NC STATE UNIVERSITY

Comparative Medicine Institute

Chris Dekaney

Assistant Professor of Gastroenterology

Education
BS, Biomedical Sciences, Texas A&M University
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Gastrointestinal Damage and Repair

Research emphasis:

Dr. Dekaney's research focuses on understanding mechanisms of intestinal repair following damage, including chemotherapy-induced damage. The intestinal stem cell niche plays an important role in intestinal damage and repair, and the roles Paneth cells and other members of the innate immune system play are particular areas of interest. More specifically, we are interested in the relationship between the intestinal stem cells and their niche during damage and repair.

Application:

- Models of intestinal injury
- Understanding intestinal stem cell niche
- Treatment of intestinal damage

Collaboration potential:

- Chemotherapy/radiation-induced intestinal damage
- Modes of treatment of intestinal damage
- Host-microbial interactions

Selected publications:

J.S. Carr, S. King, **C.M. Dekaney**. Depletion of enteric bacteria diminishes leukocyte infiltration following doxorubicin-induced small intestinal damage in mice. PLoS One. 2017 Mar 3;12(3):e0173429.

R.J. Rigby, J. Carr, K. Orgel, S.L. King, P.K. Lund, and **C.M. Dekaney**. Intestinal bacteria are necessary for doxorubicin-induced intestinal damage but not for doxorubicin-induced apoptosis. Gut Microbes. 7:414-423, 2016.

K. Seiler, E. Schenhals, R. von Furstenberg, B. Allena, B. Smith, D. Scaria, M. Bresler, **C.M. Dekaney**, and S.J. Henning. Tissue underlying the intestinal epithelium elicits proliferation of intestinal stem cells following cytotoxic damage. *Cell Tiss Res*. 361:427-438, 2015.

S.L. King, J.J. Mohuiddin, and **C.M. Dekaney**. Paneth Cells Expand from Newly Created and Pre-existing Cells During Repair After Doxorubicin-Induced Damage. *Am J Physiol Gastrointest Liver Physiol.* 305:G151-G162, 2013.