



Andrea Francesca Bellia

BSc (Hons)(Melit), MSc (Melit), MProjMgt (Aberd), AMRSB, AMAPM

Female | Maltese | 04/01/1999

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EDUCATION & QUALIFICATIONS

M.Sc. Project Management, Aberdeen University (180 ECTS; EQF Level 7) (18/01/2021 – 31/01/2023)

M.Sc. Biology (by Research), University of Malta (90 ECTS; EQF Level 7) (12/10/2020 – 30/09/2021)

Distinction: 87% (*Summa Cum Laude*)

A Predictive Occurrence Model for *Elatine gussonei* based on Environmental Factors

Supervisor/s: Dr. Sandro Lanfranco & Prof. Dr. Bram Vanschoenwinkel

B.Sc. (Hons.)(Melit.) Biology, University of Malta (180 ECTS; EQF Level 6) (02/10/2017 – 30/09/2020)

2:1 Second Class Honours (Upper Division) (*Magna Cum Laude*)

Effectiveness of Drone Imagery in Mapping Shallow-Water Benthic Assemblages

Supervisor/s: Dr. Julian Evans & Dr. Sandro Lanfranco

Networks and Memberships

RSB – Royal Society of Biology (AMRSB); APM – Association for Project Management (AMAPM).

COST – European Cooperation in Science and Technology; EANA – European Astrobiology Association Network; EPCN – European Pond Conservation Network; BES – British Ecological Society.

Languages

English and Maltese – Native; German – B1; French – A2

Skills (Core & Other)

Biology; Ecology; Phycology; Botany; Aquatic and Terrestrial Vegetation Ecology; Swimming and snorkelling; Drone piloting; Writing; Communication; Citizen Science; Presentation skills; Public speaking; Report writing; Popular and scientific writing; Planning; Management; Project Management; Computer literate; Intermediate proficiency in R and QGIS; Photography; Photography and video editing and poster design in Affinity Photo, Designer, and Publisher, and Canva.

Apart from writing and research, I also enjoy reading and sports, both of which have been part of my life from a young age, as well as a more recent hobby/pastime; photography. I mostly enjoy nature and macro photography of flora in particular. Some of my photos of Maltese flora have subsequently been used for the Annual Biology Symposium flyers and programmes in 2019 and 2020, as well as articles in the Times of Malta Science page alongside my articles, and on the University of Malta's Facebook and Instagram pages as part of the Campus Flora & Fauna Series (21 photos shared between 02/11/2020 and 18/12/2020).

I have experience of image editing using Affinity Photo, as well as using Affinity Designer to create a couple of preliminary logos, and Affinity Publisher for the Annual Biology Symposium programmes in 2019 and 2020. I also

have excellent communication, interpersonal, engagement, managerial, and organising skills, along with experience assisting unofficially with project management.

A major part of my life for over a decade was swimming, where I formed part of the national team. Some of my main achievements were being selected (in 2012) for the 2014 Youth Olympic Games (YOG) in Nanjing, as well as obtaining medals in COJI and FISEC-FISEP games in various countries. I also played tennis and practiced TaeKwonDo for about 7 years and have recently taken up running, OCR and climbing/bouldering.

GRANTS & FUNDING

COST Action CA18201 ConservePlants Virtual Mobility (VM) Grant €1,500 – *Communication and dissemination of Action outputs, and management of web and social media pages and fora*

PROFESSIONAL WORK EXPERIENCE

2023

(04/04/2023 – 07/10/2024) WG Member for [CA19128](#) - Pan-European Network for Climate Adaptive Forest Restoration and Reforestation (PEN-CAForR)

(31/01/2023 – 17/10/2025) WG Member for COST Action [CA20112](#): Platform OF policy Evaluation community for improved EU policies and Better ACKnowledgement (PROFEEDBACK)

