzie [2007]

Undergraduate Students [45]

Petrus De Campos Kermessi [2016] Natcha Butera [2015] Najoua Alloualla [2014] Marc Nunez [2014] Asylnn Cummings [2014-2015] Shatiana Turnage [2014] Rebecca Wilson [2013-2015] Siobhan Odendaal [2013-2014] Sanah Baseer [2013] Lexi Carlile [2013] Meredith Rounds [2013] Saba Ahmed [2012-2013] Kayla Velazquez [2012-2013] Ann Nauven [2011] Vaiva Liakaite [2010] Geoff Dutton [2009] Usman Raheemi [2009]

Rajalekshmy Shyam [2007- 2009]

Brett Calka [2008-2009]

Janea Swanson [2008]

Taneesha Shaw [2007]

Megan Kreft [2007-2008]

Desi Evans [2008]

Jeremiah Furman [2105] Ryan Sheldon [2015] Diamond Grady [2014] Christopher Cummings [2013] Betty Khelivch [2012- 2013] Nidhi Mistry [2012] Robert Anderson [2012] Dana Gust [2012] Jennifer Moerke [2011-2012] Swathi Naaka [2010-2011] Natalie Kudlak [2011] Michael Boyd [2011] Christina Bivian [2011-2011] Devika Malempati [2010] Ashley Leverenz [2009-2010] Harini Yalamanchili [2008-2009] Nicole Nelson [2007-2008] Julia Davis [2006-2007]

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Jenna Jabali [2014-present] Milana Williams [2015] Vidal Santacruz [2014] Amanda Alt [2014] Anna Eickhoff [2014] Kessy Kessler [2014] Meghan Odendaal [2013-2014] Olantanye Aluko [2013] Carmen Brown [2013] Alexandria Owens [2013] Patricia Sullivan [2012-2013] Sarah Toma [2012-2013] Yuridana Comacho [2011-2012] Jackie Brandt [2011] Terry Pernell [2010] Barbara Misielak [2009] Umer Raheemi [2009] Matthew Amidon [2008-2009] Jennifer Beltzer [2008-2009] Elizabeth Krupica [2008] Christina Swiderski [2008] Jenilee Candari [2007-2008]

- 2016- Effects of Antioxidant Epigallocatechin Gallate (EGCG) on Pancreatic Cancer, Sheba Prasad
- 2015- The Effects of Pterostilbene in Pancreatic Cancer

[6]

Deborah Eng [2015]; Nausheen Khan [2014]; April Quarles [2014]; Phylicia Robins [2013]; John Literacki [2011]; Andrew Baker [2010]

[12]

- 2015- Differential expression of IPCEF-1 in pancreatic cancer cell line PANC-1 after treatment with EGCG, Aslynn Cummings
- 2014- Effects of Phloretin on DHCR24 gene of PANC-1, Meghan Odendaal

 An Apple a Day Keeps the Oncologist Away? Siobhan Odendaal
- 2013-Differential gene expression in trabecular meshwork cells after treatment with phloretin, Norhan Elsayed

Differential gene expression in pancreatic cancer after treatment with p3()8(i)-3(r)11(tre)-2(a)-3(tm)11(e)yatic cancer a O p 97T ET EMC P J(n)-3(tJEn(a)-3(ticcre

undergraduate program in Health Sciences Administration. This program that will begin in Fall 2018 will be part of the Department of Biological, Chemical, and Physical Sciences and I will be involved in the hiring of a director and non-tenure track faculty for the program.

2016- Dual Acceptance Program BS/PharmD

The Dual Acceptance Program [DAP] is an early assurance program for select high school seniors. The program provides students who are motivated to become pharmacists with a clear path to achieving their goal directly out of high school. Incoming freshman students admitted to DAP are required to complete their prerequisite requirements during the first three years at the College of Arts & Science, and then transition into the College of Pharmacy to begin a three-year Doctor of Pharmacy program. I was responsible for preparing the proposal and working with the Deans in both the College of Arts and Sciences and College of Pharmacy to final approval. Currently I am part of a committee working with the Admissions and Marketing Departments at the University to implement and promote the program for Fall 2017.

