The Trinity College Dublin Botany Department Newsletter

Accomplishments

Romane Guernalec, a French master student from Brittany, has joined the Botany Department to undertake her thesis. She will be working in the *Plant Ecophysiology group* with Matt Saunders, focusing on the seasonality of CH₄ fluxes from three aerenchymatous plant species in restored peatlands.



Botany also welcomes **Professor Chalermpol Suwanphakdee** (Pol) as a visiting academic and **Mr Yuthana Banchong** (Yuth) as a PhD student, both from **Kasetsart University Thailand**. Pol is undertaking **phylogenetic analyses on Acanthaceae** in collaboration with **Trevor Hodkinson**, while Yuth is working on **molecular phylogenetics of Piperaceae** under the supervison of Pol and Trevor.

Welcome on board!

Awards

Congratulations to **Jenny Mc Elwain** who has been awarded the **2021 Academy Gold Medal** in the Environmental Sciences and Geosciences by the **Royal Irish Academy.** She is the first woman to get this award, richly deserved for her inspiring research on fossil plants and ancient earth systems!

An Taoiseach, Micheál Martin, T.D. will present the Gold Medals in the Saloon Room, Provost's House, TCD at 12:00, Monday, 4 April 2022. More info here.



And congratulations to **Brian Murphy** and **Trevor Hodkinson** who won two awards at the annual **TCD Innovation Awards**. They were **winners in the Inventors category** for research that led to the creation of intellectual property and has subsequently licensed to Industry and/or campus companies, and received a **TCD Campus Company Award**. This commercialisation work was also supported greatly by **Erika Soldi** (TCD Botany) and **Fiona Doohan** (UCD).

Publications

Ponlawat (Thai) Pattarakulpisutti completed his PhD in Botany in 2019 and returned to his lectureship position at **Suratthani Rajabhat University.**

He has just published a paper from his PhD with **Fraser Mitchell** in *Flora* entitled *The role of fluvial landforms as a driver of vegetation variation on a floodplain in southern Thailand.* Free download <u>here</u> until the 23rd of March.



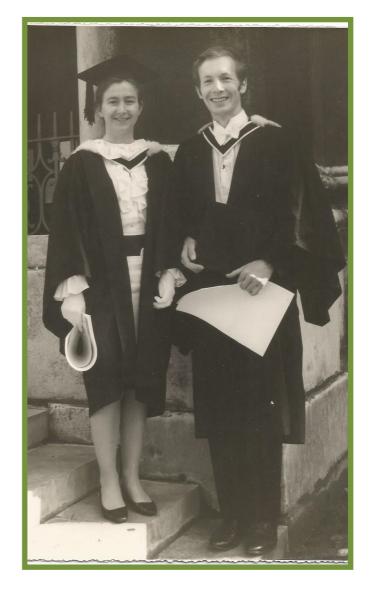
PHYTOBYTES

Publications - Olivia Goodwillie's new book

From Daniel Kelly (fellow-student in the Class of 1970)

Graduates of our Botany Department have made, and are making, a remarkable range of contributions to public life, at home and abroad. In this short report, we celebrate some of the latest contributions from **Olivia** (**née Hone**) and **Roger Goodwillie**, who graduated together - and got married - back in 1970.

After a year in Canada, they returned to Dublin. A few years later, they acquired Lavistown House, close to **Kilkenny**. Here they grew vegetables; raised a variety of livestock; and threw themselves into all sorts of culinary activities. In particular, they invented, made and marketed the delectable Lavistown cheese. Study of, and care for, nature and the environment were always central to their concerns, alongside a keen interest in traditional rural crafts. Together, they converted the house and outbuildings into what became Lavistown Study Centre. Here, down the years, they hosted courses in a panorama of subjects, from basketmaking to bryology, from wild foods to flower-painting.



For both of them, it was a logical step to start sharing something of their accumulated knowledge and skills with a wider public. Olivia's 2014 book, Something in the Tin, was an inspiring introduction to the art of baking, with mouthwatering recipes for cakes, biscuits, breads and brownies. In 2018, Roger co-authored with David Cabot The Burren, in the 'New Naturalist' series, shedding light on many aspects of a place that has long been a botanical Mecca - for TCD botanists in particular.



Roger & Olivia with artist Anne McLeod, in the vegetable garden at Lavistown. Photo by: Dylan Vaughan.

Olivia's latest appeared shortly before Christmas: *Something in the Basket: Vegetable recipes from the garden at Lavistown*. This book takes us through the seasons, from asparagus ('this perennial vegetable heralds the spring') to leeks and dried beans. Every vegetable on the list is grown at Lavistown by Roger; they are now 100% reliant on their own garden throughout the year for all of their vegetables, which are shared amongst three generations of the family. So every recipe has been well tested!

The book packs a lot into its **78 pages** — and still finds space for a sprinkling of asides, both chirpy and thought-provoking. **The illustrations**, **by Anne McLeod**, are a delight in themselves, and they complement the text wonderfully. Overall, the book combines beauty and usefulness to a high degree. **It is available at gardenfable.com**, **price €19.99 including postage.** For more on this remarkable story, see Fionnuala Fallon in the **Irish Times** of 27 November 2021:

Plot to plate ethos from a charming Kilkenny kitchen garden: the Goodwillies helped start a conversation about organic gardening and food culture'.



