



POST-DOCTORAL MEDICINAL CHEMIST FOR ANTI-COVID RNA DRUGS

The Dahlman Lab at Georgia Tech and Emory School of Medicine (dahlmanlab.org) develops nanoparticles and other drug delivery vehicles for nucleic acid drugs. The lab is pioneering the development of very high throughput *in vivo* nanoparticle assays that utilize DNA barcoding as well as 'extreme' material property design. **We evaluate how thousands of distinct nanoparticles deliver RNA and DNA drugs *in vivo* instead of evaluating them in cell culture.** These nanoparticles are then used to deliver RNA or DNA therapies.

Since starting in 2016, the lab has generated and analyzed >100,000 *in vivo* drug delivery data points; this scale of data generation is new to nanomedicine. The lab has subsequently published DNA barcoding, gene editing, and gene therapy papers in *ACS Nano*, *Advanced Materials*, *Nano Letters*, *PNAS*, *Science*, *Scientific American* and other journals, and currently has multiple papers under review at high impact journals. This work was highlighted in the 2019 World Economic Forum and *Scientific American* 'Top 10 Emerging Technologies in the World' and led to the founding of Guide Therapeutics, a cutting-edge biotech company developing new gene therapies.

We are hiring post-doctoral chemists with a background in medicinal chemistry to design lipids that facilitate the delivery of RNA drugs into cells infected with CoV-2 or other viruses. This work is time sensitive.

Candidates must have a Ph.D. in chemistry and experience in medicinal chemistry. Candidates must demonstrate the ability to develop synthetic routes and explain these routes to their colleagues. Finally, the post-doc must be able to work well on a team, even in situations where an opportunity is more exciting / time-sensitive than normal.

This is a unique opportunity for several reasons. First, you will be a member of a fun, diverse, and interdisciplinary group. Second, you will learn about high throughput *in vivo* nanoparticle assays. Third, you will work on a project designed to reach the clinic. Finally, the Georgia Tech and Emory Medical School Department of Biomedical Engineering is ranked #3 and #2 for undergraduate and graduate studies, respectively. It is located in Atlanta, a thriving city with major cultural, professional, and athletic institutions. Atlanta is called the 'city in a forest', and offers great food, music, breweries, hiking, biking, and weather. A salary in Atlanta goes much farther than in New York, Boston, or San Francisco. Finally, the DahlmanLab is a supportive and inclusive environment; we care deeply about all our lab members, independent of their background, experiences, preferences, or beliefs. People of color and women are especially encouraged to apply.

Email a CV to james.dahlman@bme.gatech.edu. **Due to the time sensitivity of this project, applicants for the position will be evaluated in the order they are received.**