**Welcome to Innovation Week!**

Over the course of week 2 you will learn all about innovation and entrepreneurship. Whether you are interested in becoming an entrepreneur or not, the skills and learning over this week can be applied to other areas of study and future employment. We need innovation and entrepreneurship to challenge the status quo, innovate in industry and create solutions to some of the worlds most pressing problems. Many of our students and academics at Imperial College have taken an invention or innovation to market.

Over this week you will work in teams to develop a new innovation in the area of Health and Wellbeing or Climate Change. On the final day of the week, you will be pitching your ideas to the entire group and there will be prizes for the most innovative idea.

Below we have listed some information that will help you contextualise the week and identifying a problem to try to solve! Don’t worry if you don’t get a chance to use these resources before you join us, we’ll provide all the training to help you develop a great idea and pitch!

**Examples of student innovations from Imperial!**

[**Cyanoskin**](https://startbook.app/events/imperial-enterprise-lab/ventures/cyanoskin)**,** The living paint, fighting the climate crisis, was founded by three students, two from Imperial College Business School, and one from the University of Manchester. Cyanoskin recently won £30,000 of prize money from Imperial Enterprise Lab’s flagship entrepreneurship competition, the Venture Catalyst Challenge.

**What is the problem they are trying to solve?**

Across the world, portfolio and sustainable business managers are over-budget and still unable to reach their net zero targets. They need to get their company and buildings to net zero faster and cheaper, but can't find solutions effective enough.

**What is their solution?**

The solution is Cyanoskin: an innovative living paint designed to transform buildings into carbon dioxide-absorbing structures, reducing emissions and addressing urban pollution. It is an easy-to-apply, efficient and cost-effective tool for CO2 sequestration. Once the outside of your building is painted, it grows benefitting you, your company and the planet.

Find out more about the students who formed [Cyanoskin here](https://startbook.app/events/imperial-enterprise-lab/ventures/cyanoskin)!

Another example is [DotPlot,](https://startbook.app/events/imperial-enterprise-lab/ventures/dotplot) an at home breast health monitoring solution to facilitate early detection of breast cancer. Founded by two students in the Dyson School of Engineering at Imperial. Debra and Shefali have gone on the raise investment for their company and have won numerous competitions!

**What is the problem they are trying to solve?**

Breast cancer claims 31 lives daily in the UK, but 47% of women don't perform regular self-checks, leading to delayed diagnoses. In the 18-35 age group, 64% fail to check their breasts, causing concern. Current guidance is varied and confusing, highlighting the need for more effective self-check methods to facilitate early detection and improve outcomes.

**What is their solution?**

Dotplot provides a handheld device that tracks breast tissue changes, accompanied by an app guiding users through monthly self-checks. Abnormal changes trigger alerts, encouraging prompt follow-ups with healthcare providers. The app creates a 3D chest model to ensure precise device placement, guiding users through a comprehensive, mapped self-examination.

Read more about [DotPlot here](https://www.imperial.ac.uk/news/235074/at-home-breast-monitoring-tool-wins-imperials/)

**UN Sustainable Development Goals**

**What is the UN Sustainable Development Goal 3 and why are they important?**

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. We often use them when thinking about impactful innovations and a way to ensure you are having a positive impact on the world.

As part of Innovation Week you will be exploring the following goals.

**Goal 3: Good Health and Well-being.**
Ensure healthy lives and promote well-being for all at all ages.

OR

**Goal 13: Climate Action**
Take urgent action to combat climate change and its impacts.

You may focus on any region in the world. Framing around the goals will help you identify a problem worth solving. We have listed he targets for each goal below.

**The UN Sustainable Development Goal 3 targets are:**

Target 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

Target 3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

Target 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

Target 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

Target 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

Target 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.

Target 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

Target 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Target 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

[**Read more about UN SDG 3 here**](https://sdgs.un.org/goals/goal3)

**The UN Sustainable Development Goal 13 targets are:**

Target 13.1 Strengthen resilience and adaptive capacity to climate related disasters

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Target 13.2 Integrate climate change measures into policies and planning

Integrate climate change measures into national policies, strategies and planning.

Target 13.3 Build knowledge and capacity to meet climate change

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

Target 13.4 Implement the UN framework convention on climate change.

Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.

Target 13.5 Promote mechanisms to raise capacity for planning and management.

Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.

[**Read more about UN SDG 13 here**](https://www.globalgoals.org/goals/13-climate-action/)

**What is Social Entrepreneurship?**

If you are wondering about ‘entrepreneurship for good’, we’d recommend watching this excellent talk by Staph Leavenworth Bakali who talks about ‘Profit for Purpose’ and another great talk with Vicki Saunders.

