

Kelly Wentz-Hunter

Professor of Biology
Department of Biological, Chemical, and Physical Sciences
Roosevelt University
430 S Michigan Ave, WB914J
Chicago, IL 60605
Office (312) 322-7107, fax (312) 341-4358
Email: kwentzhunter@roosevelt.edu

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. 1991. Magna cum laude Bachelor's of Science in Biology
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.

1993-1996 Physician's Assistant, Medical Pharmacology, Chicago Medical School.
Involved in the inception of course and syllabus.
Responsible for majority of lectures.

Courses Taught:

Graduate

BIOL 440 Human Pharmacology
BIOL 443 Clinical Bioethics and Medical Literature
BIOL 450 Cancer Biology
BIOL 468 Research Methods
BIOL 471 Biology of Aging
BIOL 483 Special Topics: Survival of the Sickest

Undergraduate

BIOL 118 Intro to Medicine and Health Sciences
BIOL 201 Organismic Biology and Lab
BIOL 301 Cellular and Molecular Biology and Lab
BIOL 350 Cancer Biology
BIOL 358 Cell Biology Lab
BIOL 371 Biology of Aging
BIOL 383 Special Topics: Survival of the Sickest
PHIL 337: Science and Ethics [Honors]
ACP 101: 21st Century Health Care [Freshman Seminar]
ACP 110: Primary Text

Second faculty travel abroad courses

BIOL 369/469: Conservation Biology, Tanzania
BIOL 323/423: Tropical Biology, Belize

Academic Advising:

2016-2017- 150 undergraduate; 35 graduate
2015-2016- 163 undergraduate; 15 graduate
2014-2015- 145 undergraduate; 20 graduate
2013-2014- 153 undergraduate; 17 graduate
2012-2013- 140 undergraduate; 15 graduate
2011-2012- 80 undergraduate; 5 graduate
2011-2010- 73 undergraduate; 7 graduate
2010-2009- 49 undergraduate
2008-2009- 30 undergraduate
2007-2008- 13 undergraduate

Research Supervision/Students Mentored:

Graduate Students [41]

Justin Sheldon [2017-present]

Jelena Maric [2016-2017]

Christopher Kurtz [2016]

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 Nguyen [2011]
Vaiva Liakaite [2010]
Geoff Dutton [2009]
Usman Raheemi [2009]
Rajalekshmy Shyam [2007- 2009]
Brett Calka [2008-2009]
Desi Evans [2008]
Janea Swanson [2008]
Megan Kreft [2007-2008]
Taneesha Shaw [2007]

Seira D'Cruz [2014-2015]
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]

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]

Advisor for Master's Thesis [2]

2016- *Effects of Antioxidant Epigallocatechin Gallate (EGCG) on Pancreatic Cancer*, Sheba Prasad

2015- *The Effects of Pterostilbene in Pancreatic Cancer*, Sierra D'Cruz

Committee Member Master's Thesis [6]

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

Advisor for Honor's Thesis [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 pterostilbene, Justyna Johnson

2011- *Differential gene expression in trabecular meshwork cells after oxidative stress*, Yuridana Comacho

2009- *Pterostilbene and its effect on the expression of glaucoma markers induced by oxidative stress in trabecular meshwork cells*, Maryam Aslani

Pterostilbene and its effect on glaucoma cells, Barbara Misielak Wegiel

The epidemic of cancer in Western society, Matthew Amidon

2008- *Characterization of cochlin from bovine ears*, Jennifer Betzer

WNT signal transduction in trabecular meshwork cells, Rajalekshmy Shyam

Trabecular meshwork cells and oxidative stress, Megan Kreft

Curriculum Development and Pedagogical Reform:

New programs

2017- Health Sciences Administration, BA

Along with the Associate Dean Catherine Campbell and Professor LaVonne Downey, I have been involved in the creation of the new

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. 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. We have seen a steady increase in applications and enrollment in this program since Fall 2014. In addition, I was responsible for the initial proposal for a differential tuition structure for this program. The proposal was finalized by the Chair of the department and the Dean of the College of Arts and Sciences and has been in place since Fall 2015.

