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

Purpose of role

- Have specific responsibility for research, for developing research objectives and proposals with Dr Etienne Farcot on the Leverhulme Trust funded project "Decoding complex auxin signalling processes using mathematical modelling".
- Plan and conduct work using approaches or methodologies and techniques appropriate to the type of research.
- Be responsible for writing up their work for publication and have the opportunity to use their initiative and creativity to identify areas for research, develop research methods and extend their research portfolio.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	**Research** ▪ Undertake original research of international excellence. ▪ Develop research objectives and proposals for own and/or collaborative research area. ▪ Plan and conduct research using recognised approaches, methodologies and techniques within the research area. ▪ Collaborate with academic colleagues on areas of shared interest for example, collaborative or joint research projects. ▪ Plan and manage own research activity and resolve problems, if required, in meeting own/team research objectives and deadlines in collaboration with others. ▪ Identify opportunities and assist in writing bids for research grant applications.	75%
2	**Engagement, Communication and Dissemination** ▪ Analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights to research area. ▪ Prepare papers for publication in leading journals and/or contribute to the dissemination at national/international conferences, workshops and meetings resulting in successful research outputs. ▪ Provide support, guidance and supervision to other staff, where appropriate in own area of expertise.	20%
3	**Project Administration**	5%

| | | • Prepare proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes.
• Co-ordinate the operational aspect of research networks, for example, arranging meetings and updating web sites etc and contribute to collaborative decision making with colleagues in area of research.
• Utilise and contribute to organising research resources and facilities and workshops as appropriate. | |

Person specification

	Essential	Desirable
Skills	- Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. - Excellent organisational skills - High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. - Ability to creatively apply relevant research approaches, models, techniques and methods. - Ability to assess and organise resource requirements and deploy effectively. - Ability to build relationships and collaborate with others, both internally and externally. - Ability to work independently and as part of a multidisciplinary and multicultural team	Ability to foster a research culture and commitment to learn in others.
Knowledge and experience	- Expert knowledge of differential equations and/or dynamical systems, as well as some background in mathematical biology. - Proficiency in Python, Julia or another programming language relevant to scientific research. - Proven ability to produce research of high quality in mathematical modelling or closely related discipline. - Some practical experience of applying the specialist skills and approaches and techniques required for the role. - Networking, actively engaging with and valuing other areas and diverse groups	- Background knowledge in statistics, machine learning or data analysis. - Experience of interdisciplinary collaborations. - Published papers in relevant academic journals. - Previous success in gaining support for externally funded research projects. - Experience of developing new approaches, models, techniques or methods in research area.
Qualifications, certification and training (relevant to role)	PhD or equivalent, in a relevant branch of mathematics or a closely related discipline (Or close to completion)	

ATHENA SWAN Silver Award

The University strongly endorses Athena SWAN principles, with commitment from all levels of the organisation in furthering women's careers. It is our mission to ensure equal opportunity, best working practices and fair policies for all.

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 always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.

Taking ownership

Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.

Forward thinking

Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.

Professional pride

Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.

Always inclusive

Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others

Line manager   Principal Investigator

Role holder   Research Associate/ Fellow

Key stakeholder relationships   Colleagues   Students