Toxicology Interdepartmental Graduate Program 2018-2019 summary of activities

Director of Graduate Education: Dr. Richard Martin (Fall 2018); Dr. Aileen Keating (Spring 2019 onwards)

Supervisory Committee: Dr. Steven Bradbury (CALS), Dr. Jacek Koziel (CoE; CALS), Dr. Joel Coats (CALS), Dr. Wilson Rumbeiha (CVM), Dr. Richard Martin (CVM)

Program Administrator: Glenn Clark

2018-2019 Toxicology graduate students:

Ahmed Abdalla (Dr. Anumantha Kanthasamy)

Laura Burns (Dr. Borts)

Caleb Corona (Dr. Coats)

Maria Gonzalez Alvarez (Dr. Keating)

Maura Hall (Dr. Coats)

Courtney Huerter (Dr. Coats)

Jacob Johnson (Dr. Coats)

James Klimavicz (Dr. Coats)

Niranjana Krishnan (Dr. Bradbury)

Bailey McGuire (Dr. Keating)

Scott Radke (Dr. Ensley (now KSU))

Dharmin Rokad (Dr. Anumantha Kanthasamy)

Cristina Santana (Dr. Rumbeiha)

Dwayne Shrunk (Dr. Ensley (now KSU))

Rachel Sorensen (Dr. Jovanovic)

Mengisteab Wolday (Dr. Martin)

Bharathi Palanisamy (<u>TOX minor</u>; Dr. Anumantha Kanthasamy) Sireesha Manne (<u>TOX minor</u>; Dr. Anumantha Kanthasamy)

New students to the program in 2018:

Rachel Sorenson (rotation student, joined Dr. Jovanovic research group) Bailey McGuire (Keating research group direct admit)

Cristina Santana (Rumbeiha research group direct admit)

Estefania Gonzalez Alvarez (Fulbright scholar, Keating research group)

Shadi Parvin-Roo (Continuing rotation)

Graduating students (Since and including May 2018 and current employment):

_	<u>Degree</u>	Mentor	Current Employment
Laura Burns	MS	Dr. Borts	Assistant Scientist I in VDPAM
Scott Radke	MS	Dr. Enslev	Clinical Assistant Professor in VDPAM

Somchai Rice PhD Dr. Koziel Assistant Scientist III Dept. of Food Science

and Human Nutrition at ISU

Vivek Lawana PhD Dr. Arthi Kanthasamy PostDoc Purdue University

Dan Luo PhD Dr. Anumantha Kanthasamy PostDoc at ISU

Adhithiya Charli PhD Dr. Anumantha Kanthasamy Research Director Charles

River Laboratories. PA

Right: Dr. Somchai Rice defended her PhD dissertation in Spring 2019.

Incoming students (Spring and Fall 2019):

Jacob Johnson (MS, Coats research group)

Courtney Huerter (MS, Coats research group)

Hannah Wickham, Kanthasamy research group

Mohd Ridzuan Nirmal Nur'Ashiqin (Fulbright direct admit to Jovanovic research group)

Graduate student awards:

<u>Dharmin Rokad - Kanthasamy research group</u>

1st Place Award for Research Poster, College of Veterinary Medicine Summer Scholar Research Program

Right: Dharmin Rokad receives the College of Veterinary Medicine award from Dr. Cathy Miller.

Society of Toxicology, Biotechnology Specialty Section Student Achievement Award

Society of Toxicology, Neurotoxicology Specialty Section Batelle Graduate Student Poster Award, $\mathbf{1}^{\text{st}}$ place.

<u>Laura Burns - Borts research group</u>

Best graduate student oral presentation award at American Association of Veterinary Laboratory Diagnosticians

Niranjana Krishnan - Bradbury research group

Joan Mosenthal research grant https://xerces.org/2019/04/03/2019-dewind-awardees/

SciSeeker award in the General Science Post Category for a posts her toxicology blog: https://entoxsimplified.com/

Iowa State University 2019 GPSS Leadership Award: http://www.gpss.iastate.edu/awards

Selected for the National ComSciCon Workshop (50/700 individuals selected)

Right: Dr. Coats, Niranjana Krishnan, Maura Hall and Dr. Bradbury visit the Monsanto Headquarters in St. Louis.

<u>Cristina Santana - Rumbeiha research group</u>
Second place poster award, New England Science
Symposium in the category of Public Health, Clinical or
Social Science (including Translational Research) at Harvard
Medical School.

Right - Cristina M. Santana presenting her award-winning research.

