Francesca Troiani, PhD

CAREER PROFILE

A broadly skilled medical Physicist with a doctorate in optical neural interfaces and a keen interest in public and societal engagement. While studying for my PhD and during my postdoctoral role I have gained multiple qualifications in public engagement and become a fully qualified PRINCE2 project manager.

WORK EXPERIENCE

Research Associate, *Imperial College London, Next Generation Neural Interfaces (NGNI) Lab* — Jan 19 –

- Research on optical neural interfaces and responsible of Public Engagement activities for NGNI Lab.
- Contributions to writing of research grant proposals.
- Organisation of NGNI lab Away Days
- Line manager of two Industry Placement 3rd year EEE student.
- Supervision of Meng, MSc and UROP EEE students.
- Preparation and delivery of summer schools talks.
- Participation to public engagement seminars and academies.
- Development and management of an activity for the Royal Society Summer Science Exhibition 2021.
- Liaising with external companies to develop further public engagement activities.

Technical consultant for art installation "out of the blue" – *Imperial College London, Newcastle University and Hatton Gallery* — May 2018 –

An engagement-through-art project to increase awareness of epilepsy and illustrate our work on the Wellcome Trust and EPSRC funded project, CANDO.

- Liaising with the artist in charge of the exhibition.
- Supervision of students involved in the project.
- Development of software to be used for the kinetic part of the installation.

Project manager of "Cerebella: a platform for invasive neural interfaces awareness" – *The Great Exhibition Road Festival (June 28-30 2019)* — Jan – June 2019

- Managing and working with a group of 5 people.
- Creation of a demonstration able to show the need for neural implants.
- Delivery of the activity at the festival.
- Live Demonstration presented at BioCAS 2019 (Nara, Oct 17-19, 2019).

STEM activity leader – *Reach out Lab, Imperial College London* — Dec 2014 –

- Leading of physics and maths activities for students of all ages, supported by a group of 5-6 undergraduate mentors.
- Delivery of activity targeted to audience age and skill levels.
- Feedback on activities created by third parties.

Research Assistant, *International School for Advanced Studies, Liminar Investigations of Memory and Brain Organization (LIMBO) Lab* — Nov 2013 – May 2014

- Research on grid cells and their role and functioning in spatial memory in the international and multidisciplinary collaboration GRID.
- Presentation of my work at international conferences and publication on peer reviewed journals.

AWARDS AND OTHER QUALIFICATIONS

Mental Health First Aider	Mental Health England	2019
PRINCE2 Pratictioner	Axelos	2019-2022
PRINCE2 Foundation	Axelos	2019
EPSRC Doctoral Prize Award	EPSRC + Imperial College	2019
Newport Research Excellence Award	Newport, SPIE Photonics West	2016
PhD Scholarship	EPSRC and EEE Department	2014-2018
Medical Physics Master's Scholarship	University college for Science L. Fonda	2011-2013

EDUCATION

Postgraduate research student, *NGNI Lab, Imperial College London* 2014 – 2019

PhD thesis: "Time domain optical coherence tomography for compound action potential recording: computational analysis and system requirement".
Supervisors: Dr Timothy Constandinou and Dr Konstantin Nikolic.

- Direct supervision of EEE Master's students and of a third-year group project.
- Organisation of the first NGNI lab Away Weekend.
- Presentation of my work at international conferences and publication on peer reviewed journals.
- Attendance of Biophotonics and Imaging Graduate Summer School
- Public engagement through Friends of Imperial events and Reach Out Lab.
- Graduate Teaching Assistant
- Participation to 3 Minutes Wonder Institute of Physics (London Heat).
- Attendance of public engagement courses and training.

MSc in Nuclear and medical Physics, *Universita' degli studi di Trieste* 2011 – 2013

Project title: "The topology of the environment affects the development of the neural representation of space: a computational model for grid cells on a hyperbolic surface" – Grade: 110/110 cum laude.
Supervisor: Prof. A. Treves..

BSc in Physics, *Universita' degli studi di Trieste* 2008 – 2011

Project title: "The role of Supernovae in galactic evolution" – Grade: 110/110.
Supervisor: Prof M.F. Matteucci.

PUBLICATIONS

A list of publications can be found here.