REF2021

Institution: University of York

1. Context and mission

Research culture and focus

1. Since its foundation in 1963, the University of York has built an international reputation for academic excellence. The values which were integral to its creation - excellence, public good, equality, community and internationalism - continue to underpin our ethos and culture, and shape our approach to the societal challenges we face today.

2. Our academic departments (paragraphs 7-8) retain a high degree of autonomy, which underpins their excellent disciplinary research. Our researchers are afforded the intellectual freedom to think creatively, cross disciplinary boundaries and establish pioneering research programmes that have quickly established our international profile across the Arts and Humanities, Sciences and Social Sciences.

3. We have maintained our highly collegial approach to research, while growing the number of staff and departments. This is facilitated by our emphasis on a shared community, rather than hierarchical management structures, and by our place in a small city with an international outlook. In addition, there is a University commitment to an egalitarian approach to working, with an emphasis on partnership across different career stages and creation of strong and supportive relationships between academic and professional staff.

4. To expand our existing research strengths and develop new opportunities for collaboration within and beyond the institution, we established seven cross-cutting Research Themes (2015-) to meet the grand scientific, social and environmental challenges of our time: Creativity; Culture and Communication; Environmental Sustainability and Resilience; Health and Wellbeing; Justice and Equality; Risk, Evidence and Decision Making; Technologies for the Future. Each theme is led by a University Research Champion, a senior research leader with a significant time allocation. The Champions involve staff at all career stages in their activities and support large and strategic bids for funding (paragraph 11).

Wider institutional context

5. The University is a campus-based, research-intensive university with 27 academic departments (Table 1) within three Faculties, over 18,000 students and 1,600 academic and research staff. We have a strong commitment to the links between research and teaching, and seek to build a university that distinguishes itself in i) the world-leading quality of its research and impact, ii) its outstanding teaching (TEF Gold), and iii) the quality and value of the students' university experience. Two of our departments are specialist research-only centres: the Centre for Health Economics and the Centre for Reviews and Dissemination. The Hull York Medical School (HYMS) is a joint venture with the University of Hull. At York, HYMS staff undertake their research aligned with one or more departments and are returned to the UoAs linked to these departments.

6. We are at the forefront of many national and international research centres and programmes (paragraph 11). Our research is facilitated by our range of external affiliations at regional, national and international levels, including:
   - *Regionally*: we participate in:
     - The White Rose Universities Consortium (1997-), founded with the Universities of Leeds and Sheffield. This strategic partnership supports

emerging collaborative projects, PhD training networks (paragraph 34) and our open research platforms (paragraphs 15-17);

○ The <u>N8 Research Partnership</u>, a collaboration of the eight most research-intensive universities in the North of England. York leads the £16m Catalyst Funded N8 AgriFood programme that addresses the global challenges of ensuring sustainable, resilient and healthy food supplies for all.

● *Nationally*: we are a member of the Russell Group of research-intensive universities.

● *Internationally*: we i) are a member of the Worldwide Universities Network (WUN), a collaborative alliance of 23 research-led universities of international standing and ii) have formed the York-Maastricht Partnership (2019-) to strengthen bilateral collaborations.

<u>Disciplinary reach</u>

7. Since its foundation, the University has had a wide disciplinary mix, most recently expanded by establishment of the Department of Theatre, Film, Television and Interactive Media (2007-), The York Management School (TYMS, 2007-) and the York Law School (2008-).

8. Since 2015, our academic departments and centres have been structured into three faculties which, like our Research Themes, encourage and facilitate working across disciplines. Faculty Research Groups enable departments to a) input into research policy; b) share good practice; and c) develop cross-departmental and cross-faculty research.

