Samuel Charles Fehling, PhD

Professional Profile

- Detail-oriented biomedical scientist with 10+ years' experience designing and executing preclinical studies for rare diseases and molecular diagnostics.
- Skilled in pharmacological evaluation, protocol development & cross-functional preclinical coordination.

Education

University of Alabama at Birmingham (UAB)	Ø Birmingham, AL
Doctor of Philosophy in Biomedical Sciences	December 2019
University of Wisconsin – Eau Claire (UWEC)	⊗ Eau Claire, WI
Bachelor of Science in Biochemistry & Molecular Biology	May 2014

Bachelor of Science in Biochemistry & Molecular Biology

Work Experience

Sr. Research Biologist at BioCryst Pharmaceuticals Inc.

- Designed, validated, and conducted in vitro and in vivo studies to characterize pharmacological properties and efficacy of small molecule drug candidates in preclinical models.
- Coordinated cross-functional collaboration and contributed to protocol development and project management to support advancement of investigational drugs.

Research & Development Scientist at BioGX

- Developed molecular diagnostic assays for custom order & FDA EUA-approved products. •
- Skilled in various industry areas including R&D, Quality Control & training of personnel. •
- Assisted in developing new product line, product platform conversions & a new PCR platform.
- Experienced in PCR platforms including BD MAX, QuantStudio, Bio-Rad CFX & ABI 7500. •
- Improved upon current procedures & approaches to save development down-time & money spent.

University of Alabama at Birmingham (UAB) Graduate Research Assistant

- Developed & analyzed therapeutic drug combinations targeting liver cancer (cholangiocarcinoma).
- Established and characterized chemotherapeutic-resistant liver cancer models using innovative in vitro and in vivo techniques.
- Skilled in handling athymic nude and C57BL/6 mice, performing oral gavage, intraperitoneal injections, and managing patient-derived xenograft (PDX) models.

Selected Publications

Aubrey L. Miller, Samuel C. Fehling, Rebecca B. Vance, Dongguan Chen, Eric Josh Brown, M Igbal Hossain, Eric O. Heard, Shaida Andrabi, Hengbin Wang, Eddy S. Yang, Donald J. Buchsbaum, Robert CAM van Waardenburg, Susan L. Bellis, Karina J. Yoon (2024). BET Inhibition Decreases HMGCS2 and Sensitizes Resistant Pancreatic Tumors to Gemcitabine. Cancer Letters.

Aubrey L. Miller, Patrick L. Garcia, Samuel C. Fehling, Tracy L. Gamblin, Rebecca B. Vance, Leona N. Council, Dongguan Chen, Eddy S. Yang, Robert CAM van Waardenburg, Karina J. Yoon (2021). The BET Inhibitor JQ1 Augments the Antitumor Efficacy of Gemcitabine in Preclinical Models of Pancreatic Cancer. Cancers.

Samuel C. Fehling, Aubrey L. Miller, Patrick L. Garcia, Rebecca B. Vance, Karina J. Yoon (2019). The Combination of BET and PARP Inhibitors is Synergistic in Models of Cholangiocarcinoma. Cancer Letters.

2020 - 2022

2014 - 2019

2022 - Present