RCA Research, Knowledge Exchange and Innovation Strategy, 2016-2021 [DRAFT]

Overview

The RCA's Strategic Plan 2016-21 sets out the following three goals:

- 1. To advance Art and Design education
- 2. To create new knowledge in Art and Design through research and scholarship
- 3. To enhance knowledge exchange and foster innovation

The two goals relating specifically to Research, Knowledge Exchange and Innovation set the following strategic objectives:

Goal 2:

- To be a research-intensive university, where teaching is informed by research.
- To realise an improved REF result in 2020 to that of 2014, increasing quality rather than quantity of research.
- For research income to increase as a percentage of overall budget.
- To have two cross-disciplinary centres of expertise operating across all six Schools.
- To increase the level of scientific input within design research projects and on offer to PGT students.
- To create new research centres operating across the six schools, including in Materials Science and Computer Science.
- To define a stronger role for Drawing as a distinct art and design discipline, with a dedicated cross-university Drawing Research Centre.
- To build upon our research strengths in vehicle design and accessible design, and create an Integrated Transport Research Centre.
- To improve provision for PGR and record improved student experience.

Goal 3:

- To establish centres of expertise in high-technology areas at RCA that enhance knowledge exchange: 'RCA Manufacturing Futures Lab' and 'RCA Imaging Lab'.
- To commercialise faculty, as well as graduate, knowledge and ideas in InnovationRCA.
- To re-align studio projects within Knowledge Exchange, rather than as a corporate sponsorship opportunity.

In addition, the College's plans for the development of its Battersea South campus by 2021 include expanding the operations of InnovationRCA, the College's incubator for graduate start-ups, so that it supports an increased number of start-ups.

The RCA's Research and Knowledge Exchange Strategy 2016-21 supports these goals, aiming to deliver a continuously improving research and innovation environment to ensure the College produces excellent research, provides an outstanding research environment that supports the career development of staff and research students, and makes a difference to the world by communicating its research findings and collaborating with academic and business partners across the globe.

This strategy for research, knowledge exchange and innovation is intended to work alongside the College's other strategies including those for Internationalisation, Finance, Information, Library and Technical Services, HR and Buildings and Estates.

Research, Knowledge Exchange and Innovation Strategy, 2016-2021

1. Research excellence

In REF2014 the RCA was ranked as the most research-intensive institution in UK art and design, submitting the highest proportion of research-active staff (65%), and achieving 100% 4* (world-leading) and 3* (internationally excellent) ratings for its research environment and impact. This high-quality, research intensive environment attracts interest from global companies keen to collaborate with the RCA's staff and postgraduate students. In 2015 and 2016 the RCA was ranked number one art and design institution in the world in the global QS rankings, in recognition of its excellent research and research impact and its reputation with employers.

We aim to ensure the RCA remains the best place to do Art and Design research. We will deliver that in 2016-21 by:

- Maintaining a research-intensive culture, demonstrated by submitting 100% of our research-active staff to the next Research Excellence Framework exercise as required, and achieving 50% of our submission graded as world leading (4*)
- Generating substantial income from research and knowledge exchange projects, aiming to generate £5m per year in research and knowledge exchange income by 2021.
- Developing our business and industry links, building on our existing relationships with global companies such as Hyundai-Kia, Google and Huawei, as well as our engagement with public and third sector organisations, governments and policy makers
- Ensuring strong support for research career development, across the all career stages from research students to senior academic staff.
- Preparing effectively for the next Research Excellence Framework, providing support and training for staff to develop and complete highquality research outputs that have demonstrable impact, and ensuring systems are in place to enable the gathering and reporting of robust evidence and data about excellent research outputs, research impact and the research environment.

2. Research, knowledge exchange and innovation leadership

Our unique position as a postgraduate institution ensures that the whole environment is research-focussed, with students and staff benefiting from the development of new knowledge at the forefront of art and design disciplines.

We will continue to build a strong research culture across the College, which is distinctive because it is informed by a specialist environment, practice-led approaches and close collaboration not only across the RCA Schools but also

externally, with other HEIs and with those who use our research, including businesses and industry, public sector bodies and governments, museums and galleries, and community organisations. We will ensure the RCA continues to play a leading role in the art and design higher education sector, setting research and innovation agendas in our disciplines and being regarded as the pre-eminent institution in our field. We will build on our existing networks and influence in the sector, continuing to play a leading role in subject associations and other networks, including CHEAD, UKADIA and the Creative Industries Federation in the UK and ELIA in Europe. In knowledge exchange, innovation and industry partnerships we will provide leadership to the sector through our active membership of PraxisAuril in the UK and the Triple Helix Association internationally. We will also continue to support staff to be effective members of national and international peer review and assessment panels for organisations such as the UK Research Councils, and representing UK art, design and innovation through international delegations with UK research funders, the British Council and others.

