

## Research & Enterprise Strategy 2016 to 2021

### Summary

The proposed Research & Enterprise Strategy is attached.

The Strategy has had input from Schools, the Research & Enterprise Committee, ExCo and SIPCo in the course of its development.

The draft Strategy was circulated to members of Senate for comment on 19<sup>th</sup> January 2017 and was discussed at SIPCo at its meeting on 19<sup>th</sup> January 2017. The attached paper reflects comments made on the previous draft by Senators, the Executive Team and Council.

Senate is invited to consider and discuss the Research and Enterprise Strategy and is asked to recommend it for approval by Council at its meeting on 10<sup>th</sup> March 2017.

Two actions are required.

### Recommended Action

Senate is invited to:

- i. **consider** and **discuss** the proposed Research & Enterprise Strategy;
- ii. **recommend** the Strategy for approval by Council at its March meeting.

**Publication: Open**



**City, University of London**

**Research & Enterprise Strategy 2016 to 2021**

## CONTENTS

Executive summary	2 - 3
1 <a href="#">Vision &amp; Strategy 2026</a>	4 - 5
2 <a href="#">Research &amp; Enterprise Strategy</a>	6 - 10
3 <a href="#">Developing world leading research</a>	11 - 14
4 <a href="#">Achieving far reaching impact</a>	15 - 18

## **ANNEX** 19

Vision & Strategy 2026 – Academic Output KPI for Research

Research & Enterprise Strategy – V&S26 - Institutional Performance Indicators (PIs)

Research & Enterprise Strategy – Additional - Institutional Performance Indicators (PIs)

## Executive Summary

Joining the University of London on 1<sup>st</sup> September 2016 was a key milestone in City's history. It clearly signaled our stronger standing and reinforces our position among pre-1992 London higher education institutions. As we take our place within the research-intensive institutions among our peer group, we will continue to work towards our vision of being a leading global university, undertaking world leading and internationally-excellent research, but which also has distinctive strengths in relation to business and the professions. As set out in City's *Vision & Strategy 2026*, our vision for the future is thus one where we have significantly grown our research and enterprise reputation as well as the contribution we make to wider society.

City made great progress in enhancing the quality and intensity of its research over the period of the *Strategic Plan 2012 to 2016*, moving to a position by 2013 where 40% of academic colleagues were producing research outputs assessed as being world-leading (4\*) or internationally excellent (3\*) as measured by Research Excellence Framework (REF). This represented a significant increase from previous assessment exercises, up from 25% in 2008 and 20% in 2010. We also significantly strengthened our enterprise activities, in part evidenced by our strong impact performance in REF 2014 based on 49 submitted case studies. We are proud of our success and will continue to strengthen the quality of our research through the next stage of our journey as set out in the *Vision & Strategy 2026* and in this Research & Enterprise Strategy for the next five years to 2021.

Central to this are the strategic priorities set out in City's *Vision & Strategy 2026* with its focus on Quality ('Better'), Growth ('Bigger') and Partnership. This strategy focuses on these three priorities in relation to City's research and enterprise activity:

- **Build on the quality ('better')** focus of the *Strategic Plan 2012 to 2016*, maintaining City's current upwards trajectory in research quality and intensity. By 2021, we will move from 40% to at least 60% of total academic staff producing 3\*/4\* research outputs as measured by the REF, with 18% producing 4\* research outputs. We will concurrently move to 100% of impact case studies rated as 3\*/4\* with at least 40% rated as 4\*. We will establish new interdisciplinary research centres, enabling us to better produce world leading research that address the major challenges facing society. We will also strengthen our reputation for world leading and internationally-excellent research around current areas of strength, and enhance the linkages between our research and enterprise activity through knowledge exchange and intellectual property (IP) commercialisation;
- **Achieve growth ('bigger')** in a way which maintains or increases quality. We will increase our external research grant funding to £15 million per annum, diversifying the funding sources and increasing the numbers of academic staff gaining it. By 2021, our intensity will be increased where existing research has momentum and we will grow our Units of Assessment horizontally where City's existing strengths can be leveraged through new areas. This will include new disciplines, increasing both the volume of research and capacity of the institution to undertake interdisciplinary research;
- **Leverage research and enterprise partnership**, working with academic, public, private and third sector institutions as research collaborators and impact partners, within London and nationally but also to a much greater extent internationally in line with the priorities set out in the Internationalisation Strategy.

We will provide the appropriate tools (facilities, systems, processes and policies) to support research and enterprise endeavours. Significant goals related to this include achieving all doctorates completed within four years as well as participating in further Research Council's UK (RCUK) Doctoral Training Consortia (DTPs) for the Arts and Humanities Research Council (AHRC), Engineering and Physical Sciences Research Council (EPSRC) and other research councils.

