

Sherif I. Elshahawi, BPharm, MSc, PhD

Department of Biomedical and Pharmaceutical Sciences

Chapman University School of Pharmacy (CUSP)

Irvine, CA 92618

[\[PubMed Profile\]](#)[\[Google Scholar\]](#)[\[PDB Depositions\]](#)[\[GenBank Depositions\]](#)[\[LinkedIn Profile\]](#)[\[ORCID Profile\]](#)[\[Lab Website\]](#)[\[NIH Support\]](#)elshahawi@chapman.edu**EMPLOYMENT**

- **Chapman University, Irvine, California** 2024 – Present
Associate Professor, Department of Biomedical and Pharmaceutical Sciences, School of Pharmacy
- **Chapman University, Irvine, California** 2017 – 2024
Assistant Professor, Department of Biomedical and Pharmaceutical Sciences, School of Pharmacy
- **University of Kentucky, Lexington, Kentucky** 2012 – 2017
Post-doctoral Scholar, Division of Drug Discovery, Department of Pharmaceutical Sciences, College of Pharmacy
Postdoctoral Scholar, Center for Pharmaceutical Research and Innovation (CPRI), Natural Products Core and Repository, Natural Products Discovery program
Professor: Jon Thorson

EDUCATION

- **Oregon Health & Science University (OHSU), Portland, Oregon** 2006 – 2012
PhD, Biochemistry and Molecular Biology, School of Medicine
Professor Margo G. Haygood (Committee Chair)
Thesis: "Isolation and Biosynthesis of Bioactive Natural Products Produced by Marine Symbionts"
- **University of Mississippi, Oxford, Mississippi** 2004 – 2006
MSc, Pharmacognosy, School of Pharmacy
Professor Marc Slattery
Thesis: "Comparison of the HPLC/PDA Chemical Fingerprint of the Hybrid Soft Coral *Sinularia maxima* × *Sinularia polydactyla* and its Parents"
- **Cairo University, Egypt** 1995 – 2000
BSc, Faculty of Pharmacy, Very Good/ Honors

TEACHING EXPERIENCE

Department of Biomedical and Pharmaceutical Sciences, Chapman University School of pharmacy 2017 – Present

- PHRM 549 (Integrated Therapeutics: Pulmonology and COPD, PharmD students, team-based learning) 2018 – Present
- PHRM 555 (Integrated Therapeutics: Infectious Diseases II, PharmD students, team-based learning) 2018 – Present
- PHRM 642 (Biopharmaceuticals, PharmD students, team-based learning) 2018 – Present
- PHS 612/735 (Advanced Principles of Drug Action, MSc and PhD students, team-based learning) 2018 – Present
- Guest Lecturer: BCHM 320 Biotechnology & Bioengineering, 1 h Spring 2020, Spring 2021, Spring 2022

Senior Teaching Assistant at the Department of Pharmacognosy, Faculty of Pharmacy, Misr International University (MIU), Egypt 2000 – 2004

- Taught and demonstrated all the laboratory sections of the Pharmacognosy, Phytochemistry & Herbal Medicine courses for Freshman, Sophomore, Middle, Junior and Senior Pharmacy students.
- Trained and evaluated other teaching assistants in the department and coordinated between them and the Professors.
- Contributed to the course design and development.

RESEARCH INTERESTS

1. Biocatalysis and chemoenzymatic approaches
2. Drug discovery and development for infectious diseases
3. Natural product discovery and diversification
4. Identification and characterization of biologically active natural product gene clusters and biosynthetic enzymes

AWARDS AND FUNDING

1. Ongoing
 - a. Collaboration Grants, Chapman University, \$15,000 (06/01/24 – 05/31/25)
Developing Drug Leads to Inhibit *C. difficile* Bacterial Infection.
PI: Elshahawi S and Yamaki J
 - b. NIH NIAID R03 AI168826-01A1 (\$138,000) (11/04/22 – 10/31/25)
Mechanisms and In Vivo Activity of a Next Generation Daptomycin Antibiotic
The purpose of this grant is to study the mechanisms of action and activity in animal models of antibiotics.
PI: Elshahawi

