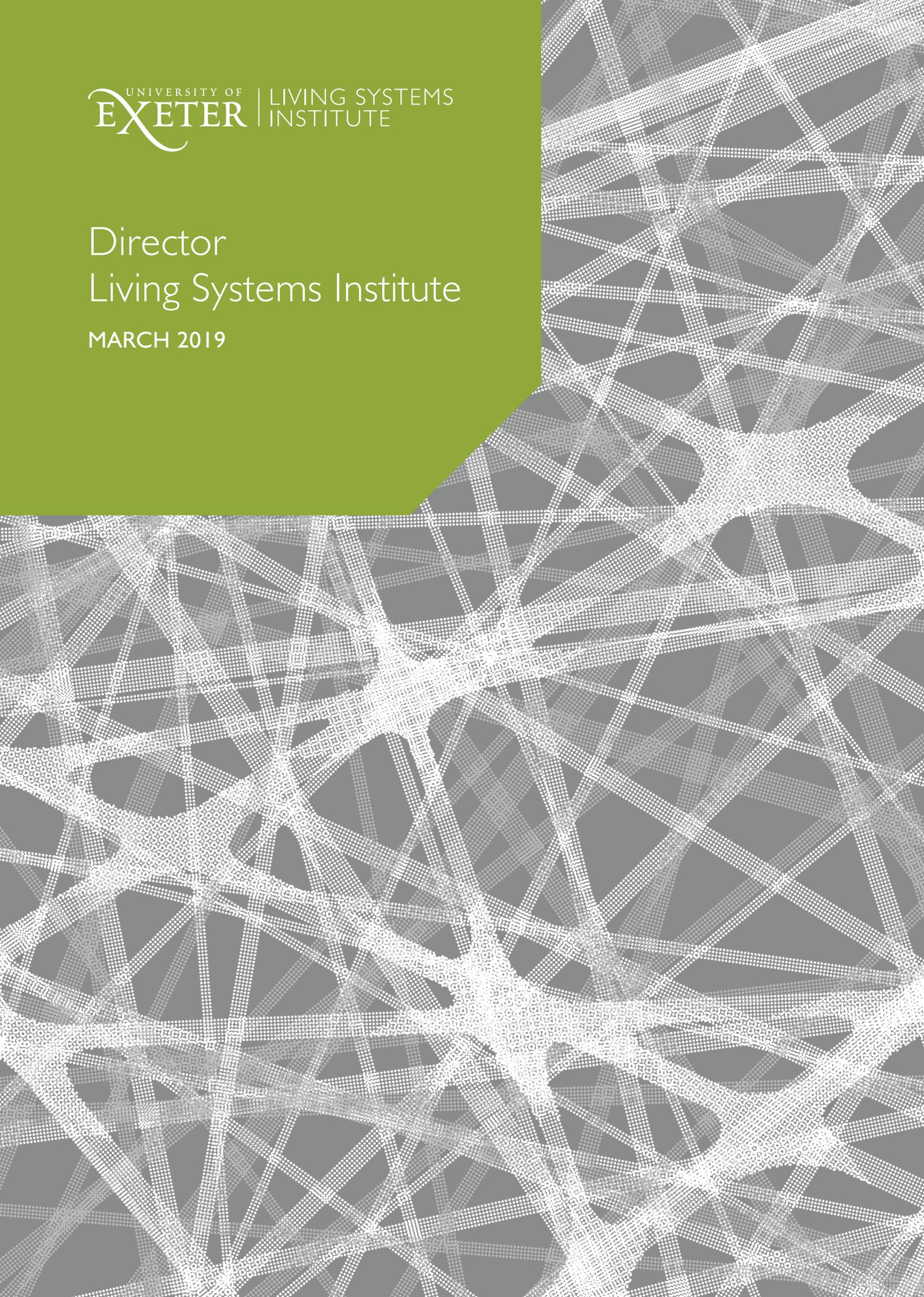


UNIVERSITY OF
EXETER | LIVING SYSTEMS
INSTITUTE

Director
Living Systems Institute

MARCH 2019



The Living Systems Institute (LSI)

