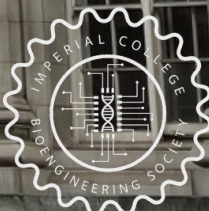


BIOENGINEERING SOCIETY
IMPERIAL COLLEGE LONDON

Splice

Autumn Term 2025



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Chief Editors' Welcome

Santiago Vázquez - 2nd Year Biomedical Engineering

Hello everyone in the Bioengineering Department, I am very excited to present the first issue of the Bioengineering Society magazine, Splice. The name was chosen for its strong relevance across our field, whether in DNA, coding, or beyond; capturing the versatility and innovation that defines bioengineering. With people from dynamic degrees and programmes, our society is certainly deserving of a dedicated magazine to showcase all things bioengineering.

The core magazine team: Yoyo, Yui, and myself have dedicated time this summer to creating this brand new edition. Our aim is to guide you through the key figures, events, plans, and advice related to our society and the department.

We have carefully selected and personally conducted interviews and gathered insights to make this issue as tailored as possible to our community. We are delighted to launch this new initiative and look forward to receiving your feedback, carrying out further interviews, and collaborating to expand Splice into a long standing tradition of the best departmental society at Imperial.

We hope you are as ready as we are to begin this new chapter and to share in the ambition behind it. Here's to continued growth and new developments. Enjoy Splice!



Yoyo Zhu - 2nd Year Molecular Bioengineering



Hi everyone,
I'm so excited to welcome you to the very first issue of the Imperial Bioengineering Society Magazine! This magazine is all about celebrating what makes our department so special — the amazing achievements of both our students and our faculty, and the sense of community that brings us all together.

We want this to be more than just something you read. It's a place to discover what's happening around the department, from big research wins to student projects that are making an impact. It's also where you'll find updates on all the activities and events we have coming up. There will be plenty of chances to make new friends, get involved, and really feel part of the Bioengineering family.

One thing I'm especially excited about is our Internship and UROP event. We know your struggles. Don't panic, you still have plenty of time to discover the useful resources at Imperial (Thanks to Santi who made the amazing Bioeng Soc website which has all the info you need). This event will give you real insights into how to find internships, apply for UROPs, and get useful career advice from people who've been through it. I hope you'll enjoy reading this as much as we enjoyed putting it together.

FROM THE BIOENG SOC PRESIDENT

Welcome to Bioengineering!

Hey everyone!

I'm Yui, and I have the privilege of being the president of the Bioengineering Society this year, one of the biggest and most active departmental societies at Imperial. As a BioEng student, you're automatically a part of the society.

We host a variety of social, academic, and well-being events, including our flagship Christmas Dinner, Movie Nights, Pub Crawls, Internship Talks, Hackathons, Dog Therapy sessions, BioEng Merch, Holiday Celebrations, and much more! We're always looking to grow and tailor our events to what our members want, so your feedback is always appreciated.

As president this year, my goal is to strengthen the sense of community in the department, and improve our ties with the wider BioEng community at Imperial, other universities, alumni and industry. The first initiative will be BioEng's first ever collaborative boat party with UCL Medical Physics and Bioengineering Society, an event that can't be missed! It's a chance to make more friends in this amazing Bioengineering community. We've also launched this magazine to highlight achievements and showcase our department's community. This was something I wish I had in my first year!

Throughout the year, we'll be collaborating with many BioEng-related societies at Imperial, from casual socials to large-scale hackathons. Tickets for events can sell out quickly, so make sure to follow us on Instagram @icl_bgsoc, check our bi-weekly newsletters, year group chats, or look out for flyers around RSM and Bessemer.

I really hope everyone has a great year ahead. This department is full of amazing people, so make the most out of it and make lifelong connections! I hope to see all of you at our upcoming events, and don't hesitate to say hi to me on campus!

Splice will have its second release this January. If you're interested in joining the team, being interviewed, or sharing feedback, don't hesitate to email me, Yoyo, or Santiago, or scan the QR code. We're always excited to meet people who share our passion for celebrating the BioEng spirit, strengthening our community, and bringing creativity to design and writing.

Yuichiro

PRESIDENT
BIOENGINEERING SOCIETY



Splice
Interest Form



BioEng Soc
Feedback Form

A Welcome From

Professor Rylie Green

Head of the Department of Bioengineering,
Imperial College London

It gives me great pleasure to welcome you all to the Department of Bioengineering and to the vibrant community of students, staff, and alumni who make this such an exciting place to study and work. Whether you are joining us for the first time this autumn or returning for another year, you are becoming part of a department that thrives on collaboration, creativity, and the pursuit of solutions to some of the world's most pressing challenges.

This year, we are delighted to be opening new teaching labs and workshops, designed to give students more hands-on experience and a space to develop innovative projects. At the same time, we are expanding our activities at the White City campus, strengthening our connections with industry, start-ups, and interdisciplinary research teams. These developments will create even more opportunities for you to apply what you learn in the classroom to real-world problems and to collaborate across fields.

