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Dr. Daniel S. Kohane obtained his M.D. and a Ph.D in Physiology from Boston University. He subsequently completed residencies in Pediatrics (Children's Hospital Boston) and Anesthesiology (Massachusetts General Hospital), followed by a fellowship in Pediatric Critical Care (Children's Hospital Boston). He is currently a Senior Associate in Pediatric Critical Care at Children's Hospital Boston, where he directs the Laboratory for Biomaterials and Drug Delivery. He is an Associate Professor of Anesthesiology at Harvard Medical School. He is also a senior associate in the laboratory of Prof. Robert Langer at the Massachusetts Institute of Technology.

Our research focuses on a wide range of medical problems including pain, peritoneal and other adhesions, surgical glues, vaccine vehicles, intracranial drug delivery, intra-articular drug delivery, patient-controlled drug delivery systems, antifungal surfaces, intracellular delivery of enzymes, ocular and trans-tympanic drug delivery, corneal prostheses, and others. We have employed microparticles and nanoparticles, including polymer systems, liposomes, mesoporous silicates, and others; hydrogels; and combination systems. Other interests include microfluidics, tissue engineering, and surface modification. We have applied our approach in food, beverage, and agricultural research as well.

The lab includes a mixture of PhD and MD scientists who are encouraged to cross-train in each other's specialties.