Table 1 - Academic departments and faculties

Sciences	Social Sciences	Arts and Humanities
● Biology ● Chemistry ● Computer Science ● Electronic Engineering ● Environment and Geography ● Health Sciences ● Hull York Medical School ● Mathematics ● Physics ● Psychology	● Centre for Health Economics ● Centre for Reviews and Dissemination ● Economics and Related Studies ● Education ● Politics ● Sociology ● Social Policy and Social Work ● The York Law School ● The York Management School	● Archaeology ● English and Related Literature ● History ● History of Art ● Language and Linguistic Science ● Music ● Philosophy ● Theatre, Film, Television and Interactive Media

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2. Strategy

Achievement of institutional research and impact objectives during the assessment period

9. The University Research Committee (URC), chaired by the Pro-Vice-Chancellor for Research, oversees research performance, strategy, policy and integrity. We launched our current Research Strategy in 2015 and this has been implemented ahead of schedule, delivering a step change in our research endeavours. Our five strategic aims were:
    i. Recruiting and retaining the best researchers at all career stages, and supporting and mentoring existing staff, to provide an attractive environment in which research can flourish (section 3);
    ii. Giving our major interdisciplinary research strengths focus, identity and presence, to encourage interdepartmental and international research activity (paragraphs 11-13);
    iii. Recognising the role of departments in supporting their staff in the development of their research (section 3);
    iv. Deploying university resources to support research excellence (paragraph 10 and section 4);
    v. Supporting our postgraduate research students and their supervisors to train a vibrant research community of excellent research scholars (section 3).

Supporting Research Excellence and Interdisciplinarity

10. We have invested in our core research excellence through a variety of mechanisms (section 4). The events organised by our Research Champions, centres and faculties facilitate the development of new ideas and collaborations. These have utilised funding from our University Research Priming, Research Champions and departmentally-managed funds. Our Research Development Fund has provided significant matched funding to support major research bids (paragraph 11) whilst our Strategic Investment Funds have developed major new initiatives including the Interdisciplinary Global Development Centre (2017-). This leads interdisciplinary research and teaching, and builds equitable partnerships for global development. Led by the Departments of Politics, Environment & Geography, and History, it has members from 20 departments.

11. Drawing on these mechanisms, our seven Research Themes (paragraph 4) have driven significant new developments, including opportunities arising from the Global Challenges Research Fund (GCRF) and Industrial Strategy Challenge Fund (ISCF). Our focus on supporting large-scale bids has underpinned a range of research centres, hubs and programmes which bring together partners from multiple sectors to produce world-leading, impactful research. These include:
    a. *Digital Creativity Labs* (UOAs 4, 11, 12, 15, 21, 23 and 33b)*.* This £18m project (funded by UKRI, university partners, and industry) brings together over 100 partners and 30 researchers from multiple disciplines to deliver impact from research in the games and media industries. Recent projects have built on this success. *XR Stories* (£15m) was established to support the region in becoming the UK centre of excellence in digital screen storytelling. This AHRC and ISCF project is one of nine Creative Industry Cluster investments, and is led by our Research Champion for Creativity. *WEAVR* is a £5.8m ISCF project which is developing immersive technologies and data-driven content production for e-sports (UOAs 11 and 33b); doctoral training is provided through *IGGI* (paragraph 34).
    b. *The EPSRC Quantum Communications Hub* (UOAs 9, 10 and 11). York leads this partnership of universities, private sector companies and public sector bodies, to exploit the fundamental laws of quantum physics for the development of secure communications technologies and services. The Hub is funded as part of the UK's

> National Quantum Technologies Programme, with grants of £24m for both phase 1 (2014-19) and phase 2 (2019-2024);
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> c. *Assuring Autonomy International Programme* (UOAs 11 and 12). This £12m partnership (2018-) with the Lloyd's Register Foundation leads research, training and standards in the safety of robotics and autonomous systems. It is directed by our first Research Champion for Risk, Evidence and Decision Making. The *Institute for Safe Autonomy* (2019-) addresses global challenges in assuring the safety of robotics and other systems that use artificial intelligence, supported by £10.5m from the UK Research Partnership Investment Fund and £24.5m from industrial partners and private donors;
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> d. *Leverhulme Centre for Anthropocene Biodiversity* (UOAs 2, 5, 7, 11, 15, 19, 21, 27 and 28). Established in 2019, this £10m international collaboration explores how the relationship between humanity and the natural world is changing, and how to develop a sustainable Earth. It includes research from humanities, social sciences and sciences, with two of our Research Champions as associate directors;
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> e. *Thanzi la Onse (Health of All)* (UOAs 2 and 19). Led by our Centre for Health Economics, the £6.6m *Thanzi la Onse* UKRI GCRF project (2017-21), aims to improve population health and reduce health inequities in Malawi, Uganda and Southern and East Africa (UOA 2).

