Isabelle Engelberg Amick

isabelle.amick@gmail.com | Greensboro, NC
www.linkedin.com/in/IsabelleAmick

Experienced Data Scientist with a background in Pharma/Life Sciences. Skilled in Python, SQL, data analysis and machine learning, as well as various drug discovery components including computational chemistry. Ph.D. in Pharmaceutical Sciences from the University of North Carolina at Chapel Hill. MS in Data Science from the University of California, Berkeley.

EDUCATION

University of California, Berkeley, Berkeley, CA — Dec 2023
Master of Information and Data Science (MIDS). GPA: 4.00/4.00

University of North Carolina at Chapel Hill, Chapel Hill, NC — Dec 2021
Ph.D. in Pharmaceutical Sciences. GPA: N/A

Johns Hopkins University, Baltimore, MD — May 2017
B.A. in Chemistry with Minor in Mathematics. GPA: 3.98/4.00

SKILLS & CERTIFICATIONS

Technical Skills: SQL, Python, Tableau, ETL, Data Analysis, Machine Learning, Data Visualization, Git, AWS
Certifications: Data Analyst Professional (Data Camp, Mar 2023)

WORK EXPERIENCE

ClosedLoop — Austin, TX (Remote)
Lead Data Scientist — Feb 2023 – Present

- Creating predictive models for patient outcomes using claims data and working directly with clients to implement models
- Designing high-complexity ELT for ingestion of claims data and additional information (SQL)
- Increased client revenue 2X through successful relationships with key stakeholders and delivery of high-quality work

PostEra — Cambridge, MA (Remote)
Computational Chemist — Sept 2022 – Feb 2023

- Led a large, collaborative drug discovery campaign for a SARS-CoV-2 antiviral target
- Leveraged computational chemistry and data science to create and triage large chemical libraries for hit discovery
- Optimized company-wide medicinal chemistry workflows through data analytics

Astrix Technology Group — Red Bank, NJ (Remote)
Informatics Engineer — Mar 2022 – Sept 2022

- Acted as a Business Analyst for a large-scale rollout of PerkinElmer VitroVivo at a global pharmaceutical company
- Turned SME interviews into actionable business requirements for application development, security, and implementation

Zifo RnD Solutions — Cambridge, MA (Remote)
Business Analyst — Oct 2021 – Mar 2022

- Supported the implementation, testing, and validation of a new Dotmatics LIMS system for a biotechnology company
- Planned, organized, and led training on the Dotmatics system for over 50 scientists across the teams of Chemistry, Biology, Quality Control, and Compound Management

University of North Carolina, Center for Integrative Chemical Biology and Drug Discovery — Chapel Hill, NC
Graduate Researcher — Aug 2017 – Dec 2021

- Discovered and characterized the first synthetic ligand for plant homeodomain finger proteins 1/19 (PHF1/19) using peptidomimetic synthesis and rational design
- Optimized and analyzed the effects of a small molecule chemical probe for PHF1/19 through medicinal chemistry, ligand- and structure-based modeling, biophysical screening, and cellular assays
- Taught a graduate-level course on Computational Chemistry and Predictive Modeling

PUBLICATIONS

Lamb, K. N.; Dishman, S. N.; Waybright, J. M.; Engelberg, I. A.; Rectenwald, J. M.; Norris-Drouin, J. L.; Cholensky, S. H.; Pearce, K. H.; James, L. I.; Frye, S. V. Discovery of Potent Peptidomimetic Antagonists for Heterochromatin Protein 1 Family Proteins. *ACS Omega*, **2022**, *7* (1), 716–732. https://doi.org/10.1021/acsomega.1c05381.

Engelberg, I. A.; Liu, J.; Norris-Drouin, J. L.; Cholensky, S. H.; Ottavi, S. A.; Frye, S. V.; Kutateladze, T. G.; James, L. I. Discovery of an H3K36me3-Derived Peptidomimetic Ligand with Enhanced Affinity for Plant Homeodomain Finger Protein 1 (PHF1). *J. Med. Chem.*, **2021**. https://doi.org/10.1021/acs.jmedchem.1c00430.

Engelberg, I. A.; Foley, C. A.; James, L. I.; Frye, S. V. Improved Methods for Targeting Epigenetic Reader Domains of Acetylated and Methylated Lysine. *Current Opinion in Chemical Biology*. Elsevier Ltd August 1, 2021, pp 132–144. https://doi.org/10.1016/j.cbpa.2021.03.002.

Suh, J. L.; Barnash, K. D.; Abramyan, T. M.; Li, F.; The, J.; Engelberg, I. A.; Vedadi, M.; Brown, P. J.; Kireev, D. B; Arrowsmith, C. H. et al. Discovery of Selective Activators of PRC2 Mutant EED-I363M. *Sci. Rep.*, **2019**, *9* (1), 6524. https://doi.org/10.1038/s41598-019-43005-z.