2014- Biomedical Sciences, MA

This 9-12 month MA program was designed to help students with a bachelor's degree, preferably with a major in the sciences, improve their academic foundation in the biomedical sciences and augment their credentials for admission into medical school or other health professional programs. The program is a good fit for students with a good overall application package who need an additional opportunity to demonstrate their ability to master challenging coursework.29.26 aoingr cle3(rog)5ich126.02(0)-3(1)6(4)]

the only BS Histotechnology training program in the state of Illinois. The collaboration with NMH was initiated by the Department of Pathology because they could not find qualified histotechnologists to hire. NMH approached the University because of our relationship and reputation within the Clinical Schools at NMH. I was responsible for preparing the required support documents for proposing this new degree and receiving approval for the program at all University levels. I have also worked with the Admissions and Marketing Departments at the University to promote the program.

Biology BS 3+1

This program was initiated to allow Roosevelt UniversitIsor80 1 440.21 0 0 1374 Tm[()] TJE

sonography. This degree has attracted new majors to the University and broadened the range of career opportunities for our graduates. I was responsible for preparing the required support documents for proposing this new degree and receiving approval for the program at all University levels. I have also worked with the Admissions and Marketing Departments at the University to promote the program.

New course Development

2017- BIOL 383/483: Special Topics: Survivial of the Sickest

2017- ACP 110: Primary Texts

2015- BIOL 443: Clinical Bioethics and Medical Literature

2014- ACP 101:21st Century Health Care

2011- BIOL 468: Research Methods

2009- BIOL 350/450: Cancer Biology

PHIL 337: Science and Ethics [Honors]

2008- BIOL 440: Human Pharmacology

Pedagogical reform

2015- PULSE: Partnership for Undergraduate Life Science Education
Our department initiated a visit from the PULSE Ambassador Program in
the fall of 2015. The department is currently working with the initiatives of
PULSE to reform our biology curriculum.

Life Science Teaching Resource Center [LifeSciTRC] Scholars/Fellows Meeting

I was one of twelve individuals invited to participate in the LifeSciTRC task force meeting. During the meeting, we worked in large and small groups to develop recommendations for the identifying, supporting, and retaining LifeSciTRC community leaders, promoting the scholarship of teaching and learning in the community, addressing science standards and recommendations (Next Generation Science Standards & Vision and Change), community tools and topics and partner involvement in the Community.

2014- LifeSciTRC Fellow

LifeSciTRC is an online community for life science educators at all levels. The community and educational resources found on this site are free and open to educators worldwide. In 2013, I completed the LifeSciTRC scholars program. The scholars program is designed to help educators find and evaluate electronic resources to use with students, effectively use electronic resources in student-centered learning, apply the core concepts and competencies of Vision and Change in Science Education to existing classroom materials, find and evaluate existing resources and resource

collections centered around Vision and Change and further professional development by participating in an online community. After completion of the program, I was asked to become a LifeSciTRC Fellow. As a fellow, I was responsible for mentoring two different scholar groups through the program. This included grading submissions, answering questions and helping participants improve their competencies in regards to Vision and Change.

2009- Cellular and Molecular Biology: Cancer

nominated by Wm. David Burns, founder and PI of SEN6sPR,120.74 598.54 TEm(S)-2Fr

Recruitment and Advising:

Pre-professional Advisor, 2012-present
I direct the pre-professional health programs and help prepare students for application to professional schools such as medicine, dentistry, optometry,

cells after oxidative stress; Protective effects of anti-oxidants against oxidative stress in the trabecular meshwork cells; The role of anti-oxidants in differential gene expression of cancer cell lines.

Visiting Research Assistant Professor

5/2009-1/2010 Rosalind Franklin University of Medicine and Science,

Department of Molecular Pharmacology

Purification and characterization of serum microRNA

biomarkers for antioxidants in humans

Visiting Research Assistant Professor

2002- 2006 University of Illinois at Chicago, Department of

Ophthalmology and Visual Sciences

RNA interference of myocilin expression in the trabecular

meshwork.

