Shaunak Kamat

Biology Instructor
Southwest Texas Junior College
2401 Garner Field Road
Uvalde, Texas 78801

Office:
Office Tel:
Office Email: skamat@swtjc.edu

EDUCATION

Ph.D. Neuroscience - Rutgers University (2014)
Thesis title: "Genetic and environmental modulation of necrosis and healthspan in Caenorhabditis elegans"

M.S. Biology - Tata Institute of Fundamental Research (2005)
Thesis title: "A genetic and molecular study of synaptic vesicle recycling in Drosophila melanogaster"

B.S. Life Sciences & Biochemistry - St. Xavier's College (2002)

COLLEGE TEACHING/EXPERIENCE

Biology Instructor - Southwest Texas Junior College (2016-present)

Teaching Assistant - Molecular Biology and Biochemistry - Rutgers University (2012)

Instructor - Genetics - ODASIS program (Rutgers University) (2009)

Teaching Assistant - Biochemistry - Rutgers University (2008)

Lab Instructor - General Biology - Rutgers University (2007-2008)

PREVIOUS EXPERIENCE

Post-doctoral Associate - Department of Molecular Biology and Biochemistry, Rutgers University (2014-2016)

Teaching Assistant - Molecular Biology and Biochemistry - Rutgers University (2012)

Teaching Assistant - General Biology and Biochemistry - Rutgers University (2007-2008)

HONORS AND AWARDS

Graduate Assistantship, Rutgers Graduate School (2009-2014)

Leatham Summer Fellowship (Summer 2013)

Leatham Summer Fellowship (Summer 2012)

McCullum Summer Fellowship (Summer 2010-2011)

New Jersey Commission for Spinal Cord Research Pre-doctoral grant (2006-2008)

PUBLICATIONS

Kamat S, Graf B, Esposito D, Komarnytsky S, Chang C, Yeola S, Raskin I, Driscoll M (2017) ï¿½Putative human exercise mimetic 20HE preferentially targets the least fit in a C. elegans population to alter metabolism and performanceï¿½ (Manuscript prepared for submission)

Brittany L. Graf, Shaunak Kamat, Kuan Yu Cheong, Slavko Komarnytsky, Monica Driscoll, and Rong Di (2017) ï¿½Quinoa improves healthspan and enhances mitochondrial metabolism in Caenorhabditis elegansï¿½ (J Func Foods)

Mark Lucanic1, W. Todd Plummer1, Esteban Chen2, Jailynn Harke3,4, Dipa Bhaumik1, Brian Onken2, Anna L. Coleman-Hulbert3, Kathleen J. Dumas1, Suzhen Guo2, Erik Johnson3, Anna C. Foulger1, Christina Chang2, Anna B. Crist3, Michael P. Presley1, Jian Xue2, Christine A. Sedore3, Manish Chamoli1, Girish Harinath2, Michelle K. Chen3,
Suzanne Angeli1, Mary Anne Royal2, John H. Willis3, Daniel Edgar1, Shobhna Patel2, Elizabeth A. Chao1, Shaunak Kamat2, June Hope1, Carolina Ibanez-Ventoso2, Jason L. Kish1, Max Guo5, Gordon J. Lithgow1 * , Monica Driscoll2 * and Patrick C. Phillips3 * (2017) ï¿½Impact of genetic background and experimental reproducibility on identifying chemical compounds with robust longevity effectsï¿½ Nature Communications 8(14256).

Kamat S, Yeola S, Zhang W, Bianchi L, Driscoll M (2014) ï¿½NRA-2, a nicalin homolog, regulates neuronal death by controlling surface localization of toxic Caenorhabditis elegans DEG/ENaC channelsï¿½ J Biol Chem. 289(17)

Rikhy R, Kamat S, Ramagiri S, Sriram V, Krishnan KS (2007) ï¿½Mutations in dynamin-related protein result in gross changes in mitochondrial morphology and affect synaptic vesicle recycling at the Drosophila neuromuscular junction.ï¿½ Genes Brain Behav. 6(1):42-53.

PRESENTATIONS

20-hydroxyecdysone is a PPARα agonist that extends health span in C. elegans by a conserved mechanism that regulates energy metabolism. (CSHL meeting on Nuclear Receptors and Disease October 2014)

Modulation of mec-10(d)-induced necrosis by ER chaperone NRA-2 (19th International C. elegans meeting June 2013)
20-hydroxyecydsone prevents age-associated decline in C. elegans (19th International C. elegans meeting June 2013)

In vitro and in vivo investigation of modulators of hyperactivated ion channel induced necrosis in C. elegans (International C. elegans neurobiology and male meeting at Heidelberg, Germany June 2012)

Modulation of hyperactivated ion channel induced necrosis (Neuroscience Program Graduate Student Association symposium February 2012)

RESEARCH EXPERIENCE

Current research: A study on the impact of bioactive compounds from Withania somnifera and Azadiracht indica on longevity and healthspan in Caenorhabditis elegans

Revised: **11/18/2017**