Allied Health Histotechnology, BS

The 3+1 Allied Health-Histotechnology BS degree was initiated and affiliated with Northwestern Memorial Hospital [NMH] Department of Pathology. The degree requires students to complete the prerequisites for the program, as well as, their general education requirements within their first three years at the University after which two semesters are spent at NMH completing the coursework and clinical rotations required for histotechnology. This degree has attracted new majors to the University and broadened the range of career opportunities for our graduates. This is

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 University Biology undergraduate students who were accepted into our College of Pharmacy doctorate program to obtain their Biology BS degree after the successful completion of one year of the Pharmacy Doctorate. Doctorate of Pharmacy programs are allowed to accept students before bachelor degree completion. However, not obtaining a bachelor's degree can be problematic for many students. Students without bachelor's degrees are neither eligible to apply to most pharmacy residency training programs nor complete dual professional degrees while in the pharmacy program [example, RU's Pharm.D./M.B.A. tract]. I was responsible for the creation of the guidelines and receiving approval for the program at all University levels and acting as a liaison with the College of Pharmacy and Registrar's office to insure eligible students receive their BS Biology degrees.

2013– Allied Health Radiography, BS

The 2+2 Allied Health-Radiography BS degree was initiated and affiliated with NMH Clinical Schools. The degree requires students to complete the prerequisites for the program, as well as, their general education requirements within their first two years at the University after which four semesters are spent at NMH completing the coursework and clinical rotations required for radiography. 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.

Allied Health Diagnostic Medical Sonography, BS

The 3+1.5 Allied Health-Diagnostic Medical Sonography BS degree was initiated and affiliated with NMH Clinical Schools. The degree requires students to complete the prerequisites for the program, as well as, their general education requirements within their first three years at the University after which three semesters are spent at NMH completing the coursework and clinical rotations required for diagnostic medical

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: Survival 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 one's 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

The SENCER Model Course 'Cellular and Molecular Biology: Cancer' was nominated by Wm. David Burns, founder and PI of SENCER, the NSF-supported national dissemination project. SENCER models are field-tested examples of courses and programs that embody the SENCER ideals, illustrate applications in several disciplines, and focus on matters of civic consequence.

http://serc.carleton.edu/sencer/cellularbiology_cancer/index.html

Vision and Change in Undergraduate Biology Education: A Call to Action
The National Conference organized by the American Association for the Advancement of Science prepared a report on Vision and Change. I was an invited participant to the three day meeting where we worked on initiatives around the core competencies.

2008- Science Education for New Civic Engagement and Responsibilities
[SENCER] Leadership Fellow

SENCER Leadership Fellows program recognizes members of the community interested in taking on more advanced involvement through formal roles in the project. Leadership Fellows are appointed for 18-month, renewable terms, and work on projects of their own design. Fellows projects have included course design, faculty development, research into student learning, and initiatives to assist other members of the SENCER community in their professional development.

Assessment:

Program Leader, 2011-present

I have been involved in assessment at the department level for both the biology and allied health degrees. I was responsible for helping to design program improvement and assessment plans for the programs and using the Learning Outcomes Open Platform, an online data base, to deposit these plans. Along with my colleague Cornelius Watson, we wrote an Assessment of Student Learning Micro-Grant to comply course assessment across the curriculum in the department. We presented our results during an assessment summit in spring of 2014. The University has now transitioned to a new database, TK20, for the housing of assessment outcomes. I remain responsible for depositing goals, outcomes and information in regards to assessment in our department.

