Support for the Annual PTX Fall Symposium provided by

- The David and Dana Loury Foundation
- Frederick Meyers, Vice Dean
  School of Medicine
- Isaac Pessah, Associate Dean of Research
  School of Veterinary Medicine
- NIGMS-funded Training Program in Pharmacology
- NIEHS-funded Training Program in Environmental Health Sciences

PTX Executive Committee Members, 2014-2015 academic year
Pam Lein, Chair, PTX Graduate Group, Molecular Biosciences, SVM
Jim Angelastro, Chair, Curriculum and Educational Policy Committee, Molecular Biosciences, SVM
Xinbin Chen, Chair, Membership Committee, Surgical and Radiological Sciences, SVM
Kermit Carraway, Chair, Admissions Committee, Biochemistry and Molecular Medicine, SOM
Angie Gelli, Pharmacology, SOM
Birgit Puschner, Molecular Biosciences, SVM
Heike Wulff, Pharmacology, SOM

PTX Admissions Committee, 2013-2014 academic year
Chair: Kermit Carraway, Biochemistry and Molecular Medicine, SOM, Cancer Center
Faculty: Jason Eiserich, Pulmonary and Critical Care, SOM
        Nilesh Gaikwad, Environmental Toxicology, CAES
        Mary Horne, Pharmacology, SOM
        Anne Knowlton, Pharmacology, SOM
        Manuel Navedo, Pharmacology, SOM
        Robert Poppenga, Molecular Biosciences, SVM
        Scott Stanley, Molecular Biosciences, SVM
        Kevin Xiang, Pharmacology, SVM
        Aiming Yu, Biochemistry and Molecular Medicine, SOM
Students: Mona El-Badawi, PhD candidate, lab of Oliver Fiehn
         Samantha Faber, PhD candidate, lab of Michael Denison
         Sean Kodani, PhD candidate, lab of Bruce Hammock
         Sucheta Mukherjee, PhD candidate, lab of Wolf-Dietrich Heyer
         Chuong Nguyen, PhD candidate, lab of Rivkah Isseroff

PTX Curriculum and Educational Policy (CEP) Committee, 2014-2015 academic year
Chair: Jim Angelastro, Molecular Biosciences, SVM
Faculty: Rick Harper, Pulmonary & Critical Care, SOM
         Birgit Puschner, Molecular Biosciences, SVM
         Aiming Yu, Biochemistry and Molecular Medicine, SOM
Students: Brandon Brown, PhD candidate, lab of Heike Wulff
         Ray Zhang, PhD candidate, lab of Isaac Pessah

PTX Membership Committee, 2014-2015 academic year
Chair: Xinbin Chen, Surgical and Radiological Sciences, SVM
Faculty:
PTX Graduate Advisors, 2014-2015 academic year

Kermit Carraway, Biochemistry and Molecular Medicine, SOM
Angie Gelli, Pharmacology, SOM
Rick Harper, Pulmonary & Critical Care, SOM
Paul Henderson, Hematology and Oncology, SOM
Mary Horne, Pharmacology, SOM
Heather Knych, Molecular Biosciences, SVM
Jerry Last, Master Advisor, Pulmonary and Critical Care, SOM,
Pam Lein, Molecular Biosciences, SVM
Lisa Miller, Anatomy, Physiology and Cell Biology, SVM
Kent Pinkerton, Pediatrics, School of Medicine & Anatomy/Physiology and Cell Biology, SVM
Birgit Puschner, Molecular Biosciences, SVM
Heike Wulff, Pharmacology, SOM

Instructors of Record for PTX Core Courses

PTX 201: Heather Knych, Molecular Biosciences, SVM
         Birgit Puschner, Molecular Biosciences, SVM
PTX 202: James Angelastro, Molecular Biosciences, SVM
         Jason Eiserich, Pulmonary and Critical Care, SOM
PTX 203: Robert Berman, Neurosurgery, SOM
         Angie Gelli, Pharmacology, SOM

