BME 180A BME Engineering Design
Fall 2022

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, 3422 Engineering Hall, **mkhine@uci.edu (mailto:mkhine@uci.edu)**
Prof. Christine King, 3410 Engineering Hall, **kingce@uci.edu (mailto:kingce@uci.edu)**

Teaching Assistants

Yasaman (Yassi) Fatapour, **yfatapou@uci.edu (mailto:yfatapou@uci.edu)**

Tai Le, **tail3@uci.edu (mailto:tail3@uci.edu)**

Office Hours: By appointment via E-mail

Lectures

Mondays, Wednesdays 6:00PM to 7:20PM

Location: Howard Schneiderman Lecture Hall (HSLH) room 100A

**Attendance is MANDATORY!

PLEASE READ:

Syllabus and Course Information (https://canvas.eee.uci.edu/courses/48556/pages/syllabus-and-course-information)

Resources for Assignments and Projects (https://canvas.eee.uci.edu/courses/48556/pages/resources)

UCI Emergency Resources (https://canvas.eee.uci.edu/courses/48556/pages/emergency-resources-page)

Schedule:

Week #	Date	Day	Lecture
1	9/26	Mon	Introduction, expectation, goals, logistics, design process

			Lecturers: Dr. Christine King, Dr. Michelle Khine **Lecture Slides: Introduction to the Course** (https://canvas.eee.uci.edu/courses/48556/files/19969552?wrap=1) ↓ (https://canvas.eee.uci.edu/courses/48556/files/19969552/download?download_frd=1)
1	9/28	Wed	The 3-1-3 Method: Transform How to Share, Pitch and Sell Your Ideas Lecturer: Ryan Foland, Antrepreneur Center Pitching Resources: **Commercialization and Pitching: Advice for New Startups Video** (https://canvas.eee.uci.edu/courses/48556/assignments/1019289) , **Starting Startups Video** (https://canvas.eee.uci.edu/courses/48556/assignments/1043366) **HW 1 Due 9/30: Personality Assessment** (https://canvas.eee.uci.edu/courses/48556/assignments/1009667)
2	10/3	Mon	Team Formation Activities **Lecture Slides: Team Formation_Day 1** (https://canvas.eee.uci.edu/courses/48556/files/19987401?wrap=1) ↓ (https://canvas.eee.uci.edu/courses/48556/files/19987401/download?download_frd=1)
2	10/5	Wed	Team Formation Activities **Lectures Slides: Team Formation_Day 2** (https://canvas.eee.uci.edu/courses/48556/files/19987412?wrap=1) ↓ (https://canvas.eee.uci.edu/courses/48556/files/19987412/download?download_frd=1) **Dimensions of Wellness Worksheet** (https://canvas.eee.uci.edu/courses/48556/files/20024252?wrap=1) ↓ (https://canvas.eee.uci.edu/courses/48556/files/20024252/download?download_frd=1) Resource: **Team Dynamics Video** (https://canvas.eee.uci.edu/courses/48556/assignments/1043363)
3	10/10	Mon	Taco Night at the Antrepreneur Center, Team Speed Dating ***Location: Antrepreneur Center, 233 Social Sciences Quad***
3	10/12	Wed	Unmet Clinical Needs Lecturer: Dr. Khine **Lecture Slides: Identifying Unmet Clinical Needs** (https://canvas.eee.uci.edu/courses/48556/files/20115912?wra ↓ (https://canvas.eee.uci.edu/courses/48556/files/20115912/download?download_frd=1) Resources: **Needs Statement** ▷ (https://biodesignguide.stanford.edu/toolkit/choosing-a-need-area-and-drafting-y first-need-statement/) , **Needs Screening and Selection** ▷ (https://biodesignguide.stanford.edu/toolkit/need-scre and-selection/) , **Customer Interview Video** (https://canvas.eee.uci.edu/courses/48556/assignments/1019291) **HW 1.5 Due 10/16: Team Selection and Project Preference** (https://canvas.eee.uci.edu/courses/48556/assignments/1009666) **HW 2 Due 10/16: Detailed Team Information, Student Participation Form** (https://canvas.eee.uci.edu/courses/48556/assignments/1009668)
4	10/17	Mon	Pitching and Presenting Lecturer: Fabio Gratton, Alchemy Factory **Lecture Slides: Pitching and Presenting - The Art of Storytelling** (https://canvas.eee.uci.edu/courses/48556/files/20477009?wrap=1) ↓ (https://canvas.eee.uci.edu/courses/48556/files/20477009/download?download_frd=1)

