

ROLE TITLE	Fluorescence Lifetime Imaging Scientist
REPORTING INTO	Senior Research Scientist
LOCATION	Reading (flexible working will be supported)

ABOUT OCCUITY

At Occuity, we are pioneering ground-breaking technological solutions to alleviate some of humanity's greatest healthcare challenges by developing technology that takes instant health diagnostic information simply by looking in the eye. With our clear vision and values, a world-leading team of experts, 9 international patents and more pending, we are developing a hugely innovative range of products that will improve the lives of millions of people around the world. Healthcare challenges are there to be solved and at Occuity, we have the vision and the technical ability to succeed. Occuity's aim is for our accessible, non-contact, mobile diagnostic health devices to make repetitive, invasive monitoring a thing of the past.

At Occuity, we value being at the forefront of cutting-edge technology and we have an incredible team of people helping us do just that. Our employees are excited to be part of a team that thrives in a culture of innovation and imagination. Our success means that we are now expanding at a rapid pace and we are seeking truly exceptional people to join our team. We are looking for trailblazers, visionaries and the naturally inquisitive; those who can challenge and those who can inspire. At Occuity, every single person has a voice - and a vital contribution to make to our success.

If this sounds like you, why not join us on our journey?

THE ROLE

Occuity is developing a new generation of retinal imaging systems to measure retinal fluorescence and retinal blood flow. We are looking for a research scientist or optical engineer with experience building fluorescence lifetime imaging microscopes or fluorescence lifetime imaging systems.

This is a hands-on role that will involve the design and building of prototype benchtop fluorescence ophthalmoscopes working as part of a growing team of scientists and engineers, working with clinical partners to validate the systems, and designing commercial research ophthalmoscopes.

KEY DUTIES & RESPONSIBILITIES

- Work as part of a team to design, build and characterise prototype fluorescence-based and laser-based ophthalmoscope systems
- Engage with clinical partners to understand user requirements and translate into specifications and design requirements
- Take data using phantoms and human volunteers and use this data to advance and improve the instruments
- Work closely with Occuity's electrical, mechanical and software teams to advance the instruments beyond prototype stage
- Thoroughly document design and engineering decisions and rationale, to facilitate commercial translation through quality management systems

This is a hands-on role that offers a unique opportunity to be an integral part of a new and innovative company at an early stage. This will allow any candidate to be involved many aspects across the business and therefore significantly broaden their experience and allow them to grow with the company.

EXPERIENCE, SKILLS & QUALIFICATIONS

Essential

- PhD in optics, physics, engineering, biophotonics or related field, or equivalent experience
- Experience designing, building, optimising and/or using fluorescence lifetime imaging microscopes or time-correlated single-photon counting imaging systems, preferably beam scanning systems
- Expertise in the analysis of fluorescence lifetime imaging data
- Expertise in the design, specification, testing, data-taking and/or documenting of optical systems
- Experience proposing and developing novel ideas, methods, or technologies
- Experience in communicating complex ideas and findings to a wide range of audiences and disciplines

Desirable

- Experience with beam scanning ophthalmoscope design or development
- Experience of software for instrumentation control and user interfaces
- Expertise in optical design software e.g. Zemax
- Experience with laser speckle contrast imaging and/or laser speckle flowgraphy
- Experience in medical device development
- Experience in image or data-taking with patients or volunteers
- Experience in image and data analysis
- Experience starting new projects
- Experience developing intellectual property and preparing patents
- Engagement with clinical, industry and academic partners to understand user requirements and translation into specifications

Personal Attributes

- Enthusiastic and passionate, you are a keen analytical thinker and problem solver

- Self-motivated, persistent and collaborative, you have a “can-do” attitude and approach
- A keen eye for detail
- Tenacious and persistent with a determination to go the extra mile to see all projects through to completion
- Equally capable of working independently or as part of a team
- An excellent communicator, you are adept at information sharing and contributing towards an open, positive team atmosphere
- You are excited about the prospect of making a real difference to people’s health around the world

EQUALITY AND DIVERSITY

Occuity is committed to encouraging equality, diversity and inclusion among our workforce, and eliminating unlawful discrimination. The aim is for our workforce to be truly representative of all sections of society and our customers, and for each employee to feel respected and able to give their best.

Further details on our Equality, Diversity and Inclusion policy can be found online