Impact

12. York's University Strategy (2015-20) states that our research will be "life-changing in its impact". Our Strategic Framework for Research Impact (2015) details our objectives to enable impact in areas including policy, health and wellbeing, environmental sustainability, social welfare, economic development and cultural enrichment. To achieve these objectives, we have strengthened our support for impact by establishing academic Impact Leads at departmental level, appointing University and faculty-based Impact Managers and allocating funding for impact (paragraphs 49-50). To further develop our impact culture, we host an annual Impact Conference and organise a termly Impact Forum, to share best practice. Achievements across a range of our Research Themes include:

> a. *Health and wellbeing*. Our health economic research has been instrumental in resource allocation decisions within the NHS and global health budgets (UOAs 2 and 16). We have influenced health policy and practice nationally and internationally, including the development of NICE guidelines in numerous clinical areas (UOAs 2 and 16), in the ethical oversight of Public Health England's activity (UOA30), and through a longstanding partnership with the World Health Organization (UOAs 19 & 28).
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> b. *Environmental sustainability and resilience*. Our research on air pollution and air quality, ocean and marine protection and conservation, and biodiversity has had a lasting and influential international impact (UOAs 5, 7, 8 and 10). The University hosts one of the centres of the internationally renowned Stockholm Environment Institute (SEI), ranked as the world's top think tank for environmental policy in 2019 (UOA7). Interdisciplinary research led by TYMS focuses on the environmental, economic and health impacts of global food systems (UOAs 2, 7, 11, 17 and 19).
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> c. *Justice and Equality*. Our world-leading social policy research has had an impact on welfare policy nationally and internationally in areas such as social inequality and child wellbeing (UOAs 20 & 21). Our research on applied human rights has influenced policies and practices supporting human rights defenders across the globe (UOAs 18 & 19), whilst our forensic science research has informed regulatory policy and legal practice in the UK and beyond (UOA26).
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> d. *Technologies for the Future.* In the physical sciences, our research on magnetic disk drives and information storage has made a significant contribution to the computing industry (UOA9), and our research on structures of enzymes has led to the development of new processes yielding biofuels and enzymes for industry

(UOA8). In biological sciences, our leading work on improving crop yields has impacted on the global production of anti-malarial agents (UOA5).

e. *Culture and Communication*. In the arts and humanities, our expertise in the preservation and conservation of the historic environment has changed the way glass conservation is approached and executed at York Minster and beyond (UOA32), and explored innovative ways of engaging the public at other cathedrals and historic sites such as the Palace of Westminster (UOA28). Research from York on silent Shakespeare films, Dickens and South African Jazz has had global impact on creative practice, cultural organisations and education (UOAs 27 & 33a).

13. To engage our wider community with our research, we run a diverse programme to educate, entertain and inspire the public. The flagship York Festival of Ideas attracts annual audiences totalling over 30,000 to more than 200 events involving speakers, exhibitions, theatre, music and films. The University is a signatory to the Civic University Agreement and the NCCPE Manifesto for Public Engagement.

Research Integrity

14. The University expects the highest standards of research integrity. We revamped our framework for research integrity in 2014, including updates to the University's *Code of Practice on Research Integrity* (revised 2019), *Code of Practice and Principles for Good Ethical Governance* (revised 2017) and *Policy for the Investigation of an Allegation of Research Misconduct* (revised 2017). Through this framework, we ensure compliance with the UUK Concordat to support research integrity. Nationally, we have participated in the Russell Group's Research Integrity Forum since 2015, to advance a collaborative approach to dealing with research misconduct and to share good practice. We launched our own Research Integrity Forum (2015-) to exchange best practice internally and we subscribe to the UK Research Integrity Office, enabling researchers to benefit from its advice and support.

Open Research

15. Overseen by our Open Research Strategy Group, we have published an Open research statement which describes our commitment to the values, principles and culture of open research. Through a programme of events and online resources, the Group is developing a community of open research practice by showcasing and sharing case studies across disciplines (UOAs 4, 8, 15 and 23) to create new opportunities for outputs and methods to be reused, reproduced and credited.