		Resource: **Presenting Your Project** ⬒ **(https://biodesignguide.stanford.edu/toolkit/presenting-your-project/)** , **Pitch Video (https://canvas.eee.uci.edu/courses/48556/assignments/1019289)** , **How to Market Your Idea Video (https://canvas.eee.uci.edu/courses/48556/assignments/1037871)**
4	10/19 Wed	Pediatric Unmet Clinical Needs Lecturer: Sharief Taraman, Pediatric Neurology, CHOC Resources: **Hospital Environment Factors Video (https://canvas.eee.uci.edu/courses/48556/assignments/102739** **Pediatric Unmet Needs Video (v1) (https://canvas.eee.uci.edu/courses/48556/assignments/1038591)** , **Pediatric U Needs Video (v2) (https://canvas.eee.uci.edu/courses/48556/assignments/1038743)**
5	10/24 Mon	Unmet Clinical Needs Lecturer: Stanton Rowe, NXT Biomedical **Lecture Slides: Unmet Clinical Needs (https://canvas.eee.uci.edu/courses/48556/files/20355784?wrap=1)** ⬇ **(https://canvas.eee.uci.edu/courses/48556/files/20355784/download?download_frd=1)** Resource: **Customer Interviews Video (https://canvas.eee.uci.edu/courses/48556/assignments/1019291)** , **Evalua Unmet Needs Video (https://canvas.eee.uci.edu/courses/48556/assignments/1038429)** , **Medical Verification and Validation Video (https://canvas.eee.uci.edu/courses/48556/assignments/1043365)**
5	10/26 Wed	How to Prepare a Resume Lecturer: Manisha Dhawan, MPath Coaching Linked In Page: **http://linkedin.com/in/manishadhawan** ⬒ **(https://urldefense.com/v3/__http://linkedin.com/in/manishadhawan__;!!CzAuKJ42GuquVTTmVmPViYEvSg!IVSok3S wdn7Q0o2pXUv3cznhqkV3RaLLnz8PSuAobF2TJKL7OGWBPl0v_PbebeTtBilfElqVDpvbQ$)** **Lecture Slides: Resume Writing (https://canvas.eee.uci.edu/courses/48556/files/20355787?wrap=1)** ⬇ **(https://canvas.eee.uci.edu/courses/48556/files/20355787/download?download_frd=1)** Resources: **Closing the Deal Video (https://canvas.eee.uci.edu/courses/48556/assignments/1027407)** , **Resume V (https://canvas.eee.uci.edu/courses/48556/assignments/1019311)** **HW 3 Due 10/26: Video Pitches for Top 3 Project Choices (https://canvas.eee.uci.edu/courses/48556/assignments/1022531)**
6	10/31 Mon	How to Write a Proposal Lecturer: Dr. King **Lecture Slides: Proposal Writing (https://canvas.eee.uci.edu/courses/48556/files/20359737?wrap=1)** ⬇ **(https://canvas.eee.uci.edu/courses/48556/files/20359737/download?download_frd=1)** Resources: **Business Model Basics** ⬒ **(https://biodesignguide.stanford.edu/toolkit/business-model-basics/)** , **Bu Model Canvas Video (https://canvas.eee.uci.edu/courses/48556/assignments/1015739)** , **Writing a Business Plan (https://canvas.eee.uci.edu/courses/48556/assignments/1043357)** , **Funding Pathways Video (https://canvas.eee.uci.edu/courses/48556/assignments/1027409)** Lecture + Examples: **Writing Your Way to a Winning Proposal (https://canvas.eee.uci.edu/courses/48556/files/20076383?wrap=1)** ⬇ **(https://canvas.eee.uci.edu/courses/48556/files/20076383/download?download_frd=1)** , **UROP Example (https://canvas.eee.uci.edu/courses/48556/files/20076352?wrap=1)** ⬇ **(https://canvas.eee.uci.edu/courses/48556/files/20076352/download?download_frd=1)** , **Startup Fund Example (https://canvas.eee.uci.edu/courses/48556/files/20076271?wrap=1)** ⬇ **(https://canvas.eee.uci.edu/courses/48556/files/20076271/download?download_frd=1)**

