### **Juliet Ashley Greenwood**

Vice Dean for Educational Initiatives EdPlus at ASU

Arizona State University

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## **EXPERIENCE, RESPONSIBILITIES, and OUTCOMES**

2019 – present

Vice Dean for Educational Initiatives, EdPlus at ASU Arizona State University

- Partner with academic units at all ASU campuses, including deans, department chairs, faculty and staff to strengthen online programming, driving course development that transforms student learning experiences.
- Leadership for Instruction Design and New Media, Assessment and Compliance, Adaptive and Personalized Learning, and the EdPlus Action Lab, leveraging data analytics and educational technology to improve and equalize degree completion.
- Assure academic quality in online programming through the accuracy of program alignment and facilitates continuous quality improvement.
- Direct assessment and accreditation efforts for online programming.
- EdPlus liaison to the University Innovation Alliance and the APLU Personalized Learning Consortium.

2019 - present Associate Professor School of Mathematics and Natural Sciences New College of Interdisciplinary Arts and Sciences Arizona State University

Teaching responsibility: Oversight and instructor for ASU101 for digital immersion students.

2017 - 2019

Associate Provost for Transformative Learning, Division of Undergraduate Education Oregon State University

- Development and supervision of newly formed Transformative Learning subdivision with ten units or initiatives: Center for Teaching and Learning, University Assessment, Difference Power Discrimination (DPD) Program, Writing Intensive Curriculum (WIC) Program, Enhancing STEM Education Initiative/HHMI Inclusive Excellence Grant, Army ROTC, Navy and Marines ROTC, Air Force ROTC, Undergraduate Research, Scholarship and the Arts (URSA), and Academic Experiential Learning.
  - Budget management and accountability (budget: \$2.2 million).
- Responsible for strategic curriculum redesign initiatives to provide faculty-centered support to improve and equalize course/program based student learning and success.
  - Newly funded \$1 million HHMI grant for Inclusive Excellence@Oregon State for developing a summer academy for instructors on inclusive STEM pedagogies and course redesign.
- Liaison to Association of Public and Land-Grant Universities (APLU) Personalized Learning Consortium and management of BMGF-funded Adaptive Courseware Initiative (project budget: \$1.2 Million).
  - 2017-18: redesigned four high fail rate math and psychology courses (5,223 enrollments) improving pass rates 7-15% supporting persistence of 547 students.
  - 2018-19: launch of 14 redesigned high fail rate courses (17,785 enrollments).
- Responsible for data infrastructure and College coordination to scale academic experiential learning.
  - Established a transcript visible non-credit option for academic experiential learning.
- Redesign of the Office of Undergraduate Research, Scholarships, and the Arts, to increase participation of students during their first two years at OSU.
  - Created hundreds of student-faculty partnerships and supported over 3,200 students
  - Doubled participation of underserved and underrepresented students
  - Tripled student research experience awards (participants have a 98% retention rate)

- Redesign of the Center for Teaching and Learning
  - Developed and launched vision for a college and discipline-based model with new faculty programming supporting excellence and innovation.
- Enhancing STEM Education (ESTEME) initiative
  - Evidence-Based Instructional Practices implemented in 58 courses across 10 units (17,145 enrollments), including Peer Instruction, POGIL, Cooperative Learning Studios.
  - 315 pedagogically trained undergraduate Learning Assistants facilitated learning in 36 courses (8,570 enrollments) in 9 Science and Engineering units; 16 faculty Action Fellows.
- Responsible for academic excellence in the Baccalaureate Core across all OSU campuses.
  - 357 reviewed/certified WIC courses by 38 departments in 9 colleges enrolling 7460 students.
  - 261 reviewed/certified DPD courses by 14 departments in 7 colleges enrolling 8175 students.
- Co-lead for Carnegie Foundation Community Engagement Re-classification application process.
- Co-chair for the Instructional Technology Governance Committee
- Member of the University Student Success Initiative Steering Committee
- Member of the University Accreditation Steering Committee
- Trans Taskforce Member charged to improve the University's understanding of transgender issues and to propose initiatives to advance the safety and belonging of transgender community members.
- Advisory Board member for NSF grant Invisiblized Gender Experiences: Transgender & Gender Nonconforming Students in Engineering Education

#### 2016 - 2017

Associate Dean for Undergraduate Studies, Division of Undergraduate Studies Oregon State University