University life can at times feel fast-paced, but it is also a period of immense growth. My advice to new students is to make the most of your lectures, labs, and workshops – they form the foundation on which everything else is built. Engage actively with your studies, ask questions, and use these opportunities to develop both your knowledge and your confidence. Just as importantly, support one another and make the most of the friendships and networks you will build here – they will become some of the most valuable outcomes of your time at university.

On behalf of the department, I warmly welcome you to the year ahead. I look forward to seeing the ways in which you will contribute to and benefit from this dynamic community, and I wish you every success in your studies and endeavours



BIOENGINEERING SOCIETY COMMITTEE



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Webmaster



Marissa
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Christopher
Wellbeing Events



Ashley
Social Events



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Social Events



Calvin
Sponsorship Liason



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Industrial Events



Joe
Academic Events

Meet Our Departmental Student Reps

Dear Fellow Bioengineers,

A huge congratulations on reaching this point in your journey! Whether you're continuing your studies or stepping into a brand-new chapter, we're so excited to welcome you into another year in the Department of Bioengineering. This is a place full of opportunities to learn, experiment, meet brilliant people, and grow not just as engineers but also as individuals.

I'm Yeline Idir, a third-year Biomedical Engineering student from Rabat, Morocco, and I'll be your Academic Department Representative this year. Outside of the lecture hall, you'll usually find me reading, painting, or at the theatre. (Fun fact: I speak about 4.5 languages, including French, Arabic, and Spanish!) My role as Academic Department Rep is to be a bridge between you, the student body, and the department. If you ever have feedback on teaching, assessments, course structure, or ideas for how our academic experience could be better, I'm your first point of contact. I gather your thoughts, bring them to staff meetings, and work with lecturers and faculty to make sure our voices are heard. Think of me as your advocate for anything related to learning and academic life, no matter how small it seems.



I'm Apollo Yang, a third-year Biomedical Engineering student from Beijing, China, and I'll be your Wellbeing Department Representative this year. I like to spend my free time reading, experimenting with cooking and working out in Ethos. (I speak about 4.5 languages too, including Chinese, Japanese and German). My role as Wellbeing Department Rep is all about supporting the student community beyond academics. As Wellbeing Rep, I work to create a welcoming, inclusive environment by listening to your concerns around stress, workload, balance, or anything affecting your student life. I organise wellbeing-focused events, signpost useful resources, and partners with staff to make sure student welfare is prioritised. Whether you need advice, someone to talk to, or just want to suggest ideas for building a stronger sense of community, I will be your go-to.

The year ahead will have its challenges, but also countless chances to create memories, build skills, and support one another. Alongside our brilliant staff and Student Services, we're here to help you navigate the ups and downs; whether that's through regular feedback sessions, casual coffee chats, or just a quick Teams message. Your voice shapes this department. Share ideas, concerns, or suggestions with us anytime: email, Teams, a quick chat after class, or through our anonymous feedback form. We can't wait to see what we'll achieve together. Dive into your modules, get involved in societies, look out for each other, and make the most of Imperial's endless opportunities.

Keep an eye out for our updates in upcoming newsletters, and let's make 2025-26 a year of growth, collaboration, and fun :)

See you around campus,

Yeline & Apollo

Undergraduate Departmental Representatives



Feedback Form

Looking After Students: Meet Geethma, the Wellbeing and Disability Officer

Starting university is exciting: lots of new friends, a new city, and a fresh start at Imperial College London. But alongside the buzz come some real challenges: deadlines, exams, homesickness, and health worries. Supporting Bioengineering students through all of this is Geethma Aponso, the department's Well-being and Disability Officer.

No Such Thing as a Typical Day

Her days are exciting and rarely predictable. Mornings begin with checking emails for urgent issues before moving into student appointments, tutor discussions, or meetings with faculty. She also leads the pastoral team and helps process disability adjustment documents so the right support is in place for teaching and exams. Beyond admin, she organises community events such as gardening with the Chaplaincy, arts and crafts, or even puppy therapy. "It's about creating spaces where students feel comfortable and can talk about their well-being," she explains.

Wellbeing Support: Don't Wait Until Things Get Tough

Her advice for new students is to reach out early. "It doesn't even have to be about a well-being concern," she says. "Come by just to say hello. It's important to know who your support people are before you really need them." Email or Teams works best, though she also keeps time for drop-ins with her booking link.



Friends Are Your Best Medicine

When coursework and exams pile up, she sees friends as the best support system. "Whether you're studying together or just having dinner, those relationships are really important." She reminds students that physical health, registering with a GP, and taking vitamin D matter as much as mental health. "Too many students think problems will go away. Often, they don't. If you're stressed, not sleeping, or struggling to eat, don't ignore it. Talk to a friend, a tutor, a well-being rep, or come to me."



Disability Support: The Earlier, The Better

The other half of her role is disability support, and here her message is clear: disclose early. Declaring a disability unlocks adjustments such as exam support, rest breaks, or deadline management. “If you wait until later, you risk missing out on help that could have made a huge difference from the start” she says. Each student meets with a disability advisor, and their plan is tailored to them. Submitting documents by October ensures adjustments are ready for the exams; later than that, practical arrangements become harder.