6	11/2	Wed	Teamwork and Leadership Lecturer: Sean Chow, Edwards Lifesciences **Lecture Slides - Teamwork and Leadership** [(https://canvas.eee.uci.edu/courses/48556/files/20478280?wrap=1)](https://canvas.eee.uci.edu/courses/48556/files/20478280?wrap=1) [(https://canvas.eee.uci.edu/courses/48556/files/20478280/download?download_frd=1)](https://canvas.eee.uci.edu/courses/48556/files/20478280/download?download_frd=1) Resource: **Intentional Teamwork** ⤷ [(https://biodesignguide.stanford.edu/toolkit/intentional-teamwork/)](https://biodesignguide.stanford.edu/toolkit/intentional-teamwork/) , **Profess Etiquette Video** [(https://canvas.eee.uci.edu/courses/48556/assignments/1019298)](https://canvas.eee.uci.edu/courses/48556/assignments/1019298) , **Team Roles Video** [(https://canvas.eee.uci.edu/courses/48556/assignments/1041189)](https://canvas.eee.uci.edu/courses/48556/assignments/1041189) , **Business Leadership Video (v1)** [(https://canvas.eee.uci.edu/courses/48556/assignments/1037918)](https://canvas.eee.uci.edu/courses/48556/assignments/1037918) , **Business Leadership Video (v2)** [(https://canvas.eee.uci.edu/courses/48556/assignments/1042959)](https://canvas.eee.uci.edu/courses/48556/assignments/1042959) , **Managing a Project Online Video** [(https://canvas.eee.uci.edu/courses/48556/assignments/1038740)](https://canvas.eee.uci.edu/courses/48556/assignments/1038740) , **Project Management Video (v1)** [(https://canvas.eee.uci.edu/courses/48556/assignments/1043356)](https://canvas.eee.uci.edu/courses/48556/assignments/1043356) , **Project Management Video (v2)** [(https://canvas.eee.uci.edu/courses/48556/assignments/1043360)](https://canvas.eee.uci.edu/courses/48556/assignments/1043360) Winning Projects Announced
7	11/7	Mon	Design Controls Lecturer: Brad Sargent, Omnica Corp. **Lecture Slides - Design Controls** [(https://canvas.eee.uci.edu/courses/48556/files/20523655?wrap=1)](https://canvas.eee.uci.edu/courses/48556/files/20523655?wrap=1) ↓ [(https://canvas.eee.uci.edu/courses/48556/files/20523655/download?download_frd=1)](https://canvas.eee.uci.edu/courses/48556/files/20523655/download?download_frd=1) Resources: **Hospital Environment Factors Video** [(https://canvas.eee.uci.edu/courses/48556/assignments/102739...)](https://canvas.eee.uci.edu/courses/48556/assignments/102739) **FDA Design Controls Video** [(https://canvas.eee.uci.edu/courses/48556/assignments/1043359)](https://canvas.eee.uci.edu/courses/48556/assignments/1043359)
7	11/9	Wed	The Patent Search Lecturers: Sarah Heimann, Julia Gelfand, UCI Library **BME 180 Library Guide** [(https://guides.lib.uci.edu/BME_180series/2022-2023)](https://guides.lib.uci.edu/BME_180series/2022-2023) Resources: **The Patent Search Video** [(https://canvas.eee.uci.edu/courses/48556/assignments/1043354)](https://canvas.eee.uci.edu/courses/48556/assignments/1043354) **HW 4 Due 11/13: Patent and Background Search** [(https://canvas.eee.uci.edu/courses/48556/assignments/10096...)](https://canvas.eee.uci.edu/courses/48556/assignments/10096)
8	11/14	Mon	UCI MEng Program Lecturer: Nikki Spratt, UCI MEng **Lecture Slides - UCI MEng Program** [(https://canvas.eee.uci.edu/courses/48556/files/20631366?wrap=1)](https://canvas.eee.uci.edu/courses/48556/files/20631366?wrap=1) ↓ [(https://canvas.eee.uci.edu/courses/48556/files/20631366/download?download_frd=1)](https://canvas.eee.uci.edu/courses/48556/files/20631366/download?download_frd=1) Resources: **Path from Student to Entrepreneur Video** [(https://canvas.eee.uci.edu/courses/48556/assignments/1...)](https://canvas.eee.uci.edu/courses/48556/assignments/1) Introduction to Design Lecturer: Dr. King **Lecture Slides - Intro to Design** [(https://canvas.eee.uci.edu/courses/48556/files/20546704?wrap=1)](https://canvas.eee.uci.edu/courses/48556/files/20546704?wrap=1) ↓ [(https://canvas.eee.uci.edu/courses/48556/files/20546704/download?download_frd=1)](https://canvas.eee.uci.edu/courses/48556/files/20546704/download?download_frd=1) Design Resources: **Justice, Equity, Diversity and Inclusion in Design** ⤷ [(https://biodesignguide.stanford.edu/toolkit/justice-equity-diversity-and-inclusion-in-design/)](https://biodesignguide.stanford.edu/toolkit/justice-equity-diversity-and-inclusion-in-design/) , **Principles of Unive Design** ⤷ [(https://projects.ncsu.edu/ncsu/design/cud/pubs_p/docs/poster.pdf)](https://projects.ncsu.edu/ncsu/design/cud/pubs_p/docs/poster.pdf) , **Defining Your Need Criteria** ⤷ [(https://biodesignguide.stanford.edu/toolkit/making-your-research-actionable-via-need-criteria/)](https://biodesignguide.stanford.edu/toolkit/making-your-research-actionable-via-need-criteria/) , **Design Consider in Healthcare Video** [(https://canvas.eee.uci.edu/courses/48556/assignments/1019310)](https://canvas.eee.uci.edu/courses/48556/assignments/1019310)

