# BME 180A BME Engineering Design Fall 2024

# **Course Description**

BME 180A – Design strategies, techniques, tools, and protocols commonly encountered in biomedical engineering; ethics, economic analysis, and FDA product approval. Materials fee.

# Instructional Team

#### Instructors

Prof. Michelle Khine, 611 Aldrich Hall, <u>mkhine@uci.edu (mailto:mkhine@uci.edu)</u> Prof. Christine King, 3410 Engineering Hall, <u>kingce@uci.edu (mailto:kingce@uci.edu)</u>

- Dr. King's Office/BME Fab Lab Hours: Tuesdays and Thursdays 1pm 5pm, Engineering Tower room 436 (BME Fab Lab)
   BME Fab Lab Manager: Christopher Tan, need something printed? Request form <u>here</u> (https://bit.ly/BMEFABLAB)
- Dr. Khine's Office Hours: Mon: 12-3, Wed 12-1:30, Thurs: 12-3 and by request

#### **Teaching Assistants**

Sarvenaz Fatapour, sfatapou@uci.edu (mailto:sfatapou@uci.edu)

Shakiba Ahmadimehr, ahmadims@uci.edu (mailto:ahmadims@uci.edu)

Office Hours: By appointment via E-mail

## Lectures

Tuesdays, Thursdays 5:00pm - 6:20pm

Location: Anteater Learning Pavilion room 1600

Connect to Mersive (TVs in Lecture Hall): <u>https://classrooms.uci.edu/tools-equipment/#wireless-presentation</u> (<u>https://classrooms.uci.edu/tools-equipment/#wireless-presentation</u>)

\*\*Attendance is MANDATORY!

# PLEASE READ AND USE THROUGHOUT THE COURSE:

# **Syllabus and Course Information**

(https://canvas.eee.uci.edu/courses/65571/pages/syllabus-and-course-

information)

# **Resources for Assignments and Projects**

(https://canvas.eee.uci.edu/courses/65571/pages/resources)

**UCI Emergency Resources** 

(https://canvas.eee.uci.edu/courses/65571/pages/emergency-resources-page)

# Schedule:

Week #	Date	Day	Lecture
0	9/26	Th	Introduction, expectation, goals, logistics, design process (https://canvas.eee.uci.edu/courses/65571/files/28191154?wrap=1) (https://canvas.eee.uci.edu/courses/65571/files/28191154/download?download_frd=1) Lecturers: Dr. Christine King, Dr. Michelle Khine
1	10/1	Tu	Team Formation Activities (https://canvas.eee.uci.edu/courses/65571/files/28274611?wrap=1). ↓ (https://canvas.eee.uci.edu/courses/65571/files/28274611/download?download_frd=1) Find Tables Given Survey Results (see day 1 slides) - will rotate based on each of these, 20 min interview process Lecturer: Dr. Christine King
1	10/3	Th	Unmet Clinical Needs in the ICU (https://canvas.eee.uci.edu/courses/65571/files/28300780?wrap=1) (https://canvas.eee.uci.edu/courses/65571/files/28300780/download?download_frd=1) Lecturer: Dr. Yama Akbari, UCI School of Medicine <u>HW 1 Due: Personality Assessment (https://canvas.eee.uci.edu/courses/65571/assignments/1432980)</u>
2	10/8	Tu	Zoom ONLY: Reverse Project Pitch Night (do NOT come to class, attend it on zoom, ATTENDANCE TAKEN so everyone you are already on a project) Agenda: BioENGINE Reverse Pitch Night 2024 Agenda (https://canvas.eee.uci.edu/courses/65571/files/28347885?wrap=1). ↓ (https://canvas.eee.uci.edu/courses/65571/files/28347885/download?download_frd=1) Zoom Link: https://uci.zoom.us/j/95272083888 ເ⇒ (https://uci.zoom.us/j/95272083888) Recording: https://uci.zoom.us/rec/play/OVD4z8vXsoRuM-yhpvqs2qQHLdV3hGAt3sQ6mnO9Dwsv20P6t79b1avrmCOK vHCC8sX6IrmmDAMs7LvX4tcqTOmYbR ເ⇒ (https://uci.zoom.us/rec/play/OVD4z8vXsoRuM-yhpvqs2qQHLdV3hGAt3sQ6mnO9I vrmCOKm2-vHCC8sX6IrmmDAMs7LvX4tcqTOmYbR).
2	10/10	Th	Pitch Recap Meeting – Finding Your Passions, Re-Team Formation Lecturers: Dr. Christine King and Dr. Michelle Khine
3	10/15	Tu	Evaluating Unmet Needs in Startups and Healthcare Lecturer: Sharief Taraman, CEO of Cognoa <u>HW 2 Due: Project Preference List (https://canvas.eee.uci.edu/courses/65571/assignments/1432981)</u>
3	10/17	Th	Evaluating Unmet Clinical Needs in Industry Lecturer: Stanton Rowe, CEO of Nidus Biomedical
4	10/22	Tu	How to Prepare a Resume and LinkedIn Page (https://canvas.eee.uci.edu/courses/65571/files/28527269?wrap=1). (https://canvas.eee.uci.edu/courses/65571/files/28527269/download?download_frd=1) Lecturer: Goran Matijasevic, UCI Chief Executive Roundtable, Alumni & Constituent Relations Projects Announced (link below and announcement)

