

Institution: University of East Anglia

1. Context and mission

The University of East Anglia (UEA) was established in 1963, with the motto “*Do Different*”. The founding Schools were English Studies and Biological Sciences, with the first cohort of about 90 students graduating in 1965. UEA has steadily grown over the intervening 58 years, with the most recent academic additions being Schools of Medicine (2002) and Pharmacy (2003) with the School of Engineering to be launched in 2021. Notable alumni include Sir Paul Nurse (1973, Nobel Prize for Medicine 2001), Kazuo Ishiguro (1980, Nobel Prize for Literature 2017), 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. UEA’s mission has always been three-fold: to achieve research excellence, teaching excellence, and civic excellence.

The University comprises four Faculties (Arts and Humanities, Medicine and Health, Science, and Social Sciences), with over 1500 academic and research staff in 19 Schools, nearly 17,000 students, and over 2100 support staff across seven professional services divisions. UEA has led the way in shaping and creating disciplines such as international development studies, creative writing and environmental sciences, recognised by the awards of Queen’s Anniversary Prizes for Higher and Further Education in 2009, 2011, and 2017 respectively. UEA is ranked in the World Top 200 (192nd overall, 44th for research citations, THE World University Rankings 2020). A commitment to small group teaching and a first-rate learning environment has resulted in a strong student experience, a culture of partnership with the Students Union, and development of innovative curricula. These qualities are recognised within the Teaching Excellence Framework (TEF Gold, 2017-2022).

UEA is a founding member of the Norwich Research Park (NRP), one of Europe’s leading centres for research in Biotechnology, Genomics, Food, Health, and the Microbiome, employing over 3000 researchers and clinicians. The NRP brings together UEA, the Norfolk and Norwich University Hospitals NHS Foundation Trust, and a unique cluster of internationally-renowned research institutes: John Innes Centre (JIC), Quadram Institute (QI), Earlham Institute (EI), and The Sainsbury Laboratory (TSL); funded by the John Innes Foundation, Biotechnology and Biological Sciences Research Council, and the Gatsby Charitable Foundation. TSL and QI are legal subsidiaries of UEA. This distinctive combination of life sciences expertise and research intensity means that Norwich is the 4th most cited city for research publications in the UK (Thomson Reuters, 2014).

A campus university of 320 acres of scenic parkland, woodland, wetland, and playing fields, UEA is much more than simply a place of learning and employment – it provides a wonderful recreational location for staff, students, and the public. Funded by the Lottery and Sport England, the £30m Sportspark opened in 2000. Recognised as one of the best sporting facilities of its kind in the UK, it boasts an Olympic-sized swimming pool, climbing wall, and many other world-class facilities. With a wide-ranging programme of activities, attracting over 1.3m visits per year it underpins UEA’s *Active Campus* campaign, encouraging staff and students to undertake activities with an emphasis on participation and fun. The Sainsbury Centre for Visual Arts is a world-leading art museum, situated in the heart of UEA’s campus. Sir Norman Foster was commissioned by Sir Robert and Lady Lisa Sainsbury to create an iconic building to house their art, including works by Bacon, Moore and Picasso, and to provide dedicated space for research on the collection. SCVA created a campus sculpture park with pieces by Moore, Gormley and Frink for the enjoyment of UEA staff and students, and to attract more visitors to experience the

unique art and architecture. UEA is highly regarded for its live performance offerings - since 1963, we have hosted nearly 3000 gigs (including Pink Floyd, Nirvana, and Amy Winehouse), performances from our own choirs and symphony orchestra, as well as a world-famous Literary Festival attracting internationally renowned writers of all genres.

2. Strategy

In 2014, the incoming Vice-Chancellor prioritised an institutional review to build a long-term vision and plan. Staff and students participated in a campus-wide conversation. The result was the *UEA 2030 Vision*, which identified four key areas of focus: research success, student success, staff success, and global success. To facilitate research success, we committed to enhancing UEA's reputation by tackling major global challenges and further increasing the reach, quality, and volume of world-leading research. To achieve this, we planned to increase our research capacity, collaborate further with NRP partners, build additional strategic partnerships, enhance facilities for research and innovation, further develop impact and innovation activities, and improve the training environment for postgraduate researchers (PGRs).