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, podiatry, veterinary medicine, pharmacy, physical therapy and physician assistant. As part of my responsibilities, I advise new, continuing, and prospective students on admissions, courses, and program requirements; mentor students who are exploring/undecided about a health career to identify goals, interests, strengths and abilities so that they can make decisions and pursue academic majors that meet their personal and professional goals; advise students with regard to progress through the program and application to professional schools; oversees professional program admissions and registration; keeps abreast of admissions and registration requirements and procedures; coordinates student placement into the medical internship program; oversees student community service, volunteer and extracurricular opportunities; collect, monitor, and report on pre-health student metrics and outcomes; develop, coordinate, and participate in special programs designed to promote student recruitment and retention; develop promotional and informational materials for use in advisement, admissions and advising; train, direct, and coordinate the work of others in providing student advisement or assistance services; serve as the institution's representative to the National and Central Associations of Advisors for the Health Professions; serve as advisor to the pre-professional and pre-vet student organizations; work with current affiliates and potential affiliates to increase clinical opportunities for students; and develop relationships with professional schools' admission departments/administrators to increase students' admission into such programs and explore dual acceptance opportunities.

Director of Allied Health Programs, 2012-present

I direct the allied health programs and help prepare students for application to medical technology, radiography, diagnostic medical sonography, nuclear medicine technology, radiation therapy technology and histotechnology. As part of my responsibilities, I advise new, continuing, and prospective students on admissions, courses, and program requirements; advise students with regard to progress through the program and application to clinical placement; work with current affiliates and potential affiliates to increase clinical opportunities for students; serve on the advisory boards of the radiography, diagnostic medical sonography, nuclear medicine technology, and radiation therapy technology programs; develop relationships with clinical directors to increase student preparedness and competitiveness for clinical placement.

Scholarship

Research Experience:

Assistant/Associate/Professor of Biology

2006- present

Roosevelt University, Department of Biological, Chemical, and Physical Sciences. The role of signal transduction and microRNA differential expression in the trabecular meshwork

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

2001-2002 University of Illinois at Chicago, Department of
Ophthalmology and Visual Sciences
Discovery of interacting factors of myocilin, a glaucoma
gene.

Postdoctoral
Fellow

1997-2001 Laboratory of Dr. Beatrice Yue, University of Illinois at
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
1991-1997

Laboratory of Dr. Judith Potashkin, Finch University of
Health Sciences
Characterization of the pre-mRNA splicing factor U2AF in
fission yeast.

Undergrad
1990-1991

Laboratory of Dr. Salim Diab, College of Saint Francis
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: 573-575.

Wentz-Hunter K and Potashkin J. (1995) The evolutionary conservation of the
splicing apparatus between fission yeast and man. *Nucl. Acid Symp.*
Series 33: 226-228.

Wentz-Hunter K and Potashkin J. (1996) The small subunit of the splicing factor
U2AF is conserved in fission yeast. *Nucl. Acids Res.* 24:1844-1854.

- 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) Ultrastructural localization of myocilin in human trabecular meshwork cells and tissues. *J Histochem. Cytochem.* 48: 1321-1329.
- Wentz-Hunter K**, Cheng EL, Ueda J, Sugar J, Yue BYJT. (2001) Keratocan expression is increased in the stroma of keratocorneas. *Mol. Med.* 7:470-477.
- Ochotorena IL, Hirata D, Kominami K, Potashkin J, Sahin F, **Wentz-Hunter K**, Gould KL, Sato K, Yoshida Y, Vardy L, Toda T. (2001) Conserved Wat1/Pop3 WD-repeat protein of fission yeast secures genome stability through microtubule integrity and may be involved in mRNA maturation. *J Cell Sci.* 114:2911-2920.
- Wentz-Hunter K**, Ueda J, Shimizu N, Yue BYJT. (2002) Myocilin is associated with mitochondria in human trabecular meshwork cells. *J Cell. Physiol.* 190:46-53.
- Wentz-Hunter K**, Ueda J, Yue BYJT. (2002) Protein interactions with myocilin. *Invest Ophthal Vis Sci.* 43:173-182.
- Ueda J, **Wentz-Hunter K**, Yue BYJT. (2002) Distribution of myocilin and extracellular matrix components in the cribriform meshwork of human eyes. *Invest Ophthal Vis Sci.* 43:1068-1076.
- Cheng EL, Ueda J, **Wentz-Hunter K**, Yue BYJT. (2002) Age-independent expression of myocilin in the human trabecular meshwork. *Int J Mol Med.* 10:33-40.
- Wentz-Hunter K**, Shen X, Yue BYJT. (2003) Distribution of myocilin, a glaucoma gene product, in human corneal fibroblasts. *Mol Vis.* 9:308-314.
- Wentz-Hunter K**, Kubota R, Shen X, Yue BYJT. (2004) Extracellular Myocilin Affects Activity of Human Trabecular Meshwork Cells. *J Cell. Physiol.* 200:45-52.
- Wentz-Hunter K**, Shen X, Okazaki K, Tanihara H, Yue BYJT. (2004) Overexpression of Myocilin in Cultured Human Trabecular Meshwork Cells. *Exp Cell Res.* 297:39-48.
- Shyam R, Shen X, Yue BYJT, **Wentz-Hunter KK**. (2010) Wnt expression in human trabecular meshwork cells. *Mol Vis* 16:122-129.
- Wentz-Hunter K**. (2010). The Use of Cancer Biology to Augment Concepts In Core Curriculum Cellular and Molecular Biology. MedEdPORTAL: <http://services.aamc.org/30/mededportal/servlet/s/segment/mededportal/?subid=8084>
- Wentz-Hunter KK** and Potashkin JA. (2011) The Role of miRNAs as Key Regulators in the Neoplastic Microenvironment. *Molecular Biology International* 201: Article ID 839872, 8 pages, doi:10.4061/2011/839872.
- Wentz-Hunter K**, Xing D, Lambert S. Pterostilbene decreases iROS and prevents the expression of glaucoma markers induced by chronic

