

# Jason Kahn



**Graduate Institution:** Cornell University

**Graduate Discipline:** Biological Engineering, Biomaterials

**Hometown:** Port Jefferson, NY

**Relevant SC Research:** Basic Energy Sciences

## Research Interest:

I have always had a broad array of research interests, but the concept of creating and exploring new systems at the interface of biology and materials science has always been my main focus. Most of my work currently falls within the biomaterials realm; I research nucleic acid engineering to explore the possibilities of DNA as structural polymer in gel systems and as a spatial organizer for nanoparticle systems. I research the interplay between DNA as an information carrier and a generic polymer, as the ability to specifically encode interactions between strands to form more complex structures is unique to DNA. This really is part of my broader interest in the ability to engineer at the nanoscale, with the ultimate goal of creating new materials and methods aimed towards creating more efficient and cheaper energy solutions.

## About Me:

Currently, I am pursuing an MS/PhD at Cornell University in the field of bioengineering with a minor in materials science. However, I have had the opportunity to conduct a portion of my research at the Institute of Bioengineering and Nanotechnology in Singapore (focusing on DNA-based drug delivery systems, and with

whom I still collaborate). Though I do collaborate on medical-based research, my main interests lie in designing and manipulating biological systems and/or biomolecules in the realm of energy production and storage. Ever since I was child, I have always wanted to not only be a researcher but a teacher as well. To this end, I try to dedicate a portion my time to helping others learn about what I find so interesting. I seek out and maintain connections to the communities in which live, and am currently a tutor at an after-school program and will be organizing a set of mini-courses for school children in upstate New York. At this point, I am striving to both further our understanding and capabilities in the field of biomaterials/soft matter through meaningful research while continuing work with younger students to engage them in scientific community.

Outside of lab, I am a Graduate Resident Fellow in the undergraduate housing system at Cornell; this involves tutoring, planning academic lectures, workshops, and of course the occasional social activity for undergraduates. It also gives me the opportunity to talk with students about their plans and opportunities after graduation. On a lighter note, though my hobbies don't necessarily include the most death-defying activities, I do

try to make the most of my free time by usually playing some music or trying to get outside by any means possible. I am a certified tennis instructor and headed the Cornell Club Tennis Team, and though I play less often than I used to, I try to play when I can and organize lab lessons for some needed de-stressing.



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