16. The University's *Policy on the Publication of Research* (launched 2014) goes beyond ensuring funder compliance and requires that research outputs be deposited in White Rose Research Online wherever possible. The Library supports the White Rose University Press (with Leeds and Sheffield), a fully Open Access publisher of peer-reviewed journals and monographs (2016-), and manages the York Open Access Fund. White Rose University Press journals have a global reach, with access from over 120 countries. The Press' first monograph, *Star Carr*, has seen over 28,000 downloads since its publication in 2018 (UOA15). We support the development of national and international open access infrastructure through financial contributions to the Directory of Open Access Journals, the Open Library of the Humanities, the arXiv preprint repository, and membership of ORCID.

17. The University's *Policy on Research Data Management* (launched 2014) ensures that researchers manage their data effectively, and share it wherever possible, typically via a national, international or subject repository, or via our own Research Data York service. Since 2017, the York Research Database has provided a public portal to access our datasets, wherever they are held. Our Department of Chemistry has a long track record in

advancing the open data agenda internationally (UOA8) and we host the Archaeology Data Service, a world-leading digital repository for archaeological data (UOA15).

Future strategy

18. Our future strategy is built on our commitment to be a University for public good, drawing on a rich tradition of thought and action on social justice and combating inequality that is distinctive to the University and the City of York. Our research will combine strong disciplinary foundations with a distinctive York tradition of creative interaction across disciplines. This gives us the capacity to discover and apply knowledge around some of the biggest challenges and opportunities our society faces, including environmental sustainability, energy, public health, digital technologies, the creative arts, the value of the humanities, and global development. The broad strategic aim which will guide us is pursuing "research with relevance and reach". Our research will be:
    a. Driven by curiosity, creativity and innovation, and guided by our principles of rigour, integrity, diversity, inclusion, and public good;
    b. Measured by the impact we have on pressing and emerging economic, social, cultural, and environmental challenges;
    c. Delivered through a progressive research culture by which we develop exceptional leadership in research by supporting strong career paths;
    d. Fostered by our University-wide capabilities in areas of research strength, with collaboration across disciplines and a focus on tackling real world problems;
    e. Built on a diverse set of local and global networks, ensuring our discoveries are made in collaboration with our regional, national and international partners.

3. People

Staffing strategy and staff development

19. Our 2015-2020 Research Strategy aimed to recruit and retain the "best researchers at all career stages" by providing an attractive research environment, underpinned by a commitment to equality, diversity and inclusion.

Recruitment and promotion

20. We have established programmes to recruit international research leaders, including an 'Inspirational Research Leaders' programme (2017) which appointed senior academics across the institution. The York Research Fellowship Scheme (2019-) attracts and supports the best early career researchers in winning external fellowships, including two UKRI Future Leadership Fellows in 2019 and four Leverhulme Early Career Fellowships in 2020. Our recruitment by age profile of academic (research and teaching) staff is shown in Figure 1.

Figure 1. Recruitment by age profile during the assessment period - academic, research and teaching staff
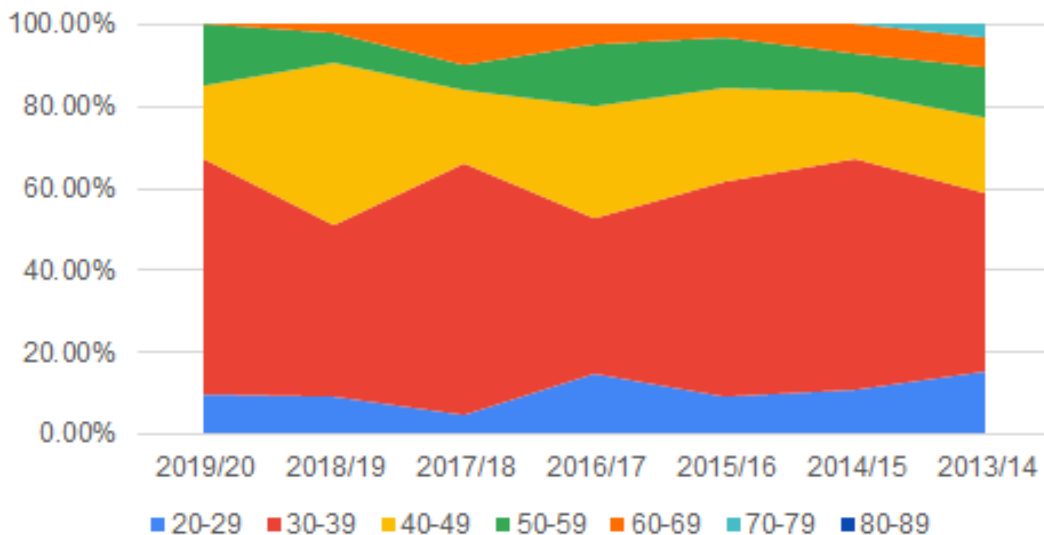
21. As part of York's 2018-22 Athena Swan action plan, we have actively encouraged the promotion of more women to Reader and Professorial roles, and the percentage of Category A submitted senior female staff has increased from 28% to 35% during this REF period (Figure 2d). There has also been a reduction in the mean gender pay gap for academic staff from 16.5% (2014) to 15.3% (2019) (the median is 13.6%). The promotion of under-represented groups has been further supported by i) enabling applicants to disclose equality related circumstances that have impacted on their ability to evidence achievement (including those related to COVID-19), and ii) ensuring BAME representation within the academic promotions panel, which has resulted in increasing the diversity of our staff (Figure 2c). Alongside research, impact and innovation activities are also now firmly established within the progression framework.