4	10/24	Th	Market Research and Patent Searching Research Guides: <u>Entrepreneurship Library Research Guide (https://guides.lib.uci.edu/entrepreneurship)</u> , <u>BME 180A Library</u> ( <u>https://guides.lib.uci.edu/bme-180a-biomedical-design)</u> , <u>Engineering Research Guide (https://guides.lib.uci.edu/c.php?g=994457</u> Lecturers: Sara Heimann, UCI Library
5	10/29	Tu	Funding a Startup (https://canvas.eee.uci.edu/courses/65571/files/28620339?wrap=1)       (https://canvas.eee.uci.edu/courses/6557'         download_frd=1)       Lecturer: Dr. Michelle Khine         HW 3 Due: Detailed Team Information, Student Participation Form (https://canvas.eee.uci.edu/courses/65571/assignments/14:
5	10/31	Th	How to Write a Proposal – <u>SBIR (https://canvas.eee.uci.edu/courses/65571/files/28558922?wrap=1)</u> (https://canvas.eee.uci.edu/courses/65571/files/28558922/download?download_frd=1) (start-ups) and <u>UROP</u> ( <u>https://canvas.eee.uci.edu/courses/65571/files/28558939?wrap=1)</u> (https://canvas.eee.uci.edu/courses/65571/files/28558939?wrap=1) (research), <u>general tips (https://canvas.eee.uci.edu/courses/65571/files/28558950?wrap=1)</u> (https://canvas.eee.uci.edu/courses/65571/files/28558950?wrap=1) (https://canvas.eee.uci.edu/courses/65571/files/28558950/download?download_frd=1) Lecturer: Dr. Christine King and Dr. Michelle Khine
6	11/5	Tu	Planning Your Project: Project Management in the Medical Device Industry - CANCELED Lecturer: Travis Rappleye, CEO Think B Squared <u>FDA and Design Controls: Engineering Ethics (https://canvas.eee.uci.edu/courses/65571/files/28706828?wrap=1)</u> (https://canvas.eee.uci.edu/courses/65571/files/28706828/download?download_frd=1) Lecturer: Christine King, PhD <u>HW 4 Due: Patent and Background Search (https://canvas.eee.uci.edu/courses/65571/assignments/1432983</u> )
6	11/7	Th	Introduction to Design Controls and FDA: Human Factors (https://canvas.eee.uci.edu/courses/65571/files/28706880?wrap=1) (https://canvas.eee.uci.edu/courses/65571/files/28706880/download?download_frd=1) Lecturer: Dr. Christine King Due 11/8 to UROP and Canvas: <u>HW 5: UROP Proposal (https://canvas.eee.uci.edu/courses/65571/assignments/1432984</u> )
7	11/12	Tu	IP and Patents Lecturer: Dr. Patricia Chan, Licensing Officer at Applied Innovation
7	11/14	Th	Pitching and Presenting Lecturer: Fabio Gratton, CEO Alchemy Factory Recording Link: <a href="https://us06web.zoom.us/rec/share/tQH4CpsY8XDwGvaMtEfRxb15TF8KV8-q_5wF6BUy4_DaGHXsDt_hdgoPLHvHjfw">https://us06web.zoom.us/rec/share/tQH4CpsY8XDwGvaMtEfRxb15TF8KV8-q_5wF6BUy4_DaGHXsDt_hdgoPLHvHjfw</a>

