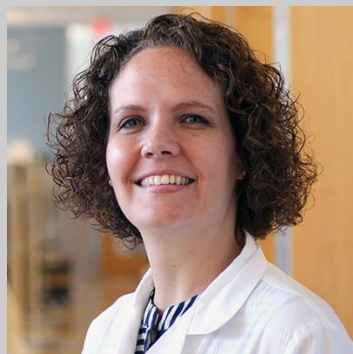




Kristy Ainslie



Associate Professor in the  
Division of Molecular  
Pharmaceutics, UNC Eshelman  
School of Pharmacy  
Member, CMI

2009 Post Doc, UCSF  
2005 Pennsylvania State  
University, PhD, Chemical  
Engineering  
2002 Pennsylvania State  
University, MS, Chemical  
Engineering  
1999 Michigan State University,  
BS, Chemical Engineering

**Address:**

4211 Marsico Hall  
125 Mason Farm Road  
University of North Carolina  
Chapel Hill, NC 27599

**Phone:** 919-962-4556

**Email:** ainsliek@email.unc.edu

[AinslieLab.web.unc.edu](http://AinslieLab.web.unc.edu)

### Therapeutics, Autoimmune Disease

#### Research emphasis:

We aim to apply our knowledge base in biomaterials, and immunology to develop new immune-modulatory therapies that treat and prevent infectious, and autoimmune diseases. Our focus is to not only release doses of medicine, but also develop therapies to skew the immune response of the body to act therapeutically. To this end, we design practical and innovative formulations, taking into account the scalable production and applications in developing nations.

#### Application:

- Controlled release of therapeutics
- Host-directed therapeutics
- Vaccines
- Antigen specific autoimmune therapies

#### Collaboration potential:

- Preparation and characterization of liposomes, polymeric nanoparticles, topical creams, and other formulations
- Formulation of a variety of immune adjuvants

#### Selected publications: (limit 4)

1. **Hoang KV, Curry H, Collier MA, Borteh H, Bachelder E, Schlesinger LS, Gunn JS, Ainslie K.** Needle-free Delivery of Acetalated Dextran-Encapsulated AR-12 Protects Mice from *Francisella tularensis* Lethal Challenge. *Antimicrob Agents Chemother.* 2016 Jan 19.
2. **Collier MA, Peine KJ, Gautam S, Oghumu S, Varikuti S, Borteh H, Papefuss TL, Sataoskar AR, Bachelder EM, Ainslie KM.** Host-mediated *Leishmania donovani* treatment using AR-12 encapsulated in acetalated dextran microparticles. *Int J Pharm.* 2016 Feb 29;499(1-2):186-94.
3. **Schully KL, Bell MG, Prouty AM, Gallovic MD, Gautam S, Peine KJ, Sharma S, Bachelder EM, Pesce JT, Elberson MA, Ainslie KM, Keane-Myers A.** Evaluation of a biodegradable microparticulate polymer as a carrier for *Burkholderia pseudomallei* subunit vaccines in a mouse model of melioidosis. *Int J Pharm.* 2015 Nov 30;495(2):849-61.
4. **Hoang KV, Borteh HM, Rajaram MV, Peine KJ, Curry H, Collier MA, Homsy ML, Bachelder EM, Gunn JS, Schlesinger LS, Ainslie KM.** Acetalated dextran encapsulated AR-12 as a host-directed therapy to control *Salmonella* infection. *Int J Pharm.* 2014 Dec 30;477(1-2):334-43.