Research

Research in the Living Systems Institute aims to reveal the fundamental principles by which living systems operate and the perturbations that cause ordered mechanisms breakdown leading to disease. The Institute crosses disciplinary and institutional barriers to engage in high-risk, fundamental research that leads to transformative technological breakthroughs. By translating breakthroughs in our basic understanding we will develop novel treatments and effective therapies and enable our research to have significant reach and impact within society. We are realising these ambitious goals by bringing together basic and translational scientists from biological and biomedical sciences, physics and engineering, mathematical and data science whose focus coalesces around:

- novel technologies for imaging, sensing and high throughput screening
- novel animal models (in particular non-mammalian systems)
- novel methods for perturbing systems at multiple scales
- novel mathematical and computational models and tools

The Institute emphasises interdisciplinary work by combining these approaches through reiterative cycles of theory, experiment, measurement and observation which enables our researchers to reveal fundamental mechanisms that govern the behaviour of living systems at multiple scales (from the nanoscale to the whole organism level). They further enable us to test predictions of disease causing perturbations or alterations to systems that will enable healthy function to be restored.

A critical strength of the University of Exeter is 'cross-kingdom' research expertise spanning human, animal, and plant function and disease. This allows the potential for discoveries in one area to be related to others thus allowing new and exciting insights. Exeter has world-leading strength in the cell biology and genetics of microbial and fungal pathogens, the genetics and genomics of chronic diseases such as diabetes and dementia, as well as whole-systems approaches for understanding neurological disorders and the response to stress. We wish the LSI to have 'porous walls', encouraging a high degree of interaction between scientists within the LSI and across our broader disciplines and colleges. We facilitate this through hot-desking and regular activities hosted by our own researchers and those from other disciplines, including seminars, workshops and social events.

In summary the LSI provides a vibrant interdisciplinary research environment, housing 35 investigators including four ERC grant holders, an EPSRC Established Career Fellow, two Wellcome Trust Investigator Award holders, two Royal Society URFs and an MRC Career Development Award holder. LSI is also home to 12 early career independent research fellowship holders (funded by EPSRC, BBSRC, MRC and STFC). The LSI also hosts the EPSRC Centre for Predictive Modelling in Healthcare and provides a home to the University's Wellcome Trust Institutional Strategic Support Fund activities.