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
Education Initiative Forum, San Francisco, CA

Learning scientific content with research and reflection on life and death issues.

The Fifth Roosevelt University Mini-Conference on Teaching, Chicago, IL

2007- *Advances in Stem Cell Research*

American Medical Technologists Regional Meeting, Schaumburg, IL

2006- *Characterization of a glaucoma gene, myocilin, in human trabecular meshwork cells*

Roosevelt University Faculty Forum and Science Day, Chicago, IL

Abstracts Presented [*undergraduate student; ^graduate Master's student]

2016- *Differential Gene Expression after Anti-oxidant Pterostilbene Treatment in Human Trabecular Meshwork Cells,*

Chicago Area Undergraduate Research Symposium

Jenna Jabali*, Kelly Wentz-Hunter

2015- *Using post-test analysis to develop metacognitive awareness and increase student performance*

55th Annual Meeting of the American Society for Cell Biology

San Diego, CA

Kelly Wentz-Hunter

2011- *Differential gene expression in trabecular meshwork cells after oxidative stress and treatment with antioxidant pterostilbene.*

Annual Biomedical Research Conference for Minority Students,

St Louis, MO

Yuridana Camacho*; Kelly Wentz-Hunter.

Identification of miRNA biomarkers of oxidative stress, a risk factor for glaucoma, in bovine trabecular meshwork cells.

MicroRNAs and Disease, Keystone Symposium, Banff, Alberta, Canada

Kelly Wentz-Hunter; Judith Potashkin; Vaiva Liakaite*; Ashley Leverenz^;

Johara Veal^.

2009- *Cellular and molecular biology core course redesign using a uniting theme of cancer.*

Transforming Undergraduate Education in Biology: Mobilizing the Community for Change, American Association for the Advancement of Science, Washington, DC

Kelly Wentz-Hunter

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

2007- *Cancer as a theme in a core curriculum cellular and molecular biology course at Roosevelt University*
SENCER Summer Institute, Portsmouth, ME
Kelly Wentz-Hunter

Research Student Presentations

2016- *Differential Gene Expression after Anti-oxidant Pterostilbene Treatment in Human Trabecular Meshwork Cells*
Jenna Jabali*, Chicago Area Undergraduate Research Symposium

Effects of Antioxidant Epigallocatechin Gallate (EGCG) on Pancreatic Cancer
Sheba Prasad^, Master's Thesis Defense

2015- *Gene Expression in Pancreatic Cancer Cells*
Aslynn Cummings*, Honor's Thesis Presentation

The Effects of Pterostilbene in Pancreatic Cancer
Seira D'Cruz^, Master's Thesis Defense

