University of Nottingham
UK | CHINA | MALAYSIA

Role profile

Job title	Research Associate/Fellow	Job family and level	Research and Teaching Level 4 (Appointment will be Level 4 Career training grade where an appointment is made before PhD has been completed)
School/ Department	Pharmacy	Location	University Park Campus

Purpose of role

This role will involve the development of a medicinal chemistry research project founded upon excellence in synthetic (medicinal) chemistry aimed at supporting an artificial intelligence (AI) enabled medicinal chemistry program. The successful candidate will work in collaboration with an AI computational chemist to explore the proof-of-concept chemical synthesis of new lead- and drug-like chemical scaffolds, enabling the synthesis of the scaffold and the expansion of the scaffolds into small "drug-like" libraries. This position is part of a recently announced EPSRC Prosperity Partnership award entitled "Accelerated Discovery and Development of New Medicines: Prosperity Partnership for a Healthier Nation" (EP/S005080/1), which will support a multidisciplinary team of approx. 30 co-workers all of whom are committed to the development of smarter chemistries to underpin efficient processes enabling the manufacture of high potency materials with a minimal environmental impact.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	**% time per year**
1	▪ **Plan and conduct supervised research using recognised approaches, methodologies and techniques within a chosen medicinal chemistry project.** This will include but is not limited to a proven record for designing and optimising synthetic routes to molecules of interest as evidenced through peer-reviewed scientific publication.	75%
2	▪ An attention to detail as evidenced through writing peer-reviewed scientific publications (named first/last authorship)	5%
3	**Collaborative research and supervision** ▪ Work in conjunction with others in the research team to achieve objectives and make an active contribution to the success of the team. Provide support, guidance and supervision to other staff and students, where appropriate in own area of expertise	10%
4	**Safe running of laboratory infrastructure** ▪ Ensure the smooth and safe running of the chemistry laboratory and assist in the supervision of undergraduate and/or postgraduate student's projects	10%

Person specification

	Essential	Desirable
Skills	• Excellent skills in organic synthesis & medicinal chemistry • Excellent oral and written communication skills including the ability to communicate complex information with clarity and write to a publishable standard. • A proven record for designing and optimising synthetic routes to molecules of interest. • Strong analytical skills including the ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. Proven expertise in NMR, LC-MS and HPLC and other analytical techniques • Ability to creatively apply relevant research approaches/models/ techniques/methods and devise and manage research programmes. • Ability to build effective relationships as part of a team and collaborate with others, both internally and externally. • Flexible, proactive and dedicated approach. Ability to work to deadlines and prioritize tasks • Experience of supervision of undergraduate and postgraduate students.	• Experience of Computational methods ▪ Molecular docking
Knowledge and experience	▪ Presenting work effectively to a variety of professional and academic audiences at meetings and conferences. ▪ A consistent track record of published research in peer-reviewed journals and writing high	▪ First author publications in high impact factor journals ▪ Training and/or supervision of students.

	quality reports and papers for publication	
Qualifications, certification and training (relevant to role)	▪ A 1st or upper-second class honors degree in synthetic chemistry-related discipline ▪ A PhD awarded or submitted in synthetic (medicinal) chemistry.	▪ Post-doctoral research experience in synthetic/medicinal chemistry-based project ▪ Industrial drug discovery working experience

As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those whose protected characteristics under the Equality Act 2010, are not well-represented in our current staff body.

The University is a signatory of the Declaration on Research Assessment (DORA). As such we commit to focus on the scientific content of publications (where requested or provided as part of the recruitment and selection process) as a basis for review of quality, and consideration of value and impact of research conducted, rather than any proxy measures such as Journal Impact Factor.

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people	Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
Taking ownership	Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
Forward thinking	Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
Professional pride	Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
Always inclusive	Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others