We will take a proactive approach to recruitment, staff development, diversity and reward in line with Academic Staff Plans to ensure we attract and retain the best academic staff. We will also strengthen academic staff performance management, with a significant increase in development. For example, we will provide support for mentoring early career academics and will offer new types of research grant application training. Related to this, we will develop clearer incentives for academic staff to engage in world leading research publication, grant-capture and impact. In line with our Athena SWAN application and subsequent applications and plans by Schools, we will ensure that equality and diversity are deeply embedded in our research and enterprise policies, practices and culture. We will also strengthen our research student (PhD) and post-doctoral research communities as the basis for a vibrant, diverse and innovative research environment, facilitated by improvements to support for research students and their enhanced integration into City's wider research community.

Beyond the recruitment, retention and celebration of individual talent, diversity and collaborative achievements, this Research & Enterprise Strategy sets out a strong inter- disciplinary research agenda designed to deliver immediate and long-term benefits both to City and ultimately to wider society. Through Schools, we will establish interdisciplinary research centres that build upon and further develop existing areas of interdisciplinarity but we will also seek to embed interdisciplinarity much more widely across the institution.

City will harness its academic and professional expertise and seize opportunities to become a major player in addressing global issues and contribute to the development of innovative solutions to complex problems. This will not only be achieved through research outputs, enterprise activities and impact but also through the development of a research culture that values, encourages and rewards academic curiosity and success, and through the dissemination of research via the institutional repository and Open Access publishing. We will seek to enhance this culture through new international research partnerships, supported by a new Distinguished Visiting Professor programme.

With respect to enterprise activity, by 2021 we aim to double the number of Knowledge Exchange Partnerships (KTPs) entered into per annum. We will also establish an IP commercialisation company supported by sector-comparable investments funds in order to double the rate at which IP commercialisation leads to 'spin-out' companies. By 2021, we will also triple the volume of academic consultancy contract activity and embed enterprise education across the curriculum to make City distinctive and a UK higher education sector leader in this area.

## 1. Vision & Strategy 2026

Joining the University of London on 1<sup>st</sup> September 2016 was a key milestone in City's history. It clearly signaled our stronger standing and reinforces our position among pre-1992 London higher education institutions. As we take our place within the research-intensive institutions among our peer group, we will continue to work towards our vision of being a leading global university, undertaking world leading and internationally-excellent research, but which also has distinctive strengths in relation to business and the professions. As set out in City's *Vision & Strategy 2026*, our vision for the future is thus one where we have significantly grown our research and enterprise reputation as well as the contribution we make to wider society.

City made great progress in enhancing the quality and intensity of its research over the period of the *Strategic Plan 2012 to 2016*, moving to a position by 2013 where 40% of academic colleagues were producing research outputs assessed as being world-leading (4\*) or internationally excellent (3\*) as measured by Research Excellence Framework (REF). This represented a significant increase from previous assessment exercises, up from 25% in 2008 and 20% in 2010. We also significantly strengthened our enterprise activities, in part evidenced by our strong impact performance in REF 2014 based on 49 submitted case studies. We are proud of our success and will continue to strengthen the quality of our research through the next stage of our journey as set out in the *Vision & Strategy 2026* and in this Research & Enterprise Strategy for the next five years to 2021.

Central to this are the strategic priorities set out in City's *Vision & Strategy 2026* with its focus on Quality ('Better'), Growth ('Bigger') and Partnership. This strategy focuses on these three priorities in relation to City's research and enterprise activity:

- Build on the quality ('better') focus of the *Strategic Plan 2012 to 2016*, maintaining City's current upwards trajectory in research quality and intensity.
- Achieve growth ('bigger') in a way which maintains or increases research and enterprise quality.
- Leverage research and enterprise partnerships.

There are significant challenges to all three of these goals.

City will need to support, retain and attract research excellent and world leading academic staff in new and existing disciplines, as well as increase the volume and quality of its research activity in an increasingly competitive funding environment. To do this, and in line with our Athena SWAN application and subsequent applications and plans by Schools, we will need to ensure in particular that equality and diversity are deeply embedded in our policies, practices and culture.

It will also need to nurture and further develop existing local, national and international partnerships as well as forging new relationships to increase its global reputation for research and impact in an environment where the latter is becoming increasingly important.

Furthermore, new areas of research will require appropriate resources with Professional Services (including Research & Enterprise, Finance and Library Services) to support them and consideration will be given as to how these will be funded.

All of these challenges are shaped by a significant period of change and uncertainty for the UK research environment. City will need to respond with agility to shifting requirements to REF 2021 and to significant changes to research funding as a consequence of the restructuring of UK Research Councils and the impact on European funding following the EU referendum result.

