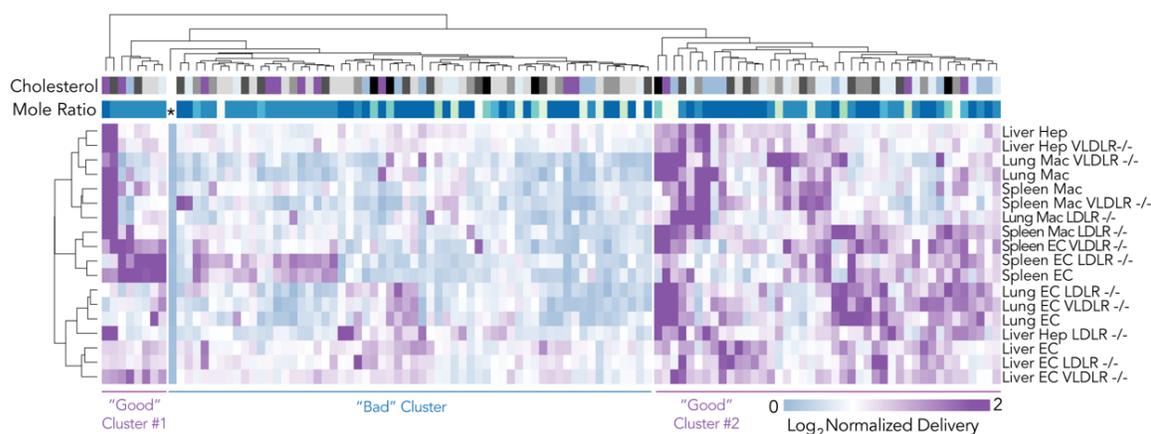


Post-docs needed: Discovering effective and safe gene editing therapies using DNA barcoded nanoparticles

The Dahlman Lab (dahlmanlab.org) at Georgia Tech and Emory Medical School is pioneering DNA barcoded nanoparticles. **For the first time, we can evaluate how thousands of nanoparticles deliver nucleic acid drugs directly in mice** (instead of evaluating them in cell culture). As an example, the heatmap below depicts ~2,000 *in vivo* drug delivery data points generated from a single experiment.



The lab started in 2016; we employ 8 full time scientists and 6 undergrad researchers. **We are hiring multiple post-docs with backgrounds in (i) organic chemistry, (ii) medicinal chemistry, (iii) vascular biology, (iv) muscle biology, or (v) immunology.** Chemists will synthesize novel polymer-, peptide-, or lipid-based compounds, and will evaluate how thousands of nanoparticles deliver DNA and RNA drugs directly *in vivo*. Biologists will lead *in vivo* studies, with the goal of rapidly studying biological pathways *in vivo*, and developing targeted gene therapies to treat disease.

We have access to clinical partners interested in translating our work. Post-docs will be trained to efficiently generate papers and patents. For example, a current Ph.D. student in the lab submitted 8 papers in their first 2 years.

This is a unique opportunity. First, you will be a member of a fun, diverse, and interdisciplinary group. Second, you will learn about nanoparticle DNA barcoding, which combines high throughput chemistry, nanoparticle characterization, RNA therapies, Cas9, and genomics. Third, you will be working in a cutting-edge field (therapeutic gene editing) developing clinically relevant technologies. 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, which is a thriving city with major cultural, professional, and athletic institutions. This 'city in a forest' welcomes people with all kinds of personal backgrounds, and offers great food, music, breweries, hiking, biking, weather, and quality of life. A standard salary goes much farther in Atlanta than in other cities with major research institutions.

Email a CV to james.dahlman@bme.gatech.edu. To be fully considered, contact us before 11/15/18.