- Program Director for the BMGF-funded APLU Adaptive Courseware Initiative to redesign high impact general education courses.
- Restructured the Office of Undergraduate Research, Scholarships, and the Arts.
- Restructured Louis Stokes Alliance for Minority Participation in STEM (LSAMP) to Central Administration to support students in all five STEM Colleges.
- Chair of FIRST Committee supporting First Generation Students at OSU building First Generation Community and creating mentorship program.
- Organized Student Advisory Committee for rapid input from students on University Initiatives.
- Oversight for grants administration.
- Collaboration with OSU data team to provide disaggregated student success data to guide faculty in curriculum and pedagogy development for inclusive excellence in all courses and programs.
- Taskforce member implementing Senate Bill 473 creating the ability for students, faculty, and staff to provide their "name-in-use," gender identity, and sexual identity for collection of demographic data.
- Division leadership, organization, communication, and community building.
- Organized Social Justice Education Initiative for Division.
- Co-facilitator of ADVANCE Seminar on disrupting systems of oppression for OSU President, Executives, and STEM Leadership, 6 credit hour equivalent, 2 weeks 9am-4pm.

#### 2014 - 2016

Associate Dean for Academic and Student Affairs, College of Science *Oregon State University* 

- Oversight for improvement of undergraduate academic programs including recruitment, orientation, first and second year experience programs, living learning communities, and diversity initiatives.
- Director of Advising and supervision of Head Advisor.
- Responsible for student scholarships and awards including donor relations and stewardship.
- Developed data-based mechanism to optimize scholarship awards.
- Responsible for experiential learning programs including Undergraduate Research, Career Development and Internships, Education Abroad, and Service Learning.
- Redesigned and more than doubled the summer undergraduate research program increasing funding and participation of underrepresented and underserved students.
- Responsible for development of curriculum, cross college coordination, Chair of the College Curriculum

- Committee, and College representation on the University Education Council.
- Oversight for Annual Assessment Reports and Program Review Compliance and represented College on the University Assessment Council.
- Responsible for efforts to provide Professional Development for faculty in the College to improve pedagogy and inclusive excellence.
- Primary liaison with the Office of Student Life, Student Care Team, Threat Assessment Team, Student Conduct, and responsible for review of Academic Integrity cases.
- Established and mentored Student Advisory Committee to support traditions, peer mentoring program. service projects, and web-based resources and communication mechanisms.
- Member of OSU Value Team for the University Innovation Alliance to implement EAB Student Success Collaborative predictive analytics platform as a tool for targeted outreach to students.
- Created a more diverse and inclusive science community focused on excellence collaborating with colleagues and students in SACNAS, LSAMP, and the STEM Leaders Program.
- Organized College Search Advocate Training to promote equity, validity, and diversity in searches.

### 2006 - present

Associate Professor of Biochemistry and Biophysics, with Tenure (prior name: Jeffrey Andrew Greenwood) Oregon State University

- Extramurally funded research program elucidating the mechanisms of tumor cell invasion developing a zebrafish xenograft model.
- Research grants totaling over \$2 million.
- 30 peer-reviewed publications.
- Served as reviewer for 10 different journals and on 10 different NIH review panels.
- Chair (2008-2011) and member (2001-2008) of Graduate Admissions Committee.
- Chair of Seminar Series, 2011-2014.
- Four doctoral and two masters students.
- 23 Undergraduate Students, 4 Honors Students, 2 Goldwater recipient/finalist.
- Instruction of Cell and Molecular Biology courses at the undergraduate and graduate level active learning model following Freeman et al. (2014; PNAS 111, 8410).
- Mentor for underserved and underrepresented students and faculty, advocate for LGBTQ rights.

#### 2000 - 2016

Director of Cell Imaging and Analysis Facility, NIEHS Environmental Health Sciences Center Oregon State University

- Redesigned Cell Culture Facility into leading edge Imaging Facility.
- Responsible for vision, goals, assessment, and supervision of daily operation.
- Core member of the Center Leadership Team.
- Led and collaborated with faculty across campus to obtain equipment grants for over \$1.3 million.
- Responsible for NIH annual reports, setting priorities for acquisition of new instrumentation, organizing workshops for training and development of new equipment, and grant funding.
- Facilitated the participation and success of undergraduate students in research.

### 2014 – present

Affiliated Faculty in Women, Gender, and Sexuality Studies Oregon State University

Support social justice education and research initiatives

2000 - 2006

Assistant Professor of Biochemistry and Biophysics

Oregon State University

• Same as Associate Professor of Biochemistry and Biophysics (above).

