



## POST-DOCTORAL MEDICINAL CHEMIST FOR LIVER DNA DELIVERY

The Dahlman Lab at Georgia Tech and Emory School of Medicine ([dahlmanlab.org](http://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 DNA drugs into target cells. The ideal outcome of this work is a lipid that will enter clinical trials.** 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](mailto: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.**