BEEC Share and Learn Report: September 2022

Presenter: Alexis Ortiz-Rosario, PhD, Ohio State University

## **Textbook Resources Curated from the Session:**

https://docs.google.com/document/d/1uMM2DONIE76fDe6H3aW2CE62l9Z95C8qLlilss3J3as/edit

## **Presentation Overview:**

- Goal: Finding the Best BME Textbooks
- Open Discussion: What makes a good book for a course?
- Brainstorming Session:

https://docs.google.com/document/d/1uMM2DONIE76fDe6H3aW2CE62I9Z95C8qLlilss3J3as/edit

## **Discussions:**

- What's makes a good textbook?
  - Niel Rothman likes when a textbook scaffolds and builds and covers
  - Jenny Amos likes the level at which it is explained at given the level of the students (sophomore, junior, graduate, etc.)
  - Matthew Wettergreen purpose of the textbook: theory, practice, or practical nature
  - o Patricia Widder worked examples
  - o Nicole Ramo opportunities for practice, recall, and cementing core concepts
  - Alexis books that implement pedagogical theories, e.g. practice and recall, examples past concept being explained
  - Neil Rothman test whether the students understand it! Stretch your brain questions to think about what's going on, not just naming/recall information
  - Tyler Harvey useful figures, access to a digital version so you can match it with your in class slides
  - Paul Gordon how updated it is since BME is constantly changing
  - Patricia Widder different of books you use in the classroom vs. books you use as supplemental resources to develop your materials
- Brainstorming Session: Fill out the below in google docs:
  https://docs.google.com/document/d/1uMM2DONIE76fDe6H3aW2CE62I9Z95C8qLIiIss3J3as/edit

## **Topics:**

Anatomy / Physiology

**Bioimaging** 

Bioinstrumentation

**Biomaterials** 

**Biomechanics** 

**Biomedical Engineering Education** 

Biotransport

Cancer

Cell/Tissue Engineering

**Drug Delivery** 

**Ethics** 

Introduction

Micro/Nano Technology

Regulatory/FDA

Thermodynamics Design

Example:

Book Title: Principles of Biomedical Instrumentation

Author: Andrew G. Webb

Course/Topic: Circuits/Bioinstrumentation/Devices

**Community Comments:** 

Make comments on what you use it for, what works in it, what doesn't