#### **EDUCATION**

1995-2000	Postdoctoral Fellow, Department of Pathology, University of Alabama at Birmingham Advisor: Joanne E. Murphy-Ullrich, Ph.D.
1995	Ph.D. in Neuroscience/Pharmacology, University of Alabama at Birmingham, Thesis: "Phosphorylation and function of the microtubule-associated protein tau"
1990	B.S. in Biology, Siena College, Loudonville, NY

## **HONORS AND AWARDS**

2018	Finalist for the Phyllis S. Lee, Dr. Martin Luther King, Jr. Legacy Award
2014	Louis Stokes Alliance for Minority Participation in STEM (LSAMP) Faculty Mentor Award
2013	Undergraduate Research Mentor Award from the National Council on Undergraduate Research
2006	Finalist for the Lloyd Carter Award for Outstanding and Inspirational Teaching

## LEADERSHIP AND SOCIAL JUSTICE DEVELOPMENT

Fall 2018	POD Network Conference, Responding to Challenges and Opportunities: Directing a Teaching/Learning Center
Fall 2017	POD Network Conference, Getting Started: Workshop for New Faculty Developers
Spring 2017	Social Justice Education Initiative, Oregon State University
Winter 2017	Journey into Leadership, Oregon State University
Summer 2016	ADVANCE Seminar, Co-Facilitator, Disrupting Systems of Oppression, Oregon State Univ.
2015-2016	OSU Foundation Advanced Resources Workshop, Oregon State University
Summer 2015	ADVANCE Seminar, Disrupting Systems of Oppression, Oregon State University
Fall 2015	Conflict Management Workshop, Council of Colleges of Arts and Science
Winter 2014	Conversational Skills for Leadership, Paul Axtell, Oregon State University

## ADMINISTRATIVE PRESENTATIONS AND INVITED SPEAKER

April 2020	Consortium for School Networking (CoSN)-American Association of School Administrator (AASA) Webinar, <i>Breakthrough Mindset: Scaling Digital Immersion Learning</i>
January 2020	LearnLaunch Across Boundaries Conference: Learning Analytics and New Pedagogies
November 2019	The Washington Diplomat Global Education Conference, Panel Discussion: <i>The Future of Education</i>
October 2019	Online Student Success Symposium (OS3), Data-informed Success Coaching
September 2019	Congressional Black Caucus, Panel Discussion: Creating Equity at Scale in Higher Education
August 2019	Distance Teaching and Learning Conference, Thought-Leader Panel - <i>An Emerging Era:</i> How the Next Digital Revolution Will Transform Higher Education
April 2019	ASU GSV Summit, Debunking the Myths of Online Education
November 2018	POD Network Annual Conference, Workshop, <i>Times Are Changing for Digital Learning:</i> Leading for Transformation
November 2018	APLU Annual Meeting, A Network Approach to Scaling Best Practices

November 2018	APLU Annual Meeting, Beyond Access: Using Adaptive Courseware to Improve Success in Foundation Classrooms
November 2018	Educause Annual Meeting, Beyond Equitable Access to Higher Education: Leveraging Adaptive Courseware for a Successful Start
October 2018	WCET Annual Meeting: "I Already Know This!" Using Adaptive Technologies to Teach Tech-Savvy Students
June 2018	WCET Leadership Summit, Ensuring Ethical and Equitable Access in Digital Learning Panelist for Institutional Exemplars: Digital Learning Implementation Strategies to Improve Student Success
January 2018	ELI Annual Meeting Preconference Workshop, Go Big: Early Lessons from Scaling Adaptive Courseware
January 2018	Oregon Women in Higher Education (OWHE) Annual Conference – Wise Women Panelist
April 2017	Sigma Delta Omega Science Sorority Ban Bossy Panelist
May 2017	Mi Familia Weekend for Hispanic students and their families – Keynote Speaker
March 2015	International Women's Day, Oregon State University – Keynote Speaker
April 2014	Sigma Delta Omega Science Sorority Ban Bossy Panelist

## **INTERVIEWS AND VIDEOS**

10/31/2018	OSU redesigning certain courses to improve student, faculty success
10/24/2018	APLU Releases First of its Kind Guide for Implementing Adaptive Courseware
	Implementation Guide: <a href="http://www.aplu.org/library/a-guide-for-implementing-adaptive-courseware-from-planning-through-scaling/file">http://www.aplu.org/library/a-guide-for-implementing-adaptive-courseware-from-planning-through-scaling/file</a>
12/19/2017	<u>College Algebra Redesign with Adaptive Courseware: A Blended, Active, and Adaptive Course https://www.youtube.com/watch?v=b7sMwn4uk4o</u>
12/19/2017	College Algebra Redesign with Adaptive Courseware: The Course Redesign Experience <a href="https://www.youtube.com/watch?v=bfu0JCBcCwc">https://www.youtube.com/watch?v=bfu0JCBcCwc</a>
1/26/2017	All Hands on Deck: Cultivating Adaptive Learning at Oregon State <a href="https://www.youtube.com/watch?v=mkC11GgVUr4">https://www.youtube.com/watch?v=mkC11GgVUr4</a>
1/12/2017	Data Analytics, Cybersecurity Top 2017 Higher Ed Tech Trends
1/4/2017	Scaling Up With Adaptive Learning
7/14/2016	Personalized learning systems to boost education of college students

