
What if....

..... we could track and repair individual cells deep inside the body?

.....we could build an environmental lab inside a raindrop?

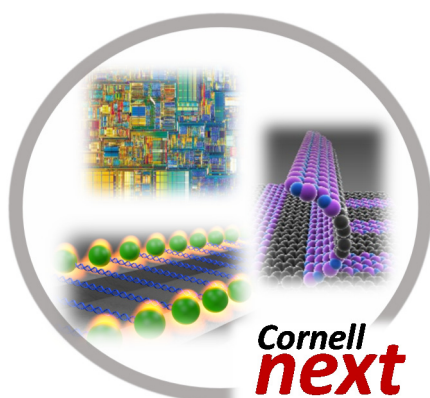
.....we could nano-engineer batteries to make fossil fuels obsolete?

.....we could create nanoscale machines as easily as we build electronic circuits?



Next is a multi-year interdisciplinary program at Cornell to push nanoscale science and microsystems engineering to the next level of design, function and integration.

How small can the smallest machines be? How will we design them? Communicate with them? Power them? Nanoscience is poised to attack these questions, and researchers at Cornell and institutions around the world are creating such integrated, active systems. These range from



nanoscale robotics and molecular assemblies designed with atomic precision, to artificial cells that mimic the properties of life, to interfaces that bridge the human-machine divide. The time is ripe to realize a true nanotechnology, one that takes inspiration and components from biology but also has behind it the full power of modern functional materials and nanofabrication technology. This revolution will impact nearly every branch of science and engineering, from the physical and life sciences to informatics and human health.

Cornell, one of the world's pioneering institutions in nanoscience, is poised to lead this revolution. We are embarking on a major new recruitment initiative, called *Next*, to make this a reality. This initiative seeks to recruit outstanding faculty who can bridge disciplines to cultivate bold approaches to science and technology at the micro and nanoscale.

Next is:

- ***Approx. 10 targeted senior hires across campus in Next-relevant fields.***
- ***Searches are overseen by an interdisciplinary, cross-college committee.***
- ***Labs will be co-located in clusters across campus.***
- ***The Kavli Institute at Cornell and the Cornell NanoScale Science and Technology Facility provide infrastructure, seed funding, and postdoctoral fellow support.***

Join us in building the future!

