Jillian Doe

Department of Oncological Sciences Huntsman Cancer Institute University of Utah 2000 Circle of Hope Drive Salt Lake City, UT 84112

801.234.6789 (laboratory) 801.381.7878 (mobile) jillian.doe@hci.utah.edu

ACADEMIC TRAINING

2009-present Ph.D. Candidate, Oncological Sciences

University of Utah, Salt Lake City, UT Expected Graduation: August 2014

May 2008 B.S. Biology, minor in Psychology

Saint Mary's College of California, Moraga, CA

RESEARCH EXPERIENCE

2010-present Ph.D. Candidate – PI Bryan Welm

Department of Oncological Sciences, University of Utah

Project: Integrated 3D model of mammary development and chemical biology to discover new role for desmosome adhesion complexes during mammary

branching morphogenesis.

2007-2009 Research Assistant – PI Mensur Dlakic

Department of Microbiology, Montana State University

Project: Established tools for Bimolecular Fluorescence Complementation (BiFC) and implemented this technology to image spatial and temporal protein

interactions during ribosome assembly in human cells.

2006-2007 Undergraduate Research Assistant – PI Allan Hansell

Department of Biology, Saint Mary's College of California

Project: Developed independent thesis project to study prion proteins.

Expressed and isolated the Saccharomyces cerevisiae prion protein, Sup35p, and

investigated plaque formation under different buffering conditions.

PEER-REVIEWED PUBLICATIONS

Doe, Jillian, Leonard, C.J., Kieffer, C., Looper, R.E., and Welm, B.E. Dioxin exposure blocks lactation through a direct effect on mammary epithelial cells that requires the aryl hydrocarbon receptor repressor. In preparation.

Doe, Jillian.*, Bhonde, V.R.*, Hess, M., Mack, J.B.C., Welm, B.E., and Looper, R.E. *Bis*-aryl oxadiazoles as effective activators of the aryl hydrocarbon receptor. *Bioorg. Med. Chem. Lett.* Submitted.

Doe, Jillian.*, Kieffer, C.*, Shelton, D.N., Leonard, C.J., Bhonde, V.R., Vankayalapati, H., Milash, B., Bearss, D.J., Looper, R.E., and Welm, B.E. Chemical genetic screen reveals a role for desmosomal adhesion in mammary branching morphogenesis. *J Biol Chem.* 2013 Jan 25; 288 (4): 2261-70. PMCID: PMC3554898.

^{*}Authors contributed equally to this work.

SCIENTIFIC OUTREACH PUBLICATIONS

Doe, Jillian. Natural history museum spotlights plight facing Utah frogs. *Explore Utah Science*. 2012 Nov 29.

Schuske, K., **Doe, Jillian.** Students consider a new future at science day. *Explore Utah Science*. 2012 Nov 12.

GRANT FUNDING AND SCHOLARSHIPS

2012-present	Developmental Biology Training Grant Predoctoral NIH Training Grant T32 HD07491
February 2014	Graduate Student Travel Award University of Utah Graduate School
2003-2007	Honors Scholarship Saint Mary's College of California
2003-2007	Scholars Award Home Builder's Association of Idaho
2003-2004	Community Service Learning Scholarship Bishop Kelly Foundation

AWARDS AND HONORS

February 2013	Selected Platform Presentation Southwest Society for Developmental Biology
September 2012	Best Poster Award University of Utah Bioscience Symposium
May 2007	Summa Cum Laude Saint Mary's College of California
May 2007	Carlos Freitas Award – Achievement in Biology Saint Mary's College of California
2003-2004	Outstanding Chemistry Scholar Saint Mary's College of California

SCIENTIFIC MEETINGS

February 2014	Keystone Symposia – Stem Cells and Cancer Poster, Banff, Alberta, Canada
February 2013	Southwest Regional Meeting of the Society for Developmental Biology Platform Presentation, Salt Lake City, Utah

INVITED PRESENTATIONS

January 2014	Bioscience Graduate Studies Recruitment Symposium
	Salt Lake City, UT
	"3D model of breast morphogenesis defines new role for cellular
	adhesion during mammary branching"

September 2013 Molecular Medicine Research Program Retreat

Deer Valley, Utah

"Loss of desmosomal adhesion facilitates mammary branching

morphogenesis"

August 2012 **Bioscience Retreat**

Heber, Utah

"Chemical genetic screen reveals a role for desmosomal adhesion in

mammary branching morphogenesis"

PRESENTATIONS

Jillian Doe, Vasudev R. Bhonde, Ryan E. Looper, and Bryan E. Welm. "Small molecule modulators of mammary branching guide drug design." Developmental Biology Training Grant Research in Progress, University of Utah, Salt Lake City, Utah – January 2014.

Jillian Doe, Vasudev R. Bhonde, Ryan E. Looper, and Bryan E. Welm. "Small molecule modulators of mammary branching guide drug design." Department of Oncological Sciences Research in Progress, University of Utah, Salt Lake City, Utah – December 2013.

Shelly Sorrells, **Jillian Doe**, Cristhian Toruno, Erik Harrington, Brett Milash, Rodney A. Stewart, Cicely Jette. "Ccdc94 promotes genomic stability and the ionizing radiation-induced G2 cell cycle checkpoint." 8th European Zebrafish Meeting, Barcelona, Spain – July 2013.