2022

(30/11/2022 – 12/10/2025) WG Member for COST Action [CA20118](#): Joint effects of Climate Extremes and Atmospheric deposition on European FORESTS (*CLEANFOREST*)

(17/11/2022 – 25/10/2025) WG Member for COST Action [CA20132](#): Urban Tree Guard - Safeguarding European urban trees and forests through improved biosecurity (*UB3Guard*)

(21/10/2022 – 27/10/2026) WG Member for COST Action [CA21138](#): Three-dimensional forest ecosystem monitoring and better understanding by terrestrial-based technologies (*3DForEcoTech*)

(18/07/2022 – Present) Advisor/Policy Consultant to Hon. Miriam Dalli at the Ministry for the Environment, Energy, and Enterprise (MEEE) on aspects pertaining to: Afforestation, Climate Change (Policy), Marine Protected Areas, Natura 2000 (N2K) Sites, and Parks, Countryside and Valley Management.

(01/08/2022) Part-Time Research Support Officer I – Project “Monitoring for Habitat 3170 – Mediterranean Temporary Ponds” and any other projects undertaken by the Department of Biology, Faculty of Science – Funded by the Environment and Resources Authority of Malta (ERA).

(05/2022) SEEDFORCE LIFE Project E21FE55-01. Seed/Sample Collection & Preliminary Ecological Niche Modelling. (Contract: Initial engagement 100h). Collection of plant and seed samples for species of conservation importance in connection with the Seed bank located at the Department of Biology, University of Malta.

2021

(08/06/2021 – Present) Assist with the organisation and management of events (October – May) for Malta Café Scientifique season 2021/2022, and 2022/2023.

(15/03/2021 – 15/05/2021) Field Observer at Ecoserv Ltd. Data collection for spring migratory bird survey of quail and turtle dove in various locations across the Maltese Islands for a study commissioned by the Wild Birds Regulation Unit, within the Ministry for the Environment, Sustainable Development and Climate Change.

(25/01/2021 – 30/09/2022) Part-Time Research Support Officer for SEA-EU Project – “The European University of the Seas” (part financed through the ERASMUS+ European Universities Initiative Programme) at the University of Malta, Office of the Pro-Rectors.

2020

(01/12/2020 – 31/01/2021) Environmental biologist at Ecoserv Ltd. Vegetation surveys of local garrigue habitats throughout Malta and Gozo. Species lists of flora, and basic habitat mapping using QGIS.

30/11/2020 Submitted an application for the Malta Council for Science and Technology (MCST) COVID-19 R&D Fund, for which I drew up the proposal, serving as the project coordinator, contact point and primary researcher.

Secondary proposer for COST Action JV2028, submitted on 13/11/2020

(09/07/2020 – 16/09/2020) Turtle nest monitoring volunteer. Duties involved keeping people and animals from entering the enclosed space of the nest and informing any individuals' questions on turtles and nestings.

(14/03/2020 – 14/10/2023) MC Substitute and WG member for COST Action [CA18201](#): An integrated approach to conservation of threatened plants for the 21st Century (*ConservePlants*). Co-communication manager responsible for the writing and dissemination of popular articles on social media (Facebook, Instagram, Twitter and LinkedIn).

2018 – 2021

Unpaid research assistant at University of Malta Botany Lab. Data collection and analysis, experimental design, critical and analytical thinking, literature searches, review of scientific papers, report writing, public speaking, presentation skills, science communication.

2017-2019

K9 trainer and handler with K9 Urban Search and Rescue Malta. Trained and participated in obedience, tracking, trailing, urban search and rescue and pet therapy. Attended two training courses and one training simulation exercise conducted by the Norwegian USAR Team (Norske Redningshunder) and K9 USAR Malta respectively ([NOVEX 2019](#)). Social media manager responsible for content creation, promotion and dissemination.