New PTX faculty

John Gray, Neurology, SOM
John Newman, Nutrition, CAES
Jon Ramsey, Molecular Biosciences, SVM

PTX Website Team, 2013-2014 academic year

Brandon Brown, PhD candidate, lab of Heike Wulff
Brad Hobson, PhD candidate, lab of Pam Lein
Carly Moore, PhD candidate, lab of Birgit Puschner
Sucheta Mukherjee, PhD candidate, lab of Wolf-Dietrich Heyer
Chuong Nguyen, PhD candidate, lab of Roslyn Rivkah Isseroff
Marianna Stamou, PhD candidate, lab of Pam Lein
Steven Vito, MS candidate, lab of Bruce Hammock
Ray Zhang, PhD candidate, lab of Isaac Pessah

PTX Seminar Series, 2013-2014 academic year

Students: Olivia Buonarati, PhD candidate, lab of Johannes Hell
          Zhijian (James) Duan, PhD candidate, lab of Hongwu Chen
          Chen (Samantha) Feng, PhD candidate, lab of Kit Lam
          Inderpreet Kaur, PhD candidate, lab of Elva Diaz
          Carly Moore, PhD candidate, lab of Birgit Puschner
          Esther Patchin, PhD candidate, lab of Kent Pinkerton
          Frances Shaffo, PhD candidate, lab of Pam Lein
          Denise Trans, PhD candidate, lab of Paul Henderson
          Kyla Walter, PhD candidate, lab of Birgit Puschner

*The 2014-2015 seminar series will be supported by the David and Dana Loury Foundation Seminar Series*
PTX Graduates in 2013-2014

PhD Degree Program

David Krawiec [Major Professor: Alan Buckpitt, Molecular Biosciences, SVM]
Dissertation title: Protein Covalent Binding Critical Targets: A Comparison of Cytotoxic Naphthalene with Non-Toxic Diethyl Maleate

Diana Lac [Major Professor: Kit Lam, Biological Chemistry and Molecular Medicine, SOM]
Dissertation title: One Bead One Compound Combinatorial Technology as Enabling Tool for Site-Specific Derivatization of Immunoglobulins and Discovery of Cell Penetrating Peptides
Current position: Senior Scientist, Biopharmx, Inc., Menlo Park, CA

Leonardo Leon [Major Professor: Kermit Carraway, Biochemistry and Molecular Medicine, SOM]
Dissertation title: The Use of Amiloride Derivatives Capable of Inducing A Novel Form of Cell Death for the Treatment of Breast Cancer
Current position: Postdoc with Matthew Petrosk, Sanford-Burnham Medical Research Institute in La Jolla, CA

Yassaman Niknam [Major Professor: Isaac Pessah, Molecular Biosciences, SVM]
Dissertation title: Diverse Environmental Contaminants DisruptCa\textsuperscript{2+} Homeostasis in Neuronal and Non-Neuronal Primary Cells: A Ryanodine Receptor Mediated Mechanism of Toxicity
Current position: Associate Toxicologist, California EPA, Developmental and Reproduction Toxicology Group

Amber Roegner [Major Professor: Birgit Puschner, Molecular Biosciences, SVM]
Dissertation title: Novel Screening Tools and Risk Assessment Approaches for the Freshwater Harmful Algal Bloom Toxins, Microcystins
Current position: Postdoctoral fellow, Oregon State University, Environmental and Molecular Toxicology, NCRR Training Grant “Veterinary Training on Aquatic Models in Biomedical Research”

Sunil Sahdeo [Major Professor: Gino Cortopassi, Molecular Biosciences, SVM]
Dissertation title: Dyclonine Rescues Frataxin Deficiency in Animal Models and Buccal Cells of Patients with Friedreich’s Ataxia through Novel Response Element in the Frataxin Gene.
Current position: Scientist, Emerging Science Group, Janssen Research and Development, Johnson & Johnson, San Diego, CA.