Breaking Down Stigma

Reducing stigma around disability and mental health, she believes, starts with openness. “Talking about it normalises it. Depression alone affects one in four people.” She adds that even small acts, like asking lecturers to use a microphone, help create a culture where others feel comfortable too.



Looking Ahead

At the heart of her role are listening, empathy, and communication. Looking ahead, she hopes to join more student initiatives and meet students outside of difficult times. “It’s also nice to meet students when things are good,” she says. “I want to be more out there, getting to know people day to day.”

For freshers in Bioengineering, her message is reassuring: you don’t have to face university challenges alone. From friends and tutors to trained professionals, there is a network ready to support you. As she puts it:
“Know who your support people are from day one. That way, when you need help, you won’t hesitate to ask.”

Contact:

Geethma Aponsu

Student Wellbeing Adviser & Disability Officer
Department of Bioengineering

Email/teams:

g.aponsu@imperial.ac.uk

Location:

Room RSM 3.11, Royal School of Mines,
Imperial College London, SW7 2AZ

For departmental information regarding student wellbeing, including **urgent support** please see:

<https://www.imperial.ac.uk/bioengineering/student-wellbeing/>

First Year Advice From Last Year's Bioengineering Students

Biomedical Engineering (BME)

Students describe BME as challenging but rewarding. The course pushes you academically while also developing time management, problem-solving, and teamwork. Many stress the importance of staying consistent. Attend lectures, keep up with study groups, and avoid relying only on recordings. The medical science module in particular is content-heavy, so don't let revision pile up before exams.

Problem-solving practice is essential for Thermodynamics and Mechanics. "Work through problems every week, not just before study groups," one student advises, "you'll need that understanding for group projects." Labs also require independence. In the Electrical Engineering Lab, students highlight the importance of troubleshooting skills. "Learn to spot short circuits and open circuits yourself instead of waiting for GTAs or technicians to fix things. Otherwise, you risk damaging components." Keeping up with your logbook is another key tip, update it during or right after each lab. Leaving it to the end makes details easy to forget, and it counts towards the assessment.

Despite the demands, BME students point to highlights such as the collaborative nature of group projects. DAPP workshops are also praised for encouraging creativity and design thinking.



Molecular Bioengineering (MBE)

For MBE students, preparation pays off. Digital Logic and Programming can be tough for those without prior experience, so brushing up on Python beforehand helps. "Use the BioEng Bible revision guide provided, it's the best resource," one student says. Textbooks are also more detailed than lecture slides and are worth using. Students encourage making friends early. "Don't be shy, everyone's in the same boat and wants to meet new people." They also stress preparing for progress tests, which both boost grades and highlight gaps before final exams.

Biomedical Technology Ventures (BTV)

BTV students face a wide range of challenges, with many hands-on projects. "Have a clear vision of what you want to achieve," one advises, whether in coursework or across the academic year. With only about 25 students, the cohort is close-knit, though some modules are shared with BME and MBE.

The second term brings lab sessions at the Advanced Hackspace, where students build robotic arms, alongside modules such as Entrepreneurship and Sensors and Actuators. The business side of the course is seen as refreshing and different, while lab GTAs are praised for their willingness to help. Overall, BTV students encourage keeping an open mind and embracing the variety. "Stay excited for opportunities."

Getting Started with a UROP: Advice from Michaela

Imperial offers a wealth of hands-on experiences, such as the Undergraduate Research Opportunity Programs (UROP), which is a structured and supervised research program.

Michaela, a final-year Molecular Bioengineering student with a keen interest in tissue engineering, regenerative medicine, and synthetic biology, shares her experience navigating this journey and offers advice for students considering a UROP.

Why Do a UROP?

Michaela always knew she gravitated towards research, so she wanted to get some extracurricular wet lab experience that would allow her to be more independent, rather than just following a protocol in course labs. She emphasises that even if you're uncertain about your future, doing a UROP really opens your understanding of the Bioengineering world, and it's always great to explore. A lot of people who had no interest in going into research absolutely loved their UROP and ended up doing a PhD!

Getting Started

Michaela emphasises that the best way to get involved in research is to reach out directly. "Don't be afraid to email professors or approach lab members," she says. Before contacting anyone, she recommends reading a few of their recent publications. This helps students understand the lab's work and identify areas where they might contribute. Highlighting what excites you about the research makes a strong first impression.



Making the Most of Your UROP

Her first project involved creating a standard operating procedure (SOP) for a stopped-flow device, while her current project focuses on genetic engineering of mesenchymal stem cells (MSCs) for a joint-on-a-chip. Experiences can vary depending on the lab, but Michaela highlights that being independent and contributing meaningfully is key.

Lab Life and Problem-Solving

Michaela also emphasises the value of the lab community. In her first UROP, she loved not just the work but spending time with lab mates, sometimes staying longer just to chat or help out. She notes that in science, you often don't know what the problem is or why something isn't working, but there are always people around to brainstorm and troubleshoot. "Science can feel a bit like detective work sometimes," she says.