[GCL2021: Social Entrepreneurship on Vimeo](https://vimeo.com/577928883)

[How To Do Good and Make Money with Vicki Saunders on Vimeo](https://vimeo.com/485927082)

**Want to see some examples of student entrepreneurs pitching their ideas?**

[The Venture Catalyst Challenge Grand Final - See Cyanoskin win!](https://www.youtube.com/watch?v=vWZ1mtk6Z4Y)

[WE Innovate Final 2023 (youtube.com)](https://www.youtube.com/watch?v=TTqtR6MrRXc)

**Learn about prototyping**

You won’t be expected to build a prototype in week 2, however, some students have built a website or a basic prototype, if you want to find out more about this, watch this video on [How to Prototype](https://vimeo.com/503422460?share=copy).

**How is Innovation and Entrepreneurship relevant to me if I want to work in industry or I am following a vocational course, such as medicine?**

“The World Health Organization (WHO) explains that ‘health innovation’ improves the efficiency, effectiveness, quality, sustainability, safety, and/or affordability of healthcare. This definition includes ‘new or improved’ health policies, practices, systems, products and technologies, services, and delivery methods that result in improved healthcare.” [Read more here](https://www.emjreviews.com/innovations/article/what-do-we-mean-by-innovation-in-healthcare/#:~:text=This%20definition%20includes%20'new%20or,that%20result%20in%20improved%20healthcare.). So you don’t have to launch a new company to be interested in innovation, you may want to improve patient care for example, or improve systems or services.

Innovating within industry and a corporate setting is hugely important, read more [about it here](https://www.forbes.com/sites/forbesbusinesscouncil/2020/07/01/why-corporate-innovation-is-essential-today/). Many large companies who have failed to innovate and keep up with changing behaviours and technologies have failed.

Many people don’t set out to be entrepreneurs, but realise that sometimes this is the quickest and best way to make an impact on the world. Driving innovation and seeing the impact of your product, service, or project in the real world and in the hands of real customers or end users!

You may also have heard of corporate innovation, or ‘intrapreneurship’ – for those of you seeking a career in a specific area, you may find that companies are seeking candidates that understand how to innovate.

“While innovative startups come and go like the wind, there is always something to learn by watching when pinnacle examples of corporate business and industry leaders forget that they aren't untouchable. Market shifts can rattle the foundations of even the most prominent enterprises. It is a reminder that no one is safe and that complacency can lead to innovation failure. So, to learn from the more famous examples of a marketing failure, [here are 50 brands that failed to innovate](https://www.valuer.ai/blog/50-examples-of-corporations-that-failed-to-innovate-and-missed-their-chance)”

**Employers are looking for Entrepreneurial Mindsets in their graduate hires!**

“Students and graduates often think that they only require entrepreneurial skills if they intend to become an entrepreneur and set up their own business as a graduate . But employers often seek an entrepreneurial mindset in their graduate recruits. These graduates are an asset because they will be able to spot gaps in the market and innovate, and because they are commercially minded. Graduate job seekers can showcase their strengths in this area by demonstrating a capacity for independent work and original thinking, as well as sound business sense and an interest in the market that their potential employer operates in”… [Read more here](https://targetjobs.co.uk/careers-advice/skills-for-getting-a-job/enterprise-and-entrepreneurial-skills-seizing-opportunities-and-seeing-them-through#:~:text=The%20graduate%20employers%20that%20are%20most%20likely%20to,agencies%20%29%205%20retail%206%20hospitality%207%20property.)

**Making applications to Imperial College**

Imperial College launched a new strategy this year, focusing on **Science for Humanity** and a pillar of this strategy is Innovation. We seek to scale up our world-class innovation ecosystem for world-changing impact. We pride ourselves on our startup culture at Imperial, nurturing the supportive and interdisciplinary environment that science entrepreneurs need to thrive. That enabling environment includes Imperial’s Enterprise Lab, our Institute for Deep Tech Entrepreneurship and our network of hackspaces, incubators and accelerators. Our network of business angels supports our students and staff as they turn their ideas into prototypes, their prototypes into startups, their startups into scaleups, and their scaleups into world-changing businesses. When making a competitive application to Imperial College programmes, you may wish to articulate how you to display a passion for innovation and science for humanity!

Finally, week two should allow you the creativity and freedom to create new innovations and understand the process of ideation, pitching and performance.

We look forward to welcoming you to Enterprise Week and can’t wait to hear your pitches!