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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 Mn<sup>2+</sup>.

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 16<sup>th</sup> Annual Teaching Conference, Saint Joseph's University PA

July 2017: Attended 14

Cellular and Molecular Biosciences

June 2009: Attended Regional Microbiology Educators' Network 6<sup>th</sup> 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 5<sup>th</sup> 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*  
13<sup>th</sup> 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*  
13<sup>th</sup> 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  
13<sup>th</sup> 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  
17<sup>th</sup> 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 gene0.0022 44 actinorhodin dependent o.color





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