2014- *Effect of Phloretin on DHCR24 gene in PANC-1*
Meghan Odendaal*, Honor's Thesis Presentation

An Apple a Day Keeps the Oncologists Away?
Siobhan Odendaal*, Honor's Thesis Presentation

MiR-107 Modulates TGFBR2 and ACVR2B Expression in Human Trabecular Meshwork Cells Under Oxidative Stress
Dong-Ji Choi^, Science and Math Research Symposium Presentation

2013- *MRP-1 Expression in Human Trabecular Meshwork Cells*
Sonia Colon-Medina*, Kelly Wentz-Hunter, Paiboon Jungsuwadee
NIH-Summer Bridge Student Poster Session

Effects of Phloretin on Glaucoma Stress Markers
Norhan Elsayed*, Honor's Thesis Presentation

- 2010- *Differential expression of miRNA in trabecular meshwork cells during oxidative stress.*
Ashley Leverenz[^], Research Symposium, Roosevelt University
- 2009- *Pterostilbene and its effect on the expression of glaucoma markers induced by oxidative stress in trabecular meshwork cells.*
Maryam Aslani*, Honor's Thesis Presentation
- 2009- *The epidemic of cancer in Western society.*
Mathew Amidon*, Honor's Thesis Presentation
- 2009- *Pterostilbene and its effect on glaucoma cells.*
Barbara Misielak Wegiel*, Honor's Thesis Presentation
- 2008- *Characterization of cochlin from bovine ears.*
Jennifer Bezler*, Honor's Thesis Presentation
- 2008- *Wnt gene expression in trabecular meshwork cells after oxidative stress.*
Rajalekshmy Shyam*, Honor's Thesis Presentation
- 2008- *The Wnt pathway of cell signaling within the trabecular meshwork.*
Megan Kreft*, Honor's Thesis Presentation
- 2008- *The overexpression of β -catenin in bovine trabecular meshwork cells.*
Bartlomeij Calka* and Mathew Amidon*
19th Annual Argonne Symposium for undergraduates in Science and Engineering and Mathematics, Argonne, IL
- 2007- *Elucidating the Wnt signaling pathways in trabecular meshwork cells.*
Rajalekshmy Shyam*
18th Annual Argonne Symposium for undergraduates in Science and Engineering and Mathematics, Argonne, IL

Reviewer

- Invited Association of Physiology (APS) Life Science Teaching Resource
[LifeSciTRC] Community Reviewer, 2015-present
- Invited APS Undergraduate Summer Research Fellowship Reviewer [UGSRF],
2016
- Invited APS Undergraduate Research Excellence Fellowship Reviewer [UGREF],
2016
- Textbook review, *Understanding Cancer* for Garland Scientific/Taylor & Francis
Group 2015
- Textbook review, *Biology of Aging 2e*, for Garland Scientific/Taylor & Francis
Group 2015
- Invited National Eye Institute Early Career Reviewer, 2012

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, CO-PI, 2013 \$250
- Cellular and Microvesicular miRNA Expression During Oxidative Stress in Trabecular Meshwork Cells, Illinois Society for the Prevention of Blindness Research Grant, PI, 2009-2010, \$4951
- Analytical Instrumentation Acquisition for the Advancement of Science Education and Research at Roosevelt University, Max Goldberg Foundation, PI, 2009, \$25,000
- McCormick Transformational Service-Learning Grant, 2009-2010, \$2320
- American Association of Medical Colleges, uScience MedEd Portal Grant 2009, \$2000
- RU Research Leave Grant, Fall 2009 and Fall 2015
- RU Summer Grant, 2007 \$1500, 2009 \$1500, 2011 \$1466, 2014 \$1500
- National Eye Institute Small Grants for Pilot Research RO3 (EY 14354), PI, 2003-2006; \$300,000
- Midwest Eye-Banks and Transplantation Center Scientific Grants Program, PI < 2001, \$15,000
- Nelson Fellowship Award, 2001, \$500
- Individual National Research Service Award (EY06889), 1998-2001