Tips for Junior Students

- Don't be afraid to ask questions.
- Read the professor's papers beforehand, and find something that genuinely interests you
- Look for areas where you can contribute.
- Build relationships with lab members and enjoy the experience.

Michaela's journey shows that UROPs are not only about experiments, they're about learning, growing, and becoming part of a scientific community.



FROM IMPERIAL TO INDUSTRY: CHLOE'S ADVICE ON MAKING THE MOST OUT OF UNI AND LANDING YOUR DREAM JOB

Meet Chloe, an MEng Biomedical Engineering graduate from the Class of 2023. She's now working in Johnson & Johnson MedTech as a Customs Design Engineer, working hands-on to create tailored joint replacements for patients, after recently finishing her 2-year graduate program rotating across R&D and operations.

At Imperial, Chloe was far more than a Biomedical Engineer. She captained the 5th team Netball, served as President and Music Director of Acapella Society, and was part of Malaysian, Barbell and Pole & Aerial societies. Her message to freshers: "Societies aren't just for fun, they teach soft skills, connect you with people from all walks of life, and make you stand out as more than just an engineer." It's important to be part of societies, both for your own fun, but also for you to be memorable to companies. Her final year dissertation on the barbell back squat tied in with her love of powerlifting, something interviewers always remembered. "People don't just want to know about your degree, they want to know who you are". At the end of the day, they are looking for someone who would fit in and they would like to work with.



When it comes to settling in, Chloe stressed, "Be yourself. Everyone tries to reinvent themselves at the start, but if you're authentic, you'll find your people. Don't play it safe, join societies early, especially the ones you've never tried before. Those experiences make uni much more rewarding." During job interviews, 99% of the time they will ask you about 'Tell me a time about when you ...' These societies experience are what give the leadership, organisational and communicational skills a solid example, which companies absolutely love.

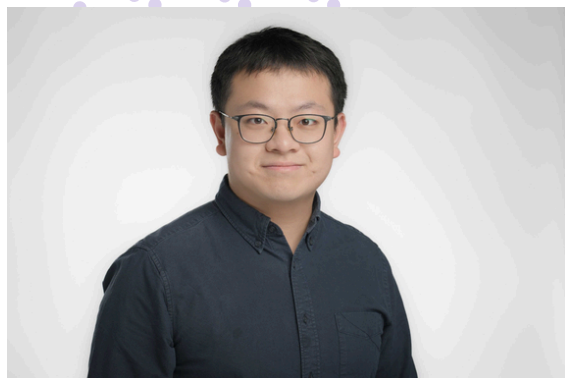
On job hunting, Chloe advises applying broadly, even just to practice. "I used assessment centres at companies I wasn't aiming for as rehearsal. For interviews, prepare 3-4 strong examples and reuse them with the STAR technique. For video interviews, shrink the camera window, practice bullet points first, then deliver polished answers on the second take."

Now in industry, Chloe finds the biggest difference is structure: "At work, you get the evenings and weekend off, while at uni, almost most of your time gets absorbed into uni"

Join as many societies as you can, put yourself out there, use your wealth of experiences as the base for your interviews and let that lead the way for you.

Teaching with Passion: Li Binghuan on Winning GTA of the Year 2024

Graduate Teaching Assistants (GTAs) are a vital part of student life at Imperial. In 2024, Binghuan was recognised with the GTA of the Year Award at the Department of Bioengineering at Imperial College, celebrating his dedication to teaching and the way his role complements his research in computational fluid mechanics.



For Binghuan, teaching is about more than just payment. “I’m not naturally very talkative, but GTA sessions force me to speak and connect with people. Every year, I still learn something new, especially in Programming 2, which I’ve taught for four years.” Those lessons often feed into his research, where he develops computational models to predict cardiovascular diseases such as aneurysms and aortic dissections. “We can’t take someone’s heart out to measure flow directly, but with simulations we can predict pressures and flows to help doctors plan treatments.”

Teaching and research reinforce each other. Coding skills from the lab improve his GTA work, while new techniques from teaching sometimes push his research forward. He has supported modules including Programming, Physiological Fluid Mechanics, and Control, and tries to reflect his own learning process in how he teaches. “It’s like organising books on a shelf: knowledge needs structure so it can be retrieved quickly.”

Asked how students can make the most of GTAs, Binghuan's advice is simple: be curious and unafraid of mistakes. "Programming is basically creating bugs and debugging them. If you explain your logic clearly, GTAs can help much more efficiently." For freshers, he recommends staying open-minded: "Bioengineering is so broad. Use projects, UROPs, and coursework to explore. Every experience gives you skills you can take into the future."

Looking back, Binghuan treasures the friendships he has built with students and the recognition his teaching has earned. After being named UTA of the Year in 2022, he now holds the GTA of the Year Award and Associate Fellowship of the Higher Education Academy. “Awards are special, but what matters most is seeing students grow and knowing I’ve played a part in their journey.”