8	11/16	Wed	FDA Lecturer: Kwame Ulmer, MedTech Impact Partners **Lecture Slides - FDA (https://canvas.eee.uci.edu/courses/48556/files/20651634?wrap=1)** ↓ **(https://canvas.eee.uci.edu/courses/48556/files/20651634/download?download_frd=1)** **UPitt and CMU MS-PhD Program (https://canvas.eee.uci.edu/courses/48556/files/20651650?wrap=1)** ↓ **(https://canvas.eee.uci.edu/courses/48556/files/20651650/download?download_frd=1)** Resource: **Regulatory Basics** ⇱ **(https://biodesignguide.stanford.edu/toolkit/regulatory-basics/)** , **FDA Video (https://canvas.eee.uci.edu/courses/48556/assignments/1015786)**
9	11/21	Mon	IP and Patents - Quan Nguyen, Nguyen Tarbet LLC. Resource: **IP Basics** ⇱ **(https://biodesignguide.stanford.edu/toolkit/ip-basics/)** , **IP and Patents Video (https://canvas.eee.uci.edu/courses/48556/assignments/1027454)** , **Record of Invention Video (https://canvas.eee.uci.edu/courses/48556/assignments/1043362)** **HW 5 Due 11/27: UROP Proposal and Business Proposal (https://canvas.eee.uci.edu/courses/48556/assignments/1009670)**
9	11/23	Wed	Fall Presentations 8 min presentation each team **Fall Presentation Lineup (https://canvas.eee.uci.edu/courses/48556/files/20647022?wrap=1)** ↓ **(https://canvas.eee.uci.edu/courses/48556/files/20647022/download?download_frd=1)**
10	11/28	Mon	Fall Presentations 8 min presentation each team **Fall Presentation Lineup (https://canvas.eee.uci.edu/courses/48556/files/20647024?wrap=1)** ↓ **(https://canvas.eee.uci.edu/courses/48556/files/20647024/download?download_frd=1)**
10	11/30	Wed	Fall Presentations 8 min presentation each team **Fall Presentation Lineup (https://canvas.eee.uci.edu/courses/48556/files/20647027?wrap=1)** ↓ **(https://canvas.eee.uci.edu/courses/48556/files/20647027/download?download_frd=1)**
10	12/1	Fri	Poster Session at Fall Design Review **CANCELED**
Finals	12/5	Mon	**HW 6 Due 12/5: Design and Project Plan (https://canvas.eee.uci.edu/courses/48556/assignments/1009671)**