2. Completed

- a. American Association of Colleges of Pharmacy New Investigator Award (\$10,000), 02/01/19 – 01/31/20, Generation of Lipopeptide Analogs Using Biocatalytic Methods.
The purpose of this grant is to generate more potent lipopeptide derivatives using natural products enzymatic and chemical methods
PI: Elshahawi
- b. Grant Writers Bootcamp, Chapman University (\$4,000) 09/20/21 – 09/19/22, Targeting *Clostridium difficile* Infections Using Enzymatically-Modified Daptomycin Derivatives
PI: Elshahawi
- c. Internal Fund, Chapman University (\$5,000) 06/15/2021 – 06/14/2022, Creating Engineered Proteins to Synthesize Next-Generation Antibiotics Targeting Resistant Bacteria
PI: Elshahawi
- d. Faculty Opportunity Fund Award, Chapman University (\$15,000) 06/01/2019 – 05/31/2021, Exploring California National Parks as a Source for Drug-Lead Discovery
The purpose of this grant is to cultivate soil bacteria from national parks and use them as sources for biologically-active natural products.
PI: Elshahawi
- e. Departmental Start-Up Grant, Chapman University School of Pharmacy (PI) 07/17/17 – 05/31/23, Research Start-Up Funds
The purpose of this grant is to set up the PI's laboratory and fund preliminary studies needed to be competitive for extramural research support.
PI: Elshahawi

HONORS

Teacher of the Year Award, 2019

PUBLICATIONS (in chronological order) [[Pubmed](#)]

1. Mupparapu N, Syed B, Nguyen DN, Vo TH, Trujillo A, **Elshahawi SI**. Selective late-stage functionalization of tryptophan-containing peptides to facilitate bioorthogonal tetrazine ligation. **Org. Lett.** 2024; 26(12): 2489-2494. PMID: 38498918.
2. Alexander AK, **Elshahawi SI**. Promiscuous enzymes for residue-specific peptide and protein late-stage functionalization. **ChemBioChem**. 2023; 24(17): e202300372. PMID: 37338668.
3. Aoun AR, Mupparapu N, Nguyen DN, Kim TH, Nguyen CM, Pan Z, **Elshahawi SI**. Structure-guided mutagenesis reveals the catalytic residue that controls the regiospecificity of C6-indole prenyltransferases. **ChemCatChem**. 2023; 15(11): e202300423. PMID: 37366495.