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17 box-shadow: 0 15px 25px #000000;
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STARTUP COMPANY LUNABIO: TACKLING THE GAPS IN WOMEN'S HEALTH



Spotting the Blind Spots

When LunaBio was created, they set out to tackle one of the biggest gaps in medicine: women's health. "Female healthcare has been under-researched and underfunded for so long," the CEO Lucy explained. "Most women with hormonal concerns only get a single blood test, which is just a snapshot of their health condition."

A Simple but Powerful Idea

LunaBio is developing a wearable hormone biosensor, similar to a glucose monitor but designed primarily to track women's cycles. Using tiny microneedles, the device could continuously measure hormones such as oestrogen and progesterone in real time, with plans to expand to luteinizing hormone and FSH. While their main focus has been cycle tracking and fertility, during their early research, they also explored potential applications in menopause care, hormone replacement therapy, athletic performance, and conditions like PCOS and endometriosis. "There's very little available right now, so we saw a huge opportunity to make an impact," they said.



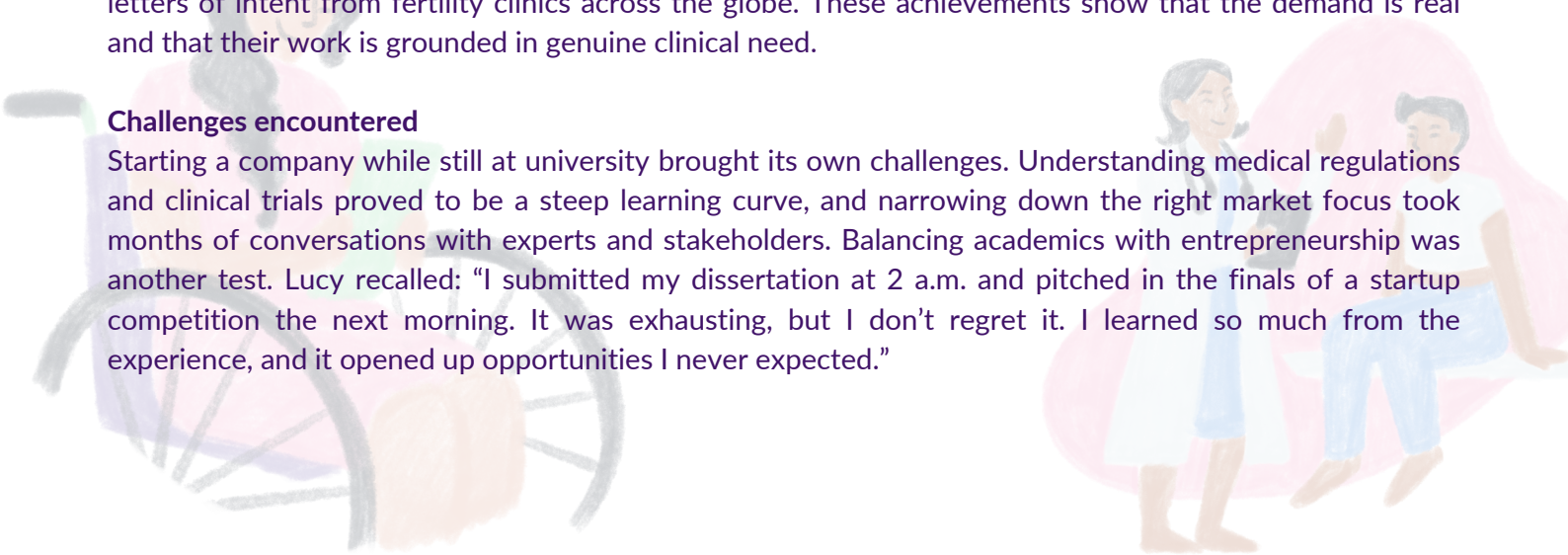
Minimally invasive microneedle technology
Monitors estrogen and progesterone in real time
Prototype design taken from their pitch deck

Finding the Right Focus

At the moment, LunaBio is still in the research and validation stage. With funding from Imperial's WE Innovate programme, the team has been analysing competitors, exploring emerging biosensor technologies, and speaking to clinics around the world to understand where their device could have the greatest impact. While they first considered PCOS as a market entry point, they soon realised IVF treatment was a clearer focus. Women going through IVF often need daily blood tests, leaving clinics with hundreds of samples to process and patients with a demanding routine. A continuous, minimally invasive monitor could save both time and resources while improving patient experience. They have secured eight letters of intent from fertility clinics across the globe. These achievements show that the demand is real and that their work is grounded in genuine clinical need.