# **GRANTS SUBMITTED AND RECEIVED**

2018-2023	Inclusive Excellence@Oregon State, HHMI, \$1M
2016-2020	All Hands on Deck: Adaptive Learning Transformation at OSU, APLU, PI, \$515K
2013-2016	Magnetic Particle Microscopy of Living Organisms, NSF, Co-PI, \$450K
2010-2015	Reducing Susceptibility to Environmental Stress Throughout the Life Span, NIH, \$5.5M J. A. Greenwood, Director of the Cell Imaging and Analysis Facility
2013-2014	Acquisition of Confocal and Two-Photon Excitation Microscope, NSF, Co-PI, \$584K
2011-2014	Investigation of the Differential Cytotoxicity of Oxide Nanoparticles Using Zebrafish Model, NSF, Co-PI, \$491K

2011-2012	Zeiss PALM MicroBeam IV Laser Capture System, NIH, \$305K
2011	Roche xCELLigence Real-Time Cell Monitoring System, OSU, \$40K
2009-2010	Zebrafish Brain Tumor Dispersal Model, OSU, \$10K
2007-2010	Reducing Susceptibility to Environmental Stress Throughout the Life Span, NIH, \$3.0M J. A. Greenwood, Director of the Cell Imaging and Analysis Facility
2008-2009	Phosphoinositide Regulation of Calpain during Glioblastoma Cell Migration, Medical Research Foundation of Oregon, \$36K
2002-2007	Phosphoinositide Regulation of Focal Adhesion Structure, NIH, \$1.1M
2006-2007	Graduate Education in Advanced Confocal Laser Scanning Microscopy, OSU, \$15K
2001-2006	Environmental Health Sciences Center, NIH, \$5.0M  J. A. Greenwood, Director of the Cell Culture Facility
2003	Cell Culture Centrifuges, OSU, \$15K
2003	Zeiss LSM 510 META Confocal Microscope, NIH, Co-I, \$370K
2001-2003	Cell Migration in Tumor Growth and Metastasis, Northwest Health Foundation, \$85K
2000-2002	TCDD Toxicity Disrupts Endothelial Cell Adhesion, OSU, \$23K
2000-2001	Phosphoinositide Regulation of Alpha-Actinin Structure and Function, Medical Research Foundation of Oregon, \$25K
2000-2001	Phosphoinositide Regulation of Alpha-Actinin Structure and Function, American Cancer Society (Oregon Affiliate), \$47K
2000	Water-Jacketed CO2 Incubators for Cell Culture Facility, OSU, \$12K

## PROFESSIONAL ACTIVITIES (relevant samples)

Reviewer of manuscripts for the following journals:

- Journal of Biological Chemistry
- Journal of Cell Biology
- Biophysical Chemistry
- Molecular Biology of the Cell
- Journal of Cell Science
- Cellular and Molecular Life Sciences
- BBA Molecular and Cell Biology of Lipids
- Archives of Biochemistry and Biophysics
- Experimental Cell Research
- Wound Repair and Regeneration

## Grant reviewer

- NIH/NIEHS Special Emphasis Panel for EHS Core Center Grants, Scientific Review Group: EHS-P1, July 22-24, 2008
- NIH/NIEHS Special Emphasis Panel for R13 and K applications, Scientific Review Group: ZES1 JAB -(C) (KR), July 23/24, 2008
- NIH/NCRR Special Emphasis Panel for S10 instrument applications, Scientific Review Group: ZRG1 CB-Q (30), November 12-13, 2009
- NIH/NCRR Special Emphasis Panel for S10 instrument applications, Scientific Review Group: ZRG1 CB-J (31), November 9-10, 2010
- NIH/NIEHS Special Emphasis Panel for EHS Core Center Grants, Scientific Review Group: EHS-P3, August 23-25, 2011
- NIH/NCRR Special Emphasis Panel for S10 instrument applications, Scientific Review Group: ZRG1

- CB-J (32), November 3-4, 2011
- NIH/NIEHS Special Emphasis Panel for EHS Core Center Grants, Scientific Review Group: EHS-P3, August 22-23, 2012
- NIH/NIAID Special Emphasis Panel for Program Project applications, Scientific Review Group: ZAI1 JTS-I (M2), March 7, 2013
- Dutch Cancer Society grant reviewer, April 11, 2013
- Medical Research Council, UK, grant reviewer, August 1, 2013
- Association for International Cancer Research, UK, grant reviewer, August 8, 2013
- NIH Special Emphasis Panel for S10 instrument applications, Scientific Review Group: 2014/10 ZRG1 CB-D (31) I, July 16, 2014
- NIH/NCRR Special Emphasis Panel for S10 instrument applications, Scientific Review Group: ZRG1 CB-T (30), November 2-3, 2015

