# Idea Translation Lab

## Module Coordinator

<table>
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<th>Dr. Mairéad Hurley, Science Gallery</th>
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<td>What will you learn from this Elective?</td>
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Our world is in a state of flux: it is the dawn of the information age, the brink of the sixth mass extinction, and we are living in the era of fake-news, trash islands, AI pets and Humans 2.0. How do we solve the problems of a future we cannot yet imagine?

In the Idea Translation Lab (ITL) course, students will work at the boundaries of art, science & engineering to develop original ideas and projects where these disciplines meet. ITL is a cross-disciplinary Trinity Elective stimulating the development of entrepreneurial, creative and critical thinking skills through collaborative group projects. The module aims to equip students with skills beyond their disciplinary boundaries and to develop creative project ideas, applying both design and entrepreneurial skills to produce projects with real world outcomes, which may have impact along different axes: social, scientific, cultural and commercial. Furthermore, the course will encourage students to reflect critically on the broader perspectives around the cultural, ethical and economic role of science in society including science policy and the commercialisation of new ideas.

This Trinity Elective is hosted in Trinity College’s Science Gallery ([https://dublin.sciencegallery.com/](https://dublin.sciencegallery.com/)), giving students the opportunity to explore the societal impact of the intersection of art and science through practical examples and project work. The themes for each iteration of this elective module will align with the theme of a current or future Science Gallery Dublin exhibition.

## Student Workload

- **Blended/hybrid model** including class time with face-to-face content, online and guest lectures, with self-reflection and weekly feedback submitted by students via Twitter and online.
- **Approximately 12 hours of lectures** (1 hour per week). Lectures will be interactive sessions, with students invited to question, debate and discuss the topics. Guest lectures will be delivered relevant experts in topic-specific areas (e.g. if the overall theme of the module is PLASTIC, we might invite a leading materials scientist or an environmental scientist to deliver a related guest lecture).
- **Approximately 24 hours hands-on classroom/lab time** (2 hours per week). Students will be able to use this time to explore themes through hands-on making, designing, creating and prototyping. Science Gallery Dublin exhibition designers, producers and curators will be involved as expert mentors during these lab sessions.
Approximately 24 hours of self-study assignments including readings and self-reflection, and approximately 36 hours of group work on midterm and end of term group project assignments.

**READING SYNTHESIS ASSIGNMENT (15%)**
Students will submit a 500 - 1000 word essay on any three readings of their choice from the course reading list.

**GROUP PROJECT (60%)**
Students will work in small groups to produce idea translation projects based on key themes. The projects will be facilitated through this process at weekly group “lab” sessions and can draw inspiration and information from weekly ‘talk” sessions with internal and external mentors. An 800 word proposal will be submitted by each group describing the nature of the group’s idea, the need it addresses, precedents and challenges to development. Groups will present their final work to a public audience at Science Gallery in the last week of the module.

**SELF-ASSESSMENT (10%)**
Students will carry out a self-assessment of their participation and learning on the course.

**WEEKLY RESPONSE (15%)**
Students will respond in 140 characters online weekly with an image/text to a question proposed by the module leader.

**Video: IDEA TRANSLATION LAB 2016 (Theme: The Future of Farming, note that the theme changes during each iteration of the module)**

Art & Science Now: How scientific research and technological innovation are becoming key to 21st-century aesthetics — Stephen Wilson.

Creative Confidence: Unleashing the Creative Potential Within Us All — Tom Kelley & David Kelley

Speculative Everything — Anthony Dunne and Fiona Raby

Talk to Me: Design and the Communication Between People and Objects — Antonelli, Paolo

A full reading list or list of resources will be provided to enrolled students
Learning Outcomes

On successful completion of this module, students should be able to:

1. Brainstorm, ideate, refine and develop ideas around big global challenges that link into Science Gallery exhibition themes.
2. Participate in a programme of learning that is connected into the Global Science Gallery network and facilitates international perspectives through broad thematic approach.
3. Locate, assess and cite relevant visual and textual materials using print and electronic databases foster critical thinking and independent learning.
4. Ability to apply a cross disciplinary approach to specific problems.
5. Communicate project ideas through the creation and dissemination of images, texts, objects and rich media.
6. Describe, analyse and critique design artefacts (including apps, business plans, agricultural robots, transgenic organisms, proposals, prototypes, mind maps, etc.)
7. Generate and support novel theses by analysing and synthesizing texts, lectures, images and artefacts.
8. Employ self-reflection and peer to peer learning in context of group project work.