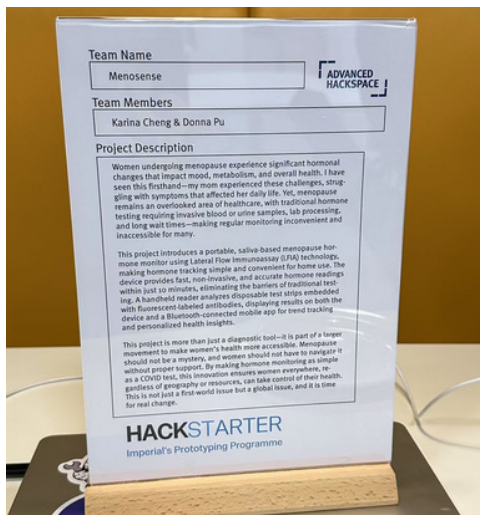
Challenges encountered

Starting a company while still at university brought its own challenges. Understanding medical regulations and clinical trials proved to be a steep learning curve, and narrowing down the right market focus took months of conversations with experts and stakeholders. Balancing academics with entrepreneurship was another test. Lucy recalled: "I submitted my dissertation at 2 a.m. and pitched in the finals of a startup competition the next morning. It was exhausting, but I don't regret it. I learned so much from the experience, and it opened up opportunities I never expected."





HACKSTARTER WINNERS: MAKING MENOPAUSE CARE ACCESSIBLE



This year's Hackstarter competition at Imperial saw students pushing the limits of creativity and engineering, but one project in particular stood out for its mix of innovation and impact. MenoSense is a saliva-based hormone monitoring device designed to support women going through menopause. Unlike traditional hormone tests that require blood or urine samples and lengthy lab analysis, MenoSense uses lateral flow immunoassay technology combined with a handheld electronic reader. The results are fast, non-invasive, and easy to track through a companion app that provides personalised health suggestions. For women who cannot easily access clinical facilities, this tool could make hormone monitoring more accessible and give them more control over their own health.

The idea was born from a personal story. Karina explained: "When I applied for Hackstarter, I was thinking of my mom, who is going through menopause. I saw how much the physical and emotional changes affected her. Unlike an invasive test, saliva is easier, less stressful, and it opens the door to a much larger market." That became the foundation of their design.

What set MenoSense apart in the competition was their ability to pair a working prototype with a compelling story. They highlighted the global scale of the problem, used animations to explain the technology, and broke down complex science in a way the audience could follow, while also being open about future hurdles: although they proved their concept using high hormone concentrations, they acknowledged the need for funding to lower detection to physiological ranges and to expand the software beyond a demo. Along the way, the students gained not only technical skills in lateral flow assays, fluorescence, and sensor integration, but also a new perspective on engineering — a mindset shift from following a research hypothesis to solving unpredictable problems. They also discovered the importance of collaboration, as founder Karina's solo idea became a stronger project when she brought in teammate Donna, turning it into a true team effort.

One major setback came when a company they relied on for a key covalent binding step told them it could not be done. The team had to rethink their approach and pivot to using intermolecular forces instead. It was a crash course in resilience. The project itself stretched across three areas: electronics, molecular biology, and software. Juggling those streams and finding solutions under time pressure became part of the challenge.

For the team, MenoSense represents what bioengineering is all about: using biology to solve real-world problems. By applying knowledge of hormone detection methods and sandwich models to saliva-based testing, they created a practical device that could make women's lives easier. Looking ahead, they hope to refine the technology to detect multiple hormones in a single strip, giving a more comprehensive view of menopause. That means ensuring one assay does not interfere with another, which will require significant experimentation and funding. Their advice for future Hackstarter participants is simple: put detail into your first proposal. "At the start you get £500 for your prototype, and you need to show exactly what you plan to buy and how you'll use it. A clear plan makes all the difference."

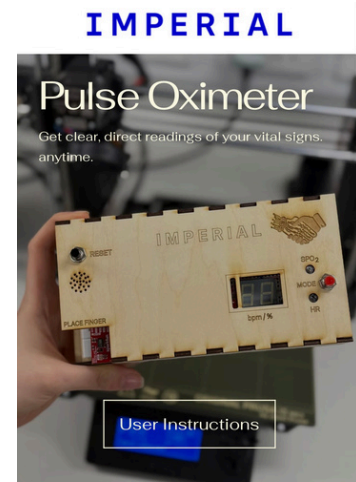
DAPP1 PROJECT SPOTLIGHT: BUILDING BEYOND THE BRIEF

Thinking Outside the Box

This year's First Year DAPP1 winners didn't just follow the brief, they made it their own. The challenge was simple on paper: build a pulse oximeter to measure heart rate and oxygen saturation using only the limited materials provided. That meant a wooden board for the casing, a single Arduino for coding, and a breadboard for the circuit. Instead of letting those limits hold them back, the team got ambitious and creative. We caught up with three of the five members — Lee, Marwin, and Inès — to hear about their journey.

A Standout Prototype

Their device impressed for three key reasons. First, it could be controlled remotely from a phone, making it far more flexible than other designs. Second, they built a live dashboard that displayed results as clear, easy-to-read graphs. This idea came early on, when they decided to test the limits of the Arduino Nano 33 IoT's Wi-Fi and Bluetooth functions, using cloud connections as the backbone. Finally, they put real thought into the user experience, creating a website that not only introduced the device but also explained what high or low values might mean for health.



