

Gianna De Jacimo-McGough

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Technical Skills

- Spectroscopy: NMR (1H, 13C), IR spectroscopy (liquid and solid), UV-VIS, mass spectroscopy, Nanodrop, ICP-OES
- Chromatography techniques: TLC, HIC, anion-exchange FPLC, immunoaffinity FPLC, column, SEC
- Microbiology skills: bacterial cell culture, transformation, gram staining, LAL assay, Bradford assay, solution preparation, western blotting, enzyme assays, Easy-Titer
- Chemistry skills: titration, distillation, vacuum filtration, liquid-liquid extraction, Rotovap operation, multi-step organic synthesis, inert atmosphere glove box operation
- Nucleic acid technology: PCR, Sanger sequencing, agarose gel electrophoresis, DNA isolation
- Protein purification skills: freeze thaw extraction, sonication, salt fractionation, dialysis, SDS-PAGE, ultrafiltration, media clarification
- Bioprinting (droplet- and extrusion-based), microscopy (light, inverted, stereo)
- Certifications: AutoCAD, Inventor

Research Experience

University of Texas at Austin: June 2023 – Present

Rosales and Kumar Lab Groups

- Synthesizing polymeric hydrogels functionalized with lanthanide-binding peptides.
- Utilizing 3D bioprinting to create microbeads and hydrogel scaffolding.
- Developing a separation system for rare earth metal ions.

University of Texas at Austin, Austin Community College: January 2023 – Present

Amorde and Roberts Lab Groups

- Synthesizing a library of fluorescent molecules – diketofurofurans and diketopyrrolopyrroles- that have potential utility for solar energy optimization.
- Improving the yield and purification process of synthesized organic compounds.

Work Experience

Austin Community College: August 2022 – December 2022

Supplemental Instruction Leader

- Instructed secondary students in face-to-face settings and via remote learning platforms.
- Provided subject-specific support to students both one-on-one and in group sessions.
- Created a warm and welcoming tutoring environment conducive to learning.
- Coached students on academic concepts and explained terminology in easy-to-understand language.

- Taught students study skills, note-taking skills, and test-taking strategies.
- Fostered positive and productive student-to-student interaction with the goal of collaborative study.

Covert Auto: July 2019 – August 2022

Receptionist

- Operated telephone switchboard to answer, screen, or forward calls, providing information, taking messages, or scheduling appointments.
- Greeted persons entering the establishment, determined nature and purpose of visit, and directed or escorted them to specific destinations.
- Filed and maintained records.
- Provided information about establishment, such as location of departments and offices, employees within the organization, or services provided.
- Collected, sorted, distributed or prepared mail, messages, or courier deliveries.

U.S. Air Force, Air National Guard: June 2018 – November 2019

Civil Engineer

- Provided technical support and guidance to sections on standards and code requirements.
- Developed engineered solutions to technical problems.
- Completed paperwork and files with accurate and complete information.

Education

Austin Community College: August 2019 – Present

Biotechnology Advanced Technical Certificate, Spring 2024

Associate of Science in Engineering, Fall 2022

Stony Point High School: August 2015 – June 2018

Obtained Diploma – Distinguished Level of Achievement

Top Ten Graduate