### **PUBLICATIONS**

### Refereed Articles

- Gamble, J.T., Reed-Harris, Y, Barton, C.L, LaDu, J., Tanguay, R., Greenwood, J.A. (2018) Quantification of Glioblastoma Progression in Zebrafish Xenografts: Adhesion to laminin alpha 5 promotes glioblastoma microtumor formation and inhibits cell invasion. Biochemical and Biophysical Research Communications. https://doi.org/10.1016/j.bbrc.2018.10.076.
- Pearce, M., Gamble, J., Kopparapu, P., O'Donnell, E., Mueller, M., Jang, H.S., Greenwood, J.A., Satterthwait, A., Tanguay, R., Zhang, X-K, Kolluri, S. (2018) Induction of apoptosis and suppression of tumor growth by Nur77-derived Bcl-2 converting peptide in chemoresistant lung cancer cells. *Oncotarget*, in press.
- Gamble J, Tanguay R, Greenwood JA. (2017) 4D Quantitative Image Analysis of Cancer Cell Invasion in a Brain Microenvironment Using ImageJ Software. Microsc. Microanal. Aug; 23(SI), 1182-1183.
- Wehmas, L.C., Tanguay, R.L., Punnoose, A., Greenwood, J.A. (2016) Developing a novel embryo-larval zebrafish xenograft assay to prioritize human glioblastoma therapeutics. Zebrafish 13, 317-29. PMID: 27158859
- Wehmas, L.C., Anders, C., Chess, J., Punnoose, A., Pereira, C.B., Greenwood, J.A., Tanguay, R.L. (2015) Comparative metal oxide nanoparticle toxicity using embryonic zebrafish. *Toxicol. Rep.* 2, 702-15. PMID: 26029632
- Hau, A.M., Greenwood, J.A., Löhr, C.V., Serrill, J.D., Proteau, P.J., Ganley, I.G., McPhail, K.L., and Ishmael, J.E. (2013) Coibamide A Induces mTOR-Independent Autophagy and Cell Death in Human Glioblastoma Cells. PLOS ONE, e65250. PMID: 23762328
- Smith, M., Boenzli, M., Hindagolla, V., Ding, J., Miller, J., Hutchison, J., Greenwood, J.A., Abeliovich, H., and Bakalinsky, A. (2013) Identification of gold nanoparticle-resistant mutants of Saccharomyces cerevisiae suggests a role for respiratory metabolism in mediating toxicity. Appl. Environ. Microbiol., 79, 728-33. PMID: 23144132
- Wang, R., Löhr, C.V., Fischer, K.A., Dashwood, W.M., Greenwood, J.A., Ho, E., Williams, D.E., Ashktorab, H., Dashwood, M.R., and Dashwood, R.H. (2013) Epigenetic inactivation of endothelin-2 and ET-3 in colon cancer. Int. J. Cancer, 132, 1004-12. PMID: 22865632
- Lal, S., La Du, Jane, Tanguay, R.L., and Greenwood, J. A. (2012) Calpain 2 is required for the invasion of glioblastoma cells in the zebrafish brain microenvironment. J. Neurosci. Res., 90, 769-81. PMID: 22183788
- Ma, L., Greenwood, J.A., and Schachner, M. (2011) CRP1, a protein localized in filopodia of growth cones, is involved in dendritic growth. J. Neurosci. 31, 16781-91.

