Unit of Assessment: 30

1. Unit context and structure, research and impact strategy

Research in Philosophy at the University of Glasgow is conducted by 19 academics (18.2 FTE) within the College of Arts. During the current REF cycle the unit of assessment (UOA) has published 6 research-informed textbooks, 8 research monographs, 27 edited collections, more than 100 chapters in edited collections, and more than 250 journal articles. Specialising in analytic philosophy, the UOA offers a collegial, supportive, and vibrant research environment that has undergone considerable change since the last REF exercise.

In 2014, the UOA's research strategy was built around the activity of two research clusters – Theoretical Philosophy and Practical Philosophy – a grouping inherited from the days when Scottish universities had two philosophy departments. In 2015 we decided it was no longer optimal to maintain these traditional groupings since established areas of strength cut across the theoretical/practical divide. Instead, we have concentrated on subfields that reflected where the UOA currently excels. We are now organised into three: 1) Perception, 2) Epistemology and 3) Virtue Theory.

This reorganisation has supported an ambitious case, successfully made, for institutional investment in the UOA. Of the eleven staff hired in the past six years, four work on perception, five on epistemology, and three on virtue (with some working in more than one subfield). With these appointments, Glasgow now has some of the largest concentrations in the UK of researchers in each of these fields. (With six members of staff specialising philosophy of perception, only three UK universities are of comparable size. With seven working in epistemology, Glasgow is nearly double the size of its next-closest competitors. In virtue theory, only one other UK university has a comparable number of staff publishing in the field.) More cohesive groups of researchers with strongly overlapping interests have allowed us to capitalise on shared strengths.

While we still eagerly support and encourage individual researchers, the most notable change in our research objectives during this REF cycle is an intentional focus on making the most of shared expertise and fostering collaborative projects. Our clusters underpin a supportive research environment centred on expert peer-review: clusters read and provide feedback on work-in-progress, offer advice on grant applications, and broker internal and external collaborations. They also organise seminars and workshops, which have brought over 100 external researchers to Glasgow audiences over the cycle.

The success of the UOA's strategic reorganisation is evidenced, among other ways, in the external recognition it has garnered. The Centre for the Study of Perceptual Experience (CSPE) has long been seen as a leader in its field, and the increase in staff who work in the Centre has enabled it to go from strength to strength. It has attracted 13 visiting research fellows and 10 research students during this REF cycle from universities in Canada, France, Germany, Japan, New Zealand, Switzerland, and the United States. And, while the *Philosophical Gourmet Report* does not track philosophy of perception, in particular, the quality of its research accounts for the University of Glasgow's rise to fifth (tied) in the UK in philosophy of mind in the <u>most recent</u> report (2018). Building on CSPE's model, the UOA developed the epistemology research cluster into the Cogito Epistemology Research Centre. And epistemology at the University of Glasgow has gone from being unranked in 2014 to being tied for second in the UK in the 2018



Gourmet Report, with further strengthening anticipated following appointments since 2018. The successes in developing Perception and Epistemology provide a model for the future development of the Virtue cluster.

Additional evidence that the strategy of organizing research in the department around shared strengths is bearing fruit can be seen in the collaborative grants secured, which total more than £1,065,000 in the current REF cycle. This sum is more than two and a half times the department's total grant capture in the last REF cycle (£384,205). Co-authored publications provide additional evidence of the strategy's success: 14 articles have been co-authored and two books have been co-edited by two or more members of the department in the current REF cycle (as compared to none in the previous cycle). Half-a-dozen other collaborative projects are in progress, including two jointly-authored books, three grant applications, and a new impact project.

In this cycle the UOA has worked hard to address the disappointing performance of its Impact Case Studies (ICSs) in 2014. Our approach to impact has used a broad programme of public engagement to foster relationships and identify promising projects with the potential to develop significant impact.

Across our three clusters we have delivered 43 public lectures, put on 36 exhibitions at festivals or galleries, made 22 media appearances, written 8 blog entries, published 8 articles in magazines or newspapers, organized or spoken at 6 workshops aimed at non-academic audiences, given 4 presentations in schools, recorded 4 podcasts aimed at the general public, and organized a fortnightly philosophy café at a public library on Glasgow's south side. (Further details about some of these activities and the responses to them is in section 4.)