Yezi Zhu [Major Professor: Allen Gao]
Dissertation title: Molecular Mechanisms of Prostate Cancer Progression and Treatment Resistance
Current position: Postdoctoral fellow in the Department of Urology, UC Davis

MS Degree Program

Edward Hackett [mentor: Mari Golub]
Thesis title: Sustained Attention in Juvenile Rhesus Macaques Treated Chronically with Fluoxetine
Current position: Student Scientist at California EPA OEHHA

Steven Vito [mentor: Bruce Hammock, Entomology, CAES]
Thesis title: Combinatorial Treatment of Diazepam and Inhibition of Soluble Epoxide Hydrolase Stops Seizures and Modulates Neuroinflammation in a Murine Model of Acute TETS Intoxication
Current position: Teaching assistant at UC Davis
Incoming PTX students

**PhD Program**

**Brian DeFelice**, Brian received his BS in Biochemistry and Molecular Biology from UC Davis in 2011, and has been working in the metabolomics field for over three years. He is interested in clinical pharmacology.

**Peter Deng**, Peter received his BS in Neurobiology, Physiology and Behavior from UC Davis in 2013 and has been working in a genomics lab at UC Davis. He is interested in neuropharmacology and neurotoxicology.

**Cameron Flayer**, Cameron received his BS in Biology with a minor in Environmental Science from Wake Forest University in 2014. He is interested in environmental pollutants and pulmonary toxicology.

**Samantha Francis Stuart**, Samantha received her BS in Chemistry with a minor in Biology from Converse College in South Carolina in 2011, and received her MS in Toxicology from Texas A&M in 2014. She is interested in neuropharmacology and neurotoxicology.

**Michelle Guignet**, Michelle graduated from Penn State in 2012 with a bachelor’s degree in Biochemistry and Molecular Biology and in Toxicology, and has been working in neuropharmacology at the US Army Medical Research Institute of Chemical Defense. She is interested in neuropharmacology and neurotoxicology.

**Joseph Jilek**, Joseph received his BS in Ecology and Evolutionary Biology in 2011, and his MS in Toxicology in 2014, both from University of Michigan. He is interested in the impact of pharmacological and toxicological agents on developmental and proliferative pathways.

**Tamara Kadir**, Tamara received her BS in Biochemistry and Molecular Biology from UCD in 2009, and received her MS from the PTX program in 2011. She has been working with the California Environmental Protection Agency, and will do her PhD studies with Dr. Kent Pinkerton.

**Jacklyn Kelty**, Jacklyn (‘Skye’) received her BS in Biochemistry and Cell Biology and in Environmental Science in 2014 from Rice University. She is interested in environmental toxicology and carcinogenesis, and in patient-based and translational studies.

**Michelle Kossack**, Michelle received her BS in Environmental Science from University of Massachusetts Amherst in 2013 and has been working at AnaBios Corporation in San Diego. She is interested in marine and aquatic toxicology.

**Sonia Revello**, Sonia received her BS from UC Davis in 2012, and is interested in clinical pharmacology.

**Thomas Sears**, Thomas received his BS in Environmental Toxicology from UC Davis 2014. He is interested in clinical pharmacology and toxicology.

**Sunjay Sethi**, Sunjay received his BS in Environmental Toxicology from UC Davis 2014. He is interested in toxicity mechanisms of environmental pollutants.
Incoming PTX Students

MS Program

Lara Anwar, Lara received her BS in Chemistry from UC Davis in 2013. She is interested in clinical pharmacology and the development of novel anti-cancer drugs and targeting agents.

Lauryn Brown, Lauryn received her BS in Environmental Toxicology from UC Davis in 2012, and has been working in a bacteriology lab at UC Davis. She is interested in molecular and developmental toxicology.

Abbas Mohamed, Abbas received his BS in Molecular, Cell and Developmental Biology from UC Santa Cruz in 2012, and has been working at Genentech. He is interested in clinical pharmacology and toxicology.