Figure 2. Percentage of Category A submitted professors and senior academic staff by protected characteristic, 31/07/2014 and 31/07/2020 by a – age, b – disability, c - ethnicity and d - gender.

Staff development

22. Our revised *Statement on Research Performance Expectations* (2015) sets the framework for departments to establish the expected performance norms within their discipline, differentiated by staff grade. This provides clarity for staff on what a successful researcher is expected to do, and on what support they can expect from their department and the University. Mentoring, coaching and leadership programmes (such as the *York Research Leaders* for experienced research-active staff who manage large grants and teams) are available to all academic and research staff to develop their research, professional and career goals. To support a culture of responsible research evaluation, we established our *Policy for Research Evaluation using Quantitative Data* (2017). This is informed by (and aligns with) the Leiden Manifesto and San Francisco Declaration on Research Assessment, to which the University has been a signatory since May 2018.

23. Departments set and implement their policies for research leave, with oversight from URC to ensure the quality of the provision. The majority enable staff to have defined time to concentrate on research and/or impact (typically, one research term after nine teaching terms).

Inclusivity

24. Our flexible working policy enables staff to balance their work with other commitments, including caring responsibilities (COVID-19 Annex). The concept of 'core hours' for departmental business enables staff to work flexibly and contribute fully to key decision-making bodies. We have introduced a carers' fund, to cover the additional costs incurred attending events (such as conferences) outside of normal hours.

25. Staff wellbeing is supported by a range of measures including our policy on managing ill-health and sickness absence, projects such as Well@York (which share resources on wellbeing), and sources of advice and support, such as occupational health and the mental health first contact network.

26. The University is committed to appointing staff on open contracts wherever appropriate. Our policy on fixed term contracts (updated July 2020) ensures a review to support the transfer to open contracts for staff who have two years' continuous service. 96% of our Category A submitted staff are employed on open contracts. Our Code of Practice for the Management of Staff on Fixed-term Contracts ensures parity of esteem, including in access to promotion and training.

Concordat to Support the Career Development of Researchers

27. York was one of the first ten UK universities to be awarded the European Commission's *HR Excellence in Research* award in 2010 and retained this in 2018, recognising our commitment to the implementation of the principles of the *Concordat to Support the Career Development of Researchers*. York plays an active role in national networks supporting the development of the revised Researcher Development Concordat, of which we are a signatory (2020).

28. On-going compliance is assured through a robust institutional framework, overseen by the Concordat Implementation Group. Our 11 departmental-level research staff associations and network of research staff liaison officers enable us to embed these principles within our research culture. This model was commended by the HR Excellence review panel and has been adopted by other universities. There is a diverse training and development programme available to our researchers (paragraph 32), supplemented by an annual Research Staff Conference and comprehensive online resources.

Early Career Researchers

29. Our probation framework (reviewed 2016) ensures support for new members of academic research and teaching staff. This includes mentoring, a reduced teaching load to support the development of research and the Postgraduate Certificate in Academic Practice, which includes training in integrity and ethics. Additionally, independent research fellows can access a range of mentoring and training (paragraphs 21 and 32).

