

Unit of Assessment: 32 Philosophy (with cross-referral to History)

a. Overview

Philosophy (including History of Science) has seen a significant flourishing of research activity since RAE08 that is due in large part to the increased focus given to research through five Centres that cover the unit's core strengths: Aesthetics, Ethics and Metaethics, History and Philosophy of Science, Metaphysics and Mind, and Philosophy of Religion. These act as a locus for research animation and support, including grant application support, Centre-specific seminar series (featuring both external and internal speakers, including postgraduates), workshop and conference organization and website management. Research that falls between the above areas is supported at the School level and inter-Centre collaborations are encouraged. There are also regular cross-Centre seminars featuring visiting speakers, a series of seminars with the Inter-Disciplinary Ethics Applied Centre for Excellence in Teaching and Learning (IDEA CETL) and regular postgraduate work-in-progress seminars run by the postgraduates themselves. An annual, externally funded lecture series (the 'Mangoletsi Lectures') attracts audience members from across and outwith the institution (recent speakers include John Dupré, Katherine Hawley, Dominic McIver Lopes and Peter van Inwagen), as do particular events such as the 'C. L. Oakley Memorial Lecture on Medicine and the Arts' given by Ian Hacking in 2013.

As a result of this enhanced focus and support, the period since RAE08 has seen

- a major increase in grant applications with total income of over £1.5 million (from an awards total of over £2.8 million);
- the maturation of Early Career Researchers with the resultant publication of a series of significant (and in some cases, award-winning) publications;
- a number of major editorships taken up by senior researchers;
- the inauguration of two new research centres in aesthetics, and philosophy of religion
- a significant increase in postdoctoral activity, and a rise in the number of visiting researchers in general;
- improved postgraduate placement with a number of PhD students obtaining international positions.

b. Research strategy

The overall strategy of the unit has focussed on maintaining its international leadership in the above areas by supporting the extant Centres, helping to further develop the Centre for Ethics and Meta-ethics and initiating the Centre for Philosophy of Religion in the context of strong and widening research relationships with Theology and Religious Studies. Centre–wide strategic research aims remain: to a) maintain and bring to a productive conclusion major research projects; b) initiate and develop applications for further significant grant awards targeted in specific areas; and c) further expand our international research profile through publications in leading journals and books, as well as through editorships, major conference presentations etc.

With regard to a), Centre-specific projects undertaken since RAE2008 include: *Centre for Aesthetics*: 'Method in Philosophical Aesthetics' (with the School of Philosophy, Nottingham; AHRC);

Centre for HPS: 'Owning and Disowning Invention' (with the Department of Historical Studies, Bristol; see also Impact Case Study 2); 'Does the Teaching of Mendelian Concepts Promote Genetic Determinism?' (Faraday Institute for Science and Religion);

Centre for Metaphysics and Mind: 'Metaphysical Indeterminacy' (AHRC; British Academy); The Nature of Representation (European Research Council).

A number of projects associated with personal awards have also been completed, including 'Actions as Processes (**Steward**); 'The Cognitive Role of Indeterminacy' (**Williams**); 'Creative Character: Creative Virtue, Vices and Fulfilment' (**Kieran**); 'A Critical Edition of W. F. R. Weldon's Unpublished *Theory of Inheritance* Manuscript' (**Radick**); 'The Lewd, the Rude and the Nasty: A Study of Thick Concepts' (**Vayrynen**); 'The Metaphysics of Time' (**Cameron**); 'Structural Realism' (French); 'Tractarian Metaphysics' (**Turner**).

As for b), there has been a significant increase in total research grant awards, reaching £2,831,423 in grant awarded value over the period (a significant improvement on £300,000 obtained for the RAE08 period), due to Centre-specific critical support and focussed reviews of application drafts, together with general support from the University, via the 'Research and Innovation Service' and the Faculty of Arts, through the 'Leeds Humanities Research Institute'





(LHRI), covering costing provision and pump-priming funds.