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8	11/21	Th	Design Controls and Risk Management Planning (https://canvas.eee.uci.edu/courses/65571/files/28914754?wrap=1) (https://canvas.eee.uci.edu/courses/65571/files/28914754/download?download_frd=1) Lecturer: Jasen Nava-Massey, President and Principal NM Engineering LLC, Robert LaHaderne, Founder Advantrix LLC (https://canvas.eee.uci.edu/courses/65571/assignments/1432984)
9	11/26	Tu	Fall Presentations (https://canvas.eee.uci.edu/courses/65571/assignments/1432997)         8 min presentation each team - teams 1-6 present         **All presentation slides due 11/26 due to Thanksgiving break timing
9	11/28	Th	NO LECTURE THANKSGIVING
10	12/3	Tu	Fall Presentations (https://canvas.eee.uci.edu/courses/65571/assignments/1432997)         8 min presentation each team - teams 7-12 present
10	12/5	Th	Fall Presentations (https://canvas.eee.uci.edu/courses/65571/assignments/1432997) 8 min presentation each team - teams 13-18 present
Finals	12/9	Мо	HW 6 Due 12/9: Design and Project Plan (https://canvas.eee.uci.edu/courses/65571/assignments/1432985) Team Evaluations (https://canvas.eee.uci.edu/courses/65571/assignments/1433007)

## **Projects:**

PROJECTS FINAL LIST (https://canvas.eee.uci.edu/courses/65571/files/28347879?wrap=1) (https://canvas.eee.uci.edu/courses/65571/files/28347879/download?download\_frd=1) PROJECT TEAM MATCHING LIST (https://canvas.eee.uci.edu/courses/65571/files/28510773?wrap=1),

(https://canvas.eee.uci.edu/courses/65571/files/28510773/download?download\_frd=1)

(https://canvas.eee.uci.edu/courses/65571/files/27912318?wrap=1)

(https://canvas.eee.uci.edu/courses/29380/files/11082853/download?wrap=1)

(https://canvas.eee.uci.edu/courses/29380/files/11082853/download?wrap=1)

(https://canvas.eee.uci.edu/courses/29380/files/11082853/download?wrap=1)

(https://canvas.eee.uci.edu/courses/29380/files/11446398/download?wrap=1)

(https://canvas.eee.uci.edu/courses/29380/files/11165991/download?wrap=1)

(https://canvas.eee.uci.edu/courses/29380/files/11446398/download?wrap=1)

(https://canvas.eee.uci.edu/courses/29380/files/11463620/download?wrap=1)

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(https://canvas.eee.uci.edu/courses/29380/files/11463620/download?wrap=1)

Project Roles and Expectations (https://canvas.eee.uci.edu/courses/65571/files/27912624?wrap=1) 🕁

(https://canvas.eee.uci.edu/courses/65571/files/27912624/download?download\_frd=1)

## **Purchasing Materials for Projects:**

Please use the below template and instructions to submit purchase requests:

Step 1): Fill out the below form for EACH vendor:

Purchase Request Template Form (https://canvas.eee.uci.edu/courses/65571/files/27912654?wrap=1). (https://canvas.eee.uci.edu/courses/65571/files/27912654/download?download\_frd=1)

Step 2) Email your Purchase Request Form (separated by vendor) to <u>bmeexpense@uci.edu (mailto:bmeexpense@uci.edu)</u> with the following Title/Subject Line:

"Vendor Name\_Purchase Request\_BME 180\_Group #"

Step 3) Keep track of your purchases for your final report. You have \$2,000 as a budget for the entire project. You can use this starting 9/26/2024.

For more information on purchasing and reimbursement, please see:

http://engineering.uci.edu/faculty-staff/purchasing-reimbursement/purchasing-requests (http://engineering.uci.edu/faculty-staff/purchasingreimbursement/purchasing-requests)

### **Job Opportunities:**

[BigHat\_Recruiting\_Engineering] One-Pager for UC Irvine-1.pdf (https://canvas.eee.uci.edu/courses/65571/files/28192001?wrap=1).  $\downarrow$  (https://canvas.eee.uci.edu/courses/65571/files/28192001/download?download\_frd=1)

### **Funding Opportunities:**

#### ASTM Capstone Project Grants and Scholarships:

As a participant in ANSI's University Outreach Program, we wanted you to be aware of the following academic awards and opportunities available at ASTM International. Please feel free to share with your colleagues.