4. Mupparapu N, Brewster L, Ostrom KF, **Elshahawi SI**. Late-stage chemoenzymatic installation of hydroxy-bearing allyl moiety on the indole ring of tryptophan-containing peptides. *Chem Eur J*. 2022;28(20):e202104614. PMID: 35178791.
5. Clinger JA, Zhang Y, Liu Y, Miller MD, Hall RE, Van Lanen SG, Phillips GN Jr., Thorson JS, **Elshahawi SI**. Structure and function of a dual reductase-dehydratase enzyme system involved in *p*-terphenyl biosynthesis. *ACS Chem Biol*. 2021;16(12):2816-2824. PMID: 34763417.
6. Mupparapu N, Lin Y-HC, Kim TH, **Elshahawi SI**. Regiospecific synthesis of calcium-independent daptomycin antibiotics using a chemoenzymatic method. *Chem Eur J*. 2021;27(12):4176-4182. PMID: 33244806.
7. Wang X, **Elshahawi SI**, Ponomareva LV, Ye Q, Liu Y, Copley GC, Hower JC, Hatcher BE, Kharel MK, Van Lanen SG, She Q-B, Voss SR, Thorson JS, Shaaban KA. Structure determination, functional characterization and biosynthetic implications of nybomycin metabolites from a mining reclamation site-associated *Streptomyces*. *J Nat Prod*. 2019 82(12):3469-3476.
8. Wang X, Abbas M, Zhang Y, **Elshahawi SI**, Ponomareva LV, Cui Z, Van Lanen SG, Sajid I, Voss SR, Shaaban KA, Thorson JS. Baraphenazines A-G, divergent fused phenazine-based metabolites from a Himalayan *Streptomyces*. *J Nat Prod*. 2019, 82(6):1686-1693.
9. Abbas M, **Elshahawi SI**, Wang X, Ponomareva LV, Sajid I, Shaaban KA, Thorson JS. Puromycins B–E, naturally occurring amino-nucleosides produced by the Himalayan isolate *Streptomyces* sp. PU-14G. *J. Nat. Prod.* 2018, 81(11): 2560–2566.
10. Wang X, **Elshahawi SI**, Cai W, Zhang Y, Ponomareva LV, Chen X, Copley GC, Hower JC, Zhan CG, Parkin S, Rohr J, Van Lanen SG, Shaaban KA, Thorson JS. Bi- and tetracyclic spirotetronates from the coal mine fire isolate *Streptomyces* sp. LC-6-2. *J Nat Prod*. 2017, 80(4):1141-1149.
11. **Elshahawi SI**, Cao C, Shaaban KA, Ponomareva LV, Subramanian T, Farman ML, Spielmann HP, Phillips GN Jr., Thorson JS, Singh S. Structure and specificity of a permissive bacterial C-prenyltransferase. *Nat. Chem Biol*. 2017, 13(4):366-368.
12. Wang X, Zhang Y, Ponomareva LV, Qiu Q, Woodcock R, **Elshahawi SI**, Chen X, Zhou Z, Hatcher BE, Hower JC, Zhan CG, Parkin S, Kharel MK, Voss SR, Shaaban KA, Thorson JS. Mccreamycins A-D, geldanamycin-derived cyclopentenone macrolactams from an Eastern Kentucky abandoned coal mine microbe. *Angew Chem Int Ed Engl*. 2017, 56(11):2994-2998.
13. Zhang J, Hughes RR, Saunders MA, **Elshahawi SI**, Ponomareva LV, Zhang Y, Winchester SR, Scott SA, Sunkara M, Morris AJ, Prendergast MA, Shaaban KA, Thorson JS. Identification of neuroprotective spoxazomicin and oxachelin glycosides via chemoenzymatic glycosyl-scanning. *J Nat Prod*. 2017, 80(1):12-18.
14. Shaaban KA, Saunders MA, Zhang Y, Tran T, **Elshahawi SI**, Ponomareva LV, Wang X, Zhang J, Copley GC, Sunkara M, Kharel MK, Morris AJ, Hower JC, Tremblay MS, Prendergast MA, Thorson JS. Spoxazomicin D and oxachelin C, potent neuroprotective carboxamides from the Appalachian coal fire-associated isolate *Streptomyces* sp. RM-14-6. *J Nat Prod*. 2017, 80(1):2-11.
15. Wenlong C, Wang X, **Elshahawi SI**, Ponomareva LV, Liu X, McErlean M, Cui Z, Arlinghaus A, Thorson JS, Van Lanen SG. Antibacterial and cytotoxic actinomycins Y6-Y9 from *Streptomyces* sp. strain Gö-GS12. *J Nat Prod*. 2016, 79(10):2731-2739.
16. Shaaban KA, **Elshahawi SI**, Wang X, Horn J, Kharel MK, Leggas M, Thorson JS. Cytotoxic indolocarbazoles from *Actinomadura melliaura* ATCC 39691. *J Nat Prod*. 2015, 78(7):1723-1729.