Finally, regarding, c), the period has seen the academic maturation of 'Early Career Researchers' in particular, with a consequent significant improvement in the number and quality of outputs. Senior colleagues have also taken on the editorships of a range of leading journals and book series in both philosophy and history and philosophy of science. A number of significant monographs have also been produced, including works in history of science (Jones and Stark), history of technology (Gooday), philosophy of action and free will (Steward; the subject of a special issue of *Inquiry*) and meta-ethics (Vayrynen).

In accordance with the above aims, the Centres' strategic agendas have generated specific developments that include the following:

Centre for Aesthetics

Leeds is now ranked equal first in the world for Philosophy of Art, according to the 2011 *Philosophical Gourmet Report*, representing a significant improvement since RAE08. In addition to the AHRC funded project 'Method in Philosophical Aesthetics: the Challenge from the Sciences', the Centre has also attracted competitively awarded pump-priming funding from the LHRI for its work on experimental aesthetics. This supported a workshop on philosophical and experimental aesthetics (March 2012), bringing together philosophers from Leeds with leading figures from psychology (Chris McManus) and experimental aesthetics (Hans Leder, Mario Pendalaere). It also led to a Marie Curie International Incoming Fellowship supporting a project that will examine the relationship between aesthetics, morality and language using both traditional philosophical tools and empirical methods from the cognitive sciences

The Centre has been prominent in supporting visiting fellowships of both internationally recognized scholars in the field such as Professor David Davies (McGill University), and early career researchers such as Sam Liao (Kansas State) and Mark Phelan (Lawrence University), associated with the above Marie Curie II Fellowship and AHRC project respectively. Workshops and conferences organised or supported by the Centre in addition to the above include: 'Experimental Aesthetics', University of Leeds, November 2009; 'Analysis and Explanation in Aesthetics', June 2010, University of Nottingham; 'The Imagination: Skeptical Challenges and Empirical Responses', February 2011, University of Leeds; 'Art, Aesthetics and the Sciences' (Graduate Workshop) University of Nottingham May 2011; 'Character, Appreciation and Value', and 'Philosophical and Experimental Aesthetics', March 2012, University of Leeds.

There are also plans to further develop work on the philosophical psychology of aesthetics, which will be related to continued research on the semantics of aesthetic adjectives, the mere exposure effect, and creativity. The Marie Curie II Fellowship will be used to help found an experimental aesthetics laboratory at Leeds. Research in normative aesthetics on topics such as 'Duties to Art' and 'Motivation in Aesthetics and Philosophy of Art' will also be pursued.

Centre for Ethics and Metaethics

Ranked joint 2nd in the UK and joint 14th in the world in metaethics in the 2011 *Philosophical* Gourmet Report (one of only 4 ranked UK departments), the Centre's research agenda is focused on foundational questions regarding the relationship between values and reasons and their relationship to questions about normativity, rationality and morality. Some of this work has already been recognized in the form of external grants, such as Vayrynen's AHRC fellowship and FP7 Marie Curie International Reintegration Grant and Heuer's British Academy Mid-Career Award. A close relationship is maintained with the IDEA CETL, supporting the associated impact development (see Impact Case Study 1). The international conference 'Themes from the Ethics of Bernard Williams' (2009, with funding from the British Academy, the Analysis Trust and the Society for Applied Philosophy) was a major highlight and resulted in a significant collection: Luck, Value and Commitment: Themes from the Ethics of Bernard Williams, OUP 2012. CEM has also hosted a number of international workshops in the period: 'Values and Reasons' (2008), 'Deference and Responsibility' (May 2009), 'Naturalism: Ethical and Metaphysical' (2009), 'Value Concepts' (2010), 'Theoretical and Practical Reasons' (2010), 'Intentions' (2012) and 'Normative Disagreement' (2012). Most of these workshops include significant 'bridge building' elements with cognate areas, such as philosophy of action and mind ('Intentions'), and aesthetics and philosophy of language ('Value Concepts' and 'Normative Disagreement'). The intersection of ethics and metaethics with such areas is strongly supported, including active cross-attendance between CEM and CMM



seminars.