First steps towards achieving the Vision were articulated in the UEA Plan 2016-2020. We committed to identify a small number of pan-university research priorities and to establish a coherent programme of strategic partnerships across the NRP and with key organisations nationally and internationally to improve our research and generate impact. We have identified three initial interdisciplinary research themes: ClimateUEA (launched 2019), CreativeUEA (2020) and DecisionsUEA (launching 2021). These themes build on existing research strengths, with academics from across UEA and NRP, and aim to shape future research priorities, tackling significant global challenges through interdisciplinary collaboration and partnership. We also launched two new Institutes in 2020:

(1) Norwich Institute for Healthy Ageing: promotes sustained population behaviour change to improve physical and mental wellbeing. Led by the Faculty of Medicine and Health, with researchers from Schools of Biological Sciences, Computing Science, Psychology, Economics and Norwich Business School, with over 40 collaborators and funders including the QI and JIC, BT, Unilever, East of England Co-Op, Age UK, Alzheimer's Research UK and Voluntary Norfolk.

(2) Norwich Institute for Sustainable Development: creates synergies across the natural and social sciences, transforming research and practice to enable equitable, food security and sustainable futures. Led by the School of International Development, in close partnership with NRP institutes, and has international collaborators including from Ethiopia, Kenya, Madagascar, Uganda, and Nepal.

Since 2017, UEA has taken a strategic approach to organising research equipment into key platforms with academic leadership and dedicated technical support. An institutional strategy prioritises how we continue to invest in, upgrade and replace major capital equipment items. As a result, we have had a step-change in competitively won funding (BBSRC, NERC and EPSRC Capital/Equipment calls) as well as focused investment of UKRI equipment grants and match funding from the UEA PVCRI Capital Equipment Fund. This has led to enhanced research facilities and major investments of £1.8m in mass spectrometry, £1.5m in structural and biological imaging, £2.1m in the Biorepository, and £3m in the Disease Modelling Unit, as well as other smaller investments across all Faculties.

At UEA, impact and innovation are recognised as the natural result of high-quality research and have been a key focus for improvement since REF2014. This area is led by the Pro-Vice

Institutional level environment template (REF5a)

Chancellor for Research and Innovation (PVCRI), who is a member of the University's Executive Team. At university level, the PVCRI is supported by an Academic Director for Innovation (since 2018). At Faculty level, there are Associate Deans for Research and for Innovation, with Directors for both within Schools. In addition to centralised Research Managers and an Impact Team, in 2014, we appointed six industrial-sector aligned Relationship Managers, responsible for building connections between academics and key external sectors. These posts have both an internal and external focus, enabling interdisciplinary research and identifying opportunities in research and innovation impact from healthcare to heritage. UEA is an active member of the Universities Policy Engagement Network. We provide direct strategic financial support, including an annual £250K PVCRI HEIF Fund for developing impact cases, and Proof of Concept and Innovation funds (£1.2m invested in 77 projects, and £1.1m in 18 projects respectively) to help academics along the commercialisation path. Within this REF period, we have held NERC, BBSRC and ESRC Impact Accelerator Awards (totalling £1.5m) which have been used to support 96 projects across UEA.

Impact activity is encouraged and rewarded at individual level with dedicated time in staff workload models. Achievements are celebrated through the annual *Impact and Innovation Awards*. Established in 2018, the Awards formally encourage, recognise and reward staff, and showcase our research and innovation to the wider community across a wide range of sectors at a gala presentation evening. This encouragement and recognition is not confined to academic staff. In 2019, Science Faculty technicians won an award for their development of "*SmartCondensing*", which saves UEA 600,000 litres of water annually. Innovation Fellowships have been awarded to two academics who have each established highly successful spinout companies based on their research.

Since 2015, we have encouraged and supported our PGRs to participate in the *i-Teams* programme, where they have twelve weeks to work on a real business problem, supported by a dedicated business mentor. To date 150 students have participated, resulting in three spinouts, the launch of a UEA wellbeing app and one student start-up business. UEA's annual 54-hour *Sync The City* start-up event, launched in 2014 with SyncNorwich (a vibrant local tech network), has had over 660 participants, including 330 students supported by 60 experienced mentors, and has led to successful start-up businesses, including Safepoint. This event received an AdvanceHE Collaborative Award for Teaching Excellence (2020). In 2017, we established our Entrepreneur-in-Residence programme to mentor new staff and student start-ups and spinouts, totalling 481 during this REF period.

The success of our innovation and impact approach is exemplified by a growing portfolio of impact cases, steady and high annual consultancy income (~£9m), a cumulative portfolio of 174 patents and significant growth in IP income to £1.9m (2019/20) from £0.25m (2013/14).