In these uncertain times, City is nonetheless in a strong position, having markedly increased research intensity since 2008 and being well-placed to increase further its impact given City's distinctiveness in the sector. This Research & Enterprise Strategy is a pathway to leverage our momentum and maintaining our current upwards trajectory towards becoming a leading global institution. We will build upon and develop City's distinctive advantages in the sector, notably its strong track record around practice and policy-oriented research and wider societal impact.

More specifically our priorities are to:

- Increase our research intensity while retaining or enhancing our research quality;
- Increase the breadth of our academic disciplines and scope of our interdisciplinary research;
- Support Schools in developing research areas that demonstrate high growth potential;
- Build a vibrant, supportive, and dynamic research environment for our research staff and student communities, paying particular attention to issues of equality and diversity;
- Build upon our existing intra and inter-School interdisciplinary research, and support the development and establishment of complementary research centres and institutes that are interdisciplinary, international and inter-sectoral, address contemporary challenges and build upon our focus on business and the professions;
- Organise our research in key themes that address global contemporary challenges, build upon City's focus on business and the professions and embrace the opportunities brought by our membership to the University of London;
- Build our research reputation and impact capabilities synergistically with our partners.

The delivery of our Research & Enterprise Strategy will depend on our ability to foster a research culture that marks City out as an attractive place to undertake world leading research. This needs to be developed around existing and new disciplinary groupings in a manner that also generates the critical mass of academic talent and interest for interdisciplinary research.

## 2. Research & Enterprise Strategy

### Key priorities

- Increase proportion of total academic staff producing 3\*/4\* research outputs from 40% to at least 60% by 2021;
- Increase proportion of total academic staff producing world leading (4\*) research to 18% by 2021;
- Develop research capacity in new and existing disciplines and support Schools in developing research in areas that demonstrate strong potential;
- Achieve growth that enhances research quality and develops capacity for inter-disciplinary research across the four main REF panels;
- Increase research grant income to £15M per annum by 2021 (6% of turnover) as a measure of esteem in which City is held and an indication of its standing in the REF 2021.

Committed to academic excellence and focused on business and the professions, City is a unique combination of world leading research and world leading practice. Our professional and academic credibility is enhanced by our unique location in the heart of London, a global hotspot and a centre for internationally excellent research.

Research and enterprise activities at City are undertaken through a diverse grouping of discipline-based, School-based and cross-School interdisciplinary research centres.

There are a range of distinctive research and enterprise strengths across the five Schools that contribute to the overall standing of the institution:

- **School of Arts & Social Sciences (SASS)** - Strengths in quantitative sociology, social survey methodology, cognitive and organisation psychology, studies of journalism and media policy, ethnomusicology, foreign policy, cultural policy. The School has also developed a strong inter-disciplinary research ethos across the institution. Building upon existing research strengths within the School and across City, SASS is developing the City Policy Institute bringing together complementary groups to undertake research within ten defined interdisciplinary themes.
- **Cass Business School** - 84% of submitted research has been rated as either world-leading (4\*) or internationally excellent (3\*). Specific strengths include organisational behaviour, marketing, corporate social responsibility, banking and finance, actuarial science and insurance. Cass is leading several interdisciplinary and inter-sectoral research initiatives with national and international partners.
- **School of Health Sciences** - 82% of submitted research has been rated as either world-leading (4\*) or internationally excellent (3\*). The School is ranked top in London for research power. Enterprise and consultancy activities through City Health and spin-out companies have shown momentum, and the School is increasingly working with health care and social care providers and commercial organisations to improve outcomes for patients.

- **The City Law School** - The School has its origins as the Inns of Court School of Law. While retaining its traditional focus and developing research agendas which integrate the professional links, Law has grown its research portfolio rapidly in recent years with strengths in socio-legal approaches to law and critical legal studies, as well as public and private international law. The School has also distinctive areas of focus in global and transnational law, including expertise in European law and a strong portfolio in criminal justice, maritime law and transport law.

- **School of Mathematics, Computer Science & Engineering** – Some 80% and 83% of submitted research outputs in the School were rated as internationally excellent in mathematics and engineering respectively. The School's particular strengths are in experimental and computational fluid dynamics, mathematics, biomedical engineering, photonics and instrumentation, visualization and Big Data, cyber security and reliability, human-computer interaction, systems and control, geotechnical and turbomachinery and compressor design.

City has also a long tradition of engaging in research-led co-investment and partnerships to catalyse the sustainable growth of the diverse businesses and enterprise community in its surroundings. We are especially active with the diverse consulting, creative, design, engineering, financial services, health, professional and third sectors based immediately around our main campus and our Business and Law Schools in the districts of Chancery Lane, Clerkenwell, Farringdon, Moorgate and Old Street.