From this activity we identified a range of areas in which our research expertise might dovetail with needs in business, government, or the wider society. These partners include Alzheimer Scotland, CHAS Children's Hospice, the Church of Scotland, Cupboard Computer Games, NASA, the Presbyterian Church of Aotearoa New Zealand, Soluis, Teenage Cancer Trust, and the Therme Group . In addition to the impact captured in our ICSs, outcomes of these collaborations include a project with the Prince and Princess of Wales Hospice to implement practices to enhance the autonomy of those approaching the end of life. This activity in turn is facilitating collaboration with members of the Scottish Parliament which may lead to legislation around end-of-life care. Another project, emerging from our epistemology and virtue clusters, has led the Therme Group not only to change designs for current developments but also to contribute £337,279 to fund a new, 5-year postdoctoral position at the University of Glasgow to investigate ways in which architectural design can enhance well-being.

We collaborate actively with other academic disciplines, both within the UK and internationally. Various members of the subject area have worked with researchers in English, Linguistics, Education, Politics, Law, Economics, Sociology, Psychology, Neurology, Neuroscience, Anatomy, Disability Studies, Information Studies, Computer Science, Art History, and Veterinary Medicine. For example, workshops run by Bain, Brady, and Corns on pain and suffering involved researchers from Neuroscience and Veterinary Medicine at Glasgow and clinicians from Glasgow's pain clinic. The 'Value of Suffering' project included a wider international team of researchers, with members from France, Australia, and the US. Colburn and Lazenby collaborated with researchers in education and economics on the 'Inequality in Educational Access' project. Colburn and Corns contributed to a project on 'Evaluating a Community Form of Palliative Care in Kerala' that involved sociologists, anthropologists, and palliative care



clinicians. Colburn also joined a team of sociologists, legal theorists, and educationalists to work on a project entitled, 'Building Futures: Aspirations of Syrian Youth Refugees and Host Population Responses in Lebanon, Greece & the UK'. Macpherson was co-investigator on 'ReThinking the Senses', a major interdisciplinary project which involved philosophers, psychologists, and neuroscientists from University of London, University of Oxford, and University of Warwick. Macpherson was also a co-investigator on a project entitled, 'Understanding the Senses: Past and Present,' which involved collaborators from English, Art History, Linguistics, and Disability Studies, and she was a co-investigator with a Neurologist from the University of Exeter on the 'Eye's Mind' project, which formed the basis of one of our impact cases and also involved an art historian and an artist. Our newly established Virtual Reality Lab engages with researchers in Neuroscience, Psychology, Computer Science, and Information Studies. Philosophy has helped fund and run the Philosophy, Psychology, and Neuroscience Seminar Series since 2014 and launched a joint philosophy and psychology Masters programme in 2019. Leuenberger's project on 'The Whole Truth' involved researchers from law, which led Philosophy and Law to form a joint research network. A number of members of staff also participate in inter-disciplinary seminars around the University of Glasgow, including the Emotions Network, the Colour Studies Group, the End of Life Group, the Human Rights Cluster, the Political Philosophy and Theory Group, and the Theology and Religious Studies Seminar.

Wherever possible we make the results of the research we undertake freely available. With the assistance of library staff, we have ensured that drafts of the journal articles we publish are freely available on the University of Glasgow's open access research repository (Enlighten). Links to these articles are easily found on each staff member's university webpage. In addition, every member of the department has an ORCID. Many also have pages on Academia.edu, ResearchGate, or PhilPapers. A number of our research projects have also included an associated blog and an active social media presence.

Because most of our research is idea- or argument-driven, rather than data-driven, readers and reviewers can see for themselves whether the ideas are clear and the arguments compelling. There is neither an opportunity nor an advantage to be gained by fabricating evidence, and the overlapping interests characteristic of our research clusters mean our colleagues are well-positioned to let us know if we have construed an opposing position uncharitably. For the limited number of projects that involve the collection of empirical data, we seek help and advice from college and school research integrity officers. In the course of their development such projects are also submitted to the university ethics boards for evaluation and approval. In addition, the College of Arts offers research integrity training to staff every semester and participating in integrity training is a compulsory part of the Early Career Development Programme (ECDP).

Our strategic aims for the next seven years build on the successes of the last seven. They are:

1. To continue to develop our existing research clusters in perception, epistemology, and virtue. We have transformed what was a modest research interest in epistemology in 2014 into a centre of excellence by 2020. And we have increased the number of staff working in the other two clusters. But there are further steps to be taken. Using the model developed by the CSPE and Cogito, we aim to develop our virtue cluster into a formally established centre of excellence in the next cycle. Expanding impactful research in virtual and augmented reality point in the direction of new projects on the pedagogical significance of VR and AR. Cogito's development will be driven in part by Mona Simion's 5-year ERC grant for a project on social epistemology and Adam Carter's 3-year AHRC grant on trust, which together will bring 3 postdoctoral researchers into the department.



