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POSITION DESCRIPTION

Head/Director, Katharina Gaus Light Microscopy Facility

Faculty/Division	DVC-Research and Enterprise
Classification Level	Academic C/D
Hours & Span (Category)	ACADEMIC POSITION NO SPAN
Position number	ADMIN ONLY
Shiftwork status	NOT SHIFTWORKER
Allowances	N/A
On call arrangements	N/A
Original document creation	June 2024

Position Summary

The Katharina Gaus Light Microscopy Facility (KGLMF) is part of the highly successful Mark Wainwright Analytical Centre (MWAC), a multidisciplinary instrumental core facility base at the Kensington Campus of UNSW Sydney supporting researchers in Science, Engineering and Medicine. The Katharina Gaus Light Microscopy Facility is one of the largest of its type in Australia with 14 experienced staff and more than 40 high end microscopes, a comprehensive histology service, and a newly established 3D culture laboratory. The Facility offers a comprehensive suite of cutting-edge instrumentation and expertise in lightsheet, confocal, multiphoton, super resolution, fluorescence lifetime, spinning disk, live cell, spatial proteomic and transcriptomic methods as well as, image processing and analysis infrastructure.

The Head/Director of the Katharina Gaus Light Microscopy Facility will have advanced knowledge of advanced light microscopy techniques, experience in overseeing the operations of a cutting-edge multiuser facility and have a strong focus on developmental instrumentation and collaborative engagement with commercial suppliers. The Head/Director will strategically plan for new core and innovative instrumentation in the facility that service the future needs of the research community of UNSW. This includes securing external funding and liaising with key stakeholders, partnerships, and networks. The role will contribute to the university as an academic, with a focus on collaborative research and support the objectives of MWAC as member of its management team.

The role of Head/Director of Katharina Gaus Light Microscopy Facility reports to the MWAC Executive Director, and has 13 direct reports.

Accountabilities

Specific accountabilities for this role include:

Level C:

- With the MWAC Executive Director, develop and execute a strategy for Light Microscopy, Histology and 3D cultures at UNSW aligned with the universities overall research goals.
- Engage in independent and collaborative research projects with a focus on specimen preparation, acquisition, and/or analysis of innovative light microscopy data.
- Manage the operations and core business of the facility including the provision of advice, high quality service and research support to key stakeholders in the facility.
- Lead and guide a team of research scientists, technical and professional staff, ensuring excellence and innovation in the facility.
- Support researcher access, foster collaborations, and partnerships with complementary facilities at other MWAC and National core light microscopy facilities.
- Strategically plan for new capabilities, provide expertise, and lead research infrastructure grants for the development of new light microscopy applications for research.
- Prepare, contribute to, and oversee publications, projects, and reports as required.
- Provide collaborative research support and analytical services, with a strong focus on excellence and research integrity to internal and external stakeholders, as well as commercial clients.
- Train and supervise research staff and participate in the delivery of short courses on in light microscopy and lectures as part of a School as required.
- Contribute to the management and broader activities of the Mark Wainwright Analytical Centre and Division of Research and Enterprise as required.
- Align with and actively demonstrate the [UNSW Values in Action: Our Behaviours](#) and the [UNSW Code of Conduct](#).
- Ensure hazards and risks psychosocial and physical are identified and controlled for tasks, projects, and activities that pose a health and safety risk within your area of responsibility.

Level D (In addition to Level C duties)

- Take a lead role in designing, implementing and overseeing the strategy in the Katharina Gaus Light Microscopy Facility at UNSW.
- Establish and run a vibrant research program with Light Microscopy techniques at its core.
- Lead research experiments, in collaboration with research groups and industry partners.
- Engage and network effectively with external University, Government and other Agencies relevant to light microscopy research infrastructure
- Provide high quality supervision or co-supervision of honours and postgraduate research projects.
- Lead the writing of publications, project and infrastructure grants and reports.

- Contribute to the leadership of the Mark Wainwright Analytical Centre, and School or Faculty level, commensurate with a Level D University appointment.
- Make significant contributions to the profession/discipline.

Skills and Experience

Level C:

- A PhD and recognition as a leading authority in the discipline of Biomedical Sciences/Chemistry/Lifesciences aligned with the mission of the Mark Wainwright Analytical Centre.
- Demonstrated experience in a relevant biomedical research field and in managing a core platform for advanced light microscopy.
- A demonstrated research track record commensurate with the academic level of appointment, with demonstrated expertise in use of light microscopy techniques for research.
- Excellent interpersonal and communication skills demonstrated initiative and ability to work cooperatively within a team environment.
- Experience in training, teaching and supervising others within a multiuser research environment whilst managing resources and research infrastructure effectively.
- Experience with sample preparation for analysis of a range of samples and with software used for analysing data from light microscopy data.
- Ability to assist in developing a forward- looking planning strategy and vision for light microscopy, histology and 3D cultures at UNSW.
- Experience in fostering collaborative research, with outcomes of high quality and impact and demonstrated capacity for research leadership.
- A record of competitive external funding for research infrastructure and collaborative research activities.
- Demonstrated experience in budget management and major equipment procurement.
- Knowledge of research ethics, integrity, and compliance requirements.
- Demonstrated ability to contribute more broadly to activities and priorities of the Mark Wainwright Analytical Centre, and the School / Faculty of affiliation.
- Ability and capacity to implement required UNSW health and safety policies and procedures.
- An understanding of and commitment to UNSW's aims, objectives and values in action, together with relevant policies and guidelines.
- Knowledge of health & safety (psychosocial and physical) responsibilities and commitment to attending relevant health and safety training.

Level D (In addition to Level C)

- High-level project management experience with a demonstrated ability to plan, oversee and manage projects involving scientific and technical staff.

- Strong influencing and negotiation skills with demonstrated ability to build both internal and external relationships and networks.
- A record of successful student and post-doctoral fellow supervision.
- Experience in leading, developing and managing academic and professional staff, including proven change management leadership.
- Demonstrated success leading competitive external funding to local and national research infrastructure initiatives as well as, for individual and collaborative research.

About this document

This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.