Teaching Experience

2022-2023

Casual Lecturer & Practical demonstrator for the undergraduate programme of practical classes at the Department of Biology, University of Malta (Part-Time, Contract). **Units:** [SCI3501](#) Academic Writing and Statistical Techniques for Scientific Research, [BIO2020](#) Plant Biology, [BIO2510](#) Field Biology - Terrestrial Habitats, and [BIO3550](#) Plant Systematics.

2021-2023

Practical demonstrator for 1st Year A level biology students at the Department of Biology, Ġ.F. Abela Junior College, University of Malta (Part-Time, Contract). (**Topics:** jc.um.edu.mt/biology/students/practicals)

2020-2021

Practical demonstrator for the undergraduate programme of practical classes at the Department of Biology, University of Malta (Part-Time, Contract). **Study units** included biochemistry ([BIO1010](#) Cellular and Biochemical Basis of Life & [BIO2070](#) Biochemical Strategies of Life), [BIO3040](#) and [BIO3300](#) Biotechnology 1 & 2, [BIO3130](#) Genetics and Developmental Biology, [BIO2510](#) Field Biology - Terrestrial Habitats, [BIO3550](#) Plant Systematics, and [BIO2020](#) Plant Biology.

2019

(12/09/2019 – 19/09/2019) Field and Lab Assistant for a 1-week intense field course Unit ([BIO3060 Field Biology - Coastal and Marine Habitats](#)) at the Department of Biology, University of Malta. **Tasks:** Coastal flora and algal identification in the field and lab, UAV piloting and image processing to produce a vegetation map of the coastal site as an orthophoto/orthomosaic of the area from drone images obtained, image processing of the resultant vegetation map, and assisting students by explaining tasks and helping with difficulties.

Dissertation Co-/Supervision

Undergraduate Co-Supervision

Francesca Grech: *Frequency of endemic species in the flora of the Maltese Islands* (2022-2023)

Maya Mallia: *Determinants of community structure in temporary freshwater rockpools* (2022-2023)

CONTINUING PROFESSIONAL DEVELOPMENT (CPD) COURSES

2023

08/03/2023 1-day training course on Carbon literacy, Carbon footprint scope 1-3 calculation, Environmental Social Governance (ESG), and Integration into business strategy. Certificate no. 167 issued by Associate Enterprises Limited trading as Assent, Lorators

2021

12/10/2021 – 01/02/2022 (15 weeks) LAS1009: Nature Photography. Evening course Programme in the Liberal Arts and Science (PLAS) at the University of Malta. (4 ECTS)

25/02/2021 – 15/03/2021 Standard Statistical Modelling Techniques Using R. Online (15h). Malta University Holding Company (MUHC)/Malta University Consulting Courses.

Formal/Educational: Society of Biology Approved CPD Event:

18/01/2021 Presentation Skills (3 Hour, 9 Base Points).

14/01/2021 Event: Natural capital priorities for coping with change (1 Hour, 3 Base Points).

11/01/2021 Introduction to Reproducible Analyses in R (5 Hours, 15 Base Points).

07/01/2021 Unconscious Bias (2 Hours, 6.0 Base Points).

02/01/2021 – 07/01/2021 Persuasive Scientific Writing (22 Hours, 66.0 Base Points).

02/01/2021 – 07/01/2021 Writing for Non-specialist Audiences (6 Hours, 18.0 Base Points).

02/01/2021 – 07/01/2021 Introduction to Project Management (6 Hours, 18.0 Base Points).

2020

24/11/2020 – 10/12/2020 Introductory Course on Statistics: Data Visualisation (Using R software). Online (17.5hrs). Malta University Holding Company (MUHC)/Malta University Consulting Courses. (Certificate)

28/10/2020 WEBINAR SERIES: CONVERGENCE OF WETLAND SCIENCE AND TECHNOLOGY: Tools & Data for Mapping Wetlands. Ecobot, co-hosted with Esri.

