



I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Bioscienze**

Scientist- in - charge: Prof CACCIA SILVIA

**Conor Scott**

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	Scott
Name	Conor

### PRESENT OCCUPATION

Appointment	Structure
Fungal Ecologist - Researcher - Full time research contract	Forest Research UK

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Biology (Integrated)	University of York	2019
Specialization			
PhD	Biology	University of York	2024
Master			
Degree of medical specialization			
Degree of European specialization			
Other			



## REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of Association	City

## FOREIGN LANGUAGES

Languages	level of knowledge
English	Fluent (mother tongue)
Italian	Basic

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2021	White Rose DTP 2nd Year Presentation Award - Awarded for best presentation of PhD project among York DTP students

## TRAINING OR RESEARCH ACTIVITY

<p>Fungal ecologist at Forest Research (Research contract)</p> <p>Responsibilities:</p> <ul style="list-style-type: none"><li>Managing multiple strands of a research project to understand ectomycorrhizal communities and their role in the establishment of new woodland on former agricultural land</li><li>Evaluation of sampling airborne fungal DNA to map spatiotemporal changes in ectomycorrhizal fungal communities</li><li>Relating microbial community dynamics to biotic and abiotic factors to educate reforestation</li></ul> <p>Skills obtained:</p> <ul style="list-style-type: none"><li>Reinforced skills and experience in ecological field work focusing on fungal ecology, community sampling, and woodland regeneration</li><li>Further enhanced analytical ability for complex ecological datasets and community comparisons</li><li>Appreciation of the research funding acquisition process, proposal writing, project management, and ecological field study design and performance</li></ul>
<p>Lecturer and Coordinator: Operation Wallacea, Honduras (Work contract)</p> <p>Responsibilities:</p> <ul style="list-style-type: none"><li>Delivering lectures concerning the conservation efforts of Operation Wallacea in Cusuco national park to voluntary research assistants and school groups</li><li>Coordinating the research experience of research assistants and school groups</li><li>Supervising the research projects of dissertation students working in Cusuco national park</li></ul> <p>Skills obtained:</p> <ul style="list-style-type: none"><li>Delivery of conservation biology lectures to audiences of mixed scientific backgrounds and experience in an accessible and engaging manner</li><li>Application of time management and organisational skills to ensure an enriching and educational experience of field research for volunteers and students</li><li>Broadened range of experience in techniques for bat, bird, fungi, habitat, herpetology, invertebrate, and mammal conservation biology</li></ul>



<p>Voluntary Research Assistant: Operation Wallacea, Peru (Voluntary position)</p> <p>Responsibilities:</p> <ul style="list-style-type: none"><li>• Carrying out multiple different ecological surveys into populations of indicator and resource species for conservation purposes</li></ul> <p>Skills obtained:</p> <ul style="list-style-type: none"><li>• Improved ability to quickly uptake information, learn new skills, and readily apply them in difficult conditions</li><li>• Developed effective group working and communication often under the pressure of time constraints</li></ul>
<p>Science Outreach City Coordinator: Pint of Science York (Voluntary position)</p> <p>Responsibilities:</p> <ul style="list-style-type: none"><li>• Recruiting volunteers, enlisting venues, and organising events with the aim of bringing scientific work to the public through accessible, engaging, and interactive shows in York venues</li></ul> <p>Skills obtained:</p> <ul style="list-style-type: none"><li>• Improvement in skills for delegation, management, and organisation through the coordination of multiple events and teams</li><li>• Development of abilities for clear and effective science communication in an engaging and interesting manner to diverse audiences</li></ul>
<p>Remediation technician at John F Hunt Remediation (Internship)</p> <p>Responsibilities:</p> <ul style="list-style-type: none"><li>• Environmental sampling, monitoring, and cleanup within a multi-disciplinary team for the development and construction of industrially contaminated sites</li></ul> <p>Skills obtained:</p> <ul style="list-style-type: none"><li>• Time management skills to meet deadlines and balance daily tasks with field work</li><li>• Flexibility to adapt learned techniques to overcome issues as they were revealed</li><li>• Ability to coordinate and effectively communicate findings within a diverse team</li></ul>

