

Leadership Level

All four job families provide opportunities to progress into Grade 10 leadership roles. A leader at this level will typically be a Professor of Practice or Director of Technical Services and will have gained extensive experience and specialisation in several different job families. They may have a track record of nationally or internationally recognised achievement and engagement.

Typical Roles: Professor of Practice, Professorial Research Fellow, Professorial Data Scientist, Professorial Research Software Engineer, Director of Technical Services, Senior Principal Engineer

Transferable skills and competencies

APPLYING EXPERTISE AND TECHNOLOGY

FORMULATING STRATEGIES AND CONCEPTS

ADAPTING AND RESPONDING TO CHANGE

(see pages 64-65)

Experiences

Activities and responsibilities likely to be required when working at this level

Health & Safety responsibilities

- Develop and lead bids for future equipment purchases/maintenance programmes or research programmes in technical fields as a principal or co-investigator.
- Develop and maintain collaborations with external bodies in the supply and delivery of the service
- Lead on all Technical Services health and safety matters
- Be a member of the University Health and Safety Committee
- Maintain up-to-date health and safety knowledge, providing expert support/advice to others

Core responsibilities

- Ensure that effective management and reporting arrangements exist across the service
- Ensure utilisation of University space/resources generating proposals for improvement
- Develop productive relationships between academic and technical staff
- Leads a group of staff to ensure goals are delivered with budgetary and resource constraints, makes judgements and decisions regarding the level of staffing and resources
- Contribute to the development of University policies and procedures, leading on technical matters
- Liaise with College/Faculty academics to ensure that the service delivers all curriculum and research requirements
- Devise appropriate action plans for investment in the maintenance and strategic development of technical support staff, services and facilities
- Provide transformational and change-oriented leadership focussed on creating a collaborative style of working
- Build relationships with sponsors to understand needs and manage expectations to enhance reputation and ensure fulfilment of commitments
- Deploy and manage the University's technical budgets
- Lead the management, development and utilisation of all technical facilities ensuring that these continue to deliver all curriculum and research requirements
- Oversee all significant building projects to ensure suitability and incorporation of appropriate technical services facilities
- Establish a forum/network for communication between all technical staff in order to identify priorities and devise well-informed plans for strategic development
- Develop and promote professional standards and encourage participation in CPD
- Contribute to research outputs, including research papers, as a co- or lead author.

Leadership Level

Personal and professional development

Development options to consider when working towards this level

Learning on the job

Working on strategies (e.g. first draft)
Leading a major project; initiating new and creative ideas resulting in successful implementation
Seek out opportunities to develop confidence and credibly represent UCL in high profile settings (e.g. chairing/presenting to large groups).

Learning from others

Engagement in discreet/ individual projects which have a defined start and end date
Access mentoring support from a colleague or local mentoring scheme
Attend internal or external networking events
Attend conferences and utilise opportunities to present

Formal learning

Accreditation/certification from a recognised professional body
UCL Leadership and/or Management training
Apply for training through a mid-career apprenticeship programme
Budget management training
NEBOSH/IOSH qualification
ILM Level 5 +
Working towards CSci or CEng

UCL Ways of Working

These describe expected behaviours in line with UCL culture and values (see pages 66-67).

For Ways of Working indicators and steps to development please refer to the Ways of Working website www.ucl.ac.uk/human-resources/policies-advice/ways-working

Case Studies



Professor Christopher Thrasivoulou

Professorial Research Fellow, Division of Biosciences

My current position is multifaceted and encompasses a diverse range of responsibilities and skill sets. My specialist role as the Director of Biosciences Imaging Facility, a lead Science Technology Platform (STP), in the Faculty of Life Sciences

(FLS), comprises two hubs. 1) the Centre for Cell & Molecular Dynamics (CCMD) and 2) UCL-Zeiss Multiscale Imaging Centre (UZMIC); both units have seen significant development under my leadership over the past 21 years. The UZMIC hub is one of the first UK Zeiss Centres of Excellence, opened in 2018 and was the culmination of many years of negotiations with key stakeholders (Zeiss & UCL). The imaging hubs comprise of several confocal and multiphoton microscopes. Additional capabilities include super-resolution, high content imaging systems, Lightsheet microscopy, Raman Confocal, micro-X-Ray CT scanners, and specialist image analysis software workstations.

