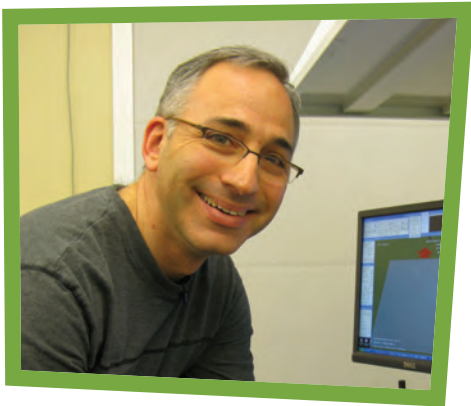


# DragonflyTV Nano Scientist Profiles



**Rich Superfine**  
Cilia Scientist

Rich Superfine is a physicist. But his work advances biology, by helping scientists learn how lung cilia function. He uses nanotechnology to engineer artificial cilia that scientists can test and observe. Understanding how lung cilia work helps improve treatments for Cystic Fibrosis and other diseases.



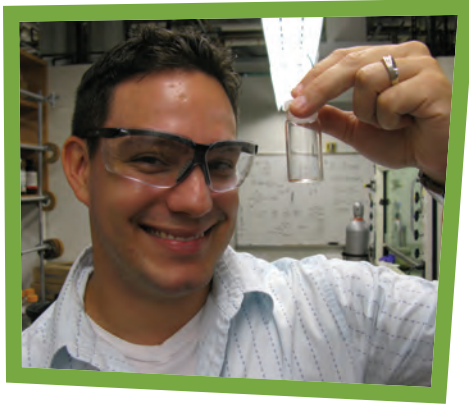
**Lesley Hamming**  
Glue-ologist

Lesley Hamming used to be a professional triathlete. But now she studies mussels—a type of clam—at Northwestern University. Why? Mussels have the amazing ability to stick to almost anything, even in water. Scientists like Lesley are trying to create sticky substances that work just as well as the mussel glue, but that can be mass-produced in a lab.



**Christy Haynes**  
Nanoparticle Safety Scientist

Christy Haynes is a chemist who is concerned about the safety of nanoparticles—especially the kind that can enter our bodies. With help from her graduate students, Christy studies the effects of different nanoparticles on our immune systems. She hopes her research will lead to “design rules” for nanoparticles that will guarantee their safety for people and the environment.



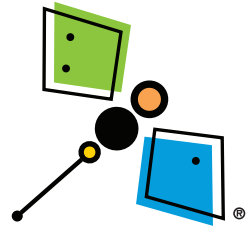
**Jason Guerrero**  
Nanocar Engineer

Jason Guerrero engineers the smallest cars in the world: nanocars! The nanocars he makes are so small, about 20,000 of them could be parked side-by-side across the diameter of a single hair! Getting these cars to work well is a challenge. But it also gives us more information about the nanoworld. Thanks to Jason's research, some day nano-sized vehicles might be used to transport molecules, making it easier to build things at the nanoscale.



**Anil Netravali**  
Eco-friendly Materials Scientist

Anil Netravali is a materials scientist who cares about the environment. He engineers earth-friendly building materials, called "composites," using parts from plants and trees. Recently, he developed a "green" skateboard that is now made and sold by Comet Skateboards. The skateboards work just as well as regular ones, but they are biodegradable—meaning they won't clog landfills.



**Tejal Desai**  
Biomedical Engineer

Tejal Desai designs tiny, nanosized capsules to transport medicine in the body to the exact spot it is needed. This is called "targeted drug-delivery," and it could make taking medicine a lot less painful. Thanks to Tejal, in the future kids with diabetes may not need insulin shots—they could just swallow capsules!