- Jang, H.S., Lal, S., and **Greenwood, J.A.** (2010) Calpain 2 is required for glioblastoma cell invasion: regulation of matrix metalloproteinase 2. *Neurochem. Res.* 35, 1796-1804.
- Jang, H.S. and **Greenwood**, **J.A.** (2009) Gylcine-rich region regulates cysteine-rich protein 1 binding to actin cytoskeleton. *Biochem. Biophys. Res. Commun.* 380, 484-488.
- Sprague, C.R., Fraley, T.S., Jang, H.S., Lal, S., and **Greenwood, J.A.** (2008) Phosphoinositide binding to the substrate regulates susceptibility to proteolysis by calpain. *J. Biol. Chem.* 283, 9217-9223.
- Full, S.J., Deinzer, M.L., Ho, P.S., and **Greenwood, J.A.** (2007) Phosphoinositide binding regulates α-actinin CH2 domain structure: Analysis by hydrogen/deuterium exchange mass spectrometry. *Protein Science* 16, 2597-2604.
- Zhang, Y., Vogel, W.K., McCullar, J.S., **Greenwood, J.A.**, and Filtz, T.M. (2006) Phospholipase C-β3 and –β1 form homodimers, but not heterodimers, through catalytic and carboxy-terminal domains. *Mol. Pharmacol.* 70, 860-868.
- Tran, T.C., Singleton, C., Fraley, T.S., and **Greenwood, J.A.** (2005) Cysteine-rich protein 1 (CRP1) regulates actin filament bundling. *BMC Cell Biology*, 6 (December), 45. **Figure 6 was chosen as image of the month. Listed as "Highly Accessed" article.**
- Fraley, T.S., Pereira, C.B., Tran, T.C., Singleton, C., and **Greenwood, J.A.** (2005) Phosphoinositide binding regulates α-actinin dynamics: mechanism for modulating cytoskeletal remodeling. *J. Biol. Chem.* 280, 15479-15482.
- Corgan, A.M., Singleton, C., Santoso, C.B., and **Greenwood, J.A.** (2004) Phosphoinositides differentially regulate α-actinin flexibility and function. *Biochem. J.* 378, 1067-1072.
- Fraley, T.S., Tran, T.C., Corgan, A.M., Nash, C.A., Hao, J., Critchley, D.R., and **Greenwood, J.A.** (2003) Phosphoinositide binding inhibits α-actinin bundling activity. *J. Biol. Chem.* 278, 24039-24045.
- **Greenwood, J. A.**, Theibert, A. B., Prestwich, G. D., and Murphy-Ullrich, J. E. (2000) Restructuring of focal adhesion plaques by PI 3-kinase: regulation by PtdIns (3,4,5)-P<sub>3</sub> binding to  $\alpha$ -actinin. *J. Cell Biol.* 150, 627-642.
- **Greenwood, J. A.**, and Murphy-Ullrich, J. E. (1998) Signaling of de-adhesion in cellular regulation and motility. *Microsc. Res. Tech.* 43, 420-432.
- **Greenwood, J. A.**, Pallero, M. A., Theibert, A. B., and Murphy-Ullrich, J. E. (1998) Thrombospondin signaling of focal adhesion disassembly requires activation of phosphoinositide 3-kinase. *J. Biol. Chem.* 273, 1755-1763
- Murphy-Ullrich, J. E., Pallero, M. A., Boerth, N., **Greenwood, J. A.**, Lincoln, T. M., and Cornwell, T. L. (1996) Cyclic GMP-dependent protein kinase is necessary for thrombospondin and tenascin mediated focal adhesion disassembly. *J. Cell Sci.* 109, 2499-2508.
- Johnson, G. V. W., and **Greenwood, J. A.** (1995) Understanding the hyperphosphorylation of tau in Alzheimer's disease: importance of examining site-specific phosphorylation in non-disease systems. *Neurobiol. Aging* 16, 371-374.
- **Greewood, J. A.**, and Johnson G. V. W. (1995) Localization and *in situ* phosphorylation state of nuclear tau. *Exp. Cell Res.* 220, 332-337.
- **Greenwood, J.A.**, Scott, C.W, Spreen, R.C., Caputo, C.B., and Johnson, G.V.W. (1994) Casein kinase II preferentially phosphorylates human tau isoforms containing an amino-terminal insert: identification of threonine 39 as the primary phosphate acceptor. *J. Biol. Chem.* 269, 4373-4380.
- **Greenwood, J.A.**, Troncoso, J.C., Costello, A.C., and Johnson, G.V.W. (1993) Phosphorylation modulates calpain-mediated proteolysis and calmodulin-binding of the 200kDa and 160kDa neurofilament proteins. *J. Neurochem.* 61, 191-199.
- Khilko, S., **Greenwood**, **J.A.**, and Johnson, G.V.W. (1992) Brain casein kinase 2: affinity purification procedure using immobilized polyethylenimine. *Protein Expression and Purification* 3, 355-361.
- Henrikson, K.P., Greenwood, J.A., Pentecost, B.T., Jazin, E.E., and Dickerman, H.W. (1992) Estrogen control

- of uterine tissue factor messenger ribonucleic acid levels. *Endocrinology* 130, 2669-2674.
- Johnson, G.V.W., **Greenwood, J.A.**, Costello, A.C., and Troncoso, J.C. (1991) The regulatory role of calmodulin in the proteolysis of individual neurofilament proteins by calpain. *Neurochem. Res.* 16, 869-873.
- Henrikson, K.P., Jazin, E.E., **Greenwood, J.A.**, and Dickerman, H.W. (1990) Prothrombin levels are increased in the estrogen-treated immature rat uterus. *Endocrinology* 126, 167-175.