My career at UCL started 45 years ago (October 1978) in the Department of Anatomy as a junior Technician. I always had a passion for science, and particularly biology, since my very early childhood and always knew this was the career pathway that I wanted to follow (my dream was to be an Astronaut after watching the Apollo Moon landing as young boy, but I knew that would never happen!). However, being a first-generation immigrant from Cyprus, coming to the UK at 3 years of age, my parents had zero experience of how to guide my secondary school education and I had no idea that I could go to university for free to pursue a degree. I left school with a handful of CSE's/O-levels and 2 A-levels (Biology and Art.... yes, I know, a weird combination). I joined a small pharmaceutical company in London for 18 months as a Junior Technician in the pharmacology department and embarked on a OND, Day-Release course in Biology. Although I enjoyed the work, my Head of Department did not like me for some reason and made my life at work very difficult, so knowing that I could never progress in the company, I resigned. One month later I joined the Royal Free Hospital School of Medicine (RFHSM), in the Anatomy Department as a junior technician working in the dissecting room (embalming cadavers, helping with the teaching, dissecting/prosecting cadavers for teaching and specimen preparation for our museum).

I continued my higher education and gained my ONC, then my HND in biological sciences. In 1981, one of the Anatomy lecturers asked me if I was interested in helping him with his research projects, which I was more than happy to do, and within a couple of years I was spending 2 – 3 days a week doing research on the

role of gut microcirculation in duodenal ulcers, where I taught myself how to build specialist microscopes for intravital imaging. I was soon promoted to full Technician, and a couple of years later to Senior Technician with a few joint-author publications. In 1985 I joined the lab of a new PI in the department, working on the effects of caloric restriction in the ageing peripheral nervous system. This was a small research group, but soon grew, with 3 – 4 PhD students, 2 Post-docs, a few MSc/BSc students, along with work experience students, one other technician and myself. This is where I honed my microscopical imaging skills and developed new protocols for quantitative image analysis techniques. I gained a vast amount of experience running the technical services of the lab and supervising BSc/MSc students. I embarked on my own projects, writing scientific papers, contributing to grant applications, attending conferences, giving talks/seminars, teaching on the MBBS undergraduate program, and in 1989, I was promoted to Chief Technician.

In the early 1990's I decided that if I wanted to progress my career as a research scientist, I would need to gain a PhD, but as I had no formal Degree (BSc) I had to sit an entrance exam to demonstrate that I had the academic knowledge as well as the practical skills to qualify for entry into the PhD program, after which I registered for a part-time PhD in the same lab. It was hard going keeping up with my PhD studies and running the lab, whilst also coping with the responsibilities of a young family. However, with the tremendous support of my wife and PI of the lab I finally graduated in 1998, with a PhD in Neuroanatomy. During this period (1996), I was promoted to Senior Chief Technician.

The number of research projects and size of the lab had extended considerably during that time, my PI and I developed a number of key quantitative microscopical techniques, and we were fortunate to get grant funding for, one for the first in the UK, Confocal microscopes. This revolutionised scientific research and our lab soon had another confocal and we became the unofficial image hub for the RFHSM.

Some years after the merger of RFHSM and UCL (1998), in 2002 I was asked to transfer to the UCL Bloomsbury Campus and run the Confocal Imaging Unit in the department of Anatomy & Developmental Biology. I was excited to accept this role and I knew that I wanted to continue with my research interests, so I accepted the position on the basis that I could continue with my existing collaborations and seek new collaborations at UCL. Shortly after my transfer to the UCL campus, I got promoted to Senior Experimental Research Officer. This promotion was critical for me as it gave me the academic status that allowed me to

apply for grants independently and supervise PhD students. Up until then I had supervised many BSc/MSc students and undertook the day-to-day supervision of PhD's, but I could not be a primary/secondary supervisor of a PhD student.