We will continue to develop existing partnerships, such as our long-established relationship with the Victoria & Albert Museum and with Imperial College, and our expanding collaborations with Huawei, Samsung and Hyundai-Kia, and we will establish new research collaborations with other HEIs and in other disciplines beyond art and design, and with cultural organisations, policy makers and global businesses eager to work with us, to enhance our the quality and impact of our research and knowledge exchange, and to maximise funding opportunities. We will:

- Confirm funding for new research centres operating across the College, in Intelligent Mobility, Materials, Computer Science and Drawing, based in the new Battersea South campus
- Ensure a strong future and sustainable financial footing for viable current research centre investments
- Apply a consistent costing and pricing policy for research and knowledge exchange projects, which includes individual reward for staff delivering Executive Education short courses, to ensure the full economic costs of undertaking such projects are recognised and recouped, and surpluses are generated, to be reinvested in relevant research and innovation activities
- Use internal funds to support individual researchers to develop large-scale proposals for external funding, and to support strategically focussed research activity such as establishing collaborations with external partners.

3. A research environment that supports staff and students

We will build a strong research culture in which there are clear opportunities for research students and research staff at all career stages to undertake

development and training to enhance their professional expertise and their experience, whether in peer review, in supervision or in developing and leading larger-scale research projects. The introduction of a new academic employment framework will guarantee support for research career development, ensuring academic staff are able to devote time to both research and teaching. We will ensure that our students benefit from access to a world-leading research environment, and that early career researchers are offered the mentoring and support they need in order to progress. We will:

- Work with Deans of Schools and Directors of research centres to ensure that all research staff agree a five-year research plan with their line manager, in line with the College's and the School's strategy, which is reviewed at least annually.
- Work with Deans of Schools to facilitate cross-College research forums around agreed themes or questions, ensuring research students are supported to engage with staff through these opportunities
- Ensure equality and diversity is fostered by earmarking research funds to support research students and early career researchers, ensuring new research staff receive appropriate mentoring and training opportunities.
- Require research-active staff to invest time in mentoring researchers at earlier career stages, for example by ensuring large-scale research projects offer opportunities for research students and early career researchers to participate and work alongside more experienced researchers.
- Establish an internal RCA peer review college, which will improve the robustness and quality of grant proposals before submission to funders, and will act as mentors for early career researchers in how to prepare strong proposals and how to undertake effective peer review
- Ensure clear policies are in place, and well understood and embedded across the Schools, to support staff in good research practice, including research ethics, use of the research repository, open access requirements, and approaches to open research data.
- By co-ordinating proposals to large-scale funding calls, develop opportunities for interdisciplinarity across Schools and across disciplines, working with other HEIs (including STEM disciplines) as appropriate
- Expand the provision of training and professional development opportunities for research staff, raising awareness of national and international funding opportunities and of how to generate high-quality research and KE proposals, and how to manage research projects effectively as a principal investigator.
- Embed a strong research culture in which research and innovation activity is well planned and managed, undertaken in line with good practice and with the College's strategic priorities, and supported by infrastructure, resources and facilities that are available to researchers throughout the year.

4. Supporting research students

The RCA has a flourishing research student culture, with MPhil and PhD students joined in 2016 by a new cohort of students studying on a new MRes programme. Research students are supported by funding from the UK Research Councils, including through two AHRC funded Doctoral Training consortia, the AHRCfunded CX Hub, and AHRC Collaborative Doctoral awards, and from business and industry sponsorship from companies including Microsoft Research. We will continue to expand the support and training and development opportunities we offer our research students in 2016-21, including introducing new and more flexible routes to doctoral degrees, a professional doctorate route, and offering funded doctoral studentships as part of our new research centres. We will also offer specialised training to our research student supervisors, enabling them to provide high-quality support for students. We will continue to review and enhance our research degree policies and processes to ensure these meet and where possible exceed national guidelines and accepted good practice, and to support our research students to submit and complete to a high standard and in good time. We will do this by:

- Forming appropriate collaborations for the next round of AHRC doctoral training partnerships, and developing broader collaborations for interdisciplinary research training outside the Arts and Humanities, and for European doctoral partnership opportunities
- Building on our successful collaborative doctorate experiences, developing our established collaborative doctoral awards models with partners such as the V&A, Tate and others, seeking new partnerships where appropriate, and reviewing and developing the CX Hub collaborative PhD model
- Increasing the proportion of RCA research students who are externally funded, whether through industry sponsorship or public research funding
- Introducing new types of doctorate appropriate to our disciplines (e.g. professional doctorate, doctorates by publication)
- Improving clarity and communication of processes for research students and supervisors, to ensure a high-quality experience for all research students
- Developing a strong and relevant programme of doctoral training and development events and opportunities for research students
- Ensuring research student supervisors are well trained and equipped to undertake their role, aiming for 50% of staff (at 0.4FTE or more) to be qualified research student supervisors by 2020.
- Developing in-house research supervision training and qualification, ensuring all research student supervisors are following good practice

- Working with doctoral supervisors and research student administrators to ensure doctoral submission and completion rates are maintained in line with or exceeding RCUK expectations
- Ensuring the support and environment for research students embeds the principles of good practice set out in the QAA Code of Practice for Research Degrees and the UK Concordat for Research Careers.