- 2. To develop a fourth research cluster in the area of metaphysics, philosophy of language, and logic. The recent addition of Bryan Pickel to the existing team of Leuenberger, Kemp, and Rieger gives these subfields – heretofore grouped with epistemology – enough critical mass to begin growing into a distinct research cluster that develops their own shared projects.
- 3. To foster the careers of early career researchers (ECRs). We currently have five lecturers and three postdocs whose careers we will be working to advance, with at least 3 more postdocs joining us over the next five years. Past success in facilitating the development of early career staff (on which more below) means there is good institutional knowledge of how to help them develop both as researchers and as leaders, with a strong focus on Careers and Culture in the new institutional research strategy for 2020-2025
- 4. *To continue to grow staff numbers*. Based on steadily growing student numbers and a significant rise in grant capture, we will seek further investment in our staff base. Such growth will enable us to bed in existing research clusters, expand in new directions, and better serve our postgraduate community.
- 5. *To continue to grow our grant capture*. In addition to projects we drive from within, we aim to respond to more challenge-driven funding opportunities by developing interdisciplinary collaborations and increasing our external partners
- 6. *To develop more relationships with potential impact partners*. We are already working with more than four times as many external partners as we were in 2014. But there are several other potential partners with whom we have a connection, such as NASA, that could be developed into a more fruitful relationship using institutional seed-funding to build collaboration.
- 7. To strengthen links with law, politics, and psychology. A new Law and Philosophy Network was launched at the University of Glasgow in late 2019 to bring together colleagues with interests in philosophy of law. However, the pandemic has delayed its development. Philosophy and Psychology launched a joint Master's programme in 2019, and there are promising connections between the two units in the areas of perception and emotion. Turning these shared interests into joint grant projects and shared PhD students is an important aim. In the area of politics, there are already joint activities organised around the Stevenson Trust, the John Smith Centre, and a joint seminar series, but there is potential for additional synergies that we would like to develop.

2. People

Our staffing strategy in this REF cycle has been built around two pillars: 1) the recruitment of new staff, and 2) the development of early career staff into senior leaders in the UOA. Retirements and departures gave the UOA an opportunity to reshape itself, and the College of Arts supported these efforts, which allowed us to expand from 13.5 to 18.2 FTE. The decision to aim for collaborative concentrations in a few areas as opposed to solo artists in every area assisted in our recruitment efforts. Specialist knowledge of the areas in which we were recruiting allowed us to use our existing networks to ensure jobs ads were brought to the attention of people who might be interested in them. And many of the colleagues who joined the UOA in this cycle were drawn by the opportunity to work with others who share their interests. A second factor that contributed to recruitment success was the Centre for the Study of Perceptual Experience's history of hosting visiting fellows, our weekly research seminars, and the conferences we had organised. Many of those who joined the UOA had visited Glasgow previously and were attracted by the collegiality they witnessed while here.



The opportunity to recruit new staff helped us begin to address the gender imbalance in UOA staffing. At the time of the last REF only 1.5 long-term staff members were women. Women now occupy a professorship, three lectureships, and two postdoctoral positions in the UOA, which amounts to 23% of the permanent members of staff and 66% of postdoctoral researchers. We still have a way to go before our gender ratio reflects that of the UK population; however, it is now at least comparable to other philosophy departments in the UK (where women make up approximately 25% of permanent positions).

A member of the UOA was Chair of the self-assessment team responsible for the successful application for an Athena SWAN (AS) Bronze award in 2016. Members of the UOA are heavily involved in the Gender Equality Committee which is implementing the AS action plan and working towards an application for AS Silver. All Philosophy staff have taken the University's Equality & Diversity Essentials training. All staff with interviewing, performance review, Equality, and REF responsibilities, receive training regarding unconscious bias and ways of mitigating its effects. We have implemented the British Philosophical Association/Society for Women in Philosophy good practice scheme. The conferences we organize now offer childcare and more time is permitted between sessions for breaks. Staff have increased ethnic and gender diversity among the authors they assign in taught courses. (In 2020, for example, roughly 38% of assigned authors identify with historically marginalized genders and 7% with historically marginalized ethnic groups.) And Feminist Philosophy, which was not previously on offer, is now taught annually.

The University has supported flexible and remote working arrangements to accommodate health and caring responsibilities. The UOA schedules research seminars and mandatory meetings in the middle of the day to ensure colleagues with caring responsibilities can attend. For those who need to take extended leave due to personal illness or caring responsibilities, the University helps ease their return to work by offering up to £10,000 to cover teaching relief and research costs.