#### ASTM Project Grants – Deadline October 31

ASTM International is offering a limited number of \$500 grants to university students to help with senior/capstone design projects. Applications that contain an ASTM International standards component and submitted on or before the deadline will be considered. Completed applications and any questions can be sent directly to Travis Murdock, <u>tmurdock@astm.org(mailto:tmurdock@astm.org)</u>

#### Mary R. Norton Memorial Scholarship for Women - Deadline December 31

ASTM Technical Committee E04 sponsors the Mary R. Norton Memorial Scholarship to encourage women undergraduate seniors or first-year graduate students to pursue the study of Physical Metallurgy or Materials Science with emphasis on the relationship of microstructure to material properties. Full details of the criteria for this award can be found in the attached application form. Completed applications and any questions can be sent directly to E04 Awards and Honors Chair, Janet Gbur, jlg120@case.edu (mailto:jlg120@case.edu)

#### Washington Internship for Students of Engineering (WISE) Program - Deadline February 1

ASTM is one of a handful of sponsoring societies seeking outstanding STEM students to participate in the nine-week WISE program in Washington, D.C. Students selected for this program will discover how government officials make decisions on complex technological issues, while also learning how engineers and scientists can contribute to the legislative process and regulatory decision-making. More information about the program can be found here: <a href="https://wise-intern.org/">https://wise-intern.org/</a> (<a href="https://wise-intern.org/">http

Additional information about all ASTM academic resources and opportunities can also be found in the attached general program flyer.

# **Upcoming Workshops & Fellowships:**

NSF GRFP Fellowship Workshop:

#### SSoE's NSF GRFP Workshop: Sept. 27th @ 9:30am

Engineering students interested in applying to the National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) program or learning more about the opportunity are invited to attend the **Samueli School of Engineering NSF GRFP Workshop on Friday, September 27**<sup>th</sup>, **9:30 – 10:30am**, in person in ISEB 4020 and via Zoom (<u>Zoom registration link here</u>)

(https://urldefense.com/v3/\_\_https://uci.zoom.us/meeting/register/tJlpd--

tpj8iE9DDsuFGPw143t1qMKKkUM1P\_\_;!!CzAuKJ42GuquVTTmVmPViYEvSg!L1M-

jfM50H4RFH2ea6SZpQAGTQyHUTELGR1IZh3BK1nya7lxU5CgPdoMiHWjp7Hlyop\_y7ys7ZIImzE4O6g9dA\$)). The workshop will focus on guidelines and developing a competitive application.

If you are considering attending the workshop (in person or via Zoom), please fill out our questionnaire

(https://urldefense.com/v3/\_\_https://docs.google.com/forms/d/e/1FAlpQLScpXgw\_-iRPxPEWc45G\_d02FU\_WWyl35wdaxjLU9kGexb7ssQ/viewform? usp=sf\_link\_\_;!!CzAuKJ42GuquVTTmVmPViYEvSg!L1M-

jfM50H4RFH2ea6SZpQAGTQyHUTELGR1IZh3BK1nya7lxU5CgPdoMiHWjp7Hlyop\_y7ys7ZllmzEFfaSxng\$)\_ so that we can better assist you.

<u>Resources from UCI's Graduate Division (https://grad.uci.edu/fellowships/national-science-foundation-graduate-research-fellowship-program-e/)</u> include an Incentive Program (\$500 for submitting, and \$1000 for winning) and consultations with fellowship mentors.

#### NSF GRFP Program Information

The NSF GRFP provides three years of support for the graduate education of individuals who have demonstrated their potential to make significant research achievements in science, technology, engineering, and mathematics (STEM). The support is provided for graduate study that leads to a research-based master's or doctoral degree in STEM.

More information about the GRFP can be found at https://www.nsfgrfp.org/

(https://urldefense.com/v3/\_\_https://www.nsfgrfp.org/\_\_;!!CzAuKJ42GuquVTTmVmPViYEvSg!L1M-

jfM50H4RFH2ea6SZpQAGTQyHUTELGR1IZh3BK1nya7IxU5CgPdoMiHWjp7HIyop\_y7ys7ZIImzHPWCJpSQ\$) and in the solicitation

(https://urldefense.com/v3/\_\_https://nsf-gov-resources.nsf.gov/files/nsf24591.pdf?