Instructor University of Illinois at Chicago, Department of

2001-2002 Ophthalmology and Visual Sciences

Discovery of interacting factors of myocilin, a glaucoma

gene.

Postdoctoral Laboratory of Dr. Beatrice Yue, University of Illinois at

Fellow

1997-2001

Chicago

Characterization of the function of myocilin in the trabecular meshwork and its role in glaucoma: Biochemical analysis of

keratoconus, a thinning corneal disease.

Doctoral Laboratory of Dr. Judith Potashkin, Finch University of

1991-1997 Health Sciences

Characterization of the pre-mRNA splicing factor U2AF in

fission yeast.

Undergrad Laboratory of Dr. Salim Diab, College of Saint Francis

1990-1991 Characterization of the allelopathic compound juglone.

Publications

Peer Reviewed Manuscripts

Potashkin J, Naik K, **Wentz-Hunter K**. (1993) U2AF homolog is required for splicing in vivo. *Science* 262: 573

- Potashkin J, **Wentz-Hunter K**, Callaci J. (1996) BTF3 is conserved in fission yeast. *Biochim. Biophys. Acta.* 1308: 182-184.
- McKinney R, **Wentz-Hunter K**, Schimitz H, and Potashkin J (1997) Molecular analysis of a novel fission yeast gene spUAP2 that associates with the splicing factor spU2AF59. *Mole. Genet.* 32: 232-235.
- Ueda J, Wentz-Hunter K, Cheng E, Fukuchi T, Abe H, Yue BYJT. (2000)

- oxidative stress in trabecular meshwork cells. *Molecular Vision*, 20160289, revised manuscript in review
- **Wentz-Hunter K**. Using post-test analysis to develop metacognitive awareness and increase student performance. *Science Education*, in review
- Cordeiro NJ, Karimuribo E, Keyyu J, Lonsdorf E, Martinez J-C, Murdoch K, Feldheim K, Thayer M, and **Wentz-Hunter K**. Oppositely skewed sex ratios of symbiont on host in an African insect-rodent mutualism. *American Naturalist*, in review

Proceedings Manuscript

Wentz-Hunter K. (2009) Life and death decisions: Upper level cancer biology course including civic engagement and creative writing. *Proceedings of ICERI 2009 Conference*, 005162-005173; *ISBN:978-84-613-2955-7.*

Presentations:

Invited Speaker

- 2016- Assessment in the classroom, Roosevelt University Mini-Conference on Teaching, Chicago, IL
- 2014- Assessment of written communication skills in biology core courses, Assessment Micro-Grants Kelly Wentz-Hunter and Cornelius Watson
- 2013- Guiding students through cognitive learning using post-test analysis, Roosevelt University Mini-Conference on Teaching, Chicago, IL
- 2011- Differential gene expression after anti-oxidant treatment, from eyes to cancer.
 Department of Biological, Chemical, and Physical Sciences, pre-tenure seminar, Roosevelt University, Chicago, IL
- 2010- MicroRNA expression during oxidative stress in the trabecular meshwork Roosevelt University Faculty Forum, Chicago, IL
- 2009- Mission in Progress: Social Justice in the Biology Curriculum at Roosevelt University
 Developing a Good Heart in STEM: The First Summit on Incorporating Social Justice and Service-Learning into the STEM Curriculum, Ithaca, NY
- 2009- Featured Model: Life and Death Decisions- Upper Level Cancer Biology Course Including Civic Engagement and Creative Writing Science Education and New Civic Engagement and Responsibilities [SENCER] Summer Institute, Chicago, IL
- 2008- Learning Scientific Content with Research and Reflection on Life and Death Issues

48th Annual Meeting of the American Society for Cell Biology

SENCER-SALG assessment over 7 semesters in a core biology course. SENCER Summer Institute, Chicago, IL Kelly Wentz-Hunter

2008- Wnt gene expression in trabecular meshwork cells.
ASCB Annual Meeting, San Francisco, CA
Rajalekshmy Shyam*, Xiang Shen, Beatrice Yue, Kelly Wentz-Hunter

