



Jordan Green, Ph.D.

Titles & Department

Director, Biomaterials and Drug Delivery Laboratory; Professor of Biomedical Engineering; Professor of Neurosurgery; Professor of Oncology; Professor of Ophthalmology

Specialization Areas

Gene delivery, nanobiotechnology, biomaterials, immunoengineering, and drug delivery.

Summary of Research & Work

Dr. Green's Biomaterials and Drug Delivery Laboratory ("Green Group") focuses on the study of cellular engineering and in nanobiotechnology—with a focus on biomaterials, controlled drug delivery, stem cells, gene therapy and immunobioengineering.

Current projects include developing:

- Safe and effective biodegradable nanoparticles for DNA and siRNA delivery
- Polymeric microparticle-based biological treatments
- Technologies to be repurposed for delivery of RNA therapeutics

Publications

- [Poly \(beta-amino ester\) nanoparticles for the non-viral delivery of plasmid DNA for gene editing and retinal gene therapy](#)
- [Structure-Function Relationships of Branched Ester-Amine Quadpolymers for Non-Viral Retinal Gene Therapy](#)
- [Combinatorial library of biodegradable polyesters enables delivery of plasmid DNA to polarized human RPE monolayers for retinal gene therapy](#)
- [Toward gene transfer nanoparticles as therapeutics](#)