#### **PRESENTATIONS**

#### **Conference Presentations**

- **Greenwood**, **J.A.** (2013) Zebrafish xenograft model of glioblastoma to identify metal oxide nanoparticles with anticancer properties. *Sustainable Nanotechology Organization Conference*. November 5.
- Wehmas, L.C., **Greenwood, J.A.**, Liu, S., and Tanguay, R.L. (2013) Identifying novel calpain 2 inhibitors to reduce *in vivo* glioblastoma invasion. *Pacific Northwest Association of Toxicologists Annual Meeting*. September 20.
  - Third place award for the graduate student presentation.
- Wehmas, L.C., Truong, L., **Greenwood, J.A.**, Punnoose, A., and Tanguay, R.L. (2012) Zebrafish xenograft model of glioblastoma to investigate structure activity relationships of zinc oxide nanoparticles with anticancer properties. *Pacific Northwest Association of Toxicologists Annual Meeting*. September 20. **Award for the top graduate student presentation**.
- **Greenwood**, **J.A.** (2009) Calpain proteolysis links phosphoinositide and calcium signals to drive glioblastoma invasion. Subgroup Session "Actin cytoskeleton and signaling in tumor invasion and metastasis" at the *American Society of Cell Biology Annual Meeting*.
- **Greenwood, J.A.** (2009) Chemical signals driving brain cancer progression. *Department of Chemistry, Gonzaga University*.
- **Greenwood**, **J.A.** (2007) Phosphoinositide binding to the substrate regulates susceptibility to proteolysis by calpain. "New and Notable" speaker for *FASEB Conference on Biology of Calpains in Health & Disease*.
- Greenwood, J.A. (2001) Phosphoinositide regulation of cell adhesion. CGRB Annual Retreat, OSU.
- **Greenwood, J.A.** and Murphy-Ullrich, Joanne E. (1996) Phosphatidylinositol-3-kinase mediates thrombospondin induced disassembly of focal adhesions in endothelial cells. *The Thrombospondin Gene Family and Its Functional Relatives: Tenascins, Osteopontin, and SPARC,* T11.
- **Greenwood**, **J.A.** and Johnson, G.V.W. (1994) Casein kinase II phosphorylation of the microtubule-associated protein tau in LA-N-5 human neuroblastoma cells. *Society for Neuroscience Abstracts* 20, 647.

## **Poster Presentations**

- Gamble J, Tanguay R, **Greenwood JA**. "4D Quantitative Image Analysis of Cancer Cell Invasion in a Brain Microenvironment Using ImageJ Software", Microscopy and Microanalysis Conference, St. Louis, MO., August 2017. **MSA Student Poster Award**
- Reed-Harris Y, Gamble J, **Greenwood JA**. "Role of Laminin α-5 in Pseudopod Formation During Glioblastoma Disease Progression", Center for Genome Research and Biocomputing Conference, Corvallis, OR, September 2016.
- Reed-Harris Y, Gamble J, **Greenwood JA**. "The Role of Laminin Alpha 5 on Glioblastoma Cells Migration and Invasion", Undergraduate Summer Research Symposium, Corvallis, OR, August 2016.
- Reed-Harris Y, Gamble J, **Greenwood JA**. "Determining the Role of Laminin α-5 on Glioblastoma Cell Proliferation by Altering the Microenvironment", Pacific Northwest Louis Stokes Alliance for Minority Participation Conference, Portland, OR, April 2016.
- Reed-Harris Y, Gamble J, **Greenwood JA**. "Determining the Role of Laminin α-5 on Glioblastoma Cell Proliferation by Altering the Microenvironment", Emerging Research Nationals Conference, Washington,