Since 2010, UEA has operated the Low Carbon Innovation Fund (LCIF1), a venture capital fund supported by ERDF, providing equity finance into East of England SMEs developing innovative technologies and products with a significant greenhouse gas reduction impact. This unique fund invested £21.4m into 48 innovative companies between 2010-2016. LCIF1 has continued to invest legacy funding, leveraging over £48m of additional private sector investment and taking part in 20% of all investment rounds of this scale in the East of England (Beauhurst, 2018). Independent analysis estimated that LCIF1 portfolio companies saved the equivalent of 250,000 tonnes of CO₂ emissions by 2020. A new LCIF2 fund is investing £10.9m alongside at least £11m private sector co-investment in innovative low carbon businesses by December 2023. Building on this knowledge

and expertise, we launched *Invest East* in 2018 with Norfolk County Council, which has provided funding advice and support to 123 companies.

Overall responsibility for UEA's commitment to open access (OA) research sits with the PVCRI, supported by our Open Research team and Academic Liaison Librarians. UEA introduced an OA Policy in 2013 to encourage researchers to make their outputs OA (preferably under a CC-BY licence) and to take a pro-active approach to uploading manuscripts to our CRIS system (PURE), which feeds the institutional digital repository and website. Since 2013, the number of outputs deposited within PURE has more than doubled, and the proportion of articles meeting OA requirements is >85%. UEA promotes gold OA wherever possible, including utilisation of publisher deals allowing immediate OA. The University's research data management policy promotes data management planning at all stages of research, producing documentation, and providing research data for scrutiny by others preferably by making data OA. Where this is not possible, we provide data to researchers on request, while maintaining high standards of research integrity. The Open Research team use *International OA Week* to engage researchers, complementing training available throughout the year, with particular interest and engagement from ECRs and PGRs. Recognising the importance of researchers' rights to be attributed to their work correctly, UEA is a member of Jisc's ORCID consortium, making it easier to register for an identifier.

Responsibility for maintaining professional standards of research integrity at UEA rests with the PVCRI, supported by a Research Integrity Manager. An established set of policies and procedures provides a framework for the highest standards of personal conduct in research. UEA has nine Research Ethics Subcommittees, an Animal Welfare and Ethical Review Board, and an overarching strategic University Research Ethics Committee to provide university-wide guidance, review and advice. UEA provides bespoke training to strengthen researchers' understanding of research integrity issues. PGR students undertake mandatory ethics training to pass their probationary period.

UEA is proud to be a civic university and an anchor institution, with its research having a transformative impact on the wellbeing of local and regional communities. Analysis by Viewforth Consulting (2018) demonstrated that UEA activity contributes £559m annually to the region's economy and supports nearly 10,000 jobs across the UK (approximately 60% in the East). UEA was instrumental in establishing Norwich as England's first UNESCO City of Literature and the home of the National Centre for Writing. UEA's first Literary Festival took place in 1991 and has hosted nearly 500 award-winning writers. UEA staff and students present their research to the public through approximately 90 exhibits, talks, workshops and screenings to 100,000 visitors at the annual Norwich Science Festival, coordinated by the Forum Trust. Since 2011, Café Conversations and Dragon Hall Debates encourage the public to engage with academics and understand their research in informal settings. The recent strategic appointments of Professors Ben Garrod (2019) and Christie Watson (2020) aim to further strengthen UEA's interdisciplinary science and research communication activities.

During 2019, digital platforms and focus groups enabled staff to shape UEA's values (Collaboration, Empowerment, Respect and Ambition) and a core set of standards for how we behave; drive excellence in teaching, learning, and research; and collaborate as an anchor institution within our community.

For Research and Innovation, the UEA Plan 2020-25 focuses on four priority areas:

- (1) Continuing to improve collaboration and interdisciplinarity to support researchers' (including PGR) ambitions at all stages of their career and continuing to improve the quality of research outputs and related activities, demonstrating disciplinary and interdisciplinary excellence, and tackling global challenges.
 - a. We will develop our new interdisciplinary themes: ClimateUEA, CreativeUEA and DecisionsUEA, and establish a further two themes to bring together researchers from across the NRP. We will explore and develop exciting new opportunities to bring together different disciplines at the boundaries between themes, e.g. climate narratives, the brain-gut nexus, and medical humanities.
 - b. We will continue to build strategic partnerships to develop pioneering research and solutions that impact on key global and sustainable development goal challenges. Nationally, we will continue to invest in the Eastern Academic Research Consortium (founded in 2013/14 with Essex and Kent) to share resources, knowledge and skills and collaborate on research projects. In 2016, UEA co-founded the international Aurora Universities Network of nine European research-intensive universities aiming to match world-class academic excellence with societal engagement and impact. From 2021-2024, Aurora will deliver two European Universities funded projects (€12m) to share research infrastructure, improve academic-business cooperation and strengthen human capital.
- (2) Continuing to improve our reputation to extend the reach, influence, impact and external recognition of our research activity and excellence.
 - a. We will integrate our online and offline presence to create a strong and consistent identity across our research and innovation themes, training and empowering our researchers to communicate their research effectively across different media.
 - b. We will continue to attract visiting fellows to UEA to collaborate and experience our supportive research environment and culture (see "People").
- (3) Continuing to increase and diversify research and related income to ensure continued investment in a vital and sustainable environment and infrastructure (see next 2 sections).
 - a. We will review and further develop more inclusive, researcher-friendly and user-centric support and internal processes for researchers to develop their research and impact activities and bid for external funding. We will continue to invest strategically in research equipment and facilities across all disciplines.
 - b. We will continue to invest in research staff development and progression at all career stages, recognising a range of research and innovation contributions.

(4) Reviewing the effect of the global pandemic on staff, students, and activities. We are incredibly proud of UEA's collaborative response to the COVID-19 challenges. We will develop strategies to support UEA's recovery (see Annex) and work with regional partners through our pledge to co-develop a *Civic University Agreement* to support regional recovery plans, local economic and growth strategies, levelling up and place-based agendas.

3. People

UEA has focused on creating a vibrant and supportive environment for all staff as part of the *Staff Success* strand of the UEA Vision and Plan. Academic staff numbers and thus research capacity have steadily increased at UEA from 1,338 in 2013/14 to 1,603 in 2020. Academic posts are divided into three key contract types to enable UEA to fulfil two aspects of its mission - research and teaching excellence: Academic Teaching and Research (ATR) staff who have a mixed research and teaching portfolio (47%); Academic Teaching and Scholarship (ATS) staff with a primary focus on teaching (29%); and Research and Analogous (RA) staff, including Fellowships, with a primary focus on research (24%). There is a clearly defined process and support for staff to move between contracts.

A revised *Academic Progressions Handbook* was launched in 2019 to make career development, promotion and progression criteria clearer and to explicitly recognise a broader range of research, teaching, and innovation/impact activities, as well as leadership, pastoral, and administrative work. Early career researchers typically start with less teaching, increasing to a full load gradually, to allow time to establish their research and they can bid for UEA-funded PhD studentships. UEA recognises that affording academic staff the opportunity to focus exclusively on research and impact activities is vital for innovative and meaningful academic work. As well as dedicated workload allocation for research, academic staff are entitled to apply for one semester of study leave for every six semesters worked. Applications must show how proposed activities add value over and above that normally expected.

UEA's *Flexible Working Guidelines*, based on good practice within the sector, set out the right for all employees to request flexible working or periods of unpaid leave. We are committed to ensuring that these are not detrimental to career development or progression. For staff with caring responsibilities, shared parental/dependents leave is available. UEA has a multi-cultural nursery on campus, caring for children from six weeks old; a salary-sacrifice scheme helps with the cost of places. Launched initially in 2013 by the Faculty of Medicine and Health, all Faculties now have *Return to Work Funds* to provide financial support for those with caring responsibilities or returning from long absences, as well as funds to support academic staff with the additional (child)care costs associated with conferences or fieldwork. '*Moving On in your Academic Career*' is a workshop specifically for female researchers and returners from career breaks, which receives consistently positive feedback.

UEA has a clear strategy to ensure that there is a positive health and wellbeing culture for all employees, providing a framework to encourage and facilitate working practices to ensure that staff are appropriately supported in the workplace. UEA launched an *Employee Assistance Programme* (2019), which provides staff with round the clock, free practical advice to deal with personal and professional issues that affect any aspect of their wellbeing, home or work life and has a good annualised utilisation of 9.7%. UEA has a robust "Report and Support" mechanism to report any incident of unacceptable behaviour, and we take a zero-tolerance approach as we

believe that bullying, harassment, sexual harassment, assault, hate and discrimination are *Never OK*.

UEA's staff development policy sets out responsibilities, from the role of the individual in reflecting on their own work and future career needs, to the Executive Team who ensure a climate that encourages continuous learning and development. The Centre for Staff Education and Development is responsible for in-house and external training and development courses and activities, including those relating to research support, supplementing specialist School/Faculty based training. Within the REF21 period, there have been 6,535 attendees at these courses.