Recent appointments of colleagues with interests in value philosophy have helped CEM to achieve critical mass and support future grant applications and postgraduate recruitment. The consequent broadening of expertise is expected to lead to a longer menu of research prospects (as well as impact related activities). A visiting fellows scheme will be introduced (following the example of History and Philosophy of Science) which will help raise the visibility of CEM internationally. The development of the Centre for Medical Humanities offers further opportunities for collaboration with the IDEA CETL on inter-disciplinary projects regarding medical ethics, and confidentiality.

Centre for History and Philosophy of Science

In the philosophy of science and philosophy of physics, Leeds maintains a *Gourmet Report* ranking of joint 15th in the world for the latter and joint 24th for the former. It is now also ranked for the first time in philosophy of biology. Major areas of research continue to cover realism, (including structural realism), and the relationship between metaphysics and science, with increased interaction between the Centre and CMM. Future research will focus on explanation, the role of mathematics in science and the inter-relationships between the philosophy of science and history of science (again in the context of the realism debate for example) and also the philosophy of art, offering opportunities for collaboration with the Centre for Aesthetics. Recent workshops include: 'Objects, Kinds and Mechanisms in Biology' (April 2012), 'Objects and Symmetries in Physics' (August 2012) and 'What Can the Philosophy of Science do for the Philosophy of Art (and vice versa)?' (October 2012), with the latter leading to further interaction with the Centre for Aesthetics.

In the history of science, the integration of knowledge, practices and contexts is pursued through such topics as intellectual property in science and technology, electrical technologies, genetics, print communication in the sciences, and science and religion. Crucial support has been provided by the Centre's Museum of History of Science, Technology and Medicine (HSTM), which now has a full-time Director who, along with a staff-student taskforce, has pursued research into the University's scientific collections, mounted several exhibitions, and contributed to international museological conferences. Building on the 'Owning and Disowning Invention' project, the AHRCfunded project 'Innovating in Combat: Telecommunications and Intellectual Property in the First World War' (Gooday), supports a postdoctoral researcher (Bruton) who is working closelv with UK Museums and Archives. A two-year project on genetics and pedagogy ('Does the Teaching of Mendelian Concepts Promote Genetic Determinism?'). supported by the 'Uses and Abuses of Biology' programme of the Faraday Institute will feed directly into Radick's book on the Mendelian turn in biology. A Faculty-funded theme 'Cultures of Ownership' has also been developed, which will underpin future research plans in the history of genetics (Radick, Jamieson), technology (Gooday, Jones, Wilson), and scientific authorship (Topham), building on the 'Owning and Disowning Invention' project, the White Rose Intellectual Property in the Biosciences (IPBio) Project and the wider IPBio Network. This theme features in proposed collaborations with the interdisciplinary Centre for the Comparative History of Print (directed by **Topham**). Future plans also include an AHRC-funded collaborative project with colleagues at Oxford and elsewhere on 'Constructing Scientific Communities: Citizen Science in the 19th and 21st Centuries'. Major conferences include: 'The Return of the Environment in Concepts of Heredity, Development and Evolution' (May 2008), 'New Perspectives on the Modern Synthesis' (May 2009), 'Managing Knowledge in the Technosciences' (July 2010), co-located with a symposium and summer school on Intellectual Property and the Biosciences, 'The Skilful Naturalist: Experiment and Theorizing in Early Modern Science' (July 2011) and 'Genetics, Genomics and Changing Understandings of Nature/Nurture: An Interdisciplinary Workshop' (May 2013). Finally, the Centre is a founding member of the 'Integrated HPS' network, which holds annual meetings around the UK and will host the 2014 conference.

