

*SIGN-IN!*



*HOSTED BY*  
*BMES AT UCI*

# *Welcome to* *Jr. BME*

Sign in here if QR code doesn't work

<https://tinyurl.com/jrbme1>

**WORKSHOP 1 - OCTOBER 22, 2023**

# TO-DO

- ✧ Introductions
- ✧ BME: A Quick Rundown
- ✧ Introduction to Jr. BME and Overview
- ✧ From High School to College
- ✧ What Lies Ahead?
- ✧ Questions
- ✧ Campus Tour!



# INTRODUCTIONS

## Varu

- ★ 3rd Year BME Premed
- ★ Suture Lab (Dr. King)



## Dean

- ★ 2nd Year BME Premed
- ★ BiNoM (Dr. Kulinsky)
- ★ Beckman Laser Institute (Dr. Milner)



## Neha

- ★ 3rd Year BME Premed
- ★ Suture Lab (Dr. King)
- ★ BEAT Lab (Dr. Oomen)



THANK YOU TO OUR VOLUNTEERS!

# ***Biomedical Engineering***



***Biomedical***

***Engineering***



# ***Biomedical Engineering***

## **BME IS:**

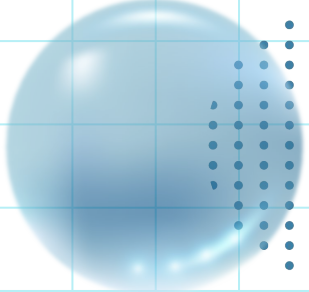
- Multidisciplinary field
- Rigorous but rewarding
- A growing and in-demand field
- Lots of hands on work
- Pathway to a wide scope of research
- Flexible career pathways
- Incorporates skills independent of just biology and engineering

## **BME IS NOT:**

- Solely limited to biology or engineering
- A “medicine only” pathway
- Read and memorize type courses
- Purely patient-centric work
- Completely separate from other engineering fields
- Requires high grades to be successful
- A soul draining engineering major
- Basically a bio major

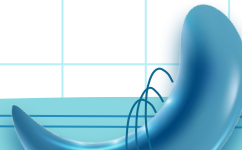
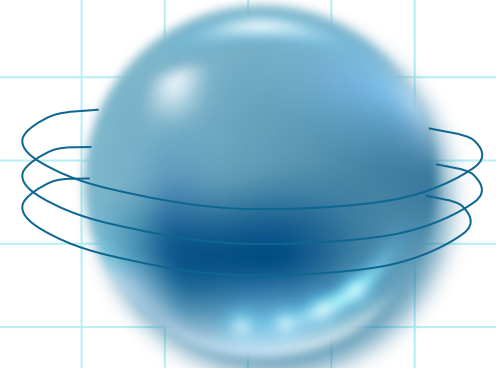


***Introduction  
to Jr. BME  
& Overview***



# BME for YOU

- High school centered to expose you to what we do in BME
- 4 Workshops
  - ✧ What is BME? (this one!)
  - ✧ Java Programming (APCSA, data structures)
  - ✧ Arduino (similar to C programming, but with hardware)
  - ✧ Onshape (computer aided design → 3D printing)
  - ✧ Plus more to come later one
- Aim: get your feet wet and not be daunted by BME in college apps
- Teach you skills that are applicable outside of BME in other majors (i.e. engineering, computer science, etc)





***From High School  
to College***



# *The Big Kid Experience*

- College = vastly different landscape than high school
- Extracurriculars are sought out by YOU (not mom signing you up for something that you find out about once you get there)
  - ✦ Research (both BME and BMEP)
  - ✦ Internships (more so BME)
  - ✦ Clinical hours (more so BMEP)
- Need help? Clubs, organizations, and . . . BMES!
  - ✦ Why? Biomedical Engineering Society is *goated*
  - ✦ Even if you don't go to UCI, there are BMES chapters at other universities (UCLA, UCSD, USC, etc). Also Portola peeps.



# *What Lies Ahead?*

**HIGH  
SCHOOL**

**???**

**COLLEGE**



# Diverse Pathways

## HIGHER EDUCATION



### MASTERS

- ✦ Length depends on research (1-2 years)
- ✦ Prepare for private industry and academia

### PHD

- ✦ Doctorate in engineering (4-6 years)
- ✦ Prepare for private industry and academia

### MEDICAL SCHOOL

- ✦ Doctorate in medicine (4 years)
- ✦ Premed-specific path at UCI

# Diverse Pathways

## INDUSTRY



### R&D

- ✦ Research and Development
- ✦ Developing product improvements and solutions

### QUALITY

- ✦ Quality testing
- ✦ Creating standards that product must meet

### MANUFACTURING

- ✦ Design and operation of the production process

# Questions?





# ***CAMPUS TOUR!***