Olivia with her last book in the vegetable garden at Lavistown. Photo by: Dylan Vaughan.

Fundings and Projects

Coring Cornaher Lough (Co. Westmeath)

Taking advantage of unusually fine weather in January, Fraser Mitchell and Henry Lamb joined forces with Aberystwyth colleagues Sarah Davies, Patrick Robson and new joint Aber-TCD PhD student Lewis Howell to core Cornaher Lough, near Tyrellspass, Co Westmeath. Fraser and Alyson Heery (PhD, 1998) first discovered the varved (annually laminated) sediments of this small lake adjacent to the Long Hill esker. Since then, advances in palaeolimnological techniques allow analysis of sediment cores at very high resolution and with refined dating methods. In this project, we aim to resolve the timing and rate of climatic, ecological and landscape changes linked to some of the major transitions in the archaeological record of central Ireland.



<u>Left</u>: Fraser Mitchell and Patrick Robson with a 1-metre section of the Cornaher Lough 6.9 m core. Right: Fraser Mitchell out on the lough to secure mooring ropes to the shore

Aberystwyth's Itrax® X-ray fluorescence core scanner will allow us to characterise the varves at intervals as fine as 60 microns, and thus to construct an annual timescale in a manner similar to counting tree rings. Another "advance" since the 1990s has been the construction of the M6 motorway which now passes within yards of the core site. With lorries passing in the background, fieldwork was therefore not quite so idyllic as we first imagined!

Trinity College Botanic Garden - Summer internship!

We are delighted to announce details of our 2022 Summer Internship Programme at Trinity Botanic Garden!

This year, two internships are being offered to eligible students. Applications are open to Trinity undergraduate students of Botany or Environmental Science. The internships will run concurrently for six weeks commencing 7th June and each comes with a stipend of €2000. Last year we again had a fantastic response. The calibre of applicants was so good that we made the most of the talent opportunity and took on three intending Botany students. Happily, their experience reaffirmed their study choice, and they are all now pursuing their botany degrees with the benefit of practical work experience.

Full details can be found <u>here</u> and any queries can be directed to Michelle Murray (murram27@tcd.ie). Application Deadline: 14th March 2022.



Athena SWAN/EDI Newsletter

Updates

The School of Natural Sciences Athena SWAN/Equality Diversity and Inclusion (EDI) committee are in the process of working towards silver accreditation. We are currently collating information and working through the application process. This is a sizeable project and will span the next few months onwards.

News

The 11th February was International Day of Women and Girls in Science. Designated by the UN, the day serves to spotlight females in STEM. Although it is a day to celebrate their successes, it is also an opportunity to draw attention to the gender inequality that still exists within science and what we can do to improve it. If you missed it there were some great highlights over on twitter using #womeninscience, including on the TCD twitter account @tcddublin.

Resources

Speak Out was launched in **November 2021**, a tool **to anonymously report bullying, violence and harassment.** You can find the Speak Out tool and relevant supports on the new webpage **here**.

If you would like more information, please view our <u>website</u>. You can contact the Athena SWAN/EDI committee at **fraser.mitchell@tcd.ie**



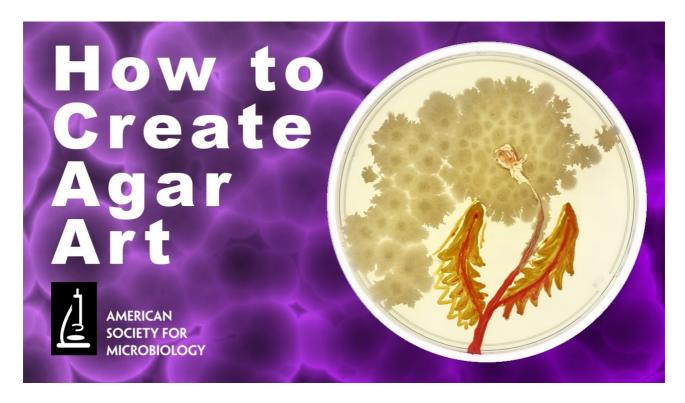
Athena School of Natural Sciences



Recognising advancement of gender equality: representation, progression and success for all.

PhytoArt - Agar Art Contest

Have you ever seen art created in a petri dish using living, growing microorganisms? That's Agar art! Creators use either naturally colorful microbes, like the red bacteria *Serratia marcescens*, or genetically modified microbes, like the yeast *Saccharomyces cerevisiae*. In 2015, the American Society for Microbiology (ASM) launched the ASM Agar Art Contest to share the beautiful and diverse world of microbes with the public. Watch the video below from Maria Peñil Cobo and Mehmet Berkmen, the winners of the first edition to see the making process, or click here to see all the winners of all the previous editions.



Scroll down to see some other wonderful examples!

PhytoArt - Agar Art Contest



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PhytoArt - Agar Art Contest

PHYTOBYTES needs your input!



Whether you are student or staff, please send any news you have, big or small, to Diego D. Bianchi (*dbianchi@tcd.ie*) with the subject heading "Phytobytes".