

Drew Clearfield

101 South Timber Road, Holland, PA 18966

Dsc46@Drexel.edu

(215) 370-1133

Education

Drexel University

Bachelor of Science in Biomedical Engineering

Concentration: Biomaterials and Tissue Engineering

Philadelphia, PA

Anticipated Graduation - June 2012

Research Experience

Biocomputation

Assisting Andres Kriete, Ph.D, in Research Involving Systems-Biology of Biological Pathways

2009-Present

- Background in quantitative modeling of biomolecular interactomes
- Experience in verifying simulations, performing sensitivity analyses, and handling SBML language

Biomaterials and Tissue Engineering

Working with Peter Lelkes, Ph.D, on Engineering Co-Electrospun Scaffolds for use in Cranial Fracture Healing

2010-Present

- Currently engineering chamber to possess climate qualities which induce electrospinning in the presence of cell proliferation
- Responsible for various mechanical testing, engineering of nanofiber scaffolds, and culturing osteoblasts

Laboratory Experience

- Experience in conducting Bradford assays, gel electrophoresis, and PCR
- Background in stress/strain analysis of elastic biomaterials using an MTS displacement apparatus
- Experience in conducting and analyzing ECGs, EOGs, and EMGs
- Trained in cell culturing techniques and immunoassaying

Related Coursework

- Human Physiology I, II
- The Body Synthetic
- Biosimulation
- Experimental Biomechanics
- Biomeasurements Laboratory
- Organic Chemistry I, II
- Differential Equations
- Fundamentals of Materials

Activities

Participant in Multiple Health Organizations

2007-Present

- Co-Treasurer of The American Red Cross Association
- Member of the American Medical Student Association
- Member of Health Occupations Students of America

Computational Skills

- Matlab, Microsoft Word, PowerPoint, and Excel Software
- SBML programming

References

Andres Kriete, Ph.D.

- Phone Number: 215.895.6163
- Email Address: ak3652@drexel.edu