VersionId=Ji0HvTaOF\_IZBcs3whd7ItoQy.VJpvJt\_\_;!!CzAuKJ42GuquVTTmVmPViYEvSg!L1M-

jfM50H4RFH2ea6SZpQAGTQyHUTELGR1IZh3BK1nya7lxU5CgPdoMiHWjp7Hlyop\_y7ys7ZllmzFwuFl3SQ\$) and FAQs

(https://urldefense.com/v3/\_\_https://www.nsf.gov/pubs/2023/nsf23154/nsf23154.pdf\_\_;!!CzAuKJ42GuquVTTmVmPViYEvSg!L1M-

jfM50H4RFH2ea6SZpQAGTQyHUTELGR1IZh3BK1nya7IxU5CgPdoMiHWjp7HIyop\_y7ys7ZIImzFPJiNewQ\$)\_

Below are the application deadlines (less than 1 month away) and eligibility requirements.

#### <u>Deadlines</u>

- October 15, 2024: Chemistry; Geosciences, Mathematical Sciences; Physics and Astronomy
- October 16, 2024: Life Sciences
- October 17, 2024: Engineering
- October 18, 2024: Computer and Information Science and Engineering; Materials Research

#### Eligibility Requirements

- Be a U.S. citizen, national, or permanent resident
- Intend to enroll or be enrolled full-time in a research-based Master's or doctoral degree program in an eligible Field of Study in STEM or STEM education (See Appendix and Section IV.3 for eligible Fields of Study)
- Never previously accepted a Graduate Research Fellowship
- Declined any previously offered Graduate Research Fellowship by the acceptance deadline
- · Never previously applied to GRFP while enrolled in a graduate degree program
- · Never earned a doctoral or terminal degree in any field
- Have completed no more than one academic year (according to institution's academic calendar) while enrolled in a graduate degree program (non-degree coursework must be clearly identified in the transcript and does not count toward this limit)
- Individuals holding joint Bachelor's-Master's degrees who did not apply while enrolled in the joint program, may apply as second-year graduate applicants if enrolled in an eligible doctoral program the beginning of the academic year immediately following the academic award year of the joint degree
- Individuals with prior graduate enrollment who have: (i) completed more than one academic year in any graduate degree-granting program, (ii) earned a previous master's degree of any kind (see guidance for joint Bachelor's-Master's degree-holders above), or (iii) earned a professional degree must meet the following requirements:
  - not enrolled in a graduate degree program at application deadline
  - two or more consecutive years past graduate degree enrollment or completion at the application deadline
- Not be a current NSF employee.

#### ULP Life Science Young Leaders Fellowship:

https://www.universitylabpartners.org/life-science-young-leaders-fellowship 
(https://www.universitylabpartners.org/life-science-young-leaders-fellowship)
leaders-fellowship)

This 6-month career exploration program will provide fellows with a deep understanding of the different career opportunities in the thriving life science industry. Fellows will participate in a variety of events including professional development training with industry professionals, networking events, industry tours, and 1:1 meetings with carefully matched mentors.

#### VentureWell E-Team Proposal:

VentureWell's <u>E-Team Program</u> 

<u>https://urldefense.com/v3/\_https://go.venturewell.org/e/388732/e-team-</u>
<u>program-/2c3j725/1557600346/h/j9mFXBpLsNvFmFIKP0sYJg9znoKiUu1sT9aleKuiCJw\_\_;!!CzAuKJ42GuquVTTmVmPViYEvSg!MGUFJ1U7f2Fr8GP\_gms
bBnQVRNRbbFIR77mBenvh--U9zC\_IpdskjyItGcVsODyW2ObUQeDdyrVJM\_9k\$)</u> offers an enriching combination of grant funding, hands-on learning
experience, and mentorship that transform student inventors into thriving entrepreneurs. **Teams can receive up to \$25,000 to advance their innovation**. Applications for our Spring 2024 cohort are now open!

#### How can you get involved?

Students: Attend one of our Info Sessions 
(https://urldefense.com/v3/\_https://go.venturewell.org/e/388732/eteam-info-sessionjan3/2c3j72c/1557600346/h/j9mFXBpLsNvFmFIKP0sYJg9znoKiUu1sT9aleKuiCJw\_;!!CzAuKJ42GuquVTTmVmPViYEvSg!MGUFJ1U7f2Fr8GP\_gmsbBn QVRNRbbFIR77mBenvh--U9zC\_IpdskjyItGcVsODyW2ObUQeDdyiHDmSQu\$) to learn more!