Invited grant review panel member, NSF Course, Curriculum, and Laboratory Improvement (CCLI) program, Type 1, 2009

Manuscript reviews for Molecular Vision 2008-present

Textbook review, Biology of Cancer for Elsevier/Academic Press, 2008

Professional Development:

Courses completed

OLED:375 Conflict and Negotiations, Spring 2015

OLED:370 Leadership Development, Fall 2014

OLED:372 Organizational Development, Fall 2014

OLED:320 Introduction to Organizational Communication, Spring 2014

LifeSciTRC, Scholar, APS, 2013

Writing Great Grant Workshop, 2010

Lewis University Summer Institute: Critical thinking, assessment, course development, Romeoville, IL, 2006.

Microinjection Techniques in Cell Biology, Marine Biological Laboratories, Woods Hole, MA, 1999.

Fundamental Issues in Vision Research: Molecular and Cell Biological Approaches, Marine Biological Laboratories, Woods Hole, MA, 1998.

Grants and Fellowships:

Funded

National Association of Advisors for Health Professions Travel Grant, \$944.25, 2016

Assessment of Student Learning Micro-Grant, C0-PI, 2013 \$250 Cellular and Microvesicular miRNA Expression During Oxidative Stress in Trabecular Meshwork Cells,

ARVO Travel Fellowship Grant, Glaucoma Research Foundation, 1999 National Eye Institute Fellowship for Fundamentals in Vision Course, 1998 Sigma Xi Grant-in-Aid of Research, 1993

Finch University of Health Science Graduate Fellowship, 1991-1997

Submitted but not funded

S-STEM: Scholarships in Science, Technology, Engineering, and Mathematics, NSF, co-PI 2011

Serum MicroRNA Biomarkers for Antioxidants in Humans, NIH, co-PI, 2010

Cellular and Microvesicular miRNA Biomarkers of Oxidative Stress, NIH, Recovery Act, Broad Challenge, co-PI, 2009

Characterization of Wnt expression in trabecular meshwork cells, Midwest Eye Bank Science Research Award, PI, 2008

Roosevelt University Graduate Training Fellows in Chicago Public

Schools, main author and senior personnel, 2007

CAREER: Identification and characterization of the Wnt signaling pathway in the trabecular meshwork, PI, NSF, 2006

SERVICE

Departmental Service

Leadership Committee, 2012-present

Pre-Professional Advisor, 2011-present

Director of Allied Health programs, 2012-present

Good News Wednesday Newsletter, editor, 2013-present

PULSE, Participant, 2015-present

Faculty Search Committee Ecology, Co-chair, 2016

Faculty Search Committee Ecology, Member, 2015

Study Abroad Supporting Faculty, Marine Biology, Belize, 2015

Faculty Search Committee Microbiology, Member, 2015

First Wave/Summer Bridge, Instructor, 2014, 2016

RU-Pre-Vet Club, Faculty Advisor, 2013-2015

Faculty Search Committee Physiology, Chair, 2013

Study Abroad Supporting Faculty, Conservation Biology, Tanzania 2013, 2014, 2016

RU Pre-Professional Club, Faculty Advisor, 2012-present

Faculty/Student Meet and Greet with Majors, organizer, 2011

RU Biology Facebook Page, Creator and administrator, 2001-present

Career Exploration for Majors, Workshop organizer, 2011-2013

Roosevelt University-Harold Washington College Partnership for STEM Education National Science Foundation STEM Talent Expansion Program Grant, Steering Committee, 2009-2014

Faculty Excellence in Scientific Research Award, 2008
Transformational Learning Recognition of Appreciation, 2008
SENCER Leadership Fellow, 2008-present
Sigma Xi, 2008
Invited Speaker American Society for Cell Biology Annual Meeting, 2008
Annual Student Award for Excellence in Performance, 1993
Medical Pharmacology Honors, Top student, 1993
Kappa Mu Epsilon, 1988
-1991

Illinois Scholar, 1987