Solving Tricky Problems

One of the biggest challenges was displaying values above 100 with only a two-digit screen. The team's solution was to make an oval shaped cut resembling a "1" to the left of the two-digit 7-segment display and place LEDs underneath it. Whenever results exceeded 100, the LEDs lit up to form a "1". Multiplexing the display and arranging the circuit also required real patience and careful thought, as the limited pins and crowded breadboard space pushed the team to be inventive. To tackle another issue — the screen going blank while the sensor processed data, which made it look like the device had stopped working — they introduced a spinning loading animation. This small but thoughtful detail reassured users that the system was active and preparing a reading.



Marwin Banluelap, Inès Meyer, Lee Caspi, Sanford Chen, Yvonne Cui, Demir Erylimaz, Su Zixin

Improvements for the Future

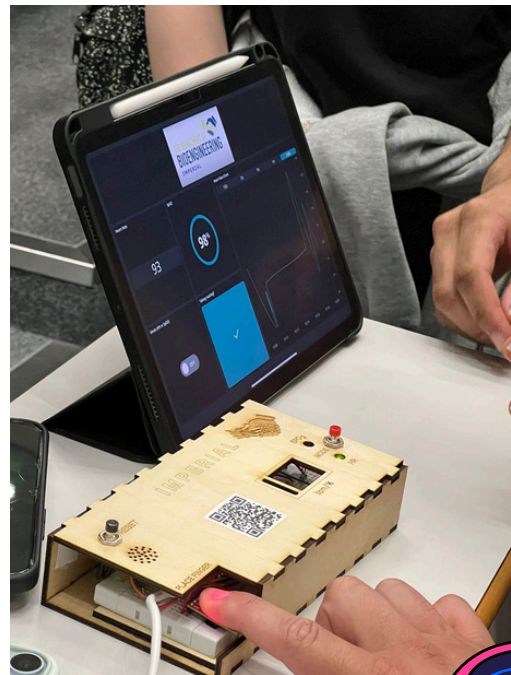
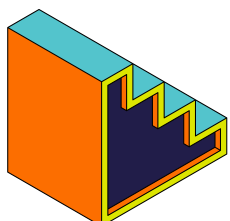
They summed up possible improvements in three keywords: portability, durability, and digital experience. For portability, they'd swap out the chunky battery for something smaller and lighter, making the device easier to carry around without compromising performance. For durability, they'd build a fully enclosed 3D-printed casing so the prototype could survive general wear and tear. And finally, to create a slick, custom-built dashboard, paired with QR-code quick access so users can pull up their data instantly on their phones.

Lessons Beyond Engineering

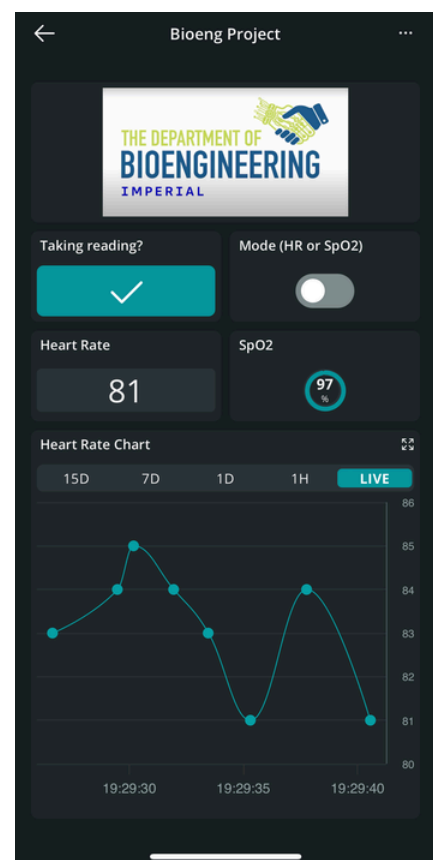
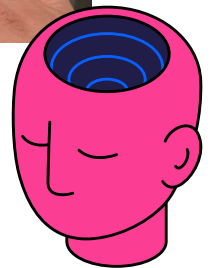
The project wasn't just about wires and code, but it also tested their teamwork and communication. They spoke about learning patience, checking in on each other, and playing to each person's strengths — whether that was coding, design, or creative thinking. Time management quickly became essential, especially under pressure. As one teammate put it: "You have to use each other's specialities, that's how you move the project forward."

Words of Advice

When asked what advice they'd give to next year's students, they said: "Be kind to your teammates, don't give up when something breaks, and aim high even with limited resources." They know the frustration of failed circuits, but they also know how rewarding it feels when everything finally works. This year's winners proved that a great project is about more than working circuits — it's about persistence, creativity, and the people you share the journey with. Next year, it could be your team in the spotlight.



User testing of the device



User Interface

"You have to use each other's specialities, that's how you move the project forward."

