

Kaelyn D. Sumigray

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EDUCATION

Duke University Medical Center
Ph.D. Candidate, Cell Biology

Durham, NC
09/2006-12/2011

Union College
B.S., Biology

Schenectady, NY
09/2002-12/2005

RESEARCH

Lineberger Cancer Center and
Department of Biology
University of North Carolina – Chapel Hill

Chapel Hill, NC
03/2012-present

Under the mentorship of Dr. Mark Peifer,
I study the establishment of epithelial polarity
during *Drosophila* embryogenesis and the
interplay between cell-cell junctions and polarity
proteins.

Duke University Medical Center
Research scholar
Graduate Student

Durham, NC
01/2012-02/2012
09/2006-12/2011

Thesis work studying novel functions of
cell-cell adhesion molecules in microtubule
organization.
Under the supervision of Dr. Terry Lechler.

Union College
Undergraduate

Schenectady, NY
03/2005-06/2006

Undergraduate honors thesis research
studying the scaffolding palladin's effects
on cell contractility and the actin cytoskeleton.
Under the supervision of Dr. Barbara Danowski.

AWARDS

Lineberger Cancer Center Postdoctoral Fellowship, 03/2012-present
American Society for Cell Biology travel award, 12/2010
Duke University Conference travel award, 12/2009, 12/2010

PRESENTATIONS

Duke University Cell Biology Departmental Retreat

09/2007 – Poster: “Understanding the roles of cell adhesion molecules in simple epithelial tissue”

09/2008 – Poster: “Novel roles for desmosomes in the small intestine and epidermis”

09/2010 – Talk: “Desmosomal control of microtubule organization”

American Society for Cell Biology Annual meeting

12/2009 – Poster: “Role of desmosomes in microtubule organization of the epidermis”

12/2010 – Minisymposium talk: “Desmosomes recruit a protein complex essential for microtubule organization and epidermal barrier function”

PUBLICATIONS

Sumigray, KD and Lechler T. Noncentrosomal Microtubules Potentiate Cell Adhesion and Barrier Formation in the Epidermis. *J Cell Biol.* 2012. *Under revision.*

Sumigray, KD and Lechler T. Desmoplakin Controls Microvilli Length but not Cell Adhesion or Keratin Organization in the Intestinal Epithelium. *Mol Biol Cell.* 2012. 23(5): 792-9.

Sumigray, KD and Lechler T. Control of Cortical Microtubule Organization and Desmosome Stability by Centrosomal Proteins. *Bioarchitecture.* 2011. 1(5): 1-4.

Sumigray, KD, Chen H, and Lechler T. Lis1 is Essential for Cortical Microtubule Organization and Desmosome Function in the Epidermis. *J Cell Biol.* 2011. 194: 631-42.

Sumigray, KD and Lechler, T. Dissecting cell adhesion crosstalk with micropatterns. *Proc Natl Acad Sci USA.* 2010. 107: 13199.

MEMBERSHIPS

American Society for Cell Biology