Through my leadership, staff recruitment/training, equipment grants success and extensive track record in imaging, I ensure that the unit can deliver an imaging solution for almost any sample. The unit has an excellent national and international reputation for delivering a high quality and impactful imaging service, evidenced by the number of external users that choose to use our unit I manage a team of four highly qualified specialist technicians with strong cell biology and physics backgrounds, whose responsibilities are to help users with comprehensive imaging advice, training, help with advanced imaging techniques, image processing and analysis. I encourage my staff to forge collaborations with research group leaders and become intellectually involved in their projects, culminating in co-authorships. The unit supports the research of over 900 registered users from more than 60 diverse research groups across the whole of UCL. We also have users from many other UK universities as well as EU collaborators and some industry users. The facility has been very successful in terms of its research output, equipment grant funding (>£5M since 2016), translating in attracting talented research staff to UCL.

I have always been a very active citizen of UCL and served on many committees over the years and currently sit on five committees. I forged collaborations with several research groups within Biosciences and other faculties and external universities. The unit was originally a departmental facility and became a Divisional facility in 2014/15 and our user base increased significantly, serving the whole of UCL; and it was during this time, I was promoted to Principal Research Fellow. My publications increased significantly as did the reputation of the unit nationally and internationally and I have since been fortunate in attracting more funding, both internal (CEF) funding and external (BBSRC/MRC/WELCOME) to purchase more cutting-edge technology microscopes. I have invested heavily over the years in developing networks, along with senior colleagues from across UCL and key decision makers, to form external links with industry and forged close partnerships with microscope manufacturers. This has proved to be important to ensure the efficient running of our core facilities especially as I lead a key Science Technology Platform. I have always been outward looking and our external appearance is critical to the success of the facility, as good publicity feeds down to external agencies, such as grant awarding bodies and enhances/reinforces UCL's reputation as a Centre of Excellence for Imaging.

I am an ardent supporter for promoting the contribution that UCL's technical community make to the success of UCL's world class research, teaching and education, and I am a member of Technical Managers Group (TMG), as well as a vocal committee member of the Technical Staff Project and Vice Chair of the Survey Reporting Group (SRG). I am a founding member of the London Consortium of Imaging Facilities Managers. This Communities of Practice group' (COP) was conceived and formed 5 years ago by the imaging facilities managers of the Crick Institute, Institute of Child Health, Imperial and UCL. Our inaugural meeting was held at the Crick Institute and attend by 14 London-based facility managers. The group has grown to 26 members; each manager hosts a meeting at their institute where we can exchange knowledge and practises. I am deeply passionate about promoting STEM in schools and have always taken on 6th form work experience students as well summer students to give them experience of working in a research lab. We have students from disadvantaged London schools visit our unit throughout the year as part of their extracurricular outreach STEM program, which is extremely popular and successful.

In 2023, I was promoted to Professorial Research Fellow, for my contributions to the UCL research community, teaching/training, UCL citizenship and external engagement. Then again in 2023, I won the Papin Prize for Core Research Facility at the The UK Higher Education Technicians Summit.

My technical career pathway has not been one that one might call a 'traditional route', although one could argue that my early career, certainly fits that description. I have always had a very positive attitude to my work and never focused on the negative, but asked 'what did I learn from that experience and what can I do differently to solving the problem? To enjoy and thrive in one's work, one must be proactive and willing to put themselves forward for challenging tasks; only in this way can one develop their craft and build their skills and experience.

My advice to all technicians is, listen to and seek advice from people within your community and even consider getting a mentor to help guide your career path. Everyone will at some point/s in their career have key events/opportunities that present themselves, it is how we react to these opportunities that will impact on our career outcomes; you just have to recognise the opportunities and be ready and prepared to act. I never thought for one moment during my early career that I would get a professorship, and I still think of myself as a technician, because that is what my skills and thinking define me as, and I am proud to say that.