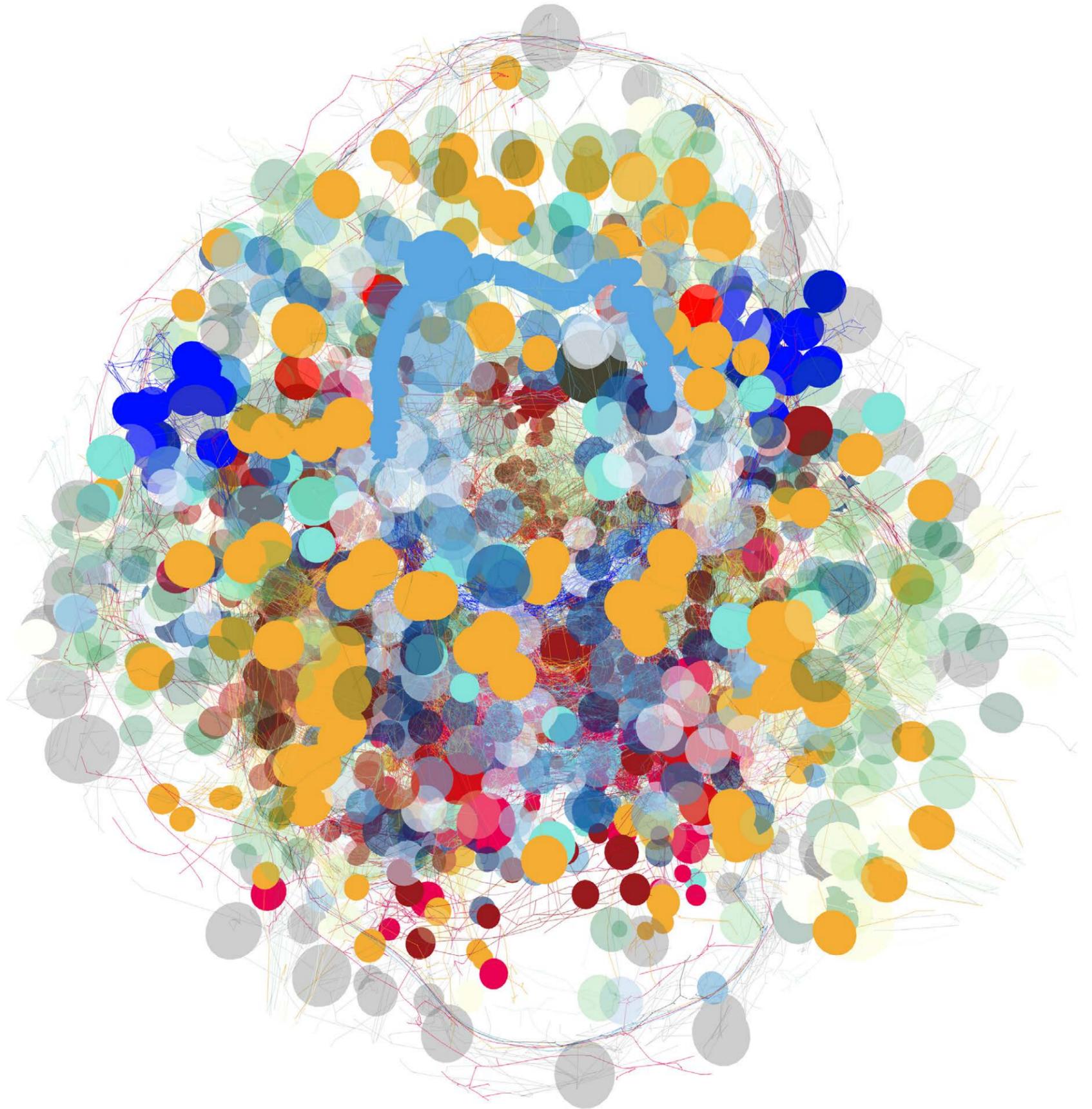


Teaching and Learning

The Institute facilitates novel, research-led teaching through our recently established BSc and MSci Natural Sciences programme that recruits 50 of the very best students each year. LSI PIs teach and mentor this next generation of scientists to enable them to collaborate across wide disciplines – from physical sciences and mathematics to cell biology and medicine. The next stage of our evolution will be the creation of a strong postgraduate community through the development of postgraduate taught programmes and participation in doctoral training centres to create an exciting hub for PhD students.

The LSI's Interaction with the Wider University's Research Environment

A key aspect of the Living Systems Institute is its relationships across the University. The Institute is tightly embedded within a wider scientific environment that is very much application-oriented and imbued with a sense of responsibility to translate scientific discovery into social and economic application. Engagement with a broad variety of communities and stakeholders is a critical focus for the Institute, from industry partners developing novel disease treatments, to members of the public keen to contribute to our fundamental research, and inform policy makers. Supporting these activities we have an embedded community engagement manager funded by the Wellcome Trust, a Royal Society Entrepreneur in Residence, an AHRC funded artist and researcher, as well as strategic partnerships with the Exeter Centre for the Study of the Life Sciences and the Exeter Northcott Theatre. The LSI is developing global research links and partnerships to foster excellence in science and science education such as our partnership with Nanyang Technological University, Singapore to deliver split-site biomedical PhD studentships.