As well as increasing the gender-diversity of staff in Philosophy, we have also increased our international diversity. In addition to staff from Scotland (3, including 2 postdocs) and England (1), we have recruited staff from two European Union countries, two North American countries, Australia, and New Zealand. However, our attempts to improve the racial diversity have thus far been unsuccessful. We hope future hiring will enable us to address this issue.

When it comes to staff development, there is considerable support from both the University and the UOA. All ECRs participate in the University's Early Career Development Programme (ECDP), which aims to help newly appointed staff develop their skills and advance their careers within a defined timetable. Colleagues on ECDP benefit from a reduced teaching and administration load in the first two years of their appointment (50% in year 1; 25% in year 2). ECDP actively encourages application to external funding schemes specifically available to ECRs, such as the Carnegie Research Incentive Grant, the AHRC Early Career Fellowship, and the European Research Council Starter Grant. Postdoctoral researchers are likewise invited to participate in the ECDP.

ECRs are also assigned a mentor whose role includes offering guidance on research output quality, grant applications, public engagement, and impact, as well as other features of university life. Another way staff in the UOA support ECRs is by applying for grants that fund postdoctoral research positions, enabling new and emerging researchers to establish their research profiles



before they are required to undertake regular teaching responsibilities. In this REF cycle 8 of these applications have been successful.

Access to mentoring is not limited to ECRs. The School of Humanities Mentoring Scheme seeks to ensure every member of staff is signed up to a mentor from one of the various schemes that operate in the University. The schemes are not compulsory but strongly recommended for either research mentoring or for career mentoring, and sometimes both.

All staff are offered one semester of research leave for every 6 semesters of teaching and are encouraged to increase their research time by acquiring research grants to buy them out of teaching duties in other semesters. Research leave can be used either to undertake new research or develop the impact of existing research. Funds are available for staff whose research would be enhanced by being somewhere other than Glasgow for their study leave. During the current REF cycle, every member of staff whose contract includes a research component and who has been employed by the University of Glasgow for three or more years has had at least one semester of study leave. Those who have been working at Glasgow for more than six years have had two.

Evidence that these support mechanisms have been successful is provided, in part, by the successful promotion of ECRs over the period. The UOA currently consists of 5.2 professors, 1 reader, 5 senior lecturers, 6 lecturers, and 1 research fellow. Of the professors, 1 began the period as a lecturer and 1 as a senior lecturer. The reader began the period as a lecturer. Half of the senior lecturers were promoted to that rank during this REF cycle. And one of our lecturers began her employment in the UOA as a postdoctoral researcher. Further evidence of our successful support for ECRs is provided by the successful placement of postdocs and other temporary members of staff in additional postdoctoral or permanent jobs at other universities, including Adelaide, Bristol, Hamburg, Lancaster, Manchester, Oslo, Oxford, Texas Tech, Tilburg, UCL, and Warwick.

The University formally supports staff through annual Performance and Development Reviews. Promotion opportunities are discussed each year and the Head of Subject and Head of School offer advice and support. Exceptional performance of a specific task or project is recognised and rewarded. Through a comprehensive range of staff development workshops run by Human Resources, the College of Arts, and the School of Humanities, staff receive training and support on research planning, grant writing, impact development, the supervision of postgraduate research students and postdocs, leadership training, bias and recruitment training. Two members of the UOA have also secured competitive places in the University's Leadership training programmes which develop senior leadership capacity across the institution.

One of the most valuable contributions to the research environment at the University of Glasgow and to the development of staff research is the weekly research seminar in which visiting researchers are invited to present one of their current projects. This not only keeps us abreast of developments elsewhere in the field, it also enables us to network with staff from around the world. Often new research projects are born as a result of conversations to which these seminars give rise. Another important contribution to the research environment are the conferences and workshops funded by competitive research grants secured by members of the UOA. They have introduced our staff and students to internationally recognized experts. Because Glasgow staff have been involved in giving papers at each of these events, they have also provided opportunities to receive critical feedback from leaders in the field.



Postgraduate research students (PGRs) are valuable contributors to our research culture. Since 2014, Philosophy has been actively engaged in increasing PGR enrolments. One strategy for doing so has been to appoint new staff who would be attractive supervisors. Another is to seek grants that would support doctoral students during the course of their studies and to work closely with students who are applying for funding to strengthen their applications. These recruitment efforts have been successful. We awarded four times as many PhDs during the current REF cycle (32) as we did during the previous one (8). And we currently have forty students engaged in doctoral studies. We are also increasingly successful in getting AHRC Studentships (two in 2016/17, four in 2017/18, five in 2018/19, and seven in 2019/20), as well as scholarships from other sources (e.g., the Economic and Social Research Council [2019], the Greek government [2019], and the University of Glasgow).