28/10/2020 – 29/10/2020 Introduction to R for Biologists (ONLINE LIVE TRAINING) University of Cambridge, Department of Genetics, Bioinformatics Training. (Certificate)

13/10/2020 – 14/10/2020 Virtual workshop: Remote Sensing from Space and Application. Organised by the University of Malta, in collaboration with the Centre National d'Etudes Spatiales. Funded by SATINET project and financed by the Malta Council for Science and Technology (MCST).

INVITED TALKS & INTERVIEWS

2021

12/11/2021 **Talk** at St Francis Secondary School: Form 2 Science Café Speaker – Researcher in Biology/Ecology

14/09/2021 and 17/09/2021 I was approached by the NGO – Green House in collaboration with BINCO to give a **talk** on rockpools, sand dunes, drone surveys and applications for the Erasmus+ exchange project – Ekologika, which hosted 15 Maltese and Belgian students (18+).

21/05/2020 *A Predictive Occurrence Model for *Elatine gussonei* based on Environmental Factors*. **Webinar** presented at the Annual Science Conference – Goes Virtual, organised by S-Cubed - Science Students' Society.

11/01/2021 **Interview**. From documenting local flora and fauna ... to participating in Malta's first Astrobiology project. [University of Malta \(UoM\) Newspoint](#)

2020

05/12/2020 **Talk and PowerPoint** of undergraduate research on the Effectiveness of Drone Imagery in Mapping Shallow-Water Benthic Assemblages. [Annual Biology Symposium \(Online\)](#). [Programme](#); [Abstracts](#)

30/11/2020 **Interview** (Maltese) of research carried out for undergraduate dissertation on the “Effectiveness of Drone Imagery in Mapping Shallow-Water Benthic Assemblages”. In Farrugia, D. (Producer & Presenter). (2020). *A series of programmes, produced and presented by Danielle Farrugia, together with researchers, scientists and students studying at the University who talk about their research in their various fields of study*. Radio Mocha [Radio series]. Malta: Campus FM. [Facebook](#); [University of Malta OAR](#)

31/10/2020 **Interview**. Clinging onto biodiversity: how Malta's cliff species survive. [Times of Malta](#)

18/04/2020 *A Drone's Eye View: Mapping Shallow-Water Benthic Assemblages*. **Abstract and Webinar** presented at the First Online Annual Science Conference, organised by S-Cubed - Science Students' Society. [Conference booklet](#); [University of Malta \(UoM\) Newspoint](#)

REVIEWER

In prep. Henwood, J., Lanfranco, E., Merritt, R. (2022). *Vaucheria* (Heterokontophyta, Vaucheriaceae) from the Maltese Islands (Central Mediterranean). *Xjenza*. [Unpublished manuscript].

PUBLICATIONS

Total publications: 8 (of which first author: 4)

Citations: 14

h index: 3

Peer reviewed journal articles

In prep. Barbosa, L. G., Amorim, C., Kulkarni, M., Portinho, J. L., Florencio, M., Morais, M., Hulot, F., Neves, G. P., Antón-Pardo, M. T., Menezes, M. F., [Bellia, A. F.](#), Lanfranco, S., & Ortega, J. C. G. (2022). Studies of aquatic ecosystems in Earth's Drylands: a global scientometric review. [Unpublished manuscript].

2021

Fišer, Ž., Aronne, G., Aavik, T., [and 107 others, including [Bellia, A.F.](#)] (2021). ConservePlants: An integrated approach to conservation of threatened plants for the 21st Century. *Research Ideas and Outcomes*, 7: e62810 doi: 10.3897/rio.7.e62810. (doi.org/10.3897/rio.7.e62810)

2020

[Bellia, A. F.](#), & Lanfranco, S. (2020). Evaluation of a dinoflagellate bloom in a perennial endorheic Mediterranean pond. *Biodiversity Journal*, 11(4). doi.org/10.31396/Biodiv.Jour.2020.11.4.961.968