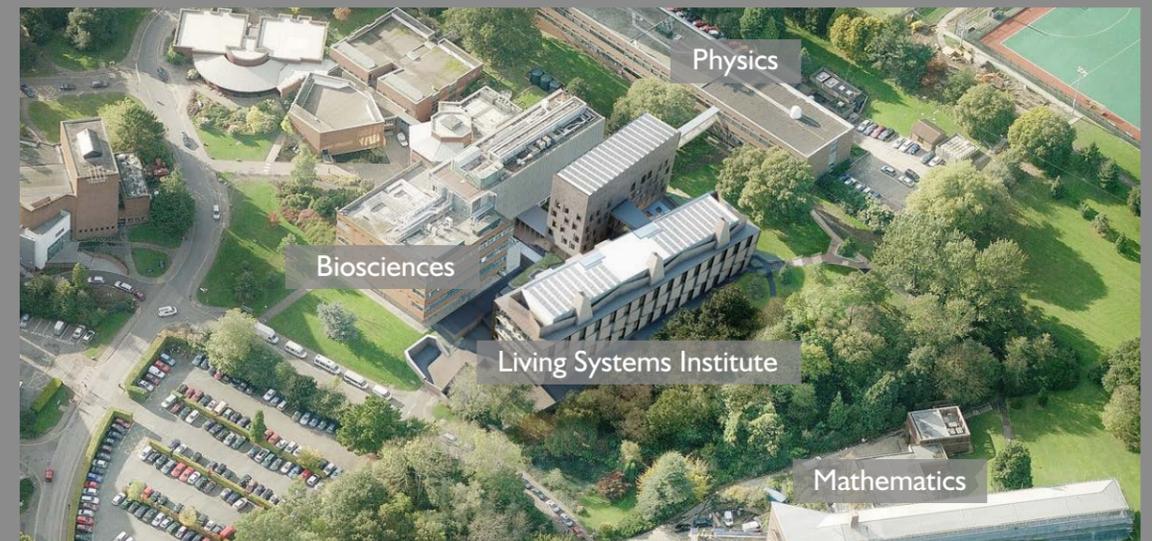


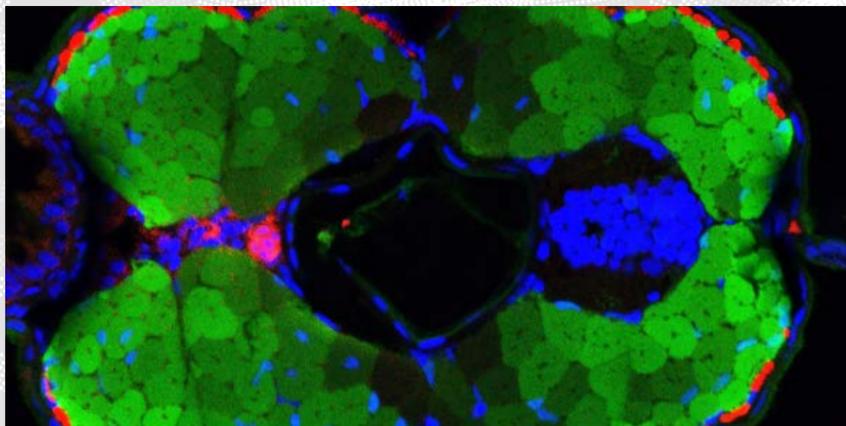


The Living Systems Building

The highly interdisciplinary and cutting-edge vision for the Living Systems Institute requires physical co-location of scientists with very broad skill-sets and the provision of high-specification technologies. The new £52 million LSI building provides 7500m² of research space, including three floors of state-of-the-art laboratories for cell and molecular biology research. The building currently houses 32 research groups, of more than 200 researchers, with complementary expertise in biosciences, medicine, physics, engineering, mathematics and computer science.

The high-quality research laboratories, bioimaging facilities, physics and engineering spaces enable the multiscale analysis of the precise operation of living systems. The research groups are fully equipped to support multidisciplinary approaches to study organelles, cells and organisms. The range of facilities include laser labs, tissue culture suites, growth rooms, a Drosophila facility, a cryoEM and SEM facility and a large Biological Services Unit. LSI researchers have access to a large Aquatic Resources Centre housing several aquatic species and the Bioluminescence Centre equipped with state-of-the-art light and electron microscopes.