As with our staff, so also with our postgraduate student population: we have worked to recruit students from underrepresented groups, encouraging promising students from these groups to continue their education. Our doctoral student community has been drawn from 22 different countries. Women have earned 35% of the PhD's we have awarded since 2014 and make up 47% of our current research student cohort. To support these students, in 2019 we initiated a programme that offers each of the women in our PhD and MSc communities a mentor (in addition to their research supervisors). And we have launched a Minorities and Philosophy chapter, which has been enthusiastically received by the graduate student community.

We foster a strong postgraduate research culture through a range of activities:

- Once a week we hold a seminar for students to present current works-in-progress and obtain feedback from fellow students and staff members.
- Each summer we take postgraduate students off campus for a two-and-a-half-day workshop. This builds rapport within the student cohort and gives them an opportunity to test their work on staff and peers. As a result of the feedback they receive, students often submit papers presented at the workshop to graduate conferences, thus enhancing their research quality and presentation skills.
- In addition to the weekly research seminar mentioned in section 1, we have three other seminar series that meet roughly once per month and feature visiting academics. So, most weeks in which classes are in session, staff and students have an opportunity to attend presentations by at least two visiting speakers, which keeps them abreast of the current state of play in most philosophical subfields.
- There are numerous reading groups for postgraduates to attend.
- Students are provided with funding enabling them to present their work at a conference outwith the University each year. This covers a proportion of their travel and accommodation costs (often all, if the conference is in the UK).
- The PGR convenor keeps PGR students informed of training and development activities outwith the subject, provided by the Scottish Graduate School for Arts and Humanities, the University's Researcher Development Unit, or the College of Arts PGR Skills Development Programme. PGR Skills Development is mandatory for all doctoral students and students are encouraged to participate in institutional postgraduate activity, such as the 'Three Minute Thesis' competition (in which one of our PhD Students was the People's Choice winner in 2015).
- The Annual Performance Review process in the unit is seen as an important formative experience, enabling us to nurture a culture of reflection among the PGR community, giving students the opportunity to recognise their progress, map out their next year of



study, and receive guidance on the steps they should take to finish their degree and prepare for their preferred field of employment.

- We run a series of job placement seminars for PhD students that introduce them to the current state of both academic and non-academic job markets. We highlight things they can already be doing to prepare themselves for the market, such as preparing articles for publication in academic journals. We teach them how to put together a CV, a letter of application, and a statement on their teaching philosophy. And we hold mock-interviews for those in the final stages of their degree.
- The CSPE Illusions Index and research stalls (see section 4) have provided opportunities for graduate students to gain public engagement experience.
- Our students are encouraged and mentored in running postgraduate conferences, with an average of one a year held at Glasgow in Philosophy since 2014.

Evidence that the above mentioned support systems have had a positive impact on the research done by postgraduate students in philosophy at Glasgow can be seen in both completion rates and publications. During the current REF cycle, 77% of our doctoral students successfully completed their research and were awarded a PhD. And within 3 years of graduation, 65% of those new PhDs had published one or more journal articles or academic book chapters.

3. Income, infrastructure and facilities

Our grant capture strategy during the current REF cycle has been:

- to support as wide a range of staff as possible with making successful grant applications, particularly by supplementing College support structures with informal reading of colleague's applications.
- to appoint new staff who show an excellent track record or potential in winning major funding
- to include Early Career Researchers in collaborative applications with senior members of staff
- to encourage collaborative applications, both within and outside the Unit, in order to broaden disciplinary and interdisciplinary expertise

Alongside external funding, our Unit benefits from having access to University-administered research and impact funds. For those developing a large grant proposal there is a competitive fund to which researchers can apply for seed money that will provide them with the time or resources needed to move their project from promising idea to successful grant application. The School of Humanities has a research fund to which staff can apply to enable them to meet with collaborators, attend conferences, or do preliminary research that will help them launch a new project; it also offers an informal peer-review network for grant applications. Four staff received money from the College of Arts in 2018-2019 to enable them to complete significant projects like monographs. The Glasgow Knowledge Exchange (KE) Fund supports collaborative approaches to communicate research outcomes and generate impact and has provided resources that enabled the researchers heading up major impact projects to be relieved of some of their other duties. Finally, small grants are available from the Scots Philosophical Association, the Mind Association, the Aristotelian Society, and the Royal Society of Edinburgh to support conferences or workshops, and several members of staff have made use of this resource.