Research Students

30. The York Graduate Research School (YGRS, 2015-) was created as a key aim of the 2015-2020 Research Strategy, to provide institutional oversight of postgraduate research.

31. Our approach is centred on the fundamental value we attribute to the relationship between students and their supervisors, who meet for regular supervision meetings. Additionally, all students have a biannual meeting of their Thesis Advisory Panel who review and advise on academic progress and professional development. Formal reviews of progress by an independent panel occur at the end of years 1 and 2 (and 3 for four-year PhDs), assessed against institutional criteria. The online SkillsForge system brings together records of these meetings and wider training into one place, to support effective supervision and enable institutional monitoring against policy requirements.

32. Beyond departments, the Research Excellence Training Team provides training for research students (and staff) in a range of areas including knowledge exchange and partnerships; personal and professional development; data management and open access; research integrity and ethics. Our research communication events such as PhD Spotlight, 3 Minute Thesis and ResearchBites have resulted in successes in national competitions. We have also established training to support supervision across the University, including 'Becoming an Effective Researcher' and 'Being an Effective Supervisor', built on the UK Council for Graduate Education's principles.

33. Our *Policy on Research Degrees* sets out our governance framework and includes clear policies to support distance learning, integrated and cross-disciplinary PhDs, to enable creative programme development. There is institution-level decision-making for all leave of absence and extension requests to ensure transparency and consistency which has improved on-time submission. 81% of research students who started in 2015/16 have completed on time, compared to 72% who started in 2013/14.

34. The YGRS Dean has oversight of all training grant applications, matched funding requests (paragraph 10) and international sponsor relationships. During the assessment period, York has been successful in a series of external Doctoral Training Partnerships (DTPs), including the White Rose AHRC and ESRC DTPs, the BBSRC White Rose Doctoral Training Partnership in Mechanistic Biology, the NERC DTPs (ACCE and PANORAMA), EPSRC CDTs (IGGI and Fusion), and the Wolfson Trust Studentships in the Humanities. This funding has supported 18% growth in the number of PhDs awarded between 13/14 to 18/19.

Equality and diversity

35. Our Equality, Diversity and Inclusion Strategy (2017-2022) sets out our commitment to create an inclusive community where diversity is recognised, valued and celebrated. Our Code of Practice sets out how this has informed our REF submission.

36. To build this inclusive community, we established a network of departmental Equality Champions whose role includes: i) raising awareness of campus wide equality activity; ii)

supporting departmental equality initiatives, such as Athena SWAN and; iii) celebrating and promoting equality activities and success. Our five staff equality networks involve over 200 staff in sharing good practice and providing peer support and development: the Athena SWAN Forum, INCLUDE (Inclusive Network Connecting and Linking University Disabled Employees), LGBTI Matters, Women in Research Forum and the Staff Race Equality Forum (SREF). The SREF is working on our institutional response to Black Lives Matter, implementing initiatives to improve our support for, and understanding of, the barriers faced by our BAME staff.

37. We have made significant progress with Athena SWAN accreditation, with 19 departments holding an award (July 2020) compared to seven at the outset (August 2013). We are the only UK HEI to date to hold three Gold awards. Chemistry was the first UK department to achieve a Gold award (held since 2007) and Biology was the first UK biology department to achieve Gold in 2014. 93% of our academic departments have established a self-assessment team. Institutionally, York holds a Bronze award.

4. Income, infrastructure and facilities

Research income

38. Our research income has grown, built on an 81% growth in UKRI income between 2013/14 to 2018/19, which has increased our market share from 1.5% to 2.1%. In order to achieve this, we have:
    a. Focussed our research capacity by establishing seven Research Themes (paragraph 4);
    b. Identified strategically important funding opportunities, with a focus on increasing the number of larger research grants (paragraph 11);
    c. Ensured a strong network of support for these bids with our Research Development Managers working alongside Research Champions and Associate Deans (Research) to establish research teams for major collaborative projects;
    d. Committed internal funds (paragraphs 10 & 20) to support emerging projects, provide substantial matched funding for external bids, and attract excellent research fellows;
    e. Increased our disciplinary-specific research support, through departmental and faculty-based staff.

Infrastructure and facilities

Facilities

39. The central Library buildings are open 24 hours a day, 362 days of the year. We subscribe to over 21,000 journals and house the Humanities Research Library, Borthwick Institute for Archives, King's Manor Library and York Minster Library. This holds outstanding collections including an extensive collection on stained glass (UOA32).