Jillian Doe, Collin Kieffer, Dawne N. Shelton, Vasudev R. Bhonde, Ryan E. Looper, Bryan E. Welm. "Understanding the role of desmosomal adhesion during mammary branching morphogenesis." Developmental Biology Training Grant Retreat, Deer Valley, Utah – April 2013.

Jillian Doe, Collin Kieffer, Dawne N. Shelton, Christopher J. Leonard, Vasudev R. Bhonde, Ryan E. Looper, Bryan E. Welm. "Loss of adhesion facilitates mammary gland branching morphogenesis." Southwest Regional Meeting of the Society for Developmental Biology, Salt Lake City, Utah – February 2013.

Jillian Doe, Collin Kieffer, Christopher J. Leonard, Vasudev R. Bhonde, Ryan E. Looper, Bryan E. Welm. "Exposure to environmental toxins blocks mammary development and lactation." Developmental Biology Training Grant Research in Progress, University of Utah, Salt Lake City, Utah – January 2013.

Jillian Doe, Collin Kieffer, Christopher J. Leonard, Vasudev R. Bhonde, Ryan E. Looper, Bryan E. Welm. "Exposure to environmental toxins blocks mammary development and lactation." Department of Oncological Sciences Research in Progress, University of Utah, Salt Lake City, Utah – January 2013.

Jillian Doe, Collin Kieffer, Dawne N. Shelton, Christopher J. Leonard, Vasudev R. Bhonde, Hariprasad Vankayalapati, Brett Milash, David J. Bearss, Ryan E. Looper, Bryan E. Welm. "Activation of AHR Drives Desmosomal Adhesion to Block Mammary Branching Morphogenesis." Department of Oncological Sciences Research in Progress, University of Utah, Salt Lake City, Utah – March 2012.

POSTER PRESENTATIONS

Jillian Doe, Collin Kieffer, Dawne N. Shelton, and Bryan E. Welm. "Loss of desmosomal adhesion facilitates mammary gland branching morphogenesis." Keystone Symposia- Stem Cells and Cancer, Banff, Alberta, Canada – February 2014.

Shelly Sorrells, Seth Carbonneau, Erik Harrington, Jillian Doe, Aye T. Chen, Bridgid Hast, Brett Milash,

Ujwal Pyati, Michael B. Major, Yi Zhou, Rodney A. Stewart, Leonard I Zon, A. Thomas Look, Cicely Jette. "The Novel Radioprotective Protein Ccdc94 Protects Cells From Ionizing Radiation." Southwest Regional Meeting of the Society for Developmental Biology, Salt Lake City, Utah – February 2013.

Jillian Doe, Collin Kieffer, Dawne N. Shelton, Vasudev R. Bhonde, Ryan E. Looper, and Bryan E. Welm. "Loss of adhesion facilitates mammary gland branching morphogenesis." Bioscience Symposium, University of Utah – September 2012.

TEACHING EXPERIENCE

Fall 2012	Teaching Assistant – Advisor Dr. Niki Hack 7 th Grade, Salt Lake Center for Science Education, Salt Lake City, Utah
	Major Contribution: Initiated and directed a semester long project on model organisms, which included laboratory experiments, field trips to research laboratories at the University of Utah, and a final research symposium.
2004-2007	Teaching Assistant – Advisor Dr. Joel Burley Chemistry Department, Saint Mary's College of California, Moraga, California
	Major Contribution: Redeveloped undergraduate level laboratory experiments for high school outreach programs.

MENTORING EXPERIENCE

2011-2013	Christopher Leonard – Undergraduate Student Designed and conducted experiments for an independent thesis project.
Spring 2013	Patricia Tiburcio – Graduate Rotation Student
Spring 2013	Kaatje Fisk – Middle School Science Fair Student Awarded top middle school project.
Fall 2011	Alex Stark – Graduate Rotation Student
Fall 2011	Pengbo Wang, Ph.D. – Visiting Postdoctoral Fellow Studied primary cell techniques including isolation, transduction, and growth of single cell mammary cultures.
Spring 2011	Pranav Mathur – Graduate Rotation Student
Spring 2011	Daisuke Yamaji, Ph.D. – Visiting Postdoctoral Fellow Created transduced mammary outgrowths <i>in vivo</i> .

COMMITTEES AND SERVICE

2010-present	Student Advisory Committee Department of Oncological Sciences, University of Utah
2008-2013	Vice President, Board of Directors Alzar School, Cascade, Idaho Facilitated development of a semester high school focused on leadership training, cultural exchange, and service learning.
2012-2013	Career Perspectives Committee Department of Oncological Sciences, University of Utah

Organized a monthly seminar series featuring PhD scientists from around

the United States.

February 2011 Science Fair Judge

Weilenmann School, Park City, Utah

Spring 2011 **Recruiting Committee**

Molecular Biology Program, University of Utah

Coordinated interview weekends for over 100 prospective graduate students.

2010 Oncological Sciences Departmental Review

Department of Oncological Sciences, University of Utah

PROFESSIONAL MEMBERSHIPS

2012-present Society for Developmental Biology

2012-2013 AAAS

REFERENCES

Assistant Professor Assistant Professor Professor

Surgery Dept. Oncological Sciences Dept. Oncological Sciences Dept.