

Giving Matters | Debbie and Andy Rachleff

Inspired Advocates for Basic Science Research

The Zika virus. It's a household word now, but most of us hadn't heard of it a year ago. And seemingly overnight, medicine has mobilized a public health response. But in truth, medical solutions never happen overnight. The answer to Zika—and all other diseases that plague us—are found far upstream, in the labs of scientists who have been seeking to understand the basic building blocks of life for decades.

Those basic science explorations have captured the imaginations of Debbie and Andy Rachleff.

“Basic science is the foundation of all scientific research,” says Debbie. “If you want the greatest long-term yield for human health, there's no better investment. It's not as glamorous as some other kinds of research, but basic science discoveries can be applied across all medical disciplines, providing solutions to all diseases.”

Passionate about medical philanthropy, the Rachleffs are attracted to the high-risk, high reward ideas that hold the greatest promise for improving human lives—the so-called “moon-shot.” As is so often the case, their journey began with a personal relationship. The couple's first gift to Stanford Medicine funded a microscope in the cancer lab, which bears a plate memorializing a close friend of Debbie's who died of breast cancer.

Over time, their experiences with medicine and philanthropy have led them to the view that fundamental research is the area that provides the greatest leverage.

Another relationship has deepened that conviction. Upon meeting renowned developmental biologist Lucy Shapiro, PhD, Debbie was inspired to pursue funding of innovative basic science research at Stanford.

“The story Lucy tells about how her basic science research improved the lives of millions of children around the world is both amazing and inspirational,” says Debbie. “Early on, Lucy didn't anticipate the impact her basic scientific research would have,” says Debbie. “But its effect has been staggering. That's the beauty of basic science.”



Debbie and Andy Rachleff



Lucy Shapiro, PhD, receiving the 2013 National Medal of Science from President Barack Obama

Shapiro, the Virginia and D.K. Ludwig Professor and a National Medal of Science winner, is passionate about a world invisible to most of us: the inner workings of bacterial and fungal cells. She has revolutionized the understanding of the genetic circuitry of bacteria, and developed new drugs and treatments desperately needed to fight the spread of antibiotic resistance and emerging infectious diseases across the globe.

“It’s a very special experience to connect with people not directly in my field of science, and have them share the joy and excitement of basic research,” says Dr. Shapiro. “I had just such an experience with Debbie.

Her enthusiasm for basic science, and the medical innovations it can produce, left a lasting impression on me.”

With an early \$1 million commitment, the Rachleffs are helping to shape the Stanford Biomedical Innovation Initiative (BII). This venture fuels the most creative and disruptive ideas; allowing talented researchers to pursue high potential investigations that struggle to attract funding from more conservative sources like the NIH. Its pooled fund concept seeks to attract many people at varying levels; an aggregate of funders to move science forward.

“Not every project will have a positive outcome,” says Andy, executive chairman of Redwood City-based Wealthfront, Inc. and previously co-founder and general partner of venture capital firm Benchmark Capital. “If you expect every individual experiment to have a positive outcome, you’re less likely to get big wins. If venture capitalists looked at it that way, there would be no great companies, because no one would take any chances.”

The Rachleffs hope their BII launch gift will inspire others—especially Silicon Valley leaders, the engineering and scientifically driven tech community, and young people making first-time gifts—to join the effort. “The bigger we can make that pool—the far greater chance of having that long-term, huge impact,” says Debbie.

Debbie, a longtime, energetic advocate for the Stanford Women’s Cancer Center, is quick to point out that in basic science, even small gifts can make a big difference: “To a basic science researcher, a little goes a long way; especially in this time of decreasing federal funding.”

“It’s the hardest thing to fund,” agrees Andy. “Yet it can have the biggest impact. If more people gave to basic science, there would be a lot less incremental improvements in medicine and a lot more breakthroughs.”