The PVCRI has lead responsibility for ensuring that UEA meets the principles of the *Concordat to Support the Career Development of Research Staff*. UEA has developed a Concordat Implementation Plan, which details the support for the personal, professional, and career development of our research staff. In September 2012, UEA achieved the 'HR Excellence in Research' Award in recognition of our commitment to implementing the principles of the Concordat. From May 2018, UEA more closely integrated these initiatives with Athena SWAN, to enhance synergistic positive action and change. In January 2019, an inaugural UEA-wide annual Researcher Summit was held (67 participants), with career development as a central focus along with the launch of an annual Merit in Research Awards scheme. In 2019, UEA extended relocation expenses to all research staff and in 2020 introduced merit-based promotion and salary awards for research staff, so that they can progress independent of their funding source. UEA signed the *Technician Commitment* (2018) to further ensure the visibility, recognition, career development and sustainability of research technicians as a vital element of our research environment.

A key step in the career development of many researchers is gaining an independent fellowship. To support these applications and maximise success, UEA holds an annual Research Fellowships briefing day, typically attracting 50 attendees. For all fellowship applications, an experienced mentor is appointed to help them develop the best proposal possible. For example, within this REF period, UEA has hosted 16 Leverhulme Early Career Fellowships, two Royal Society Fellowships, ten European Research Council Fellowships, and supported 37 UKRI Future Leader Fellowship applications.

The UEA Doctoral College, launched in 2018-19, integrates Faculty and School provision for 1600 PGRs (including NRP PGRs), enabling collaboration and innovation. PGR numbers have grown from 312 starters in 2015, to 412 in 2018. Six new DTPs have been awarded within this period, resulting in an increase in UKRI-funded PGRs from 18.3% (2013/14), to 27.2% (2018/19) and has consolidated our expertise to deliver an excellent PGR experience and high-quality doctoral training programmes across multiple funders. The remainder of our PGRs are either UEA-funded (25%), self-funded/funded from other sources including DfE, NHS and non-UK governments (25%).

CareerCentral supports PGRs, including a successful internship and placement programme to enhance employability and an OfS-funded scheme, *Gateway to Growth*, linking our graduates with regional SME employers. The 3MT competition, Sustainability Impact (SHAPE) and i-Teams programmes are open to all PGRs to provide useful additional experience. PGRs also have access to the centralised Research and Innovation Service for advice. UEA's NRP membership allows PGRs access to a wider range of additional specialist facilities and training. PGRs are an integral part of our research community and regularly participate in research seminars, colloquia and annual celebratory research showcases. PGR supervisor training is mandatory and refreshed

Institutional level environment template (REF5a)

every three years. Annual monitoring and progress reports enable PGRs to raise concerns, seek additional support and highlight training/development needs with their supervisory team.

We have a full-time SU sabbatical PG Education Officer, uncommon among UK universities, and we value working in partnership with our PGRs. We applied for HEFCE Catalyst funding (£150K) for the Courage Project (2018-20), to improve institutional practices and self-resilience for mental and physical wellbeing. Some of these pioneering initiatives have since informed the Vice-Chancellors Task Force for Staff and Student Wellbeing. UEA enjoys a higher-than-average response rate (58% 2015, 58% 2017, 59% 2019) to the PRES survey and high overall satisfaction (84-87% over the REF period).

Equality, diversity, dignity and respect are the keystones of the UEA People ethos. UEA's People and Culture Directorate, in consultation with campus Trade Unions, developed the *UEA Code of Practice for Staff - Equality and Diversity (E&D)* to ensure compliance with the *Equality Act 2010*, and to provide a comprehensive range of guidance for staff across many aspects of working life. Briefing notes cover the nine protected characteristics to raise awareness amongst staff and managers, and to ensure that all staff are informed about their responsibilities. All staff undertake mandatory annual E&D training, those involved in recruitment undertake training biennially to minimise unconscious bias in selection processes. For new staff there is a half-day induction, including information about the support networks available, including: *ResNET* (a support and information network for all women working in research across the NRP, events focusing on the structural obstacles affecting female academic career development); *Staff Pride and LGBT+ Allies* (>350 members); *Access All Areas* (disabled staff and students working to pursue a fully accessible campus); and the *BAME Staff Network* (established 2018/19). New members of staff are assigned a mentor to guide them in their new role and life on campus.