Through the integration of world-leading research and world-leading practice, we will continue to leverage our unique location as a bridge between the City of London, Tech City and the Knowledge Quarter. Our approach to research and enterprise will seek to build on this geographical strength as we develop our academic disciplines and enterprise practices.

City is one of the most international universities in the world and over the next ten years through our Internationalisation Strategy we plan to:

- Increase our global reach and brand visibility through participation in international research and establishment of international networks;
- Have an impact on global issues and policy formulation;
- Improve our engagement with global challenges;
- Increase income generation in education, research, and enterprise;
- Better prepare our students for a globalised world.

Key to success is to complete the journey begun by City in 2010, achieving at least 60% of total academic staff producing 3\* and 4\* outputs by REF 2021. Success for City will be measured by Schools' targeted performance in REF 2021 in relation to their academic staff plans.

Taking the measure of the proportion of staff producing 4\* research, our plan is for at least 18% of our total academic staff to reach that threshold. We will achieve this primarily through the development of existing staff and a proactive recruitment strategy which focuses on attracting new academic staff to our existing areas of world leading research. A key element of this will be strong support for our equality and diversity goals and embedding the approach and objectives set out in our Athena SWAN application.

Outputs will be measured annually through ARQM. A new mechanism will be introduced to evaluate the contribution of staff to impact as assessed by the REF. This will enable us to recognise the very significant contribution of staff whose research is generating impact and acknowledge this in workload planning and other support mechanisms. Performance will continue to be monitored through the annual appraisal process. In support of the goal around 4\* research, we will establish a research fund which will return a proportion of QR funding to academic staff engaged in world leading research publication, grant-capture or impact.

As identified through the Schools' Strategic Plan, we will encourage and support research in areas that demonstrate potential for development through discussions and wide consultation with internal and external stakeholders, including potential funders and the beneficiaries of our research.

We will support international collaboration through establishing and nurturing international networks and research partnerships, encouraging international co-authoring, and directing our resources to enable City in becoming truly international.

We will support research and activities that contribute to enhancing City's research reputation and to improving knowledge for the good of society.

We will build upon our existing interdisciplinary research that is undertaken both within and across Schools. We will develop a database of academics who have interdisciplinary and inter-sectoral leaning and who are keen to explore and pursue bidding opportunities. We will also work through the Schools' Academic Staff Plan to attract and recruit academic staff who can support our developing interdisciplinary research.

In collaboration with Schools, we will bring together existing areas of expertise and build on our existing world-leading profile around broad research themes that address current global challenges, align with governmental priorities, and will enable us to attract interdisciplinary national and international funding. Some examples are:

- Public policy and finance;
- Creativity and innovation;
- Fundamental approaches to emerging technologies;
- Ageing;
- Gender and sexuality.

These themes will not be exclusive but will provide an interdisciplinary and cross-School focus in support of research funding environment trends.

We will increase the disciplinary breadth of our research by introducing new disciplines and increase the interdisciplinarity of our research portfolio. This will increase our capacity for excellent and world leading research within the scope of new Units of Assessment in REF 2021 including, for example:

- Architecture, Built Environment and Planning;
- English Language and Literature;
- Education;

- Geography, Environmental Studies and Archaeology;
- History.

We will support Schools in establishing interdisciplinary centres and institutes (including the provision of space and administration), and we will support academics making long-term partnerships locally, nationally and internationally by hosting interdisciplinary conferences and seminars, and inviting eminent academics to collaborate on cross-institutional research and publication co-authoring.

Supported by Marketing & Communications, facilitated by the Research & Enterprise Office and working collaboratively with Schools, we will increase public engagement, using a diverse range of communication media to disseminate the results of our research, facilitate its translation into practice, and influence policy makers, professional practitioners, business, industry and public bodies. We will need to ensure timely submission of outputs to City Research Online (CRO) is embedded within Schools' research processes so that our research outputs are disseminated as publicly and widely as possible.

We will take advantages of our new membership to the University of London as a focal point for networking, knowledge sharing, collaboration, co-authoring and access to conferencing facilities.

Through the Education & Student Strategy, we will identify areas of our curriculum where the outcomes of our research can be more effectively integrated into the curriculum. We will also ensure that education in new disciplines is research and practice informed, and reflects our twin aims of excellent education and internationally excellent research.

City will continue to grow research grant income both through increasing numbers of academic staff attracting funding and through supporting staff in winning large grants. On our current trajectory, RGC income will reach £15M by 2021, representing 6% of turnover, although changes to the funding environment remain a threat. The increased breadth of City's academic discipline complemented by the grouping of its research strengths in four key interdisciplinary themes will support this objective and contribute to alleviating a potential loss of EU research funding. In particular, through national and international collaboration, we will align ourselves to benefit from new funding streams including the Global Research Challenge Fund (GRCF) and the opportunities offered by partnership with other University of London institutions: for example, through the London International Development Centre (LIDC) and the London First Higher Education Research Network.