#### UCI I-CORPS \*\* Highly Recommend!

#### https://innovation.uci.edu/i-corps/ (https://innovation.uci.edu/i-corps/)

#### Have a great idea?

NSF I-Corps is the perfect opportunity to focus on market research and quickly validate your idea. NSF I-Corps is a four week, immersive boot camp that guides researchers through the market research process to help them product-market fit. This program meets once a week (virtually unless circumstances change) and is designed for researchers doing work in the STEM (Science, Technology, Engineering, and Mathematics) fields.

I-Corps is designed to help you:

- Kick start your innovation with up to \$2000 in funding for customer discovery
- · Successfully translate university research to technologies in the market
- Obtain skills and training essential for professional development
- Explore alternative career paths (entrepreneurship, business, marketing)

#### Cost: FREE!

For more information and dates: <u>http://innovation.uci.edu/programs/i-corps/ (http://innovation.uci.edu/programs/i-corps/)</u> (mailto:doug.crawford@uci.edu)

#### Y-Combinator Startup School:

Y Combinator is launching Startup School for Future Founders, a course specifically for founders who are interested in starting a company in the future! You can register (https://ycombinator.cmail20.com/t/t-l-xtddhht-sirjyttdk-j/) for the new course today.

This course will start November 9th and run for 6 weeks. We designed it for you: students, engineers, creatives, and anyone thinking about founding a startup at some point, but not actively working on one right now.

The course will cover important topics for this early stage, such as generating good startup ideas, finding/vetting a co-founder, and validating your idea with potential customers. Each week, you'll be able to watch lectures from YC partners and other industry experts, and then complete high-impact exercises to put those learnings into practice.

We hope you'll join us by signing up  $\Rightarrow$  (https://ycombinator.cmail20.com/t/t-l-xtddhht-sirjyttdk-t/) today and spreading the word  $\Rightarrow$  (https://ycombinator.cmail20.com/t/t-l-xtddhht-sirjyttdk-i/) with anyone else who might be interested.

# **Competitions:**

#### ANSI Competitions (Standards):

https://www.ansi.org/news\_publications/news\_story?menuid=7&articleid=713eb799-ab8b-403b-9d36-2b53dc98109c&utm\_campaign=OO\_EML\_20September-21-2020-whatsnew\_BG&utm\_medium=email&utm\_source=whatsnew (https://www.ansi.org/news\_publications/news\_story?menuid=7&articleid=713eb799-ab8b-403b-9d36-2b53dc98109c&utm\_campaign=OO\_EML\_20September-21-2020-whatsnew\_BG&utm\_medium=email&utm\_source=whatsnew)

#### VentureWell Competitions and Resources

 ASPIRE ⇒ (https://venturewell.org/aspire/)

 BMEidea ⇒ (https://venturewell.org/bmeidea/)

 Cleantech University Prize ⇒ (https://venturewell.org/cleantech-university-prize-cleantech/)

 DEBUT ⇒ (https://venturewell.org/debut/)

 E-Teams Grants ⇒ (https://venturewell.org/student-grants/)

 Inventing Green Toolkits ⇒ (https://venturewell.org/inventing-green-toolkits/)

 NSF I-Corps ⇒ (https://venturewell.org/i-corps/)

#### Other Competitions and Resources

ACC InVenture Prize (http://accinventure.gatech.edu/) Baylor New Venture Competition (https://www.baylor.edu/business/newventurecompetition/) Collegiate Inventors Competition (https://www.invent.org/challenge/) James Dyson Award (https://www.jamesdysonaward.org/)\_ \*\*Resource: James Dyson Application Workshop Video (https://canvas.eee.uci.edu/courses/65571/assignments/1432979) MIT Clean Energy Prize (http://cep.mit.edu/) MIT Water Innovation Prize (http://www.mitwaterinnovation.org/) Rabobank-MIT Food and Agribusiness Innovation Prize (http://food-ag.squarespace.com/innovation-prize/) Rice Business Plan Competition (https://rbpc.rice.edu/) Westly Prize (https://westly.org/westly-prize/) Pitch Launch Grow (https://www.universitylabpartners.org/our-events/pitch-launch-grow-2021)

https://ucinnovationchallenge.org/ => (https://ucinnovationchallenge.org/)

# Join Us on Social Media!

BioENGINE LinkedIn: https://www.linkedin.com/groups/13533228/ 🕞 (https://www.linkedin.com/groups/13533228/)

BioENGINE Instagram: @bioengine

BME Discord Channel: https://discord.gg/d45UZZMA > (https://discord.gg/d45UZZMA)