Evidence that the abovementioned resources have enhanced the research environment within Philosophy at Glasgow can be seen in the marked increase in the number of staff members who have applied for competitive research grants and the amount of grant income secured over the



past two REF cycles. Between 2001 and 2007, the department obtained £131,870 from sources outside the University of Glasgow to support research. In the next cycle that sum increased to £384,205. Since 2014 we have secured £1,572,588 in grant income, a fourfold increase since 2013 and a ninefold increase since 2007. Nearly half of this income stems from sources whose funding is not derived from the UK government – from charities based in the UK, EU, or US, or from the research councils of other countries.

The increase in external funding has also been due to a change in the culture of the subject area (and the School of Humanities within which it is housed). There has been increased support for teaching and administrative relief from the School and College not only to allow people to use grant income to good effect but also to give staff time to develop competitive grant applications. In addition, we have incorporated a discussion of research funding in annual performance reviews and begun reporting on recent grant success in department meetings. Securing grant income is an important (but not mandatory) criterion for promotion.

As a result of these changes, 17 members of staff (out of the 18.2 whose contract includes a research component) have successfully applied for external funding during the current REF cycle.

This research funding has yielded:

- 3 impact projects
- 1 virtual reality/augmented reality research lab
- 8 postdoctoral research positions
- 5 exhibitions
- 22 conferences
- 26 workshops
- A visiting speaker series that brought 20 academics to Glasgow over the space of 2 years to talk about their current research.
- 1 policy report
- 6 edited collections
- 40 published papers
- 1 monograph

Infrastructure and facilities

Our research success has been aided by various features of the University's infrastructure. In the area of grant capture, the College Research Support Office assesses funder requirements and eligibility issues, and regularly disseminates information on current and prospective grant calls and deadlines. They also give detailed feedback on impact plans. School Finance Officers assist with the preparation of research budgets. ArtsLab provides a peer-review service for grant applicants, offering feedback on proposals from at least two current grant holders within the College of Arts. At subject level, feedback is available from the Philosophy Research Officer and from the members of one's research cluster.

The UOA has a suite of 26 offices, which affords every permanent member of staff an individual office. The remaining offices are assigned to postdoctoral researchers, postgraduate research students, and academic visitors. These offices are equipped with state-of-the-art technology, which is maintained and supported by the University's information technology team. We also



have three seminar rooms under local administration, which provide venues for reading and writing groups that encourage supportive interactions between the members of our research community.

The University Library has an extensive collection of philosophy books and journals, accessible in either physical or electronic form (often both). This collection is continually updated by a subject-specific librarian. Members of staff are also invited to identify books, journals, or databases that should be added to the collection. The Library's special collection contains original copies of historic texts that are of particular interest to those working on Scottish Enlightenment figures, such as Francis Hutcheson's correspondence. We also benefit from having access to the Mitchell Library, Europe's largest public reference library, located a short distance from campus.

The big-ticket investment in facilities to assist with research in philosophy has been the creation of a number of virtual and augmented reality labs to support research being led by the Centre for the Study of Perceptual Experience. Beginning in 2016, a 20m² space was set aside for this purpose and equipped with more than £30,000 of supporting technology. It is now a key resource for several interdisciplinary research projects being conducted by staff and PhD students. In 2019, two additional spaces were renovated for use in teaching and equipped with £110,000 of hardware. These labs provided a (then) world first: 15 six-degrees-of-freedom headsets being used in a single space. It produced a blueprint for how universities could use VR in teaching at scale. And the University is currently building a new, £113,000,000 research innovation hub (the Advanced Research Centre or ARC), designed to facilitate partnerships between university research staff and parties outwith the university. This includes, a VR/AR lab, designed in consultation with members of the UOA, a major investment in this element of the UOA's research and impact activity.