Lanfranco, S., [Bellia, A. F.](#), & Cuschieri, P. (2020). Influence of morphometric and geographic factors on plant community composition of temporary freshwater rockpools in the Maltese Islands. *Inland Waters*, 10(4), 468-479. doi.org/10.1080/20442041.2019.1704152

2019

[Bellia, A. F.](#), & Lanfranco, S. (2019). A preliminary assessment of the efficiency of using drones in land cover mapping. *Xjenza*, 7(1), 18-27. [DOI: 10.7423/XJENZA.2019.1.02](https://doi.org/10.7423/XJENZA.2019.1.02)

Books

In prep [Bellia, A. F.](#) & Cassar, T. (2022). A Field Guide to Resident Temporary Freshwater Rockpool Flora and Fauna in the Maltese Islands. [Unpublished manuscript].

Chapters

2021

Lanfranco, S., & Bellia, A. F. (2021). Valley systems as hotspots of vegetation diversity in the Maltese Islands. In S. Davies (Ed.). *Valleys: Discovering Malta and Gozo's watercourses and their value to society*. (pp. 28-47). Parks Malta. ISBN 978-9918-0-0106-4. <https://lifeip-rbmp-geoportal-valleymanagement.hub.arcgis.com/pages/book>

2020

Bellia, A. F., Evans, J., & Lanfranco, S. (2020). A drone's eye view: A preliminary assessment of the efficiency of drones in mapping shallow-water benthic assemblages. In *Eighth International Symposium "Monitoring of Mediterranean Coastal Areas. Problems and Measurement Techniques"* (Vol. 126, pp. 501-509). Firenze. [DOI:10.36253/978-88-5518-147-1.50](https://doi.org/10.36253/978-88-5518-147-1.50)

CONFERENCES

2021

Bellia, A. F. (2020). *Rigorous Rockpool Recolonisation, or Hitting Rock Bottom?* **Abstract and Oral Presentation** presented at the 9th Conference of the European Pond Conservation Network (EPCN). 25th May, 2021.

Bellia, A. F. (2020) *A Predictive Occurrence Model for Elatine gussonei based on Environmental Factors*. **Webinar** presented at the Annual Science Conference – Goes Virtual, organised by S-Cubed - Science Students' Society. 21st May, 2021

2020

Bellia, A. F., Vanschoenwinkel, B., Dolmans, V., & Lanfranco, S. (2020). *Predictive-occurrence model for the rare and protected amphibious plant – Elatine gussonei*. **Abstract and Poster** presented at the British Ecological Society's Annual Meeting: A Festival of Ecology. 14-18 December, 2020.

Presented at the European Astrobiology Network Association (EANA) Virtual meeting 2020. 27-28 August.

Aquilina, M., Bellia, A. F., Meekers, L., Borg, J., Borg, J., Zarb Adami, K., & Lanfranco, S. (2020). *A preliminary assessment of the effects of EM radiation on eubacterial genomes*. **(Poster)**

Bellia, A. F., Aquilina, M., Lanfranco, S., Borg, J., Borg, J., & Zarb Adami, K. (2020). *Looking to the past to predict the future: Tardigrades – a model example*. **(Poster)**.

Borg, J., Sinagra, E., Ciarlò, J., Aquilina, N., Zarb Adami, K., Aquilina, M., Bellia, A. F., Borg, J., & Lanfranco, S. (2020). *Projecting the evolution of Titan's atmosphere under a reddening sun*. **(Poster)**.

Lanfranco, S., Bellia, A. F., Aquilina, M., Borg, J., Zarb Adami, K., & Borg, J. (2020). *"No moon is an island"... or is it? Investigating the possibility of metacommunity dynamics in the Solar System*. **(Poster)**.

Bellia, A. F. (2020). *A Drone's Eye View: Mapping Shallow-Water Benthic Assemblages*. **Abstract and Webinar** presented at the First Online Annual Science Conference, organised by S-Cubed - Science Students' Society. [Conference booklet](#); [University of Malta \(UoM\) Newspoint](#). 18th April, 2020.