40. We have a range of high-value science facilities, accessible to external users in government, industry and the third sector. Our Atmospheric Chemistry Building (established by the Wolfson Foundation, 2014) was expanded in 2018 with £6.7m of investment from NERC and the University, creating the largest dedicated space for atmospheric chemistry research in any European university. Our Bioscience Technology Facility (BTF) provides access to state-of-the-art equipment for an international network of academic and commercial users (COVID-19 annex). We are part of the Technician Commitment initiative, providing national-level leadership via our project TechYork, which

supports and trains our technical staff to develop the high-level skills which underpin our cutting-edge scientific research.

41. We invested £2.5m to deliver a step change in our High Performance Computing (HPC) provision, which uses cluster computing to combine access to local, regional and national facilities. Our new Viking cluster (2019) is ~7 times larger than our previous HPC system, providing researchers with access to 7,500 cores and 2.5Pb of storage along with GPUs for artificial intelligence and machine learning research. This facilitates research in areas including climate modelling, archaeological analysis, artificial intelligence and machine learning. This upgrade moved York to the top quarter of the Russell Group for HPC provision. We also benefit from shared facilities, including the N8 Centre of Excellence in Computationally Intensive Research.

Challenge-led interdisciplinary research centres

42. Housed within the new £12.5m Environment building, the York Environmental Sustainability Institute (2011-) facilitates world-class interdisciplinary research on environmental sustainability for the research community, industry and policy-makers through its research on sustainable food, resilient ecosystems and urban living. It involves academics from 17 departments and over 130 external partners.

43. The Centre for Future Health (2016-), co-funded by the University and Wellcome Trust, was created with the ambition to support cutting-edge, interdisciplinary projects that address the world's most important health and wellbeing challenges. It has funded projects from 18 departments across all three faculties.

44. The York Biomedical Research Institute (2017-) has brought together a critical mass of biomedical researchers across nine departments to grow innovative fundamental, experimental and translational multi-disciplinary research in biomedical and clinical sciences.

45. Drawing on world-leading research and innovation in Biology and Chemistry, BioYork (2018-) brings internal and external partners together to drive the development of UK bio-based industries to deliver growth, jobs and environmental benefits.

Faculty-based research centres

46. The Humanities Research Centre (HRC, 2009-) coordinates research across and beyond the Faculty by developing interdisciplinary initiatives and providing extensive support for research and impact. The purpose-built £11m Berrick Saul Building offers dedicated space for research centres including the Centre for the Study of Christianity and Culture and the Centre for Global Health Histories. The centre also provides work space for postgraduate research students, postdoctoral staff and visitors.

47. The Faculty also leads four internationally-renowned interdisciplinary period centres: Centre for Medieval Studies, Centre for Eighteenth Century Studies, Centre for Renaissance and Early Modern Studies and the Centre for Modern Studies. The latter two are based at the HRC.

48. The Research Centre for Social Sciences (2013-) supports departments in research development, impact and research training. The building provides workspace for doctoral and postdoctoral researchers, visiting scholars and research groups and centres including the Centre for Applied Human Rights.

Enabling impact

49. To support researchers pursuing knowledge exchange (KE) and impact, the University and Faculty Impact Managers work with the Research and Enterprise directorate to develop partnerships with external organisations and to plan, track and evidence the impacts from our research. They also i) broker links with government and policy makers, for example, with the Cabinet Office Open Innovation Team; ii) facilitate commercial knowledge exchange, for example, via our award winning Enterprise Fellowship programme; and iii) enable funding, for example, a 100% success rate in AHRC Follow on Funding.

50. We allocate funding to researchers for impact and KE work, including HEIF (over £20m since 2014), Impact Acceleration Accounts from the EPSRC (£1.3m, 2017-2020), BBSRC (£300k, 2018-2021), ESRC (£660k, 2014-2018; £1.1m, 2019-2023) and an Arts and Humanities Impact Accelerator Fund (£65k/year since 2016-2017). Additional funding is available through GCRF Impact Development Awards (£261k for 2018-2020), which primed the *Thanzi la Onse* project (paragraph 11e), and by the Centre for Future Health (£811k, KE, Impact and Translation Awards since 2016).