

Skye Lane Goetz

Biomedical Research Scientist (AI & Data)

+1 (909) 497-9907
skye.lane.goetz@gmail.com
skye-lane-goetz
SkyeAv
0009-0007-8373-2352

Work Experience

Institute for Systems Biology (ISB)

Research Associate (Data Science)

Placeholder

Seattle, WA

Nov 2024 - Present

Institute for Systems Biology (ISB)

Data Science Intern

Placeholder

Seattle, WA

Aug 2024 - Sep 2024

Institute for Systems Biology (ISB)

Summer Intern/Trainee (NSF REU)

Placeholder

Seattle, WA

Jun 2024 - Aug 2024

Haynes-Zigler Lab (CalPoly)

Student Researcher (Computational Subgroup)

Placeholder

San Luis Obispo, CA

Sep 2024 - Nov 2024

CalPoly Water-Energy Sustainability Training Team (WESTT)

Student Researcher (PHOS and CRIAS projects)

Placeholder

San Luis Obispo, CA

Jan 2024 - Jun 2024

Compass Group USA

Food Service Worker

Placeholder

San Luis Obispo, CA

Jan 2024 - Jun 2024

General Polymer Solutions (GPS Polymers) LLC

Customer Fulfillment and Logistics

Placeholder

Upland, CA

Aug 2021 - Sep 2023

US Soccer Federation

US Soccer Grassroots Referee (Grade 8)

Placeholder

Upland, CA

Jun 2021 - Sep 2023

Kessen Star Spinners

Founder, President, and CEO

Placeholder

Upland, CA

Dec 2015 - Sep 2016

Projects

Placeholder

Placeholder

Placeholder

Placeholder

Placeholder - Placeholder

Skills

Technical Skills

- Languages:** Python, Julia, Nim, Clojure, SQL, Shell Scripting, LaTeX
- Data Science:** Pandas, Numpy, Polars, SciPy, Matplotlib, Seaborn
- ML/DL:** PyTorch, Scikit-learn, XGBoost, Imblearn
- LLMs & Weak Supervision:** HuggingFace Transformers, PEFT, LoRA, LangChain, Instructor, Snorkel, UWS
- Knowledge Graphs:** Ontology, Knowledge Curation, KGX, Centrality Analyses, Graph Neural Networks
- NLP:** spaCy, NLTK, Embeddings, Text Classification
- Tooling:** Docker, Conda, Poetry, Setuptools, Nix, Slurm

- Domain Knowledge**
- **Microbiome & Multi-omics Data:** Statistical and Computational Analysis of Datasets, Integration of Heterogeneous Biological Data
 - **Computational Chemistry:** Cheminformatics, Quantum Chemistry with ORCA, TDDFT Excited-state Calculations, RDKit, Molecular Modeling
 - **Spectroscopy:** FTIR, ¹H NMR, ¹³C NMR, DEPT
 - **Environmental Engineering:** Algae-based Biofuels and Biofertilizers, Wastewater Treatment Applications

- Additional Competencies**
- **Business & Entrepreneurship:** Early-stage Venture Creation, Product Marketing, Small-scale Operations
 - **Sales & Operations:** Door-to-door Sales Experience, SPIN Selling, Logistics and Client Delivery
 - **Communication & Mentorship:** Team Mentorship, Scientific Presentations, Public Speaking, Conference Talks
 - **Agribusiness:** Academic Foundation (6 months) prior to Biochemistry Transition

Publications

[1] Gwênlyn Glusman Skye L. Goetz, Amy K. Glen. MicrobiomeKG: Bridging Microbiome Research and Host Health Through Knowledge Graphs. *Frontiers in Systems Biology*, 2025 (Accepted).

[2] Sergio E. Baranzini Chris Bizon Matthew Brush William Byrd Lawrence Chung Andrew Crouse Eric Deutsch Michel Dumontier Aleksandra Foksinska Jennifer Hadlock Kaiwen He Sui Huang Robert Hubal Gregory M. Hyde Sharat Israni Kelyne Kenmogne David Koslicki Jana Dorfman Marcette Ewy A. Mathe Abrar Mesbah Sierra A. T. Moxon Christopher J. Mungall John Osborne Carrie Pasfield Guangrong Qin Stephen A. Ramsey Justin Reese Jared C. Roach Reese Rose Karthik Soman Andrew I. Su Casey Ta Gaurav Vaidya Rosina Weber Qi Wei Mark Williams Chunlei Wu Colleen Xu Chase Yakaboski The Biomedical Data Translator Consortium Karamarie Fecho, Gwênlyn Glusman. Announcing the Biomedical Data Translator: Initial Public Release. *Clinical and Translational Science*, 2025.

[3] Qi Wei Jared C. Roach Arpita Joshi Skye L. Goetz Sierra T. Moxon Matthew H. Brush Colleen Xu Yao Yao Amy K. Glen Evan D. Morris Alexandra Ralevski Ryan Roper Basazin Belhu Yue Zhang Ilya Shmulevich Jennifer Hadlock Gwênlyn Glusman Guangrong Qin, Kamileh Narsinh. Generating Biomedical Knowledge Graphs from Knowledge Bases, Registries, and Multiomic Data. *bioRxiv*, 2024.

Education	
California State Polytechnic University (CalPoly) <i>BS Biochemistry</i> ○ Placeholder	San Luis Obispo, CA <i>Sep 2023 - Present</i>
Upland High School <i>High School Diploma</i> ○ Placeholder	Upland, CA <i>Aug 2019 - Jun 2023</i>