



Laura Ensign-Hodges, Ph.D.

Titles & Department

Marcella E. Woll Professor of Ophthalmology; Professor of Ophthalmology; Associate Professor of Biomedical Engineering; Professor of Gynecology and Obstetrics; Professor of Medicine; Professor of Oncology; Professor of Pharmacology and Molecular Sciences

Specialization Areas

Nanomedicine, drug delivery systems, ophthalmology, and gynecology.

Summary of Research & Work

Dr. Ensign-Hodges' work focuses on designing more effective formulations for prophylactic and therapeutic drug delivery and characterization of biological barriers in health and disease.

Publications

- [Gelling hypotonic polymer solution for extended topical drug delivery to the eye](#)
- [Avoiding a sticky situation: bypassing the mucus barrier for improved local drug delivery](#)
- [Engineering biomaterials to prevent post-operative infection and fibrosis](#)
- [Machine learning-driven multifunctional peptide engineering for sustained ocular drug delivery](#)
- [Nanoparticle formulations for enhanced drug delivery to the bladder](#)
- [Enhanced drug delivery to the reproductive tract using nanomedicine reveals therapeutic options for prevention of preterm birth](#)