



Louis Born

Research Fellow, Johns Hopkins School of Medicine

Project Title: Topical Gene Delivery Using a Chitosan Complex to Accelerate Wound Healing of the Skin

Year Awarded: 2015

What do you hope to learn through this research? I hope to learn more about non-viral, cationic polymers for gene delivery during this research.

What can you tell us about the progress made in this area since you first began your research? I've been working with Chitosan-TPP Nanoparticles, and I am currently optimizing the nanoparticle/DNA ratio for gene delivery.

How can this research help patients, clinicians and/or scientists? Hopefully, this research will be able to provide a topical method to accelerate wound healing of the skin.

How did you get interested in wound healing and this area in particular? My previous research experience involved the investigation of another cationic polymer that had applications as a non-viral vector for gene delivery. I was very excited to meet Dr. Harmon and start applying my knowledge of gene delivery methods to wound healing of the skin.

What are your future plans for your work in wound healing? I plan to continue research in gene therapy. Hopefully, I can develop a topical cream/gel that can be used on a variety of wounds, from burns to scrapes.

Who do you consider your mentors and your close associates in this project? How did you start working with them? I consider Dr. John Harmon my mentor during this project. I met him after I started volunteering in the clinic at Johns Hopkins Bayview Medical Center.

Tell us about your life away from the lab and/or clinic? Away from lab I like to play sports and fish and crab in the Chesapeake Bay.