5. Knowledge exchange, innovation and impact

We will continue to build on the RCA's reputation for excellence in research-led innovation, developing further our knowledge exchange, consultancy and executive education activities, building on our acknowledged strengths in research impact and our track record of attracting world-leading business and industry partnerships for the next Research Excellence Framework. We will do this by:

Knowledge Exchange

- Increasing the number and range of research-led knowledge exchange partnerships with business, industry and public sector partners across all Schools, and raising the level of external income generated through these projects year on year
- Exploring options for ensuring continued sustainable support and funding for the next phase of the CX and HELIX research centres.
- Embedding processes to enable us to capture innovation and impact outcomes more effectively, and to capitalise on staff IP appropriately
- Supporting staff to understand, capture and articulate effectively the impacts of our research.
- Establishing two Centres of Expertise, a manufacturing futures lab and an imaging lab, that build on our reputation for research and innovation excellence in these fields, working with relevant partners in business and industry

Executive Education and Consultancy

- Developing a systematic approach to delivering Executive Education to external clients, increasing the level of income generated through such activities, and broadening the range of research staff able to deliver them.
- Providing bespoke Executive Education packages for major clients, and developing a portfolio of standard RCA Executive Education offers that can be delivered with shorter development time, to maximise income generated, meeting the target of £1m by 2021.
- Establishing, and applying consistently, an RCA-wide charging policy for Executive Education and consultancy projects, which covers all costs and generates profits which can be used to provide appropriate levels of reward to the individuals involved and to be reinvested in research and innovation activity.

- Delivering our Executive Education portfolio with selected international partners.
- Establishing a design-led MBA or equivalent with a high-profile academic partner.

Innovation and Enterprise

- Planning for the future sustainability and expansion of InnovationRCA, ensuring it is able to support an expanded portfolio of design-led graduate start-ups through its incubator, and to support the commercialisation of RCA research staff IP, as part of the new RCA's new innovation hub in the Battersea South development.
- Supporting the work of the Helen Hamlyn Centre for Design, providing support for its developing research culture, ensuring relevant staff are able to submit high-quality research outputs and impact to the next Research Excellence Framework, to generate income from research, knowledge exchange and executive education activities, and to collaborate with RCA Schools and Centres.

Impact

We will continue to ensure our research generates significant impact and benefit, whether economic, social or cultural, stemming from our expertise in the visual and creative arts, design and innovation, technology and materials, and critical thinking and cultural interpretation. The College is committed to the concept of translational research, through which research leads to excellence in teaching and achieves impact through its application in many sectors of society, business, industry and public life, making a positive difference to lives by bringing about benefits to the economy, society, culture, quality of life, and health and wellbeing. As artists, designers, curators, commentators and historians, RCA researchers have extensive experience of communicating and promoting the impact of their research beyond academic, engaging with audiences and those who use and are involved in our research and knowledge exchange activities.

We will continue to invest in support and infrastructure to ensure our research delivers impact through exhibitions in museums and galleries, formal and informal learning, innovation in art, design, business and manufacturing, and the creation of physical and digital environments, developing the necessary partnerships, networks and collaborations with other institutions, businesses and users locally, nationally and internationally.

International research and innovation

Working in line with aims and values set out in the College's Internationalisation Strategy 2016-21, we will develop our international links in Europe and globally, in particular focussing on links with countries in the Middle East, North Africa, South and East Asia and the USA, building on existing partnerships with leading

universities including the University of California, Berkeley and the Pratt Institute in the USA, and Tsinghua University in China. As one of the founders of the Global Grad Show in the United Arab Emirates, we will expand our activities there, including delivering Executive Education courses in Dubai, building on that city's design focus, and further afield. And we will continue to work with existing global partners in business, industry and government, and to develop new partnerships for global research and innovation in art and design, including exploring opportunities for international doctoral training collaborations, ensuring the RCA continues to welcome and to explore partnerships from around the world as part of its rich and open culture of research and innovation.

Emma Wakelin Director of Research & Innovation Royal College of Art December 2016