17. Wang X, Reynolds AR, **Elshahawi SI**, Shaaban KA, Ponomareva LV, Saunders MA, Elgumati IS, Zhang Y, Copley GC, Hower JC, Sunkara M, Morris AJ, Kharel MK, Van Lanen SG, Prendergast MA, Thorson JS. Terfestatins B and C, new p-terphenyl glycosides produced by *Streptomyces* sp. RM-5-8. **Org Lett.** 2015, 17(11):2796-2799.
18. **Elshahawi SI***, Shaaban KA*, Kharel MK, Thorson JS. A comprehensive review of glycosylated bacterial natural products. **Chem Soc Rev.** 2015, 44(21):7591-7697.
19. **Elshahawi SI**, Ramelot TA, Seetharaman J, Chen J, Singh S, Yang Y, Pederson K, Kharel MK, Xiao R, Lew S, Yennamalli RM, Miller MD, Wang F, Tong L, Montelione GT, Kennedy MA, Bingman CA, Zhu H, Phillips GN Jr, Thorson JS. Structure-guided functional characterization of enediynes self-sacrifice resistance proteins, CalU16 and CalU19. **ACS Chem Biol.** 2014, 9(10):2347-2358.
20. Wang X, Shaaban KA, **Elshahawi SI**, Ponomareva LV, Sunkara M, Copley GC, Hower JC, Morris AJ, Kharel MK, Thorson JS. Mullinamides A and B, new cyclopeptides produced by the Ruth Mullins coal mine fire isolate *Streptomyces* sp. RM-27-46. **J Antibiot.** 2014, 67(8):571-575.
21. Wang X, **Elshahawi SI**, Shaaban KA, Fang L, Ponomareva LV, Zhang Y, Copley GC, Hower JC, Zhan C-G, Kharel MK, Thorson JS. Ruthmycin, a new tetracyclic polyketide from *Streptomyces* sp. RM-4-15. **Org Lett.** 2014, 16(2):456-459.
22. Shaaban KA, Singh S, **Elshahawi SI**, Wang X, Ponomareva LV, Sunkara M, Copley GC, Hower JC, Morris AJ, Kharel MK, Thorson JS. The native production of the sesquiterpene isopterocarpolone by *Streptomyces* sp. RM-14-6. **Nat Prod Res.** 2014, 28(5):337-339.
23. Shaaban KA, Singh S, **Elshahawi SI**, Wang X, Ponomareva LV, Sunkara M, Copley GC, Hower JC, Morris AJ, Kharel MK, Thorson JS. Venturicidin C, a new 20-membered macrolide produced by *Streptomyces* sp. TS-2-2. **J Antibiot.** 2013, 67(3):223-230.
24. Shaaban KA, Wang X, **Elshahawi SI**, Ponomareva LV, Sunkara M, Copley GC, Hower JC, Morris AJ, Kharel MK, Thorson JS. Herbimycins D-F, ansamycin analogues from *Streptomyces* sp. RM-7-15. **J Nat Prod.** 2013, 76(9):1619-1626.
25. Wang X, Shaaban KA, **Elshahawi SI**, Ponomareva LV, Sunkara M, Zhang Y, Copley GC, Hower JC, Morris AJ, Kharel MK, Thorson JS. Frenolicins C-G, pyranonaphthoquinones from *Streptomyces* sp. RM-4-15. **J Nat Prod.** 2013, 76(8):1441-1447.
26. **Elshahawi SI**, Trindade-Silva AE, Hanora A, Han AW, Flores MS, Vizzoni V, Schrago CG, Soares CA, Concepcion GP, Distel DL, Schmidt EW, Haygood MG. Boronated tartrolon antibiotic produced by symbiotic cellulose-degrading bacteria in shipworm gills. **Proc Natl Acad Sci U S A (PNAS).** 2013, 110(4):E295-304.
27. Donia M, Fricke WF, Partensky F, Cox J, **Elshahawi SI**, White J, Phillippy A, Schatz M, Piel J, Haygood M, Ravel J, Schmidt EW. Complex microbiome underlying secondary and primary metabolism in the tunicate-*Prochloron* symbiosis. **Proc Natl Acad Sci U S A (PNAS).** 2011, 108(51):E1423-E1432.
28. Yang JC, Madupu R, Durkin AS, Ekborg NA, Pedamallu CS, Hostetler JB, Radune D, Toms BS, Henrissat B, Coutinho PM, Schwarz S, Field L, Trindade-Silva AE, Soares CA, **Elshahawi S**, Hanora A, Schmidt EW, Haygood MG, Posfai J, Benner J, Madinger C, Nove J, Anton B, Chaudhary K, Foster J, Holman A, Kumar S, Lessard PA, Luyten YA, Slatko B, Wood N, Wu B, Teplitski M, Mougous JD, Ward N, Eisen JA, Badger JH, Distel DL. The complete genome of *Teredinibacter turnerae* T7901: an intracellular

endosymbiont of marine wood-boring bivalves (shipworms). *PLoS One*. 2009, 4(7):E6085.

CONFERENCE PRESENTATIONS (Only those I presented myself are stated)