Centre for Metaphysics and Mind

The Centre's primary research activities cover metaphysics, philosophy of mind and action, as well as philosophy of logic, language, mathematics and formal epistemology. In metaphysics, Leeds is ranked joint 2ⁿ in the UK and joint 10th in the world in the *Philosophical Gourmet Report*. It is now also ranked for the first time in philosophy of mathematics (with connections to HPS). A major AHRC award ('Metaphysical Indeterminacy') has funded a number of distinguished visitors



(including Matti Eklund, Kit Fine, John Hawthorne, Katherine Hawley, Agustin Rayo and Ted Sider), as well as an extended series of 6 workshops over 3 years, culminating in a major international conference in December 2013 (with speakers including Tom Dougherty, Delia Graff Fara, Agustin Rayo and Miriam Schoenfeld). Major workshops and conferences include 'Metaphysics of Theism' (2009), 'Knowledge and Agency' (2010; held jointly with the Centre for the Study of Mind in Nature, Oslo), and 'The History of Necessity' (Spring 2012). In the philosophy of mind and action CMM has attracted two BARDA awards ('The Cognitive Role of Indeterminacy' and 'Actions as Processes'), and hosted an international conference on philosophy of action ('Actions as Processes', 2011). Philosophy of logic, language, and mathematics is an emerging area of strength with Leeds ranked in Philosophy of Language for the first time as joint 21st in the world and joint 4th in the UK in the Gourmet Report. The Centre has recently attracted a major ERC award ('The Nature of Representation') which funds two postdoctoral fellows, two PhD students, a programme of international visitors (including Liz Camp, Harty Field, Wolfgang Schwarz and others) as well as a series of workshops. A major international conference on the work of Dummett was co-hosted with the School of Mathematics in 2013 (with speakers including Imogen Dickie, Ian Rumfitt and Crispin Wright). A recent early career appointment (Santorio) with expertise in linguistics-driven philosophy of language has expanded our research in this area, with the support of a Marie Curie Reintegration Award. As a result, a workshop bringing together Early Career Researchers in the philosophy of language will be held in early 2014 and, later in the year, a major conference on probability and modality is planned. A workshop on 'The Motivations for Naïve Realism' is also planned for January 2014, funded by the Mind Association Major Conference Grant. The Centre has also attracted individual research grants from the BA ('The Metaphysics of Time') and the Mind Association ('Tractarian Metaphysics') and individual grant applications in perception (Logue), metaphysics (Turner), and the overlap between metaphysics and ethics (Barnes), as well as a collaborative project in metaphysics (Barnes, Cameron, Turner) have also been successful. Finally, strong research links exist with both CEM (on naturalness, explanation, and moral language) and HPS (on fundamentality and probability).

Centre for Philosophy of Religion

The Centre for Philosophy of Religion was inaugurated in 2012 and hosts fortnightly research seminars, postgraduate presentations and work in progress talks. It also provides support for individual and collaborative grant applications and hosts a Cambridge University Press funded PhD scholarship, associated with the Centre edited journal *Religious Studies*. The significance of research in this area for the School as a whole is indicated by the recent appointment of a new Chair in Philosophy of Religion (one of only three in the UK), which offers the opportunity for further interdisciplinary collaboration between Philosophy and Religious Studies. Together with the appointment of colleagues in Religious Studies who have backgrounds in philosophy, this marks a significant investment in cross-disciplinary research. An international conference will be held in 2014 to mark 50 years of *Religious Studies* and the Centre has joined the Centre for Aesthetics in applying for funding for a conference on 'Aesthetics and Philosophy of Religion'. Strong links also exist with the Centre for HPS, where John Brookes, a leading scholar in the area of 'Science and Religion', has a Visiting Professorship. The Centre also intends to develop a distance learning MA that will support PhD applications in this area.

Inter-Disciplinary Ethics Applied Centre for Excellence in Teaching and Learning (IDEA CETL)

Although a separate academic unit within the Faculty, the IDEA CETL's research strategy and environment is closely related to that of the School. The Director of the CETL is a member of Philosophy and good communication is maintained between the relevant research committees. There is particularly strong interaction with CEM and the CETL holds a regular inter-disciplinary research seminar in which colleagues from Philosophy/HPS also participate. It organises regular workshops, on such topics as 'Just Prices', 'