

# JONATHAN KNOWLES' RESEARCH FELLOW: BRAIN-GUT AXIS

Norwich Medical School, Faculty of Medicine and Health Sciences

**RA2365** 

CANDIDATE BROCHURE



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# WHAT MAKES UEA SO SPECIAL?

The University of East Anglia is a publicly funded major UK research and teaching university. It was built to embody a radical new vision for higher education, where interdisciplinarity is crucial and excellence in both research and teaching is valued. UEA consistently ranks within the top quarter of universities in the UK for the quality of research and teaching.

As a major regional employer and cultural centre, we take our regional civic responsibilities very seriously and have kept our sights on the people and place we call home. In fact, we launched our University Civic Charter in October 2023; created from in-depth community engagement, renewing our commitment to the region as part of our 60th anniversary.

There are many things which make UEA special, not least of which is the community of staff and students that work and study here. UEA includes three Nobel prize winners, including Sir Paul Nurse and Sir Michael Houghton, and many fellows of the Royal Society and British Academy amongst our alumni and current staff.

Our campus is home to Sir Denys Lasdun's iconic brutalist architecture set in hundreds of acres of beautiful country park that includes a large broad (lake). In the spirit of Lasdun's ambition to inspire an anatomy of ideas, today, UEA is tackling some of the key challenges of the changing world. UEA's research combines disciplines

and breaks new boundaries across its priority research themes of climate, creative and health.

UEA is the place where global warming was first documented. Since the 1970s, UEA's Climatic Research Unit, and more recently Tyndall Centre for Climate Change (Headquarters hosted at UEA), have played a pivotal role in developing temperature records and climate models, contributing to the understanding of climate change, and informing global policy. Many UEA scientists have played significant roles in the Intergovernmental Panel for Climate Change (IPCC), which was jointly awarded the 2007 Nobel Peace Prize for its efforts to increase public knowledge of anthropogenic climate change. Environmental Science and Global Studies at UEA continue to be a major powerhouse for research and teaching.

UEA is widely regarded as a pioneer in creative writing, having established the UK's first Creative Writing Masters programme in 1970. This renowned programme has since attracted and produced numerous successful writers, including Booker Prize winners such as lan McEwan and Anne Enright, and Nobel Prize Winner Sir Kazuo Ishiguro. In recent years, UEA academics have played a pivotal role in the discovery and presentation of the Gloucester Royal shipwreck (Norfolk's Mary Rose). Our iconic Sainsbury Centre for Visual Arts is a major museum and arts research facility.



Health research at UEA not only embraces the Faculty of Medicine and Health but draws in research from both social and natural sciences. Research under this theme has made major contributions in the fields of healthy ageing, epidemiology and involving citizens (via our innovative Citizens' Academy) in improving health care outcomes. This theme benefits from close association with the other major research institutes on the Norwich Research Park; notably the Norfolk and Norwich University Hospital and the Quadram Institute. The Norwich Cancer Research Network, and Norfolk Institute for Healthy Ageing, are examples of key mechanisms for delivery of real impact from health research at UEA.

UEA has been a major success over the last 60 years and looks forward with confidence to the next 60 years.

For an informal discussion about the post please contact Professor Philip Baker, Pro-Vice-Chancellor, Medicine and Health Sciences via Philip.Baker@uea.ac.uk.

# **UEA is part of the Norwich Research Park**

Norwich Research Park (NRP) membership locates UEA in one of the largest concentrations of research institutes in the whole of Europe – four independent internationally-renowned research institutes: John Innes Centre, Quadram Institute, Earlham Institute and The Sainsbury Laboratory; with the University of East Anglia and Norfolk and Norwich University Hospitals NHS Foundation Trust, supported and funded by The John Innes Foundation, The Gatsby Foundation, and UKRI Biotechnology and Biological Sciences Research Council.

The NRP provides an ideal environment for collaborative use of infrastructure and facilities, with a single portal for academics and businesses to access the specialist facilities across the Park.

The Enterprise Centre is a regional business, knowledge and innovation hub, with workspace provision and supports over 80 businesses working alongside UEA staff and students in a dynamic and vibrant entrepreneurial community. On the wider NRP, there are dedicated laboratory and office spaces in the Innovation Centre and Centrum hosting over 600 staff within a total of 115 businesses and spinouts.



## THE ROLE

We are seeking an outstanding Research Fellow to lead innovative research at the brain-gut axis, with a focus on its medical and health implications.

This post is offered in partnership with the Quadram Institute, a world-leading centre for research into food, gut biology, and health, based on the Norwich Research Park.

The successful applicant will join a vibrant, interdisciplinary environment, leveraging the combined strengths of UEA and the Quadram Institute to advance understanding and treatment of diseases influenced by brain-gut interactions.

Whilst appointment within the Faculty of Medicine and Health Sciences is most likely, for a suitable candidate, there is the potential for appointment within the Faculty of Science, either as a cross-appointment or as the primary appointment.

### **KEY RESPONSIBILITIES**

- Develop and lead a competitive, collaborative research programme at the brain-qut axis, with clear medical or health relevance.
- Initiate and manage research projects that integrate large-scale data, artificial intelligence, and/or genetics to unravel mechanisms of brain-gut communication.
- Drive cross-disciplinary collaborations with colleagues across UEA, the Quadram Institute, and other Norwich Research Park partners.
- Supervise and mentor research staff and students, fostering a culture of innovation and scientific excellence.

- Lead and contribute to high-quality funding applications, with a particular focus on building a track record that establishes credibility for future external fellowship applications (e.g., UKRI, Wellcome, MRC).
- Produce internationally recognised, peer-reviewed publications and work towards establishing an international reputation in the field.
- Engage with external partners to maximise the translational impact of research, including potential spinout activity.
- Champion new approaches and challenge orthodoxy, acting as a role model for innovative thinking.
- Uphold the highest standards of research integrity and ethics.

# THE PERSON

# EDUCATION, EXPERIENCE AND ACHIEVEMENTS

- PhD in biomedical science or a closely related discipline relevant to the brain-qut axis (E)
- Postdoctoral research experience in a relevant field (E)
- A strong proposal for research on the brain-gut axis (candidates will be asked to submit a 1-page summary with their application) (E)
- Strong record of high-quality publications as first or last author (E)
- Demonstrable experience in securing or contributing to external research funding (E)
- Experience supervising or mentoring junior researchers or students (E)
- Track record of interdisciplinary collaboration (D)

### **SKILLS AND KNOWLEDGE**

- Sophisticated technological and methodological skills (e.g., omics, imaging, computational biology) (E)
- Excellent organisational skills (E)
- Excellent interpersonal and communication skills (E)
- Familiarity with UK and EU research funding systems (D)

## **PERSONAL ATTRIBUTES**

- A clear trajectory and credibility for future external fellowship applications (E)
- Ability to work effectively with colleagues and students from diverse backgrounds and to contribute to an inclusive working and learning environment (D)

**Essential Requirements (E)** are those, without which, a candidate would not be able to do the job.

**Desirable Requirements (D)** are those which would be useful for the post holder to possess and will be considered when more than one applicant meets the essential requirements.

## **FURTHER INFORMATION**

The post is available from 1 January 2026 on a full-time basis for a fixed term period of 3 years.

Salary will be £48,822 to £56,535 per annum on Grade 8 on the single salary spine.

Place of Work - The University is strongly committed to providing an excellent student experience and research environment, and it is expected that all staff will be available on campus to carry out their duties during their working week in support of these goals. We have a hybrid-working policy which supports a mix of at home and on campus 'hybrid' working for many roles. For the majority of hybrid roles, the expectation is a minimum of 60% of working time will be spent physically present in the workplace.

The flexibility of the hybrid-working policy allows the possibility of some remote working, but it is the expectation that all appointments will be UK based, with any overseas working agreed in advance by exception only.

If successful you will be asked to show evidence of right to work in the UK prior to any formal offer being made. Non-British and non-Irish nationals entering the UK to undertake employment or who are currently in the UK will have to meet eligibility criteria under the points-based immigration system. The University may be able to provide sponsorship under the <u>Skilled Worker route</u> if relevant criteria are met. Please note, due to the complexities of the immigration system, Skilled Worker visa sponsorship is not guaranteed for every role. If you would like further information about whether this role is eligible for visa sponsorship, please contact staff.visacompliance@uea.ac.uk

The post is superannuable under the Universities Superannuation Scheme and there is an annual holiday entitlement of 30 days plus statutory (8 days) and customary (6 days) holidays. The University is committed to creating an environment where the health, welfare and safety of all students and staff is of paramount importance. The University's Safeguarding Policy addresses both child protection and safeguarding children, young people and vulnerable adults within the work of the University. Appointment will be subject to satisfactory pre-employment

checks, which may include an Occupational Health assessment.

Information on the benefits of working at UEA can be found at <a href="https://www.uea.ac.uk/about/working-at-uea">https://www.uea.ac.uk/about/working-at-uea</a>.

If you require the information contained within this candidate brochure in a different format please email staff.recruitment@uea.ac.uk

#### **HOW TO APPLY**

To apply for this vacancy, please follow the online instructions at: <a href="https://vacancies.uea.ac.uk">https://vacancies.uea.ac.uk</a>

A 1-page summary of your proposal for research on the brain-gut axis is required as part of your application.

The closing date for this role is 11:59pm on 1 December 2025.

Please note that the application form contains an Equal Opportunities section which must be completed. The Equal Opportunities information will not be made available to the selection panel and will not form any part of either the short-listing or decision making process.

It is anticipated that interviews will take place via Microsoft Teams on 22 **December 2025** and we will inform you of the outcome of your application prior to this date. Candidates should note that travel and incidental expenses incurred in attending an in-person interview will not be reimbursed.



# **ABOUT THE PROJECT**

## The Importance of the Brain-Gut Axis

The brain-gut interface represents one of the most dynamic frontiers in biomedical science. Increasing evidence demonstrates that the bidirectional communication between the central nervous system and the gastrointestinal tract plays a pivotal role in health and disease. Disruptions in this axis are implicated in a wide range of conditions, including neurodegenerative diseases, mental health disorders, autoimmune diseases, and metabolic syndromes. Understanding the mechanisms underpinning the brain-gut connection offers transformative potential for developing novel diagnostics, therapeutics, and preventative strategies for major human diseases.

## About the Quadram Institute

The Quadram Institute is an internationally renowned centre for research into the links between food, gut health, and disease. Its unique integration of fundamental science, clinical research, and translational innovation provides an exceptional environment for advancing research at the brain-gut interface. The successful candidate will benefit from access to state-of-the-art facilities, collaborative networks, and opportunities for real-world impact.



# **ABOUT THE SCHOOL**

Norwich Medical School (MED) was established at UEA in 2001 and has over 300 members of teaching, academic, research and support staff – and a large number of active NHS secondees and honorary appointees from a wide range of disciplines (including medical specialties, clinical psychology and psychological therapies, biological sciences, health economics, epidemiology and medical statistics). In our relatively short history we have established a reputation for exciting and innovative research led teaching supported by a wide-ranging programme of research and team science.

The School has grown significantly with increases in the number of MB BS students as part of the national requirement to increase junior doctor numbers. The School also delivers a large number of Post Graduate programmes which support the NHS workforce. The School also includes a highly regarded Doctoral School supported by the Universities Doctoral College.

The School's research focus is on developing research themes, set within three research departments, that answer important health questions, from an understanding of the basic mechanisms of disease through to translational medicine and clinical trials.

We are an important park of the Norwich Research Park Community and have strong and growing links with the Norfolk and Norwich University Hospital, the Quadram institute, Earlham Institute and John Innes Centre. More widely we also have close working relationships with colleagues in the community as well as the James Paget University Hospital, Queen Elizabeth Hospital, Kings Lynn and our community partners in primary care and mental health.



# **ABOUT THE FACULTY**

The Faculty of Medicine and Health Sciences is led by the Pro Vice Chancellor of Medicine and Health Sciences, Professor Philip Baker, working closely with the Deans of School, and the Associate Deans who share responsibility for the areas of Research; Enterprise and Engagement; Education; Admissions; and PGR. These senior academics, together with the Heads of Research Departments, Faculty Director of Operations, the Human Resources Business Partner, and the Senior Finance Business Partner (Faculty), form the Faculty Executive.