4. Collaboration and contribution to the research base, economy and society

Contribution to the economy and society

As mentioned above, public engagement plays an important role in the life of the UOA and 14 of our 18.2 members were involved in events aimed at sharing our research expertise with the wider public. Here are a few highlights. Each year the Centre for the Study of Perceptual Experience runs a booth at the Glasgow Science Festival and contributes to 2-3 festivals outwith Glasgow, such as the Explorathon, the Cheltenham Science Festival, and the Being Human Festival, to name but three. The enthusiastic response to exhibitions on visual illusions that the CSPE designed for one of these festivals prompted Fiona Macpherson, head of the CSPE, to create an online resource on illusions. From 2014 to 2017 the Centre for the Study of Perceptual Experience ran a web page on illusions aimed at the public. During this period the page was visited more than 400 times per month on average. In September 2017, CSPE launched The Illusions Index, a fully searchable, interactive, curated collection of illusions aimed at the public (www.illusionsindex.org) and in 2019 a series of interactive quizzes were added to the site, allowing people to earn a "Master of Illusion" certificate. This was funded by the University Research Office, the College of Arts, the School of Humanities, and the Glasgow Knowledge Exchange Fund. Since its launch, the site has been visited over 799,000 times by 688,000 different viewers from around the world (US 44%, UK 12%, India 6%, Australia, 5%, Canada 5%, Germany 1% etc.). The CSPE also has a substantial social media presence via Twitter and Facebook.

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Our virtue research cluster has also been highly involved in public engagement. Glen Pettigrove has spoken to community groups in the UK and New Zealand (including the Humanist Society, the Rationalist Society, the Church of Scotland, and the Glasgow Philosophical Society) and been interviewed by reporters from the BBC and The Herald on moral emotions. Michael Brady, David Bain, and Jennifer Corns's 'Value of Suffering' project yielded 56 research and public talks and an extended interview aired by the Australian Broadcasting Corporation. Brady continues to work as a production consultant with Quarantine theatre company and Sick! Festival. Corns collaborated with two artists to put together the Foundation Painting Show, which was exhibited in Glasgow and Berlin. And the autonomy at the end of life project that Ben Colburn and Jennifer Corns have spearheaded included a workshop for practitioners working in palliative care.

Reactions to these public engagement activities has consistently been positive. In most cases, our evidence is anecdotal – people approach us after an event to say how much they liked an exhibition or learned from a presentation. In some cases it is behavioural – having heard us speak on one occasion, a group invites us back to speak on another. But in a few cases we have collected more systematic data. For example, 100% of those who filled out a questionnaire after participating in the Explorathon in 2018 indicated they enjoyed the event very much. Written comments on the Illusions Index sites include, "This is a wonderful site! In a way I'm sad that I didn't come across it until after completing my university degrees as this sounds like just the kind of thing I would have been interested in studying", and ""This will be a fantastic teaching aid for my phil of cognitive science course! Thanks very much for creating and maintaining it."

Apart from public engagement, which we have undertaken throughout the current REF cycle, our longest-running contribution to society has grown out of the intersection of Ben Colburn's research on autonomy and Jennifer Corns's work on pain. Working in collaboration with the Prince and Princess of Wales Hospice – made up of more than 100 full-time staff and 650 volunteers who serve more than 1,200 patients per year – they were able to contribute to discussions that altered policy, practice, and evaluative frameworks in ways that enhance and protect autonomy for the dying. Drawing on Colburn's research, practitioners at PPWH developed training and CPD materials (shortlisted for a prize from the Culture, Health & Wellbeing Alliance in 2020) that are now being used internationally, initially in Ireland, Australia and New Zealand. Another strand of this project can be seen in Colburn's contribution to a Scottish cross-parliamentary working group on End of Life Choices that he was invited to join in 2016. He presented his research in the Scottish Parliament in November 2019, and his work is cited in the white paper the working group has produced in advance of a parliamentary discussion (postponed by Covid-19) of changes in legislation governing end of life choices.

A more recent contribution to society and economy began in 2018 when the UOA hosted a conference to which 25 industry leaders from the Therme Group and their affiliates were invited. The Therme Group designs and develops what they call 'well-being resorts'. Five members of the UOA, together with collaborators from Psychology and Architecture, presented research on the nature of well-being and its relationship to architectural design. These presentations prompted Therme to alter plans for two of their current projects. To help advance this discussion further, the University is hosting a postdoctoral researcher – funded by Therme for five years and based in the UOA – who will investigate relationships between architecture and human happiness.

Another nascent impact project is developing with NASA, exploring the ethics and metaphysics of risk in conversation with NASA engineers. Glen Pettigrove has been consulting with the



Church of Scotland about the ethical issues that bear on the closing of a church. Still other impact activities have involved various members of staff serving as consultants for playwrights or dramatic productions on emotions, pain, and suffering. The University has facilitated each of these impactful enterprises by giving staff time to enter into these conversations, providing teaching cover for them to travel to another city to speak with engineers, observe rehearsals, or consult with church officers. On other occasions the University has provided money and staffing. Work on the Illusions Index, for example, was made possible through internal grants offered by the University Research Office, the College of Arts, and the School of Humanities, totalling more than £19,000.