- **Elshahawi SI**. “Selective C–H Activation of Tryptophan-Containing Peptides via Indole Prenyltransferase Enzyme Catalysis”. American Chemical Society (ACS) Spring 2025, Oral speaker meeting, March 2025, San Diego, CA
- **Elshahawi SI**. “Functionalization of Tryptophan-Containing Peptides Using Biocatalysis”. American Chemical Society (ACS) Spring 2023. Oral speaker, March 2023, Indianapolis, IN
- **Elshahawi SI**, Late-Stage Functionalization of Peptides Using a Chemoenzymatic Platform. American Chemical Society (ACS) Spring 2022. Oral speaker, March 2022, San Diego, CA
- **Elshahawi SI**. “Late-Stage Chemoenzymatic Functionalization of an FDA-Approved Antibiotic”. Applied Biocatalysis Summit. November 2021. Invited oral speaker
- Munjy L, **Elshahawi SI**, Ostrom RS. “Integrating the Basic and Clinical Sciences in the PharmD Curriculum to Increase Critical Thinking Skill Sets” MEHP Decennial Virtual Conference, John Hopkins University School of Education. Oral speaker, July 2021
- Mupparapu N, Lin Y-H C, Kim TH, **Elshahawi SI**. “Enzymatic Synthesis of Calcium-Independent Superior Daptomycin Analogs”. ACS National Spring Meeting. April 2021
- **Elshahawi SI**. "Enzymatic Synthesis of Daptomycin Analogs to Combat Resistant Bacteria." American Association of Colleges of Pharmacy, Chemistry Section. Invited oral speaker. Feb 2021
- Mupparapu N, Lin YH, Kim TH, Brewster L, **Elshahawi SI**. Specific Modifications of Tryptophan-Containing Peptides Using a Chemoenzymatic Platform. Applied Biocatalysis Summit 2020. November 2020
- **Elshahawi SI**. American Association of Colleges of Pharmacy (AACP) Virtual Meeting. “Generation of Lipopeptide Analogs Using Biocatalytic Methods”. July 2020
- **Elshahawi SI**, Mupparapu N, Lin Y-HC. Generation of Lipopeptide Analogs Using Biocatalytic Methods. Part of the "New Investigator Award Recipient Poster Abstracts Presented at the 121st Virtual Annual Meeting of the American Association of Colleges of Pharmacy, July 13-31, 2020". American Journal of Pharmaceutical Education June 2020, 84 (6) ajpe8231
- **Elshahawi SI**. American Association of Colleges of Pharmacy (AACP) Chemistry Section Business Virtual Meeting. “Generation of Lipopeptide Analogs Using Biocatalytic Methods”. June 2020
- **Elshahawi SI**. Society for Industrial Microbiology and Biotechnology; 3rd International Conference on Natural Product Discovery and Development in the Genomic Era. San Diego, CA. “Specific Modification of Peptides Using Biocatalytic Tools” Jan 2020
- **Elshahawi SI**. Society for Industrial Microbiology and Biotechnology Annual Meeting. Chicago, IL. “Selective Prenyltransferase Enzymes for the Development of Biologically-Active Molecules” August 2018

SCIENTIFIC SOCIETIES

- American Society of Pharmacognosy (ASP)
- American Chemical Society (ACS)

- American Association of Colleges of Pharmacy (AACP)

MEDIA COVERAGE

- R03 Grant Recipient Dr. Sherif Elshahawi
<https://blogs.chapman.edu/pharmacy/2022/12/07/r03-grant-receipient-dr-sherif-elshahawi/>
- Quoted in an interview with AACP Connect's Chemistry Section: "Chemistry Section Member Spotlight: New Investigator Awardee." February 24, 2019.
- Symbiotic bacteria administer novel antibiotics
<http://www.nature.com/nmiddleeast/2013/130114/full/nmiddleeast.2013.5.html>
- Could the next new cancer drug come from Kentucky coal mines?
<http://medicalxpress.com/news/2013-11-cancer-drug-kentucky-coal.html>
- American Society of Pharmacognosy student poster award winner
http://www.ohsu.edu/xd/education/schools/school-of-medicine/departments/basic-science-departments/environmental-biomolecular-systems/news/asp_2011_student_poster_winner.cfm
- Microbes Rule the Waves
<http://biol3309-2012.blogspot.com/2013/03/boronated-tartrolon-antibiotic-produced.html>
- A team science publication resulting from the College's Kentucky coal mine research is the college's monthly highlight
<http://pharmacy.mc.uky.edu/display.php?id=1156>
- Bacterium from coal mine fire could aid drug targeting
<http://news.rice.edu/2017/02/06/bacterium-from-coal-mine-fire-could-aid-drug-targeting-2/>
- Mining for new cancer fighters. A microbe found in an abandoned Kentucky coal mine produces novel compounds
<http://cen.acs.org/articles/95/i7/Mining-new-cancer-fighters.html?type=paidArticleContent>
- Pharmaceuticals from a coal mine?
<https://www.sciencedaily.com/releases/2017/02/170206130415.htm>

PERSONNEL MENTORED

Students and Postdoctoral have conducted research under my mentorship. My responsibilities included helping them to design, conduct, and analyze hypothesis-driven research projects. This included ensuring proficiency with common and specific lab techniques and protocols and helping to structure individual research presentations. They made/ are making sufficient contributions to warrant authorship on peer-reviewed research articles and/or oral or poster presentations.