Neurotechnology Society



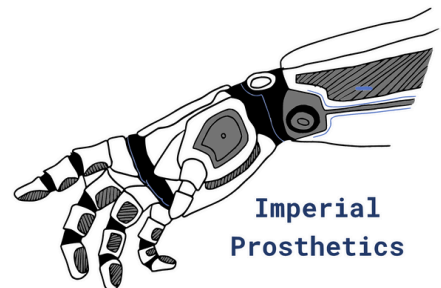
Launched in 2024, Imperial Neurotech Society is the UK's first student-led neurotech society, uniting 700+ students and professionals passionate about neurotechnology. Last year, our society offered 30+ unique learning and networking opportunities, including guest-speaker talks, journal club meetings, workshops, podcasts, hands-on projects, conferences, hackathons, and socials. Starting off from 'ICL x g.tec Medical Engineering BCI Workshop' on 22nd October 2025, we will build on our success with more exciting events next year. Whether you're into engineering, biology, medicine, coding, business, or design, there's a place for you to innovate with us! → <https://iclneurotech.co.uk/>

Prosthetics Society

Hello bioengineers, are you looking to join a hands-on bioengineering project? Then, let us introduce you to the Prosthetics Society! We're made up of 3 sub-teams currently working on making an EMG-controlled arm, a pneumatically powered exoskeleton, and a semi-active leg with a carbon-fibre foot. This year, we're also starting a brand-new, affordable prosthetics team focused on creating an open-source, affordable knee adapter joint.

Core activities:

- Weekly team meetings to design and build prototypes, and occasional joint meetings with other teams to share
- Workshops on CAD, PCB, and 3D printing. This year, we have a workshop with Ottobock on state-of-the-art prosthetics.
- Talks from professionals
- Socials where you can meet students from different years and courses



Whether you're into engineering, design, or just curious about prosthetics, we'd love to have you on board. Don't worry if you don't have any previous experiences. Come join us and help shape the future of prosthetics while gaining hands-on experience! Email us at prosthet@ic.ac.uk or DM us @icl_prosthetics if you have questions.



Running for Hope: Join Us in Changing Children's Lives!



Hello everyone! We are Emil, Gianni, Dameer and Sophia, a team of passionate 3rd-year Bioengineering students, and this October, we will lace up our running shoes and take on the Royal Parks Half Marathon — not for our CV, but to give children in crisis a fighting chance at life. We have been sponsored by Chain of Hope, an incredible charity that delivers life-saving heart surgery to children in some of the world's most vulnerable communities. Every step we take is a step toward healing, hope, and a brighter future for children who desperately need our help.

Why are we doing this? Because we believe that every child deserves access to life-saving care, no matter where they are born. Because we've seen the transformative power of Chain of Hope's work, and we're determined to make a difference. You can be part of this life-changing mission. Your donation, no matter the size, will directly fund surgeries, medical supplies, and the hope of a healthier tomorrow for children in need. Together, we can turn miles into miracles. Join us—donate today and help us run for a cause that truly matters.

Mums and Dads Challenge

The BioEng Family that's able to get 8 out of 10 of these challenges by the end of Term 1 wins free BioEng merch! Remember to take a photo as evidence! Email bgsoc@ic.ac.uk when you've completed it.

- ☐ Go to union together and get a drink (can be non-acoholic!)
- ☐ Have a meal together
- ☐ Have a study session together
- ☐ Cook at someone's place together
- ☐ Join the Mums and Dads Pub Crawl
- ☐ Take a photo with the Queen's Tower
- ☐ Join a BioEng Soc event together
- ☐ Recreate a TikTok or Reel
- ☐ Photo with another BioEng family
- ☐ Visit one of the South Kensington museums

Upcoming Events

29 Sept

BioEng Family Pub Crawl

Meet your BioEng Mum and Dad and come hop around the student-favourite pubs around campus!

1 Oct

Welcome Fair

Join us at Welcome Fair for BioEng freebies, a physical copy of Splice, and meet the committee!

2 Oct

Trivia and Pizza Night

Join us for free pizza and a fun quiz night on campus with your friends, and to meet other fellow Bioengineers!

3 Oct

Hyde Park Picnic

Join us at Hyde Park (just 5 mins away from RSM!) for an afternoon filled with games, food and fun!

10 Oct

UCL Medical Physics and Biomedical Engineering Soc x IC BioEng Soc Boat Party

A chance to meet others from the department and the wider London BioEng community! Make sure to get your tickets ASAP as they will sell out quick!

22 Oct

BioEng x Materials x DesEng Careers Fair

10+ companies will be sharing on campus!

27 Oct

Bio x BioEng x BioChem x MechE x DocSoc Halloween Movie Night

Free movie!

Early Nov

Internship and UROP 101

Learn from students that have done internships and UROPS. An interactive careers fair style event where you can network!

Late Nov

November Social – You Choose!

Help decide what our Nov social will be! Vote for your favourite event – bowling, pub crawl, karaoke, board games and more!

9 Dec

Christmas Dinner

200+ students, staff and alumni celebrate Christmas and the end of first term. A heavily subsidised event with delicious food and drinks.

Mid Dec

Winter Wonderland

Join us to visit Winter Wonderland, just 10 minutes walk away from campus, with a heavily subsidised ticket!