Erik Palmer

Website	people.math.sc.edu/etpalmer
Email	etpalmer@math.sc.edu
Phone	803-777-4224
Address	Department of Mathematics LeConte College 1523 Greene Street Columbia, SC 29208

Education

Ph.D Applied and Computational Mathematics - Expected May 2018
University of South Carolina, Columbia
Supervised by Dr. Paula Vasquez
Advanced to Candidacy - October 2015

M.S. Applied Mathematics June 2013
California State University, East Bay

B.A. Mathematics, B.A. Chinese June 2007
University of California, Davis

Honors and Awards

Landahl Travel Award 2015
Woldzimierz and Anna Wrona Scholar in Mathematics 2011-2012
Finalist: HOM SIGMAA Student Paper Contest 2007

Peer-Reviewed Publications

Yuan Jin, *Erik Palmer*, Paula Vasquez, David B Hill, M. Gregory Forest, "Modeling and Simulation of Mucus Flow in Human Bronchial Epithelial Cell Cultures - PART I: Idealized Axisymmetric Swirling Flow", PLOS Computational Biology, **Forthcoming**

Presentations and Panels

A Stochastic Model for Lung Mucus Gel Networks

- SIAM Materials Science Conference, May 2016, Philadelphia, PA

Qualifying Exam Preparation - Student Panel

- The Graduate Colloquium , April 2016, Columbia, SC

(Talk Title -TBA)

- Applied and Computational Mathematics Seminar, April 2016, Columbia, SC

A Stochastic Model for Lung Mucus Gel Networks (Introduction)

- The Graduate Colloquium, October 2015, Columbia, SC

Posters

A Stochastic Model of Lung Mucus Gel Networks (Preliminary Results)

with Greg Forest, David Hill and Paula Vasquez.

- SC EPSCoR/IDeA State Conference, January 2016, Columbia, SC
- Annual Meeting of the Society Mathematical Biology, June 2015, Atlanta, GA
- Graduate Student Day - Poster Presentation Competition, April 2016, Columbia, SC

Measuring Rhythm: Which Ruler to Use?

with Andria Barraza and Shirley Yap.

- California State Univ., East Bay, Student Research Symposium April 2013, Hayward, CA

Research

Research Assistant

Supported by NSF Grant# DMS-1410047

University of South Carolina, Jan. 2015 - Aug. 2015, Jan. 2015 - present.

Research areas include:

- Mathematical Biology
- Complex Fluids and Rheology
- Stochastic Differential Equations
- Parallel Computation

Teaching

University of South Carolina

- Precalculus Mathematics, Instructor:
  - Fall 2015
- Calculus 2, Teaching Assistant:
  - Spring 2014, Fall 2014

- Intensive Basic College Mathematics, Instructor:
    - Fall 2013

California State University, East Bay

- Introduction to Algebra: Instructor:
    - Winter 2011, Fall 2012
- Elementary Algebra, Instructor:
    - Fall 2011, Winter 2013
- Intermediate Algebra, Instructor:
    - Fall 2012, Winter 2012, Winter 2013, Spring 2013

Extracurricular and Volunteer Experience

Exam Proctor

30th Annual USC High School Math Contest, January 2016

Founding Member

Peer Excellence Award Committee, Spring 2015 - present

Professional Associations

American Mathematical Society
Society for Industrial and Applied Mathematics
Society for Mathematical Biology