Teaching is organised through the Faculty's two Schools of study, comprising Health Sciences (HSC) and Norwich Medical School (MED), assisted by a Centre for Inter-professional Practice (CIPP).

The Faculty also has strong research links with the Norwich Research Park, comprising the Quadram Institute (QI), the John Innes Centre (JIC), the Earlham Institute (EI) and the Norfolk and Norwich University Hospital NHS Foundation Trust, see https://www.norwichresearchpark.com





# **OUR VALUES**

Shaped by staff, our UEA values represent a core set of standards for how we behave as an employer, drive excellence in teaching, learning and research, and collaborate as an anchor institution in our local community.

From tackling global challenges, striving for student and staff success, and creating a vibrant inclusive environment, our values are what unite us.

- **+** AMBITION
- **→** COLLABORATION
- **→** EMPOWERMENT
- **→** RESPECT



## **AMBITION**

# We are ambitious for our future success.

We are forward-thinking and brave in our approach and decisions. We make space for innovation and creativity, seizing opportunities that are responsible and sustainable. We are ambitious for the advancement of education and research.



## **COLLABORATION**

# We are collaborative in our approach.

We work together with shared purpose. We build connections, share ideas and develop new networks. We champion our regional, national and global relationships and demonstrate that together we can achieve greater goals and positively influence the world around us.



## **EMPOWERMENT**

# We empower ourselves and each other.

We develop ourselves and others, trusting people to make decisions based on their expertise and knowledge. We continually improve systems and processes to support us in working in an agile and efficient way.



## RESPECT

# We respect each other.

We treat everyone with respect and dignity. We value diversity and foster a community where people can express different thoughts and views. We are open to challenge, so we can learn and improve. We encourage a positive, inclusive environment where everyone has opportunities to fulfil their potential.

## RESEARCH AT UEA

REF21 results showed that 91% of our research is world leading or internationally excellent (<u>The University of East Anglia</u>: Results and submissions: <u>REF 2021</u>); and the Knowledge Exchange Framework (KEF) results show UEA as above average across most indicators in our Cluster-X grouping (<u>Knowledge exchange framework</u>: Dashboard (kef.ac.uk)).

UEA research is highly cited, the 6th most cited in the UK and 41st globally (THE Research Citations rankings 2022). Ten researchers associated with the Norwich Research park and seven researchers from UEA have been named in the annual <u>Clarivate</u> Web of Science Group Highly Cited Researchers list for 2022.

UEA is listed in the World Top 100 for research citations (Times Higher Education World University Rankings 2023) and World Top 50 (Times Higher Education Impact Rankings 2022).

## **REF21 Highlights – Top 20s**

- 1st overall, 6th for outputs and 1st for impact for (Anthropology and) Development Studies (8th for research power)
- 1st overall, 2nd for outputs and 1st for impact for Agriculture, Food and Veterinary Sciences
- 3rd overall, 7th for outputs and 8th for impact for History

- 4th overall, 14th for outputs and 5th for impact for Earth Systems and Environmental Sciences (9th for research power)
- 4th overall, 9th for outputs and 1st for impact for Social Work and Social Policy
- 5th overall, 8th for outputs and 7th for impact for Area Studies

# **UEA** is home to several world-renowned Research Centres and Networks

- Climatic Research Unit (CRU) <u>Climatic</u> <u>Research Unit - Groups and Centres (uea.ac.uk)</u>
- Tyndall Centre <u>Homepage -Tyndall Centre for</u> <u>Climate Change Research</u>
- Norwich Institute for Healthy Ageing (NIHA) https://healthyageingnorwich.com/
- Centre for Japanese Studies & Sainsbury Institute for the Study of Japanese Art and Cultures <a href="https://www.uea.ac.uk/groups-and-centres/centre-for-japanese-studies-thttps://www.sainsbury-institute.org/">https://www.sainsbury-institute.org/</a>
- Biomedical Research Centre <a href="https://www.uea.ac.uk/groups-and-centres/biomedical-research-centre">https://www.uea.ac.uk/groups-and-centres/biomedical-research-centre</a>
- Centre for Competition Policy <a href="https://www.uea.ac.uk/groups-and-centres/centre-for-competition-policy">https://www.uea.ac.uk/groups-and-centres/centre-for-competition-policy</a>

- Norwich Institute for Sustainable Development (NISD) <u>Home - The Norwich Institute for</u> <u>Sustainable Development (nisd.ac.uk)</u>
- Centre for Research on Children and Families (CCRF) <a href="https://www.uea.ac.uk/groups-and-centres/centre-for-research-on-children-and-families">https://www.uea.ac.uk/groups-and-centres/centre-for-research-on-children-and-families</a>
- Water Security Research Centre (WSRC) <u>Water</u> <u>Security Research Centre - Groups and Centres</u> (uea.ac.uk)
- Productivity East <a href="https://www.uea.ac.uk/groups-and-centres/productivity-east">https://www.uea.ac.uk/groups-and-centres/productivity-east</a>

UEA houses the British Archive for Contemporary Writing (with material from renowned authors such as Doris Lessing and Lee Child), the nationally accredited East Anglian Film Archive, Sainsbury Centre for Visual Arts, Sainsbury Institute for the Study of Japanese Arts and Culture, and Sainsbury Research Unit for the Arts of Africa, Oceania and the Americas.

# OTHER ACCOLADES

- Queen's Anniversary Prizes for Higher and Further Education have been awarded to UEA for international development studies (2009), creative writing (2011) and environmental sciences (2017). Notable alumni include Sir Paul Nurse (1973, Nobel Prize for Medicine 2001), Sir Kazuo Ishiguro (1980, Nobel Prize for Literature 2017), Sir Michael Houghton (1972, Nobel Prize for Medicine 2020) and Sarah Gilbert (1983) who led the Oxford University team to develop a COVID-19 vaccine, approved in 2020.
- Our Doctoral College, established in 2018, hosts six Doctoral Training Partnerships and integrates Faculty and School provision for 1600 Postgraduate Research Students (including those from across the Norwich Research Park), enabling collaboration and innovation.
- We recognise our global impact and were one of the first universities to declare
  a climate and biodiversity emergency in June 2019. Our sustainable campus,
  including over 50 acres of environmentally valuable parkland, is constantly
  evolving with ambitions to be 100% net zero by 2045 or sooner.
- UEA is a University of Sanctuary, an accreditation given to universities that show an ongoing commitment to creating a welcoming culture of inclusivity and awareness.
- UEA was awarded the Silver Athena SWAN Award in 2019, and all our Schools hold awards at Bronze or Silver.

A vibrant place to study, learn and work, UEA is a very special place.



# A SUSTAINABLE UNIVERSITY

At UEA, we are now working to create a university that will be even better in the future, and we are working to achieve net zero carbon by 2045 (or earlier). Our Sustainable Ways vision is one of a resilient university – where consumption is efficient and self-generated energy supports low carbon goals, supported by a vibrant community of world-leading researchers and inspired graduates.

At a basic level, our sustainable development means that we try to balance the 'three pillars' of environmental, economic and social elements.

We challenge our environmental impact through on-site energy generation and a district heating and cooling network, reducing our reliance on grid electricity and therefore fossil fuels. We promote and use recycled and 'eco' products such as biological cleaning materials. We champion local suppliers and ethical causes, including Fairtrade and vegan products. We seek to ensure value for money in a holistic, whole-life costing sense in our new buildings and procurement contracts.

#### **OUR INITIATIVES**

Central campaigns, such as holiday shut-downs or awareness day events, support a whole-University approach to energy saving and other initiatives.

Follow us on X @SustainableUEA



# **OUR CAMPUS**

UEA is based on a campus that provides top quality academic, social and cultural facilities to over 17,000 students.

Although located in 320 acres of rolling parkland, virtually no part of the campus is more than a few minutes' walk from anywhere else, so everything is close at hand – the library, nursery, health centre, supermarket (incorporating a post office) and restaurants. Amongst the striking buildings is the UEA's Sainsbury Centre for Visual Arts, which contains the Robert and Lisa Sainsbury Collection – one of the greatest art collections formed in Europe during the 20th Century.

