

AHEAD OF THE CURVE NYEE's Ophthalmic Innovation and Technology Program

*"The whole objective of our Program is to convert translational research into products, and that requires innovation: an ecosystem of people, partnership, industry, clinicians, and engineers of new technology."*ⁱ

*—Dr. Tsontcho (Sean) Ianchulev
Director of the Ophthalmic Innovation and Technology Program*

Think of the New York Eye Infirmary of Mount Sinai's (NYEE) Ophthalmic Innovation and Technology Program as an incubator, laboratory, and launching pad for the next generation of micro-interventional ophthalmological devices—all rolled into one.ⁱⁱ A kind of synergistic force field attracting thinkers and doers from inside and outside the NYEE and Mount Sinai Health System (MSHS) who are passionate about developing new therapies, technologies, and diagnostic modalities.

As the inventor of three U.S. Food and Drug Administration-approved devices—the miLOOP™, the first micro-interventional cataract fragmentation device for non-thermal cataract surgery; intraoperative aberrometry, which has eclipsed the 50-year standard for intraocular lens power determination; and CyPass™, the first non-trabecular micro-stent for glaucoma — Ianchulev knows of what he speaks.ⁱⁱⁱ And more innovations are on the way. "The Program is creating a place where the best and the brightest ideas are not just taken out for a spin," Ianchulev adds, "but are actually brought to life."^{iv}

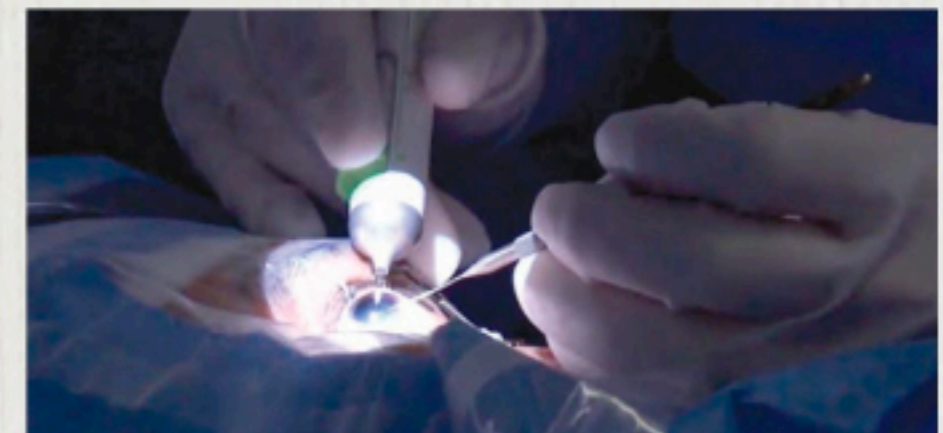
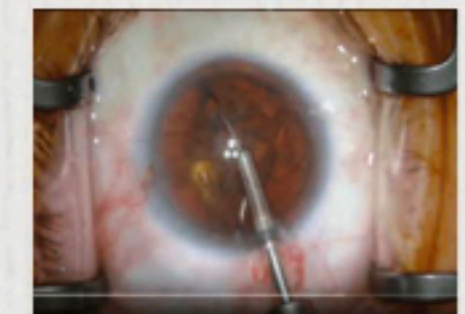
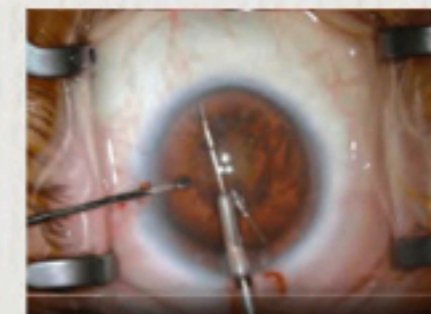
That is where Mount Sinai Innovation Partners—MSHS's technology commercialization office, which ensures that Mount Sinai discoveries and innovations are translated into health care products and services that



benefit patients and society—comes in. "As an Executive-in-Residence, Sean Ianchulev, MD, MPH, is an integral member of our team, helping to advance technology in Mount Sinai for the benefit of patients," says Erik Lium, PhD, Executive Vice President of Mount Sinai Innovation Partners. "Dr. Ianchulev's work as a clinician, inventor, and entrepreneur, along with the faculty and clinicians at NYEE's Ophthalmic Innovation and Technology Program, are bringing next-generation technologies to the healthcare marketplace."

The infirmary is home to the Ophthalmic Innovation and Technology Program as well as residents and

"Everything is out there for us to discover"



Far left: Dr. Ianchulev. Top: the miLOOP device. Above sequence: the miLOOP segmenting a patient lens with severe cataracts. Left and above: Dr. Kira Manusis using miLOOP to break up a cataract.