Vision from the Deputy Vice-Chancellor for Research and Impact

Professor Neil A.R. Gow FRS, FMedSci, FRSE, FRSB, FAAM

The Living Systems Institute at Exeter offers a substantial opportunity for its next Director. The Institute's inaugural Director, Professor Phil Ingham, recruited exceptional scientists across the composite disciplines of biology, engineering, maths, medicine and physics who are already benefitting from the colocation and collaborative opportunities offered within the LSI building. The Institute's new Director will be expected to build on this foundation and shape the Institute's research into a truly multidisciplinary hub capable of developing a world-changing approach to understanding diseases and their diagnosis. As the DVC overseeing this research institute I am looking for a strategic thinker who is able to bring long-term vision and direction to position the Institute; and someone who is able to build a collaborative community around the distinct interdisciplinary research themes we are investing in. This spans fundamental science at the nanoscale,

though work using our various animal models and on into clinical trials. We are looking for someone whose own research can build bridges within these existing research themes; and who has a broad view of science and an appreciation for the rich potential for discovery at the interfaces between traditional disciplines. They will be able to build connections across the University to strengthen and mutually support the Institutes' research in the context of a changing external research landscape.

I will look to this leader to nurture the Institute's staff and build on LSI's existing strengths while positioning the Institute for success and impact in the future. More broadly I expect the next LSI Director to work with me to support the development of Exeter's research and education ecosystem in the context of upcoming research challenges and government direction.

"if you dream... of future discoveries and inventions, let me tell you that the fertile field of discovery lies for the most part on those borderlands where one science meets another..."

Sir D'Arcy Wentworth Thompson, CB FRS FRSE, 1903



Vice-Chancellor's Introduction

The University of Exeter is an ambitious institution keen to grow its reputation as a research intensive global institution. As part of this journey we are establishing a number of world leading interdisciplinary research institutes. Amongst these the Living Systems Institute (LSI) was established in 2016 to pioneer novel approaches to the understanding of disease mechanisms and how they can be better diagnosed and treated. The Institute builds on our significant and established research in human, animal and plant diseases, and incorporates innovative imaging, biophysical and diagnostic technologies and powerful mathematical modelling and data science capabilities by drawing together academics from across and at the boundaries of several Colleges and disciplines.

LSI is designed to foster innovative interdisciplinary research practices through the colocation and collaboration of exceptional scientists in a state-of-the-art building. The Living Systems Institute is at the core of the University's vision for the life and biological sciences and its £52.5 million building is part of a deliberate £450 million investment in science at Exeter.

The inaugural Director of Exeter's Living Systems Institute was Professor Phil Ingham FRS who laid the foundations of an exceptional Institute. Exeter is now looking for a new Director of the Institute to develop and secure the LSI vision into the future.

The enclosed information defines our present capabilities but we invite you to look beyond the detail to future possibilities. We look forward to hearing from you how you might develop this outstanding opportunity.

Steve Smith

Professor Sir Steve Smith
Vice-Chancellor and Chief Executive
University of Exeter

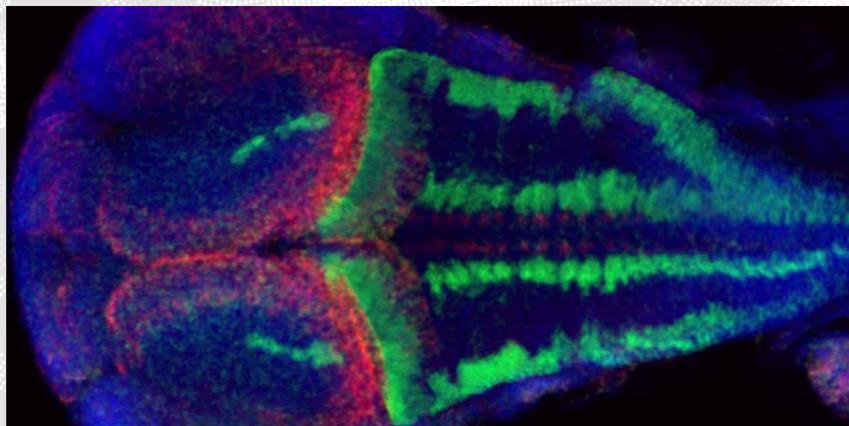
About the University

The University of Exeter is a Russell Group university that combines world-class research with very high levels of student satisfaction. Exeter has over 21,000 students and is in the top one per cent of universities worldwide. Exeter is ranked 14th in *The Times and The Sunday Times Good University Guide 2018* and 14th in the *Guardian University Guide 2019*. In the 2014 Research Excellence Framework (REF), the University ranked 16th nationally, with 98% of its research rated as being of international quality, while in 2017, Exeter was awarded a Gold rating in the Teaching Excellence Framework (TEF) assessment. Exeter was named *The Times and The Sunday Times Sports University of the Year 2015-16*, in recognition of excellence in performance, education and research. Exeter was *The Sunday Times University of the Year 2012-13*.

The University launched its flagship Living Systems Institute in 2016 – a world-class, interdisciplinary research community that will revolutionise the diagnosis and treatment of diseases. This follows recent investments of more than £350 million worth of new facilities across its campuses in recent years; including landmark new student services centres – the Forum in Exeter and The Exchange on the Penryn Campus in Cornwall, together with world-class new facilities for Biosciences, the Business School and the Environment and Sustainability Institute.

- 1 Forum
- 2 South Cloisters
- 3 Biosciences
- 4 Business School
- 5 The Exchange





Role Description

Reporting to the Deputy Vice-Chancellor for Research and Knowledge Transfer, the Director of the Living Systems Institute will provide high-level scientific leadership to the Institute and upwards of 30 PI research academics. The individual will be supported by a range of University professional services staff including a dedicated Institute Manager and administrative team to assist in the effective management of the LSI and the delivery of its objectives

The ideal candidate will have a strong interest in the molecular or system wide basis of disease and generic mechanisms underpinning living systems. It is expected that the Director will have a world leading research portfolio and a track record of excellence, evidenced by publications in the very best international journals, citation indices and international awards, visits, conference invitations, grants and a clear international profile. An

appropriate start-up package will be made available to facilitate continued support for their research and the future research of the LSI. Furthermore, the Director will possess exceptional communication skills, with the ability to seamlessly interact across the spectrum of research areas represented within the Institute, inspire our talented staff and work collaboratively within our wider University leadership structure to achieve collective strategies.

The Director of the LSI will be responsible for all aspects of the Institute's remit. Working in close collaboration with College Pro-Vice Chancellors and Executive Deans, the successful individual will ensure that every opportunity is taken to optimise and exploit the synergies offered by the interaction of world-leading researchers working at the interfaces of the disciplines.

Key Responsibilities and Accountabilities

The key responsibilities and accountabilities of the post will be to:

- Continue the creation of a world-leading interdisciplinary research institute providing inspired leadership and exceptional academic vision.
- Develop the LSI's international reputation in understanding the fundamental biological processes and diagnosis of disease.
- Establish the LSI as a centre that publishes research of the highest international quality and is supported by significant research grant income.
- Work with businesses and industrial partners to help develop knowledge-based economic activity.
- Collaboratively integrate the activities of LSI with other disciplines and research groups across the University, providing a strong coherent academic vision.
- Develop and foster links across the wider University and its strategic partners on the theme of living systems.
- Contribute strongly to the University's strategic goals to sustain a top ten position in the UK, and achieve a global top 100 ranking.
- To contribute to the research-education ecosystem, by facilitating the work of others whose role it is to promote research inspired learning and the development of international PGT Masters Courses.



Performance Metrics

The success of the LSI will be measured through a number of different metrics which will include:

- Strong profile of highly cited peer-reviewed research publications or strong profile of peer-reviewed research publications whose citations exceed journal norms.
- Success in winning new, peer-reviewed funding from national and international funding agencies.
- Success in achieving world-leading status as measured, for instance, through the Research Excellence Framework and through evaluation and feedback from the external scientific advisory panel.
- Engagement across the University and the establishment of a truly multidisciplinary culture.
- Opening up of new collaborations both across the University and with external groups and organisations.
- Identification and development of new lines of research.
- Identification and development of increased opportunities for knowledge transfer and application (patents, licensing agreements, spin outs, opportunities to influence Government decisions on policy).
- External interactions including key lectures given, level of public engagement and policy advice.



Person Specification

Standing and Reputation

Have an international research reputation and a successful career as a scientist in a discipline relevant to the interests of the Living Systems Institute as demonstrated by peer recognition and the following:

- An established record in leading a major research group in a field associated with living systems and compatible with our research vision.
 - A record of high quality, internationally significant publications commensurate with distinguished professorial status.
 - Have led a major interdisciplinary research centre or a large national, or international collaborative project.
 - Possess a broad understanding of research opportunities in the field of living systems.
 - A proven track record of significant research income generation.
 - Experience of engagement with a wide range of stakeholders, particularly with institutional leadership positions and international industrial partners.
- A track record in the successful mentoring and nurturing of early career scientists and other colleagues to promote their careers and integration within a research community.

Strategy

- Vision and experience of leadership and the ability to think and operate strategically.
- Independence of mind, breadth of understanding and a commitment to look across the disciplines and the research areas to identify and exploit opportunities.
- Able to create alignment between the LSI and the University's College research strategies.
- Ability to integrate educational programmes that take advantage of, and enhance the research base, for example through the recruitment of Postgraduate Taught Course students.

Leadership

- The gravitas, emotional intelligence and academic understanding to lead and bring together a senior team of cross-disciplinary academics around common research visions.
- Ready and able to act as lead ambassador internally, nationally and globally promoting the vision of the Institute.
- Be a strong and inspirational leader, committed to providing leadership to staff from a wide range of academic disciplines, and to the goals of the LSI. Able to work with and motivate a range of staff of differing levels of seniority, to enthuse them and to obtain commitment. Able to create excitement and enthusiasm around the changes the institute will deliver.
- Ready to provide an excellent training ground and mentorship for early career researchers and other colleagues as part of a research-education ecosystem.
- An awareness and understanding of equality and diversity within an organisation.

Management

- Strong financial acumen with the ability to deliver the Institute's strategy while ensuring long-term financial sustainability.
- Have clear sight of all income streams supporting the development of plans to grow philanthropic income, industrial partnership funding, etc.
- Ready to work with the Institute Manager and College Pro-Vice Chancellors and Executive Deans to ensure clear financial planning and effective deployment of resources.
- Able to create a culture that nurtures and inspires academic staff to fulfil their potential.

Commercial Acumen

- Committed to fostering creativity, innovation and different ways of working which will in turn open up new commercial opportunities.
- Committed to ensuring that the LSI strategy is focused around knowledge transfer and impact and that they are central to the Institute and its culture.
- Focused and driven to work with industry and other organisations in the development of applications, technologies and policies. Able to create excitement around the benefits and synergies that rise from the creation of the LSI and the opportunities it creates.

Communication, Negotiating and Networking Skills

- Act as the lead global ambassador for the LSI distilling passion and excitement around its vision through the appropriate scientific communities both nationally and globally.
- Ready to attend and contribute to appropriate conferences on the international stage.
- Able to demonstrate evidence of achieving results through persuasion and negotiation where no direct authority exists.
- Able to engage a range of stakeholders including media, corporate partners and general audiences through the ability to adjust and flex communication style.
- Able to create, build, strengthen and sustain collaborative relationships and networks.



Live and Work in the Most Beautiful Part of the UK

Staff at the University of Exeter, whether based at our campuses in Devon or Cornwall, benefit from living in one of the most beautiful parts of the country.

With stunning scenery, outstanding quality of life, and increasingly excellent economic prospects, the South West has cemented its reputation as one of the very best places to live, work, and study in the UK. It's no wonder our students are consistently amongst the most satisfied in the country.

“Well-heeled and comfortable, Exeter exudes evidence of its centuries-old role as the spiritual and administrative heart of Devon. The city’s Gothic cathedral presides over pockets of cobbled streets; medieval and Georgian buildings, and fragments of the Roman city stretch out all around. A snazzy new shopping centre brings bursts of the modern, thousands of university students ensure a buzzing nightlife, and the vibrant quayside acts as a launch pad for cycling or kayaking trips.

Throw in some stylish places to stay and eat and you have a relaxed but lively base for explorations.”

Lonely Planet Guide to Great Britain

Exeter – A Modern City with a Rich History

Exeter is home to our main site, the Streatham Campus on the edge of the city, and St Luke’s Campus in the heart of the town. Set in the heart of the beautiful Devon countryside, Exeter is consistently rated as one of the best places to live, work, and study in the UK.

Exeter is a lively, vibrant city with a strong independent sector. There are boutique shops alongside high street stores, and quirky cafes peppered amongst independent restaurants using locally sourced produce. Find out more about what Exeter has to offer, including food, shopping and places to visit, on the Exeter Live Better website. You can also hear from students about their life in Exeter on our blog pages.

Boasting a high quality of life and low crime rate, a quarter of Exeter’s population study or work at the University, making the city a welcoming environment for students and academics alike.

Over recent years a number of big-name companies and organisations have seen the potential of the South West’s capital city, from the Met Office to John Lewis Partnership. Exeter’s new Science Park provides outstanding opportunities for technologically-driven businesses to develop.

Exeter is the administrative and commercial centre of Devon, and the region’s exquisite coastline and impressive national parks are only a short drive, cycle, bus or train journey away. With direct flights from Exeter to London, the city is better connected and more accessible than ever.

How to Apply and Selection Process

Confidential Preliminary Discussions

For an informal and confidential conversation about the position, you are welcome to contact Professor Neil Gow FRS, Deputy Vice-Chancellor (Research and Impact), n.gow@exeter.ac.uk or (01392) 725152, or, Roo Haywood Smith, Living Systems Institute Manager, f.s.haywood-smith@exeter.ac.uk or (01392) 726508.

How to Apply

Applications should be made online via the University of Exeter website. As part of your application, please attach a single pdf file or a maximum of two pdf files, to include:

- A full and up-to-date curriculum vitae with publications list.
- A covering letter explaining why the post is of interest and how your skills and experience meet the requirements taking into account the Person Specification in this Candidate Brief.

Selection Process

As part of the selection process, shortlisted candidates will be invited to spend a day at the University of Exeter, visiting the Living Systems Institute, meeting and speaking to key stakeholders, giving a seminar on their area of research and attending a dinner.

Shortlisted candidates will be invited back to the University of Exeter shortly thereafter for a formal interview when shortlisted candidates will be asked to give a presentation as part of the process.

Additional Information Relating to the Post

Right to Work

An offer of employment, is conditional upon your eligibility to work in the UK.

Relocation

To assist you in your relocation to Exeter, the University may offer a relocation allowance. More detailed information about the Relocation Assistance Scheme can be found at www.exeter.ac.uk/working/new/relocation

Bespoke relocation services are available, upon request. Horizon Relocations are a company that provides a comprehensive range of relocation services tailored to individual requirements. The bespoke service ensures you feel comfortable and completely engaged with your relocation.

Schools – Devon

Exeter and Devon has an excellent selection of state and independent schools.

The Good Schools Guide is the UK's number one school guide, helping parents in every aspect of choosing the best education for their children. GSG reviews more than 1,000 schools, covering state and independent, boarding and day, mainstream and special sectors.



For further information, please visit:

www.goodschoolsguide.co.uk/local-authority/devon-county-council

To find and compare schools in England, please visit:

www.compare-school-performance.service.gov.uk/schools-by-type?step=phase®ion=878&geographic=la&phase=secondary

T&C

The terms and conditions of employment are detailed in the document "University of Exeter Conditions of Employment". For further information, please visit: www.exeter.ac.uk/staff/employment/conditions/terms

Salary

The appointed candidate will be offered a salary and start up package that is commensurate with their experience and requirements.

Reference and Medical Clearance

An offer of employment, is subject to satisfactory medical clearance and satisfactory references.



HR Services
Northcote House, The Queen's Drive
Exeter EX4 4QJ