Postdoctoral Scholar:

- Nagaraju Mupparapu, Postdoctoral Scholar "Chemoenzymatic synthesis of biologically active compounds" Aug. 2018 – May 2022

PhD Student:

- Diem Nguyen, PhD Student Aug. 2021 – Present

MSc Student:

- Javier Amaya, MSc student "Discovery of anti-Gram-negative natural products from unexplored soil bacteria" Oct. 2024 – Present

- Ashley Alexander, MSc student “Enzyme engineering to alter the properties of indole prenyltransferases” Sept. 2022 – Present
- Ahmed Aoun, MSc Student “Altering the regiospecificity of C6 indole prenyltransferase enzymes towards drug development” Nov. 2017 – July 2019

PharmD Students:

- Stephanie Ly, PharmD Student, Class of 2026 “Genotype identification of bacteria isolated from California national parks” Jan 2024 – April 2025
- Alice Oum, PharmD Student, Class of 2026 “Secondary metabolite reservoir of terrestrial microorganisms” Jan 2024 – April 2025
- Aws Al-Hashimi, PharmD Student, Class of 2025 “Cytotoxicity of bacterial crude extracts from the California national parks” May 2023 – Aug 2024
- Angelica Trujillo, PharmD Student, Class of 2024 “Chemoenzymatic tagging of peptides” May 2022 – Aug 2023
- Thao Vo, PharmD Student, Class of 2024 “Chemoenzymatic derivatizations of peptides” May 2022 – Aug 2023
- Rayann Hsieh, PharmD Student, Class of 2024 “Secondary metabolite reservoir of terrestrial microorganisms” May 2022 – Aug 2023
- Alan Thammavongsa, PharmD Student, Class of 2024 “Secondary metabolite reservoir of terrestrial microorganisms” Jan. 2022 – Aug 2023
- Marina Barsoum, PharmD Student, Class of 2023 “Engineering of an efficient biocatalyst” Jan. 2022 – April 2022
- Emily Gonzalez, PharmD Student, Class of 2023 “Secondary metabolite reservoir of terrestrial microorganisms” May 2021 – Oct. 2021
- Kunal Patel, PharmD Student, Class of 2022 “Virtual screening of natural products against Sars-Cov-2 targets” May 2020 – Dec. 2021
- Engy Beaway, PharmD Student, Class of 2022 “A collection of prenylated natural product compounds” May 2020 – Aug. 2021
- Nikita Dave, PharmD Student, Class of 2024, “Protein purification for drug diversification” Dec. 2019 – Jan. 2020
- Lamya Al-Saleh, PharmD Student, Class of 2023 “Protein purification for drug diversification” May 2019 – Aug. 2019
- Tiffany Nguyen, PharmD Student, Class of 2023 “Protein purification for drug diversification”, May 2019 – Aug. 2019
- Zhengfeiyue (Chelsea) Pan, PharmD Student, Class of 2023 “An amino acid switch increases the promiscuity of a carbon-carbon bond forming biocatalyst”. *This led her to winning Best Poster Award in the Southern California Conferences for Undergraduate Research (SCCUR)* May 2019 – Jan. 2020
- Yu-Hsin (Cindy) Lin, PharmD Student, Class of 2021 “Secondary metabolite reservoir of terrestrial microorganisms” Jan. 2019 – Aug. 2020
- Christopher Nguyen, PharmD Student, Class of 2022 “Protein purification for drug diversification” *Chris received summer fellowship at Takeda and a Post-doctoral fellowship with Biogen and Massachusetts College of Pharmacy and Health Sciences in Therapeutics Development in 2022.* Aug. 2018 – Feb. 2020

- Michelle Le, PharmD Student, Class of 2022 “Large scale protein overproduction for drug diversification”. *Michelle received the Pharmacovigilance and Patient Safety fellowship in partnership with Purdue University, AbbVie, and the FDA* Aug. 2018 – Dec. 2018
- Tae Ho Kim, PharmD Student, Class of 2020 “Production and purification of Prenyltransferases” May 2018 – May 2020