<u>Sireesha Manne – Kanthasamy research group</u> Society of Toxicology Metals specialty section, First place presentation award. Effects of Love Level Hydrogen Suffice Engineers on the Parlinguistics of Love Level Hydrogen

Best Abstract Award, SOT Occupational and Public Health Specialty Section

Best Graduate Student Award, SOT American Scientists of Indian Origin Specialty Section

SS Roger O. McClellan Student Award, SOT Toxic and Exploratory Pathology and Comparative and Veterinary Specialty Section

SOT Graduate Student Travel Support Award

SOT Exposure Specialty Section- Honorary mention

SOT Best Overall Abstract Award, Medical Devices and Combination Products Specialty Section

North American Travel Grant, American College of Toxicology, 39th Annual Meeting

Iowa State University Research Excellence Award - Spring 2019

<u>Toxicology Interdepartmental Graduate Program</u> provided research travel awards of \$475 to Cristina Santana, Caleb Corona, Niranjana Krishnana, Sireesha Manne, Maura Hall, Dharmin Rokad and Colin Wong for travel to research conferences to present their work.

Faculty awards:

Dr. Boris Jovanovic, Environmental Toxicology and Chemistry Journal's "exceptional reviewers of 2018" award.

Dr. Wilson Rumbeiha, SOT Global Senior Scholar Award

Dr. Jon Mochel's research group was selected by the National Cancer Institute to conduct a research trial as part of the NCI Comparative Oncology Trial Consortium

Dr. Aileen Keating, Biology of Reproduction top reviewing editor award

Dr. Aileen Keating, Stephen B. Harris Mid-Career Research Award, Society of Toxicology Reproductive and Developmental Specialty section.

Dr. Gary Munkvold, Regents Award for Faculty Excellence

Dr. Heather Greenlee –promoted to full professor

Dr. Jacek Koziel

Medal for Merit, Wroclaw University of Environmental and Life Sciences, Poland.

Top Reviewer in Environment/Ecology Award, Publons.

Top Reviewer in Chemistry Award, Publons.

Excellence in Review Award: Waste Management journal (Elsevier)

The **Toxicology retreat** was held on April 29th, 2019. Thank you to all who attended and presented their research.

Toxicology Graduate Student

Organization – invited Dr. Annelise Nguyen from Kansas State University as the Zaffarano Lecturer. She presented a seminar entitled "Development of Heterogeneous Tumor Spheroids". She also shared her career pathway during a lunch hosted and attended by the Toxicology graduate students.

Right: Toxicology graduate students with Dr. Nguyen.



Current Toxicology Faculty

Agricultural and Biosystems Engineering

Jacek Koziel, Professor

Animal Science

Stephanie Hansen, Associate Professor Aileen Keating, Associate Professor Stephan Schmitz-Esser, Associate Professor

Biochemistry, Biophysics and Molecular Biology

Marit Nilsen-Hamilton, Professor

Biomedical Sciences

Vellareddy Anantharam, Adjunct Assistant Professor

Chandrashekhar (Chandru) Charavaryamath, Assistant Professor

Michael Cho, Professor and Lloyd Chair in Biomedical Sciences, Co-Director, Center for

Advanced Host Defense, Immunobiotics and Traslational Comparative Medicine (CAHDIT)

M. Heather Greenlee, Associate Professor

Anumantha Kanthasamy, Distinguished Professor, Eugene and Linda Lloyd Professor,

Director of Iowa Center for Neurotoxicology, Biomedical Sciences Departmental Chair

Arthi Kanthasamy, Associate Professor

Richard Martin, Professor and Director of Graduate Education for Toxicology and

Biomedical Sciences, M.R.C.V.S., Dip. E.C.V.P.T.

Jonathan Mochel, Associate Professor

Alan Robertson, Research Associate Professor

Ravindra Singh, Professor and Salsbury Chair

Thimmasettapp Thippeswamy, Professor

Chemical and Biological Engineering

Laura Jarboe, Associate Professor

Entomology

Keri Carstens, Collaborator Assistant Professor Joel Coats, Distinguished Professor

Food Sciences and Human Nutrition

Ruth MacDonald, Professor, FSHN Department Chair Aubrey Mendonca, Associate Manju Reddy, Professor Kevin Schalinske, Professor

Genetics Development and Cell Biology

Jo Anne Powell-Coffman, Professor

Natural Resource Ecology and Management

Steven Bradbury, Professor Boris Jovanovic, Assistant Professor

Plant Pathology and Microbiology

Gary Munkvold, Professor and Seed Science Endowed Chair

Veterinary Diagnostic Lab and Production Animal Medicine

Wilson Rumbeiha, DVM, Professor, DABT, DABVT

Veterinary Microbiology and Preventive Medicine

Qijing Zhang, BVsc, Professor and Frank Ramsey Endowed Chair, Associate Dean for Research and Graduate Studies, College of Veterinary Medicine