
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 – May 1993)
 Mount
 Advisor: Dr. Marilyn Pryor
 Title: The effect of thyroid blocks on beta -adrenergic receptor levels in
 adipose tissue (BAT) of cold-exposed *Mus musculus*.

Industry intern (Summer 1992)
 Mount
 Advisor: Dr. Mary Campbell
 Completed new experiments for general and inorganic college laboratory
 courses.

GRANTS National Institutes of Health AREA grant 2R15GM093366-02A1
HONORS September 2014 – May 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 – August 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 Educators' Network 16th Annual Teaching Conference, Saint Joseph's University PA

July 2017: Attended 14

Cellular and Molecular Biosciences

June 2009: Attended Regional Microbiology Educators' 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 Educators' 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 ÐSpring 1993
Teaching assistant in undergraduate introductory and advanced Organic
Chemistry laboratories

RESEARCH STUDENTS
SUPERVISED AT
BRYN MAWR

Holly Stewart, Ö08
Nicki Zelenski, Ö08
Katherine Weng Ö09
Rica Dela Cruz Ö10
Yang Gao, Ö10
Sahitya Penumetcha Ö10
Natalie Mackow Ö12
Rebecca Sheplock Ö12
Jillian Galloway Ö13
Jessica Watkins Ö13
Nawar Naseer Ö14
Kaeun Bae Ö15
Fiona Gambanga Ö15
Han Wang, Ö15
Alice Bell Ö16
Shayoni Nag Ö16
Wenzhi Song Ö17
Hope Walsh Ö17
Ketki Chinoy Ö18
Mariam Haider Ö18
Malini Sharma Ö18
Anran Huang Ö19
Mercette Ohlwiler HCÖ19
Genesis Perez-Melara Ö19
Emma Nikols Ö21
Emma Yoder Ö21
Lana Hwang Ö23
Anna Miller Ö23
Tillie Ripin â23

EXTRAMURAL POSTERSBY
UNDERGRADUATE RESEARCH STUDENTS

Mariam Haider* and Monica Chander (July 2017)
Identification of the physiological activator of SoxR in *Streptomyces coelicolor*
13th Annual Regional Microbiology Educators Student Research Symposium,
Saint Joseph's 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 Joseph's University

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 Joseph's 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 genes in *S. coelicolor* using RNA-Seq
Temple University School of Medicine

Nawar Naseer* and Monica Chander (July 2013)
Identification of SoxR -dependent genes in *S. coelicolor* using RNA-Seq
10th Annual Regional Microbiology Educators Student Research Symposium,
Swarthmore College

Han Wang* and Monica Chander (July 2013)
Function of an *Streptomyces coelicolor* (S. coelicolor) dependent gene
1283 | <https://doi.org/10.68249/09.58749-11> | 3/6

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