Number of students in the PTX Program (including incoming students)

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>65</td>
</tr>
<tr>
<td>MS</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
</tr>
</tbody>
</table>

Publications by PTX Graduate Students in 2013-2014

PhD students identified in **bold black font**; PTX faculty identified in **bold blue font**


**PTX graduate student honors in 2013-2014**

Karan Agrawal [John Newman]
- Travel award, American Association of Veterinary Laboratory Diagnosticians Annual meeting, Oct 2014

Donald Anderson [Laura Van Winkle]
- Superfund Basic Sciences Research Fellowship, 2013-2014

Christopher Barnhart [Pam Lein]
- ARCS (Achievement Rewards for Scientists) Scholar, 2011-2014
- Superfund Basic Sciences Research Fellowship, 2010-2014
- 2014 Northern California SOT Graduate Student Achievement Award

Brandon Brown [Heike Wulff]

Olivia Buonarati [Johannes Hell]
- NIAMS NRSA F31 Predoctoral Fellowship, 2013-2016

Sarah Carratt [Laura Van Winkle]
- Delta Zeta Foundation Charline Chilson Scholarship, 2014
- Superfund Basic Sciences Research Fellowship, 2014

Hao Chen [Pam Lein]
- Superfund Basic Sciences Research Fellowship, 2011-2014
- NIEHS T32 Fellowship, 2012-2014
- 2014 Neurotoxicology Specialty Section of the Society of Toxicology Graduate Student Poster Award, 3rd place
- CETI Trainee, 2014

Jocelyn Claude [Kent Pinkerton]
- NIAMID T32 Predoctoral Fellowship in Animal Models of Infectious Diseases

Samantha Faber [Michael Denison]
- NIEHS T32 Fellowship, 2014-2015
- Superfund Basic Sciences Research Fellowship, 2014-2015

Peter Henderson [Johannes Hell]
- NIGMS Pharmacology T32 Fellowship, 2012-2014
- American Heart Association Predoctoral Fellowship, 2014-2016

Brad Hobson [Pam Lein]
- ARCS (Achievement Rewards for Scientists) Scholar, 2014-2015
- NIGMS Pharmacology T32 Fellowship, 2013-2014
- 2014 Neurotox Specialty Section of the Society of Toxicology Graduate Student Poster Award, 1st place
Seiya Kitamura [Bruce Hammock]
   • Superfund Basic Sciences Research Fellowship, 2013-2014
   • IUPAC 2014 Conference Student Education Award by the American Chemical Society (ACS)

Sean Kodani [Bruce Hammock]
   • Superfund Basic Sciences Research Fellowship, 2013-2014

Caroline (Carly) Moore [Birgit Puschner]
   • EPA STAR Predoctoral Fellowship, 2011-2014
   • Freedland Fellowship, 2012-2014
   • American College of Toxicology North American Graduate Fellowship, 2014-2016

Sucheta Rinti Mukherjee [Wolf-Dietrich Heyer]
   • NIGMS Pharmacology T32 Fellowship, 2013-2015
   • ASBMB Invited Speaker for Experimental Biology 2014

Chuong Nguyen [Rivkah Isseroff]
   • NIGMS Pharmacology T32 Fellowship, 2013-2014

Esther Patchin [Kent Pinkerton]
   • NHLBI Cardiovascular Science T32 Fellowship, 2013-2015

Maria Paz Prada [Manuel Navedo]
   • NIGMS Pharmacology T32 Fellowship, 2014-2015

Amber Roegner [Birgit Puschner]
   • EPA STAR Predoctoral Fellowship, 2010-2013
   • UC Davis School of Veterinary Medicine Osburn Graduate Fellowship, 2013-2014

Sunil Sahdeo [Gino Cortopassi]
   • NIGMS Pharmacology T32 Fellowship, 2013-2014
   • Freedland Fellowship, 2014-2015

Frances Shaffo [Pam Lein]
   • CCRBM NHBLI Lung Biology T32 Fellowship, 2013-2015

Chelsea Snyder [Marty Privalsky]
   • Student Travel Award, American College of Toxicology Annual Meeting, Nov 2014

