Graduate Student (August 1993-February 2000)

University of Connecticut Health Center, Department of Biochemistry,

Farmington, CT.

Advisor: Dr. Peter Setlow

Thesis: Regulation of Bacillus stearothermophilus phosphoglycerate mutase by pH and Mn²⁺.

Undergraduate Research (September 1992 ĐMay 1993) Mount

or: Dr. Marilyn Pryor

s: The effect of thyroid blocks on beta -adrenergic receptor levels in adipose tissue (BAT) of cold-exposed Mus musculus.

istry intern (S ummer 1992) Mount

or: Dr. Mary Campbell

oped new experiments for general and inorganic college laboratory

HONORS

GRANTS National Institutes of Health AREA grant 2R15GM093366-02A1

HONORS September 2014 ĐMay 2019; \$285,500

AWARDS Project title: Adaptation of Streptomyces coelicolor to endogenous antibiotics mediated by a redox-sensing transcription factor.

Faculty Research Fund, Bryn Mawr College Mar. 2014-Aug. 2015; \$4000

National Institutes of Health AREA grant 1R15GM093366-01 April 2010 ĐAugust 2013; \$202,767

Project title: Regulation of Streptomyces differentiation and antibiotic production by SoxR

Edward G. Henderson Memorial Prize (2000) Outstanding Ph.D. thesis research in Biomedical Sciences University of Connecticut Health Center

Cum Laude with High Honors in Biochemistry (1993) Mount Holyoke College

Louisa Stevenson Prize (1992) Excellence in Chemistry, Mount Holyoke College

Sarah Williston Scholar (1991) Top 15 percent of class, Mount Holyoke College

Bernice MacLean Award (1990) Excellence in Biology, Mount Holyoke College

PUBLICATIONS * indicates undergraduate co-author; # indicates corresponding author

Chander, M, Lee, A.*, Vallery, T.*, Thandar, M.*, Jiang, Y.*, Hsu, L. 2015. Mechanisms of very long abortive transcript (VLAT) release during promoter escape. Biochemistry 54(50): 7393-408.

Naseer, N*, Shapiro, Joshua A., Chander, M *. 2014. RNA-Seq analysis reveals a six-gene SoxR regulon in Streptomyces coelicolor. PLOS One 9(8):e106181.

Sheplock, R.*, Recinos, D.A., Mackow, N.*, Dietrich, L.E.P.*, and Chander, M*. 2013. Species-specific residues calibrate SoxR sensitivity to redox active molecules. Mol. Microbiol

Chander, M., Setlow, B., and Setlow, P*. 1998

ABSTRACTS
POSTERS
& INVITED
LECTURES

June 2021: Attended New York Bacillus Interest Group Annual Meeting, New York University, NY (Virtual)

July 2020: Supposed to attend 2020 Gordon Research Conference on Microbial Stress Responses, S. Hadley, MA (cancelled due to Covid-19)

June 2019: Attended Regional Microbiology EducatorsÕ Network 16th Annual Teaching Conference, Saint JosephÕs University PA

July 2017: Attended 14

Cellular and Molecular Biosciences

June 2009: Attended Regional Microbiology EducatorsÕ Network 6th Annual Teaching Conference, Swarthmore, PA

July 2008: Attended Gordon Research conference on Microbial Stress Responses, S. Hadley, MA

June 2008: Attended Regional Microbiology EducatorsÕ Network 5th Annual Teaching Conference, Swarthmore, PA

July 2006: Attended Gordon Research conference on Microbial Stress Responses, S. Hadley, MA

University of Connecticut Medical School Facilitator Fall semester 1997 Co-taught a Comprehensive Medical Problem Solving class to first year medical students; evaluated and graded students.

Mount Holyoke College Fall 1990 DSpring 1993 Teaching assistant in undergraduate introductory and advanced Organic Chemistry laboratories

RESEARCH Holly Stewart, Õ08 STUDENTS Nicki Zelenski, Õ08 SUPERVISED AT Katherine Weng 009 BRYN MAWR Rica Dela Cruz Õ10

Yang Gao, Õ10

Sahitya Penumetcha Õ10

Natalie Mackow Õ12

Rebecca Sheplock Õ12

Jillian Galloway Õ13

Jessica Watkins Õ13

Nawar Naseer Õ14

Kaeun Bae Õ15

Fiona Gambanga Õ15

Han Wang, Õ15

Alice Bell Õ16

Shayoni Nag Õ16

Wenzhi Song Õ17

Hope Walsh 017

Ketki Chinov Ô18

Mariam Haider Ô18

Malini Sharma Ô18

Anran Huang Ô19

Mercette Ohlwiler HCÕ19

Genesis Perez-Melara Ô19

Emma Nikols Ô21

Emma Yoder Ô21

Lana Hwang Ô23

Anna Miller Ô23

Tillie Ripin â23

STUDENTS

EXTRAMURAL Mariam Haider* and Monica Chander (July 2017)

POSTERSBY Identification of the physiological activator of SoxR in Streptomyces coelicolor UNDERGRADUATE 13th Annual Regional Microbiology Educators Student Research Symposium, RESEARCH Saint Joseph Os University

Anran Huang* and Monica Chander (July 2017)

Investigating the protective function of SoxR in Streptomyces coelicolor 13th Annual Regional Microbiology Educators Student Research Symposium, Saint Josephos University

page 9

Malini Sharma* and Monica Chander (July 2017)

Determining the function of EcaB, a SoxR regulated monooxygenase in

Streptomyces coelicolor

13th Annual Regional Microbiology Educators Student Research Symposium,

Saint JosephÕs University

Alice Bell* and Monica Chander (April 2016)
Activation of SoxR in Streptomyces coelicolor: The actVI-orf2 mutant
Thomas Jefferson University Chapter of Sigma Xi Student Research Day

Wenzhi Song* and Monica Chander (April 2016) Identification of the SoxR activator in Streptomyces coelicolor utilizing null mutants of actVA-orf5 and actVA-orf6 in the actinorhodin biosynthetic pathway

Thomas Jefferson University Chapter of Sigma Xi Student Research Day

Kaeun Bae* and Monica Chander (October 2014)
Understanding how Streptomyces coelicolor avoids destruction by endogenously-produced antibiotics
17th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences, University of Maryland, Baltimore County

Nawar Naseer* and Monica Chander (November 2013) Identification of SoxR-dependent

Fall 2012: Member of Chemistry Search Committee for Biochemist

September 2009-2012: Council on Undergraduate Academic Standing

January 2012: Invited speaker at Career Roundtable Discussion for Ph.D. candidates sponsored by Eastern Pennsylvania Association for the American Society for Microbiology, Drexel University, PA

Fall 2011: Member of Biology Search Committee for Ecologist

Summer 2011: Member of Biology Search Committee for Interim Genomicist

April 2011: Panelist at HHMI-sponsored College Careers Symposium, Haverford College, PA

August 2009: First year student advising

Fall 2008: Member of Biology Search Committee for Computational Ecologist

August 2008: First year student advising

July 2008: Moderated Ethics in Science for BMC Summer Science Research Program

Fall 2007: Member of Biology Search Committee for Evolutionary Developmental Biologist