To enable City reach its ambitious research grant income objectives, we will:

- Pro-actively foster City's relationship with UKRI and other funding bodies;
- Identify funding opportunities through horizon scanning, systematically communicating those opportunities, connecting academic expertise and coordinating responses to funding calls;
- Provide training and support in writing and reviewing grant applications (including peer review);
- Review our process flows, procedures and policies, and invest in technology to simplify and better support the grant management life-cycle from application to post-award research project management;

- Develop our professional service staff and provide an administrative support service that frees up academic staff time so that attention can be given to activities that require academic expertise.

Through the Education & Student Strategy, we will identify areas of our undergraduate and postgraduate taught curriculum where the outcomes of our research can be more effectively integrated into teaching and learning. We will also ensure that education in new disciplines reflects our twin aims of excellent education which has a close relationship, where appropriate, with internationally excellent research.

City will seek to attract at least two large externally funded research centres to strengthen its research reputation and profile. Building upon our vertical and horizontal growth, and in collaboration with the office of the Vice-President (International) we will expand the number of overseas universities and organisations we collaborate with to attract joint research grants and host cross-institutional projects.

City will proactively seek philanthropic donations to fund research activity for proposals that do not fit with the priorities of the UKRI. New ideas developed by Schools and departments will be prioritised by the Vice-President (Research & Enterprise) through the existing committee structure. Success in attracting external funding will require strong leadership by and collaboration between the offices of the Vice-President (International), Vice-President (Research & Enterprise) and Development and Alumni Relations Office

### 3. Developing world-leading research

#### Key priorities

- Recruit and retain internationally excellent and world leading academic staff in new and existing disciplines;
- Support existing research excellent academic staff to increase the proportion of their 4\* outputs;
- Develop vibrant research communities, supported by a range of policies that support academic staff at all stages of their career, paying particular attention to issues of equality and diversity, including the actions and objectives set out in our Athena SWAN action plan;
- Achieve 100% of second year PhD students completing within 4 years, supported by being part of Research Council DTPs (Doctoral Training Partnerships) consortia for the ESRC (Economic and Social Research Council). AHRC (Art and Humanities Research Council) and EPSRC (Engineering and Physical Sciences Research Council).

City will seek to increase the proportion of research that is world leading and internationally-excellent in order to enhance the overall standing of its position as an increasingly research-intensive institution.

The three most powerful accelerating factors towards world-class university status are:

- Increasing research grant income as a key vehicle for enhancing the quality of research outputs;
- Introducing new disciplines to facilitate world leading interdisciplinary research that will also extend and deepen our presence across the four REF's panels;
- Working and thinking across borders, establishing and nurturing international collaboration and partnerships and providing our academic staff and research students with a truly international environment.

We will recruit staff in existing disciplines and in new areas (such as English, History, Geography, Politics) who are already achieving this level of research output, or who show the potential to do so.

City has defined both its expectations of its academic staff and its obligations to them. City expects research-active academic staff to undertake research of world leading or internationally excellent standard, and to disseminate the results of that research through appropriate channels, including publications via our institutional repository (City Research Online - CRO), public engagement and events, and commercialisation.

In return, City commits to provide training and development opportunities to academic staff to support them in achieving their academic ambition. We will support Schools in identifying and developing early-career researchers and talented staff producing 1\* and 2\* outputs through, for example research mentoring, to move towards a higher proportion of 3\* and 4\* outputs. We will also pay particular attention to issues of equality and diversity in developing and delivering support.

The new research spaces which have been delivered as part of the Estate programme from the *Strategic Plan 2012 to 2016* received many positive mentions during the engagement with academic staff. We will continue to invest in areas where we have momentum and critical mass and provide our staff with cutting-edge equipment and space. We will also proactively seek external funding (grants, Innovate UK, KTPs, philanthropic donations) to improve our infrastructure, facilities and library services. Additionally, we will invest in IT systems that support the full research life-cycle (e.g., expertise database, grant management, research data storage, pathway to impact) and ensure compliance with external regulations (e.g. HEFCE's open access policy). To this end an investment envelope has been earmarked within the Five Year Financial & Investment Plan.

We will expand our partnerships with overseas universities to recruit high quality postgraduate research students and facilitate student exchange, and to undertake research in collaboration with international universities and research centres via our existing partnerships within the WC2 (World Class Universities in World Cities) University Network and other universities.

