

## **BME5107: Green Lab Principles & Practice** (starts late September 2026)

### **Course Contributors**

**Dr Una FitzGerald:** Dr FitzGerald is the module facilitator and is an [Associate Professor in Biomedical Engineering](#). Her primary research area is Multiple Sclerosis and neurodegenerative disorders. However, since 2018 she has developed an interest and expertise in the area of lab sustainability. In 2019 she led the CÚRAM lab to be the first in Europe to gain Green Lab Certification from [My Green Lab](#). An invitation to chair the Sustainable Energy Authority of Ireland's working group for public sector labs followed, along with the launch on Earth Day 2022 of [Irish Green Labs](#). In November 2023, she was the inaugural recipient of Science Foundation Ireland's award for 'Green Transition' and during My Green Lab's Global Summit in September 2024, she received a 'Life-time Achievement' award from My Green Lab. In 2025, the [International Institute for Sustainable Laboratories](#) awarded Research Ireland's Centre for Medical Devices (Cúram) for piloting lab greening across Ireland.



**Dr Iain MacLaren:** Dr MacLaren is the Director of the Centre for Excellence in Learning & Teaching (CELT), which spans a range of responsibilities including technologies to support teaching and learning (whether in the classroom or online), the professional development of academic staff, teaching and learning policy and strategy, and research and scholarship in higher education. Prior to taking up this role, he taught and researched in a number of universities in Scotland and England, and his own disciplinary background is in Astrophysics (BSc, Hons) Edinburgh, PhD Durham) which broadened also to atmospheric physics, advanced computing techniques, multimedia technologies, and education. He has participated in, and led, a number of national and international



projects related both to professional development and learning technologies. He was a founding Board member of the National Forum for the Enhancement of Teaching & Learning, is currently a Principal Fellow of the Higher Education Academy/Advance HE, and writes and publishes in the field, most recently in *Reflective Teaching in Higher Education* (1st and 2nd Editions, Bloomsbury) which is a core text for many Postgraduate programmes in teaching and learning.

**Dr Caitriona Carlin:** Dr Carlin has a BSc in Environmental Biology and a PhD in Zoology, both from UCD. From 2008, she was employed at the University of Galway as a postdoctoral researcher and since 2011, has been Coordinator of the MSc in Sustainable Environments/Sustainable Resource Management Policy and Practice. Dr Carlin has been a full-time lecturer since 2021. She led the setting up of the Biodiversity Trail on the [University of Galway Campus](#) . Between 2014 and 2023, Dr Carlin was a Principal Investigator on an EPA-funded project entitled ‘Health Benefits from Biodiversity’ (including the [Nature & Environment Attain & Restore Health](#). In July 2025, the EPA awarded Caitriona €657,464 to carry our research on “Collective Opportunities in Nature & Environment for Community Transformations.”



**Dr Gesche Kindermann** Dr Kindermann has a BSc in Environmental Science (NUIG), an MSc in Ecosystem Conservation & Landscape Management (UCC), and a PhD in Environmental Science. For a period, she was also a volunteer with the Wildlife Conservation Society in Maroanetra, Madagascar. Dr Kindermann is the Director of the MSc Environmental Leadership and the academic coordinator for the MSc in Biodiversity and Land Use Planning. She is an investigator on the EPA-funded “Sheer Wellbeing” and NEAR Health project, an EPA/HSE funded project. Gesche is



also the coordinator of the campus-wide ‘Introduction to Sustainability’ module, delivered to multiple undergraduate programmes and hundreds of students, in

semesters 1 and 2. Dr Kindermann's main research areas of interest are habitat and landscape conservation management with particular focus on coastal dune systems and machairs.

### Guest Lecture:

Jack O'Grady, Director of Certification, My Green Lab



- Graduated from MTU in 2019 with a 1H1 Degree in Nutrition & Health Science
- 2018-2021 – a Lab Tech and then Senior Associate in R&D, @ [Pepsico](#) (Cork)
- 2021-2022- QC Analyst @ Regeneron (Limerick)
- ✓ Set up European Green Team for [Pepsico](#)
- ✓ Joined MGL, Feb 2022 as Sustainability [Programmes Manager](#)
- ✓ Director of Certifications - Impact Laboratories