Submitted to the 9th Conference of the European Pond Conservation Network (EPCN). London (UK).

Bellia, A. F., & Lanfranco, S. (2020). *A Solution to a Hollow Argument: Flying high in the field of freshwater ecology*. **(Abstract and Poster)**.

Bellia, A. F., & Lanfranco, S. (2020). *A True TFR Typology?* **(Abstract and Poster)**.

Bellia, A. F., & Lanfranco, S. (2020). *Rigorous Rockpool Recolonisation, or Hitting Rock Bottom?* **(Abstract and Oral Presentation)**.

Lanfranco, S., & Bellia, A. F. (2020). *An elegant model for Elatine gussonei?* **(Abstract and Poster)**.

Lanfranco, S., & Bellia, A. F. (2020). *Are Good Pools an Urban Myth?* **(Abstract and Poster)**.

Lanfranco, S., & Bellia, A. F. (2020). *"Rain, rain go[ing] away" - pool hydrology in a drying climate*. **(Abstract and Oral Presentation)**.

Popular articles

2022

Bellia, A. F. (2022). Dwindling Habitats and Plummeting Partnerships. *ConservePlants*; [The Sunday Times of Malta](#)

2021

Bellia, A. F. (2021). Plants: Half-way there. *ConservePlants*; The Sunday Times of Malta

Bellia, A. F. (2021). Nectar: Not only a plant's affair! [ConservePlants](#); [The Sunday Times of Malta](#)

2020

Bellia, A. F., & Lanfranco, S. (2020). Dangerous Beauties: Are Complex Flowers a Fast Track to Extinction? [ConservePlants](#); [The Sunday Times of Malta](#)

Bellia, A. F., & Lanfranco, S. (2020). Life on the Edge. [ConservePlants](#); [University of Malta \(UoM\) Newspoint](#); [The Times of Malta](#)

Bellia, A. F., & Lanfranco, S. (2020). The COST of COVID-19. [ConservePlants](#); [The Sunday Times of Malta](#); [University of Malta \(UoM\) Newspoint](#); [COST News](#); [MaltaToday](#)

2019

Bellia, A. F. (2019). I, in the Sky. THINK Magazine, (30) pp.14. [THINK ISSUU](#), [THINK UM Online](#), [University of Malta Open Access Repository \(OAR@UM\)](#)

HONOURS AND AWARDS

ASA Swimming League

01/2014 ASA (Aquatic Sports Association of Malta)

Cadets: 1st place, 5,253 points

[Neptunes WPSC](#), [Times of Malta](#)

MOC Sports Award Nominee for Swimming, Individual Category.

30/11/2013 Malta Olympic Committee (MOC)

Maltese Olympic Committee (MOC) Sports Award Nominee 2013 (12th Edition) for two bronze medals in 50m and 100m Butterfly at the Comité d'Organisation des Jeux des Iles (COJI) Island Games (2013) in Ajaccio, Corsica. Sport: Swimming. Category: Individual. Published in: [Sportinmalta](#), [Malta Independent](#), [Times of Malta](#)

Age Group Records

ASA (Aquatic Sports Association of Malta), Age Group C Record (Age 13-14)

- **50m Butterfly**

- [07/04/2013 - 30.48](#)

- **100m Butterfly**

- [21/07/2012 - 1:10.95](#) ([Independent](#))
 - [03/11/2012 - 1:09.36](#) ([PressReader](#), [Times of Malta](#))
 - [02/02/2013 - 1:08.79](#) ([Times of Malta](#), [Maritime Directory](#))
 - [18/05/2013 - 1:07.06](#) ([Times of Malta](#))

Youth Olympic Games (YOG) 2014 Nominee

14/11/2012 ASA (Aquatic Sports Association of Malta)

Nominated as a potential athlete to participate in the Youth Olympic Games - 2014.