Beyond international partnerships, collaboration may take many forms as the way researchers interact depend on their academic discipline and the nature of their work. We will use existing networks as well as the new opportunities brought by our membership to the University of London to encourage collaboration and knowledge sharing with the best researchers internally, nationally and globally where strengths are complementary or where combined mass offers potential advantage. We will establish a Distinguished Visiting Professor scheme inviting eminent academics from all over the world to engage in research collaborations with City staff and develop our capacity for world leading research (for example through joint funding applications and co-authoring). In parallel, we will strive to develop partnerships with commercial and non-commercial organisations to translate our research outputs into new products, policies or professional practice.

We will enable Library Services improves the support they provide to academic staff. Through the operational and Five-Year Investment Plans, we will ensure that City's approach to prioritising investments considers the broad range of support needed to implement the Research & Enterprise Strategy.

City's research excellence is determined by the excellence of its academic community. The academic performance framework has set clear career paths and academic promotion criteria. We will build on this framework to attract, retain and nurture research excellent academic staff.

Delivering a research culture requires a spirit of collaboration within and beyond disciplines, and a recognition that individual contributions lead to greater success when combined. The grouping of academic strengths in thematic research will help. It also requires an environment that is strongly supportive of equality and diversity, enabling fertile and innovative thinking and open intellectual discussion to thrive. However, to develop and entrench a vibrant and diverse research and enterprise ethos, we will break through territorial boundaries, and develop and embed a culture that values, encourages, facilitates and rewards individual curiosity and collaborative achievements.

Being a member of the University of London will enhance PhD student recruitment (both in terms of quality and quantity) and facilitate greater involvement in Doctoral Training Partnerships (DTPs). It will also offer the potential for future post-doctoral development. We will enhance the Graduate School's development programme and provide training that helps with academic research and sets students on a career path to become the next generation of research leaders in academia, or on a career that will benefits from their research and leadership exposure. We

will closely monitor student progression and completion, and review mechanisms in place (e.g. doctoral supervision, conferences etc.) to support student during their journey. We will aim to reach 100% completion rate for second year PhDs within four years by 2020, and provide mechanisms to better support and manage weaker students. We will support research students in reaching their potential and, through international exposure, we will enable our students to develop their presence on the world-wide academic scene. The destination of our graduates will be monitored as a measure of our research quality.

Both the Graduate School and the Schools will work to ensure that City is part of UKRI Doctoral Training Partnerships, building on the successful entry of Business and Management and Economics pathways in the ESRC-funded SeNSS DTP. We will work to include further pathways over the lifecycle of the SeNSS DTP, notably in sociology, political science, geography, psychology and media. City will also seek to form relationship with other suitable institutions to ensure it is part of DTP consortia for other research councils as these calls are made. Specifically, key Councils are the AHRC and EPSRC. We will aim to double the number of post-doctoral research staff at City by 2020 and seek to attract a range of externally funded awards that will allow the best students to continue their research for an additional period after graduation in order to support them in producing high quality outputs that will accelerate their movement into an academic career.

More specifically we will:

Develop vibrant research communities: At the institutional level, we will establish a new university research seminar series to foster interaction between disciplines across the institution; At School, department, UoA levels, we will ensure that the workload allocation model in place ensures that Schools and departments are able to achieve their strategic plans and enable academic staff to pursue their research goals (e.g. appropriate teaching and administrative loads, mentoring, strategic use of sabbaticals, support for School Athena SWAN submissions);

We will communicate departmental goals to ensure academic staff know how their own performance and ambition contribute to City's performance;

We will create an environment in which discovery is valued, incentivised and rewarded at both local (workload, sabbatical, conference funding) and institutional level (academic promotion, President's awards);

We will support our postdoctoral researchers and research students by integrating them into our vibrant and diverse research communities, developing their research and leaderships skills, and providing them with opportunities to promote their work nationally and internationally through conferences, seminars and networking events;

Promote diversity and ensure inclusion: We are committed to recruiting, retaining and promoting research excellent academic staff from a variety of backgrounds. Beyond the Athena SWAN and gender equality agendas, we will intensify our efforts on diversity. Particularly, when policies and processes are identified as being blockers, we will revise policies and work with Schools to find appropriate solutions and embed norms that support diversity into everyday working practices. Particular policy areas include approaches to workload, sabbatical, maternity leave and research leadership. In line with our Athena SWAN submission, we will support female representation in senior and research leadership roles and aim for a proportion of at least 30% female professorial staff by 2021;

Develop a range of supporting policies that are adapted and sympathetic to individual circumstances and support the development of our staff at all stages of their career (e.g. sabbatical leave linked to outputs, support for academic staff returning from maternity leave, mentoring and training for early career academic, include research supervision within the teaching load, provide time to senior academic engaged in the mentoring of junior members of staff). We will review our existing policies and develop some that promote and enable collaboration across City and beyond, and provide a platform for engaging with stakeholders (consultancies, research contracts, student employability) and generating impact from research (commercialisation, teaching and learning, innovation);

Nurture research excellent academic staff: Through a 'you asked, we listened' initiative to support research, we will identify the needs of our research excellent academic staff (e.g. grant support, reduced teaching administration load, access to facilities, conferences and networking opportunities), and will provide support, including financial support, whenever possible;

Support early career academic staff: The recruitment and training of early career academic and research staff are critical to City's long-term success. Young academic and research staff generate vibrancy and vitality in City's academic life and are our future research leaders. We will support a career approach and create opportunities for individuals to develop their research abilities and leadership skills. We will support senior staff in effectively providing support and mentoring to junior members of staff through training, appropriate workload allocation and administrative support.

## 4 Achieving far reaching impact

### Key priorities

- By REF 2021, 100% of impact case studies to be rated as 3\*/4\*, with at least 40% rated as 4\*;
- By 2020, double the number of Knowledge Transfer Partnerships (KTPS) entered into per annum;
- By 2020, double the income from high-level Continuous Professional Development (CPD) activity;
- By 2020, triple the number of consultancy contracts entered into;
- Establish an independent enterprise company to develop proposals for supporting spin-out companies, establishing a £350k investment fund.

Research impact is defined by the Research Councils as ‘...*the contribution that excellent research makes to society and the economy*’. In the context of the REF, impact is defined by HEFCE as ... ‘*an effect on, change, or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life beyond academia*’. Impact was a major quality criteria in the REF 2014 and, in light of the review by Lord Stern, its significance is likely to increase for REF 2021. City submitted 49 impact case studies to REF 2014 and aims to submit an additional 5 to 10 to REF 2021, achieving at least 40% of its overall submission to be of world leading (4\*) standard.

However, achieving impact goes beyond the REF. We will seek to achieve positive impact on society in a way that raises City’s reputation world-wide through an interrelated three-pronged approach involving research, education and enterprise.

#### Achieving impact through research:

In developing excellent disciplinary-based and inter-disciplinary research, we will generate robust solutions to complex problems. Maximising the impact from this research will require effective dissemination of our research outcomes. We will therefore engage more proactively in sharing these solutions with research users and research partners and in enabling their adoption more widely. We will do that by exploiting the range of knowledge transfer routes available and will take full advantage of the various pathway to impact offered by (i) public engagement; (ii) policy engagement; (iii) industry collaboration; and (iv) commercialisation.

#### Achieving impact through education:

In harmony with the Education and Student Strategy and through the Schools’ Strategic Plan we will adopt a more dynamic approach to our educational offer by ensuring our undergraduate and post-graduate taught programmes are informed by and closely linked to research and enterprise.

### Achieving impact through enterprise:

Enterprise is integral to City's *Vision and Strategy 2026* as a key mechanism to position us as a world-leading institution.

City has a long tradition and much success in engaging in enterprise activities. For example, City has strongly signaled its commitment to local economic development by leading on, underwriting and acting as a service delivery partner on a £3.2M European Regional Development Fund project starting in October 2016. This devolved funding provides significant opportunity to develop greater impact through outreach and academic enterprise activities in London's economy alongside other reputable partner universities (UCL, Imperial College). City will continue to support and pursue similar local development funding opportunities as it seeks to develop the scope and depth of its external engagement activities.

Achieving far reaching impact through enterprise will enhance City's reputation and provide opportunities for income generation in areas where it can contribute to the University's financial sustainability.

City has evolved a bifurcated approach to enterprise: academic enterprise and student enterprise. The difference in emphasis between the two is reflected across the HE sector and is founded in the variance in ownership of intellectual property between staff and students.

#### **Academic enterprise:**

Academic enterprise describes the ways in which academic colleagues transfer expertise and knowledge through external partnerships with business, public and voluntary organisations to create impact. Such partnerships take the form of industry collaborations, bi-directional secondments, consultancy arrangements, provision of short courses and CPD courses, KTPs and provision of expert assistance in helping inventive ideas reach the marketplace through the commercial exploitation of intellectual property.

City has a strong Intellectual Property (IP) portfolio and a history of successful commercial exploitation of inventive opportunities from research. However, in recent years, City's commercialisation of IP has taken a back seat to more orthodox ways of disseminating knowledge (e.g. research publications). In part, this has been driven by the pressures of successive research quality exercises such that enterprise routes to knowledge transfer were inadvertently but concomitantly undervalued. With the advent of the impact agenda, it is vital that City reinvigorates its commercialisation activities.

