



## POST-DOC COMBINING VIRAL / NON-VIRAL GENE THERAPIES FOR STARTUP

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. More broadly, **our lab develops new technologies at the interface of big data, genomics, and gene 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 now developing technologies that combine our expertise in non-viral gene therapies with viral gene therapies. **We are therefore hiring post-doctoral scientists with viral gene therapy and / or scRNA-seq experience.** The ideal outcome of this work will be the creation of a startup company.

Candidates must have a Ph.D. in microbiology, biology, genetics, or biological / biomedical engineering. Candidates must demonstrate the ability to develop viral gene therapies and explain their research to their colleagues. The post-doc must be able to work well on a team in situations where an opportunity is more exciting / time-sensitive than normal. **Finally, the ideal post-doc will have an interest in creating a biotech startup.**

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). **Applicants for the position will be evaluated in the order they are received.**