## PROJECT ACTIVITY

Year	Project
2024-Present	<p>Exploring underground pathways for woodland regeneration</p> <ul style="list-style-type: none"><li>• Characterising ectomycorrhizal communities on UK woodland species across gradients spanning mature woodland to former agricultural land</li><li>• Exploring ectomycorrhizal colonisation routes and the potential to capture fungal communities with air sampling approaches</li><li>• Assessing the potential of mixed species planting strategies to alter soil microbial community structure and composition for improved woodland establishment</li><li>• Investigating microbial inoculums to accelerate ectomycorrhizal colonisation of woodland tree roots</li><li>• Bioinformatic processing of microbial metabarcoding sequence data</li><li>• Comparative analysis of fungal community composition and structure across large ecological datasets</li></ul>
2019-2024	<p>Mining the secretome of the lignocellulose degrading fungus <i>Parascedosporium putredinis</i> NO1</p>



	<ul style="list-style-type: none"><li>• Industry sponsored PhD project mining the secretome of the lignocellulose-degrading fungus <i>Parascedosporium putredinis</i> NO1</li><li>• Bioinformatic analysis of genome sequence data using novel structural modelling strategies</li><li>• Development of bioinformatic workflows to isolate in silico secretomes from sequence data</li><li>• Proteomic data analysis in combination with molecular techniques to probe the capacity for degradation of industrially relevant lignocellulosic substrates</li><li>• Heterologous expression, protein purification, and investigation of enzymes for lignin breakdown</li></ul>
2018-2019	<p>Investigating the xylan-degrading ability of the extremophilic red alga <i>Galdieria sulphuraria</i></p> <ul style="list-style-type: none"><li>• Investigation of the xylan-degrading ability of the extremophilic red alga <i>Galdieria sulphuraria</i> through a range of molecular techniques including proteomic data analysis, protein purification and characterisation, and the adjustment of standard techniques to heat- and acid-resistant proteins</li></ul>

## CONGRESSES AND SEMINARS

Date	Title	Place
2022	Lignobiotech Conference, oral presentation	Vancouver (Canada)
2023	Microbiology Symposium, oral presentation	York (UK)
2023	HVBNet Conference, oral presentation and poster presentation	Harrogate (UK)

## PUBLICATIONS

Articles in reviews
Whole genome structural predictions reveal hidden diversity in putative oxidative enzymes of the lignocellulose-degrading ascomycete <i>Parascedosporium putredinis</i> NO1, Microbiology Spectrum, ASM Journals, 2023, <a href="https://journals.asm.org/doi/full/10.1128/spectrum.01035-23">https://journals.asm.org/doi/full/10.1128/spectrum.01035-23</a>
A bioinformatic workflow for <i>in silico</i> secretome prediction with the lignocellulose degrading ascomycete fungus <i>Parascedosporium putredinis</i> NO1, Molecular Microbiology, Wiley, 2023, <a href="https://onlinelibrary.wiley.com/doi/full/10.1111/mmi.15144">https://onlinelibrary.wiley.com/doi/full/10.1111/mmi.15144</a>
<i>Parascedosporium putredinis</i> NO1 tailors its secretome for different lignocellulosic substrates, Microbiology Spectrum, ASM Journals, 2024, <a href="https://journals.asm.org/doi/full/10.1128/spectrum.03943-23">https://journals.asm.org/doi/full/10.1128/spectrum.03943-23</a>

Congress proceedings

## OTHER INFORMATION

Laboratory Skills
<ul style="list-style-type: none"><li>• Microbiological techniques for culturing bacteria, fungi, yeast, and algae</li><li>• DNA and RNA purification and preparation for sequencing</li></ul>



- Proteomic experiment design and proteome harvest
- Cloning techniques for heterologous expression
- Heterologous protein expression in prokaryotic and eukaryotic systems
- Protein purification and molecular protein techniques
- Protein investigation, assay design, and activity testing
- Biomass content analysis

## Field Skills

- Ecological field study design
- Soil sampling for microbial community analysis
- Soil chemistry profile analysis
- Biotic and abiotic variable monitoring

## Data Skills

- Bioinformatic analysis of sequence data
- Structural modelling and structural comparison
- Statistical analysis of large biological datasets
- Bioinformatic workflow design and development
- In silico protein sequence investigation

## General Skills

- Presentation and communication of scientific work to diverse audiences
- Manuscript design and writing
- Experiment design and report writing ability
- Time management and organisation skills
- Basic understanding of Italian maintained through daily practice

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: Farnham UK, 14/01/24