- D.C., February 2016.
- Reed-Harris Y, Gamble J, **Greenwood JA**. "Advantages and Applications of the Zebrafish Xenograft Model", STEM Leaders Symposium, Corvallis, OR. January 2016.
- Reed-Harris Y, Gamble J, **Greenwood JA**. "Current Applications of the Zebrafish Xenograft Model", Celebrating Undergraduate Excellence Conference, Corvallis, OR. April 2015.
- Gamble J, **Greenwood JA**. "Basement Membrane Structure and Composition Alter Glioblastoma Movement", Center for Research and Biocomputing Spring Conference, Corvallis, OR. April 2015.
- Reed-Harris Y, Gamble J, **Greenwood JA**. "Current Applications of the Zebrafish Xenograft Model", Celebrating Undergraduate Excellence Conference, Corvallis, OR. April 2015.
- Wehmas LC, **Greenwood JA**, Liu S, Punnoose A, Tanguay RL. Zebrafish-based screening to prioritize drug development for glioblastoma therapy. [Abstract] In: *Society of Toxicology 53<sup>rd</sup> Annual Meeting*. Phoenix, AZ. March 2014.
- Wehmas LC, **Greenwood JA**, Liu S, Tanguay RL. Identifying novel calpain 2 inhibitors to reduce in vivo glioblastoma invasion. [Abstract] In: *Pacific Northwest Association of Toxicologists Annual Meeting*. Platform Presentation. Seattle, WA. September 2013.
- Wehmas, L.C., Truong, L., **Greenwood, J.A.**, Chess, J., Punnoose, A., and Tanguay, R.L. (2013) Zebrafish xenograft model of glioblastoma to investigate structure activity relationships of zinc oxide nanoparticles with anticancer properties. *Society of Toxicology Annual Meeting*. March 10.
- Wehmas, L.C., Truong, L., **Greenwood, J.A.**, Punnoose, A., and Tanguay, R.L. (2012) Zebrafish xenograft model of glioblastoma to investigate structure activity relationships of zinc oxide nanoparticles with anticancer properties. Sustainable Nanotechnology Organization Conference. November 4. **L.C. Wehmas was recipient of Student Travel Award.**
- Wehmas, L.C., Truong, L., **Greenwood, J.A.**, Punnoose, A., and Tanguay, R.L. (2012) Zebrafish xenograft model of glioblastoma to investigate structure activity relationships of zinc oxide nanoparticles with anticancer properties. NIEHS Nano Consortium Meeting, July 31.
- Wehmas, L.C., Truong, L., Punnoose, A., **Greenwood, J.A.**, and Tanguay, R.L. (2012) Low developmental toxicity of zinc oxide nanoparticles hold promise for applications in nanomedicine. *Society of Toxicology Annual Meeting*. March 11.
- Lal, S., and **Greenwood, J.A.** (2008) Phosphoinositide regulation of proteolytic post translational modification: A role in cell migration. *Molecular Biology of the Cell*, 1826.
- Mayo, C., Fraley, T.S., and **Greenwood, J.A.** (2007) Phosphoinositide binding regulates α-actinin proteolysis by calpain. Keystone Symposia on PI 3-kinase Signaling Pathways in Disease, 130.
- Jang, H., and **Greenwood**, **J.A.** (2006) CRP1 bundling of F-actin requires LIM1 domain and adjacent glycine rich region. *Molecular Biology of the Cell*, 819a.
- Jang, H., and **Greenwood**, **J.A.** (2006) CRP1 bundling of F-actin requires LIM1 domain and adjacent glycine rich region. CGRB retreat.
- Full, S.J., Watson, J., Deinzer, M.L., Ho, P.S., and **Greenwood, J.A.** (2006) Phosphoinositide binding regulates α-actinin CH2 domain structure: analysis by hydrogen/deuterium exchange mass spectrometry. American Society of Mass Spectrometry Sanibel Conference Focus on Biomolecular Structure, Dynamics and Function: Hydrogen Exchange and Covalent Labeling Techniques, poster #13.
  - S.J. Full was recipient of ASMS Sanibel Student Travel Award.
- Jang, H., Tran, T.C., Singleton, C., Fraley, T.S., and **Greenwood, J.A.** (2005) Cysteine-rich protein 1 (CRP1) regulation of actin filament bundling. *Molecular Biology of the Cell*, L94.
- Jang, H., Tran, T.C., Fraley, T.S., and **Greenwood, J.A.** (2005) Characterization of cysteine-rich protein 1 (CRP1) interaction with the actin cytoskeleton. CGRB retreat.

### **ACADEMIC SERVICE TO OREGON STATE UNIVERSITY (relevant samples)**

### University and College

- University Innovation Alliance travel/value team (EAB SSC project) 2014-2016
- University Assessment Council 2014-2016
- University Education Council 2014-2016
- Name-in-use Committee for Registrar 2015-2016
- Health and Well-Being Living Learning Community Advisory Board 2014-2016
- Student Conduct Hearing Board 2014-2015
- OSU Mental Health Initiative Committee 2014-2015
- University Committee on Student Experience and Engagement (UCSEE) 2014-15
- Faculty Senator, College of Science, 2007, 2014-2017
- Pre-med Committee 2013-2016
- University Chemical Safety Committee 2011-2014
- 2003-2014: Confocal Microscope Oversight Committee (Chair) 2003-2014
- Faculty advisor for the Indian Student Association 2006-2007
- Life Science Undergraduate Curriculum Review Committee, 2007-2008

### Search Committees

- Vice Provost for Undergraduate Education 2018
- Senior Vice Provost for Academic Affairs 2015
- University Innovation Alliance Fellow 2015
- EECS Head 2014-2015
- College of Science Dean Search Committee 2012-2013

### Department of Biochemistry and Biophysics

- Seminar Chair 2011-2014
- Graduate Admissions Committee, Chair 2008-2011
- Graduate Admissions Committee 2001-2008