Marianna Stamou [Pam Lein]
   • Freedland Fellowship, 2012-2014
   • Superfund Basic Sciences Research Fellowship, 2013-2015
   • 2014 Neurotoxicology Specialty Section of the Society of Toxicology Graduate Student Poster Award, 2nd place

Kyla Walter [Birgit Puschner]
   • T-32 Predoctoral Clinical Research Training Program, 2013-2014
   • Freedland Fellowship, 2014-2015
   • NIEHS T32 Fellowship, 2014-2015

Ray Zhang [Isaac Pessah]
   • NIEHS T32 Fellowship, 2013-2015

PTX Student Involvement in Service Activities in 2013-2014

Brandon Brown [Heike Wulff]
   • PTX website committee
   • Chancellor’s Graduate and Professional Student Advisory Board

Olivia Buonarati [Johannes Hell]
   • PTX seminar series

Zhijian (James) Duan [Hongwu Chen]
   • PTX seminar series

Chen (Samantha) Feng [Kit Lam]
   • PTX seminar series
Brad Hobson [Pam Lein]
• PTX website committee

Inderpreet Kaur [Elva Diaz]
• PTX seminar series

Caroline (Carly) Moore [Birgit Puschner]
• PTX Admissions Committee
• PTX website committee
• Graduate Student Representative, Society of Toxicology, Neurotoxicology Specialty Section
• Peer Mentor, Society of Toxicology, Undergraduate Education Program

Sucheta (Rinti) Mukherjee [Wolf-Dietrich Heyer]
• PTX Admissions committee
• PTX Website committee

Chuong Nguyen [Roslyn Rivkah Isseroff]
• PTX Admission Committee, 2013-2014
• PTX website committee
• PTX representative to the Graduate Student Association (2013-present)
• Member, Vice Provost of Global Affairs Recruitment Advisory Committee

Esther Patchin [Kent Pinkerton]
• PTX seminar series

Frances Shaffo [Pam Lein]
• PTX seminar series

Marianna Stamou [Pam Lein]
• PTX website committee
• Chair, Professional Development Subcommittee, Society of Toxicology Graduate Student Leadership Committee Executive Board
• UC Davis student representative, Student/Post-Doc/Alumni Network (SPAN) committee, NIEHS Superfund Research Program

Denise Trans [Paul Henderson]
• PTX seminar series

Steve Vito [Bruce Hammock]
• PTX website committee

Kyla Walter [Birgit Puschner]
• PTX seminar series

Ray Zhang [Isaac Pessah]
• PTX website committee
• Graduate Student Representative, Society of Toxicology, Northern California (NorCal) Regional Chapter
Announcements

NEW FELLOWSHIP FOR PTX PhD CANDIDATES
David and Dana Loury Foundation Fellowship

PTX Faculty Awards

**Oliver Fiehn**, Molecular & Cellular Proteomics Lectureship Award (at Experimental Biology conference, San Diego, April 2014); and Metabolomics Society, Lifetime Honorary Fellow award (at Metabolomics Society conference, Tsuruoka/JP, June 2014)

**Jerry Last**, 2013, awarded the title of Honorary Professor (Profesor Ad-Honorem) in the College of Chemistry at the University of the Republic in Montevideo, Uruguay.

News from PTX Alumni

**Katie Sutherland-Ashley**: As of 2014, Katie took a position as an associate toxicologist in the Pesticide and Food Toxicology section of OEHHA in the Oakland office. She focuses on peer review of Department of Pesticide Regulation risk assessments documents and updating public health goals for contaminants in California drinking water.

**Keisha Williams**: As of July 2014, Keisha took a position as lead scientist in the State of Michigan’s equivalent of the California Air Resources Board. She will be studying risks of toxic air contaminants in Michigan and recommending policy for resolving air quality issues.

**Pavel I. Zimin**: Pasha recently took a position as a postdoctoral researcher with Dr. Philip Morgan at the Children's Hospital in Seattle, WA.