The examples mentioned above are only a few of our contributions to society and economy. From the mainstream to the marginalized (Stonewall), from the privileged (Therme resorts) to the underprivileged (refugees), from the corridors of power (the Parliaments of Westminster and Holyrood) to the neighbourhoods of the powerless (Coatbridge), from the religious (Church of Scotland) to the non-religious (the Humanist Society), from those at one extreme of the imaginative spectrum to the other (the Eye's Mind Project), from life's early years (philosophy in schools) to its final days (the Scottish Cot Death Trust, the Prince and Princess of Wales Hospice), from the Hebrides to the Antipodes, Philosophy at Glasgow has engaged with the length and breadth of society.

Collaboration

Since one of our objectives during the current REF cycle was to develop research clusters that would encourage collaboration, it is not surprising that there has been a fair amount of collaborating with colleagues within the department, both on research outputs and on impact projects. Eight members of the department have co-authored one or more papers with at least one of their colleagues. However, our collaborations have not been limited to fellow philosophers, let alone to philosophers at Glasgow. Members of the UOA have collaborated with academics from 14 disciplines at more than 80 universities in 19 countries. These collaborations have led to the publication of 4 books, 20 edited collections, 61 chapters in edited collections, and 65 journal articles. (These numbers only pick out publications on which a member of the department is named as an author or editor.) Other results of these collaborations include the production of 1 film, 3 plays, 4 art exhibitions, 4 impact projects, 10 successful grant applications, and 16 conferences.

Contribution to and recognition by the research base

Philosophy at Glasgow has likewise distinguished itself in its service to the wider profession. During the current REF cycle members of the UOA have served as

- Director of the British Philosophical Association (BPA)
- President of the BPA
- Member of the BPA Executive Committee
- President of the Scots Philosophical Association (ScotsPhil)
- Treasurer of the ScotsPhil
- Secretary of the ScotsPhil
- Trustee of the Kennedy Memorial Trust
- Member of the AHRC Council
- Member of the AHRC's peer review college
- Member of the UKRI Creative Industries Advisory Group

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- Secretary of the Analysis Trust
- Executive Committee member for the Royal Institute for Philosophy
- Member of the Mind Association Executive Committee.
- Member of the Royal Society of Edinburgh Fellowship Committee

Members of the UOA are advisors on international research projects, conferences, research centres, and organisations. We have participated in half-a-dozen periodic reviews of research and teaching at universities in the UK and overseas. We have refereed grant or scholarship applications for:

- Analysis Trust
- AHRC
- British Academy
- Czech Science Foundation
- Deutscher Akademischer Austaushdienst
- European Research Council
- Hong Kong Research Grants Council
- Icelandic Research Fund
- Independent Social Research Foundation
- Irish Research Council
- Israel Science Foundation
- John Templeton Foundation
- Kennedy Memorial Trust
- Leverhulme Trust
- Mind Association
- Netherlands Organization for Scientific Research
- Polish National Science Centre
- Research Foundation Flanders
- New York University
- UKRI Future Leaders Competition
- Volkswagen Foundation.

Every member of staff regularly referees manuscripts for academic presses or journals. In an average year we collectively referee more than 200 journal articles, 15-20 book manuscripts for academic presses, and 3-5 tenure or promotion files for universities in Europe or the US. And various members of the UOA are on journal editorial boards, including The Philosophical Quarterly, Philosophy and the Mind Sciences, Oxford Bibliographies Online, Analysis, dialectica, and others.

Finally, our contributions to the field are reflected in the external honours awarded members of staff. Fiona Macpherson, who leads the Centre for the Study of Perceptual Experience, was elected as a Fellow of the Royal Society of Edinburgh in 2017 and as a member of Academia Europaea in 2018. Christoph Kelp, who leads the Cogito Epistemology Research Centre, was named Young Epistemologist of the Year by Stanford University in 2017. Mona Simion was awarded a distinguished Mind Fellowship in 2018. An article by Adam Carter was selected for inclusion in the *Philosopher's Annual* as one of the 10 best philosophy papers published in 2018 and another was selected by the *Philosophical Quarterly* for its 2019 Essay Prize. And members of the UOA have been invited to give lectures and keynote talks at conferences around the world – in Australia, China, France, Germany, Japan, the Netherlands, New Zealand, Spain, Sweden, Switzerland, and the US, to name just a few. These individual honours arise from a collaborative and collegial research environment that supports excellence at all levels.