UEA has improved staff gender balance ratios since 2013, such that the proportion of female academics is now above the sector average and has improved from 26% to 32% at ATR Professorial level. Currently, UEA employs 56% women, comprising: academic (49% female), RAs (54%) and professional and support staff (64%). PGR intake has been gender-balanced since 2012/13. The Executive Team is now 50% female (25% in 2013). UEA was awarded the Silver Athena SWAN Award in 2019, ten Schools have been awarded Bronze and four Silver, with the remaining five Schools working towards their first award. We are proactively ensuring that research and innovation event panels and speakers are diverse. UEA's female academics are supported to participate in the Advance HE Aurora Leadership Programme for women, with engagement increasing year-on-year. UEA signed up to the Race Equality Charter (planned submission in 2022), supported by the Vice-Chancellor's Taskforce on Tackling Racial Harassment and BAME staff and student networks and groups. We make annual submissions to the Stonewall Workplace Equality Index and progressed from rank 293 to 202 in four years.

Equality within the REF submission is ensured by the presence of both an HR Manager and the University's Equality, Diversity and Inclusion Manager on the REF Strategy Group, which has overall responsibility for submission. As a signatory, UEA applies the DORA principles to all research assessment, including the REF submission. Unconscious bias training is mandatory for all staff involved in REF21 decisions as detailed in our Code of Practice.

4. Income, infrastructure and facilities

UEA's centralised Research and Innovation Service of >100 staff provides dedicated professional support for project finances and contracts, EU and GCRF funding, ethics review and research governance, as well as providing consultancy, IP and commercialisation advice.

Institutional level environment template (REF5a)

To support research planning and management, UEA undertakes an annual individual research activity planning (RAP) process. Led by School Research Directors, it includes a meeting with all research-active staff to encourage reflection on past activities and strategically develop future research plans. Individuals receive constructive feedback help them shape grant proposal writing strategies, optimise their publication plans, and develop impact from their research where appropriate. This process also identifies support needs, including training, mentoring and participation in a UEA-wide coaching scheme.

We have adopted a strategic approach to bidding for external research funding, informed by the RAP process. For large/strategic grant applications, there is an institutional sift process to provide a supportive framework and quality feedback through peer review from experienced and successful colleagues to improve the quality of the application. Internal peer review panels for grant applications, along with UEA's mentoring schemes, provide support and advice for the development and improvement of grant applications. At 29%, our overall success rate with UKRI grants by value (2019/20) is a positive improvement from 2013/14 (26%).

As described above, since 2017 UEA has reorganised its key research facilities and equipment into platforms and strategically invested more than £8m. 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 Norwich Clinical Trials Research Unit based at UEA, employs UEA's nursing, clinical, quality assurance, and IT staff to support clinical trials across the UK. The East of England Research Design Service is one of ten regional services providing advice and support to researchers developing applied health/social care proposals.

From suffragettes to science, UEA's Archives and Special Collections feature an impressive collection of printed, digital and audio-visual materials, with a catalogue system, study and groupwork space, and an Archivist to support researchers. UEA is home to 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. We have transformed and continue to invest in UEA's media suite with training facilities, a recording studio and vocal booth, and digitisation lab, supporting growth in digital humanities research, and invested £144k in new library systems (2019/20).

A High-Performance Computing (HPC) cluster supports research across UEA, with an annual investment of £0.5m. It provides access to a variety of hardware that can support intensive computation, including high memory, GPU, parallel and standard compute nodes. The HPC team provides assistance with computationally challenging workflows in all areas of research at UEA, including climate change modelling, fluid dynamics of ocean circulation, medical statistics, biodiversity measurement and health economics.

UEA's HEBCIS facilities and specialist equipment income has grown from £0.65m (2013/14) to £5.71m (2019/20).

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 (2014, £11.5m) hosting over 600 staff within a total of 115 businesses and spinouts.

Since REF2014, we have transformed our campus by co-investing in five key infrastructure projects: Bob Champion Research Centre (2014, £17m), The Enterprise Centre (2015, £13m), Quadram Institute (2018, £80m), New Science Building (2019, £28m) and Productivity East (2020, £7.5m). The next phase of the UEA Campus Development Plan includes refurbishment of the original Lasdun Wall, including well-designed collaboration spaces, digital infrastructure and facilities. Buildings will take better account of future research and innovation needs, providing spaces to hold seminars and events with tools for flexible working, virtual and physical conversations and collaboration.