- 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 Search Committee Chemistry, Member, 2009
Faculty Search Committee Ecology, Member, 2008
RU Colleges Against Cancer, Faculty Advisor, 2008-2014
RU Science Journal Club, Faculty Advisor, 2008-2009
RU Science Day, Coordinator, 2008

College Service

College of Arts and Sciences Council, Chair, 2016-present
General Education Faculty Leadership Committee, 2016-present
Graduate Admissions MA Biomedical Sciences, 2016-present
General Education Working Group, 2016
Gathering Content, website revisions to the six allied health programs,
pre-professional page, and biomedical sciences program, 2016
Class Scheduling, Biology, 2012-present
McHenry High School Visit Day, Speaker, 2016
Dean Search Committee College of Arts and Sciences, Member, 2014
Policy Studies ad hoc committee, 2014
Reappointment, Tenure and Promotion Workshop, Leader, 2014-2015
Catalog Copy, responsible for yearly revisions to the six allied health
programs, pre-professional page, and biomedical sciences
program, 2014-present
Graduate Orientation, 2006-present
Graduate Open House, 2014-present
High School Visit Day, Faculty panel, 2008, 2010, 2013

University Service

First Year Fellow, 2016-present
First Year Experience Task Force, 2014-present
Institutional Animal Care and Use Committee, Chair, 2010-present
Assessment Committee, 2009-present
Undergraduate Academic Reinstatement and Probation Committee, 2008-
present
CAS Dean Search Committee, 2015
Senate, University Senator, 2014-2016
Senate, Senate Executive Committee, 2014-2016
Senate, Handbook Subcommittee, 2014-2016
Planning and Budget Committee, 2013-2016
General Education Committee, 2013-2015
Strategic Planning Subcommittee 5, Member, 2013
Athletic Mentoring Board, Mentor, 2011-2013
Social Justice in the Biology Lab: A Panel Discussion, ACP 101 Keynote
event, Panel member, 2011
RU Lakers, Official Scorekeeper for basketball and volleyball, 2010-
present
Faculty Library Committee, Member, 2007-2009
Head Librarian Search Committee, Member, 2008

University Open House, 2006-present

Professional Service

American Association for the Advancement of Science, 1992-present
American Association of Cell Biologists, 1997-present
Science Education and New Civic Engagement Responsibilities
[SENCER], 2006-present
SENCER Leadership Fellow 2008-present
Sigma Xi, 2008-present
American Association of University Professors [AAUP], Executive
Committee, 2012-present
LifeSciTRC Fellow, APS, 2014-2015
AAUP, Treasurer, 2014-present
Central Association of Advisors for the Health Professions, 2012-present
National Association of Advisors for the Health Professions [NAAHP],
2012-present
NAAHP, Biannual Meeting, Session Chair, 2016
Chicago Area Undergraduate Research Symposium, Poster Session
Judge, 2016
Illinois Articulation Initiative, Committee member, 2008-2013
Argonne Symposium for Undergraduates in Science, Engineering, and
Mathematics, Session chair, 2008
Association for Research in Vision and Ophthalmology, member, 1997-
2013

Community Service

International Cancer Advocacy Network, Research Team Leader, 2011-
2017
iBio Talent Sparks, Invited speaker and laboratory supervisor, 2010-2011
Summer Biotech Institute, Instructor 2008-2009
Science Chicago, sponsored by Museum of Science and Industry,
Microscope Mania, Science Saturdays, 2008
Taste of Science and Math, Chase Summer Academy at Roosevelt
University, Instructor, 2008
RU GLAMOROUS-CSI [Girls Learning About Math, Outstanding Research
and Organizing Unique Solutions using Computers, Science and
Investigations] Summer Camp for Girls, Curricular Director and
Instructor, 2007- 2010
Chicago Public School Science Fair, Judge, 2007

Honors:

National Society of Collegiate Scholars Distinguished Membership, 2013
Advisor of the Year, Colleges Against Cancer, Schaumburg, 2011
Event of the Year, Colleges Against Cancer, Schaumburg, 2010, 2011
Outstanding Service Award, Roosevelt University, 2009

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
Dean's List, 1987-1991
Illinois Scholar, 1987