Undergraduate Students:

- Mariam Elrabat, Undergraduate student “Purification of an enzymatically-modified peptide using HPLC” Jan. 2023 – Feb. 2025
- Anthony Luis, Undergraduate Student, “Biocatalytic synthesis of an antimicrobial compound” Dec. 2020 – May 2021
- Ahmad Alrusayes, Undergraduate Student, “Protein engineering for drug development” Oct. 2019 – May 2020
- Brian Kim, Undergraduate Student, “Secondary metabolite reservoir of terrestrial microorganisms” Sept. 2019 – May 2020
- Lauren Brewster, Undergraduate Student, “Protein purification for drug diversification” Aug. 2019 – May 2020
- Katrina Ostrom, Undergraduate Student, “High-throughput screening of biocatalytic drug conversion” June 2019 – Aug. 2019

Rotation Students: A few PhD or MSc students have spent a period of 5 weeks as rotation

- Kate Lozada, MSc student, Fall 2020
- Ryan Stueber, MSc student, Fall 2019

Thesis Committee Member:

- Srishti Jha, MSc student, Fall 2023 – Present
- Jane Yao, PhD student, Fall 2021 – Present
- Mamta Iyer, PhD student, Fall 2020 – Present
- Elmira Ziaei, PhD student, Spring 2018 – Spring 2021
- Mashid Amini, MSc student, Fall 2017 – Summer 2019
- Saud Alshammari, MSc student, Fall 2017 – Spring 2019

CONFERENCES AND WORKSHOPS RELATED TO TEACHING AND STUDENT SUCCESS AND MENTORSHIP

- Student Success Institute: Advancing a Culture Where Everyone Can Thrive, American Association of Colleges of Pharmacy, October, 2024
- Conference on Innovative Teaching and Student Success, Center for Excellence in Teaching and Learning, Chapman University, August 2024
- Entering Mentoring Workshop, developed by the Center for the Improvement of Mentored Experiences in Research at the University of Wisconsin Madison, Schmid College of Science and Technology at Chapman University, May 2024
- Use of Artificial Intelligence (AI) in Pharmacy Education, American Association of Colleges of Pharmacy, April 2024
- January Conference on Teaching (JanCon), Institute for Excellence in Teaching and Learning, Chapman University, January 2020

- First Year Faculty Experience (FYFE), Institute for Excellence in Teaching and Learning, Chapman University, March 2018
- First Year Faculty Experience (FYFE), Institute for Excellence in Teaching and Learning, Chapman University, November 2017

SERVICE

University Service:

- Chair and member, Academic Affairs Committee, Aug. 2024 – Present
- Member, Academic Affairs Committee, Aug. 2018 – July 2024
- Member, Academic Progression and Integrity, Aug. 2018 – Aug. 2021
- Member, Science Committee, Aug. 2018 – Aug. 2022
- Member, ACPE Self-Study Committee, Curriculum, Aug. 2019 – July 2020
- Member, ACPE Self-Study Committee, Curriculum, Aug. 2023 – July 2024

External Service:

Ad Hoc Reviewer for funding agencies proposals

- 2024: NIH ad-hoc reviewer, Centers of Excellence for Translational Research U19 2025/01 ZAI1 CAB-M (J1) 1
- 2024: NIH ad-hoc reviewer, Small Business: Drug Discovery and Development; MBBC-G (10) B Study Section
- 2022: NIH ad-hoc reviewer, Synthetic and Biological Chemistry B Study Section
- 2022: Auckland Medical Research Foundation
- 2021: NIA-American Association of Colleges of Pharmacy (AACP), Chemistry Section
- 2020: NIA-American Association of Colleges of Pharmacy (AACP), Chemistry Section
- 2019: NIA-American Association of Colleges of Pharmacy (AACP), Chemistry Section

Ad Hoc Reviewer for Journals:

- Journal of Natural Products
- ChemCatChem
- ACS Omega
- ChemBioChem
- Studies in Natural Products Chemistry (Bioactive Natural Products)
- Scientific Reports
- Antibiotics
- Journal of Industrial Microbiology and Biotechnology
- Marine Drugs
- Research in Microbiology
- RSC Advances
- Naunyn-Schmiedeberg's Archives of Pharmacology
- Molecules
- PLOS One
- Journal of Fungi

- BioMed Research International
- Chemistry and Biodiversity