The University has invested in new learning and teaching and research spaces, including a celebrated new Enterprise Centre that underpins its commitment to promoting student enterprise and entrepreneurship.

Sport and Recreation plays a major part in the life of the University of East Anglia, centred around the major Sportspark facility which is one of the most successful community sport facilities in the UK. This accessible and affordable facility provides a diverse range of activities, and incorporates a 50m Olympic size swimming pool, indoor climbing wall, coaching resource centre and sports injury clinic.



# **NORWICH**A CITY OF STORIES

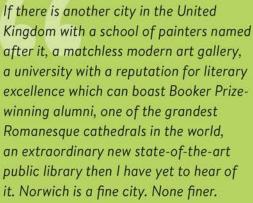
The city's motto is 'A fine city' and its strong cultural heritage has seen Norwich maintain the best of its historical character whilst developing to become one of the most vibrant and attractive cities in Europe. Norwich offers miles of riverside walks and cycle ways, and a unique collection of 1930s parks. The city is surrounded by beautiful countryside and within easy reach of the stunning Norfolk coast.

Norwich is a UNESCO World city of Literature, the first in the UK, as well as being one of the newly named Tech Cities recognising the growth of digital businesses in the region. The most prominent high-rise building, apart from the castle, is the magnificent 11th century cathedral, which still dominates the skyline. The city's medieval centre of cobbled streets remains largely intact, but there is still space for modern buildings such as the city's centrepiece, the Forum, which is a striking piece of contemporary architecture. The glass front overlooks the colourful open-air market (one of the largest in the country) and reflects the city in all its diversity.

The city is consistently rated as one of the top ten shopping venues in the UK. Norfolk and Suffolk attract thousands of visitors each summer. The famous Norfolk Broads are among the most important wetlands in Europe and a haven for rare plants, wildlife and insects. The Broads attract holidaymakers who come to navigate the intricate natural network of waterways formed by the Rivers Bure, Yare and Waveney and their tributaries.

For further information about UEA's excellent facilities, staff benefits, picturesque campus and the UEA working environment, please visit the 'Careers at UEA' microsite <a href="https://www.uea.ac.uk/about/working-at-uea">https://www.uea.ac.uk/about/working-at-uea</a>. Additional information about living and working in the city of Norwich can be found at <a href="https://www.workinnorwich.co.uk/">https://www.workinnorwich.co.uk/</a>





#### STEPHEN FRY



# **LOCATION**

Some cities you've heard of, others you have to discover. Norwich is one of the most beautiful, modern historic cities in Britain. It's a city that celebrates the independent, stimulates creativity, promotes change and encourages diversity.

UEA is a campus university located 3 miles from the centre of Norwich. Situated in the heart of Norfolk, which means it's an ideal location to explore Norwich and beyond.

## **BY RAIL**

LONDON • 2 HOURS

**CAMBRIDGE • 1 HR 15 MINS** 

**BIRMINGHAM • 4 HOURS** 

Many European cities (including Paris and Amsterdam) easily accessible by train

## **BY ROAD**

KINGS LYNN • 1 HOUR CROMER • 45 MINUTES SOUTHWOLD • 1 HOUR

## **BY AIR**

NORWICH AIRPORT • 20 MINUTES
STANSTED AIRPORT • 2 HOURS
London is a major airline hub and all main international destinations are easily accessible



An internationally renowned university, UEA is ranked in the UK Top 25 (Complete University Guide 2025), UK Top 30 (The Mail 2025) and the World Top 100 (Times Higher Education Impact Rankings 2024), where it ranks in the UK Top 20 for research quality (Times Higher Education Rankings for the Research Excellence Framework 2021) and World Top 20 for Health and Wellbeing (QS World University Rankings for Sustainability 2024), reflecting the international excellence of its research environment. The University holds UK Teaching Excellence Framework Silver status.

## **Equality, Diversity, Inclusion and Wellbeing**

The University is committed to diversifying its workforce and to the wellbeing of all our staff. For example, we already hold an Athena Swan Silver Institutional Award in recognition of our advancement towards gender equality. Further details on our broader Equality, Diversity, Inclusion and Wellbeing work can be found on our website.