Projects:

Project List - FINALIZED 10/3/22 (https://canvas.eee.uci.edu/courses/48556/files/19986445?wrap=1) ↓ **(https://canvas.eee.uci.edu/courses/48556/files/19986445/download?download_frd=1)**

Teams List (TBA)

(https://canvas.eee.uci.edu/courses/48556/files/19733817?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)
(https://canvas.eee.uci.edu/courses/29380/files/11463620/download?wrap=1)
(https://canvas.eee.uci.edu/courses/29380/files/11463620/download?wrap=1)

Project Roles and Expectations (https://canvas.eee.uci.edu/courses/48556/files/19733708?wrap=1) ↓
(https://canvas.eee.uci.edu/courses/48556/files/19733708/download?download_frd=1)

Educational Effectiveness Study Information Sheet (https://canvas.eee.uci.edu/courses/29380/files/10722349/download?
wrap=1) ↓ (https://canvas.eee.uci.edu/courses/29380/files/10722349/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/48556/files/19733875?wrap=1) ↓
(https://canvas.eee.uci.edu/courses/48556/files/19733875/download?download_frd=1)

Step 2) Email your Purchase Request Form (separated by vendor) to **bmeexpense@uci.edu** (mailto:bmeexpense@uci.edu) 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 9/22/2022.

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/purchasing-reimbursement/purchasing-requests)

Job Opportunities:

Matregenix Internship (https://canvas.eee.uci.edu/courses/48556/files/20325677?wrap=1) ↓
(https://canvas.eee.uci.edu/courses/48556/files/20325677/download?download_frd=1)

Medtronic Neurovascular's Virtual Site Visit (https://canvas.eee.uci.edu/courses/48556/files/20325694?wrap=1) ↓
(https://canvas.eee.uci.edu/courses/48556/files/20325694/download?download_frd=1)

Funding Opportunities:

TBA

Upcoming Workshops & Fellowships:

UCI Stella New Venture Competition Orientation:

The SZNVC is an annual innovation contest aimed at providing funding, support, and inspiration to interdisciplinary teams of UCI undergrad and grad students who have business ideas. I'd like to share this great news and invite all Engineering students to attend the **orientation on November 7th from 4:30PM – 7:00PM**. Please see the registration link here: **https://na.eventscloud.com/sznvcbb23** ▣ **(https://urldefense.com/v3/__https://na.eventscloud.com/sznvcbb23__;!!CzAuKJ42GuquVTTmVmPViYEvSg!LJ4AfAe61KVziuRU3omen Af2W_jb8QGyuGyq2gfd2vmYsk9QRpBxPJLmYo9j8C6QZQeI1U-Q6Vo$)**

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: **http://innovation.uci.edu/programs/i-corps/ (http://innovation.uci.edu/programs/i-corps/)**

Any questions, and if you schedule conflicts with the virtual orientation, please contact: **sophia.lin@uci.edu (mailto:sophia.lin@uci.edu)** or **doug.crawford@uci.edu (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** ▣ **(https://ycombinator.cmail20.com/t/t-l-xtddhht-sirjyttdk-t/)** today and **spreading the word** ▣ **(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 ⤷ (http://www.invent.org/challenge/)

James Dyson Award ⤷ (https://www.jamesdysonaward.org/) **Resource: James Dyson Application Workshop Video (https://canvas.eee.uci.edu/courses/48556/assignments/1027452)**

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/ZM4SyngE4R ⤷ (https://discord.gg/ZM4SyngE4R)