#### **Academic enterprise activities are the main routes to research impact.**

In this respect, therefore, we will:

- Develop new Master's programmes that are closely related to our research strengths;
- Seek to increase the amount of high level CPD in line with School's Strategic Plan, leveraging existing expertise and building on Schools' existing capacity particularly within Cass Executive Education and City Law School. We will work with partners to identify both business needs and gaps in the market. By 2020, City will seek to develop a wider range of high level CPD provision around new areas particularly within SASS, SHS and SMCSE - based disciplines. We will ensure that every new Masters Programme include in its proposal the development of at least one associated CPD, providing a dynamic relationship between research, teaching and learning;

- Further enhance City's short courses offer. These short courses are already very successful but there is significant scope within the market to further improve our position. We will seek to expand our provision of high-quality short courses particularly in computing, to boost impact in the context of public service provision and to improve revenues;
- Proactively seek to increase the number of inventive disclosures across all Schools per annum in line with the percentage increase in research income. We will work co-jointly with Schools to ensure that governance, processes and policies surrounding IP commercialisation support the protection of our IP and enable their appropriate commercial exploitation through for examples the formation of spin out companies, high value license deals or other royalty bearing engagements. Drawing on sector best practice, we will establish a joint venture company so that routes to market are expedited. To achieve this, City, as one of the venture partners, will seek to establish an IP development fund of £350k. In the first year, £100k would represent a one-off capital contribution towards founding the company and the remaining £250k would be a recurrent investment into IP development projects;
- We will be more systematic and business-minded in our approach to using our spaces, facilities, library resources, equipment and professional expertise for external engagement;
- We will encourage academic colleagues to exploit their expertise by seeking or accepting offers to engage in external academic consultancy and research contract activity. This will extol the benefits to City in the context of impact whilst respecting Schools' strategic plan and workload model. We aim to triple the number of consultancy contracts entered into by 2020.
- We will review the use of HEIF funding as directed by HEFCE to build on our knowledge transfer capacity across a broad portfolio of strategic activities which optimise impact.

### **Student enterprise**

Student enterprise focuses on imparting entrepreneurial skills in our undergraduate and postgraduate community through embedding a culture of entrepreneurial thinking and opportunities for business engagement in the curricula. In parallel, students who self-select as entrepreneurs and wish to develop their creative ideas into businesses can be mentored, obtain access to many types of informative business events, business competitions, skill- building workshops, funding support and incubation opportunities.

### **Student enterprise activities are key routes to education-based impact.**

In this respect, we will position ourselves as sector-leading in enterprise education and will support all students with a viable project start a business should they wish to do so. We will embed enterprise education within curricula in all Schools wherever possible. In collaboration with the Careers Services and the Entrepreneurship team, we will also continue to innovate in the way we support students through a variety of learning and networking experiences to enable their entrepreneurship journey. For example, we will strengthen City's leadership in the Social Enterprise Festival co-jointly led with Queen Mary University of London and join social enterprise relevant and appropriate networks, and seek both internal and external funding streams to support development in this area.

Both sets of enterprise activities lead to impact and as such contribute in various ways to realising City's academic ambitions. There are points of confluence in these academic and student enterprise activities. An example of an area of overlap between academic and student enterprise is the City Internship Incubator Programme which recruits MBA students as interns. The interns work on due diligence projects which directly benefit City's IP portfolio. Conversely, City provides practical commercial business skills which improve the employability and entrepreneurial knowledge of the interns. Building upon the success of this programme, we will expand the number of internship opportunities seeking to increase our intake by at least 25% by 2020.

Similarly, placements in industry and public life are effective mechanisms for knowledge exchange and consequent impact. City has had modest success in winning KTP funding. Our aim is to double the number of KTPs by 2020 and for this activity to be present across a wider range of academic disciplines. Through City Circle, we will explore opportunities to increase both our placement offer to student and our offering to the employers of our students and to our broad range of partners.

In collaboration with the Student and Education Strategy, we will seek to expose and exploit these opportunities to increase our education-based impact and enhance City's overall contribution to the economy and society.

## **ANNEX**

### ***Vision & Strategy 2026 (V&S26) – Academic Output KPI for Research***

At least 60% of academic staff producing 3\*/4\* outputs

### **Research & Enterprise Strategy**

#### **V&S26 Institutional Performance Indicators (PIs)**

Proportion of total academic staff producing 4\* outputs (18%)

PhD completions within 4 years (100%)

Index of Citations (*THE* index >80)

RGC income (> £15M)

Enterprise income (>£16M total measure)

Proportion of female staff in Professorial positions (30%)

#### **Additional Institutional Performance Indicators (PIs)**

Proportion of outputs on CRO

Proportion of 3/ 4\* impact case studies (100% by 2021)

Proportion of 4\* impact case studies (40% by 2021)

Number and/or value of grants applied to by funder

Number/ value of interdisciplinary grants applied for

Success rate by funder

Number of research sabbaticals undertaken

Number of spin-out companies active

Number of KTPs

CPD income (£)

Number of students engaging in enterprise activities