

I am the Principal Investigator of the *Adjuvant Discovery and Development Laboratory (Dowling Laboratory)* within the *Precision Vaccines Program (PVP)* at Boston Children's Hospital and Harvard Medical School (HMS). My laboratory focuses on understanding mechanistic immune responses in age-specific (newborns/elders) and distinct population manner (immune-compromised) and uses our discoveries in these areas to help us to design better vaccines and therapeutics in the future. Specifically, my work focuses on adjuvant discovery, using adjuvants to enhance our understanding of host innate and adaptive immune responses, evaluation of adjuvant synergy, adjuvant development, all in the context of rational vaccine design.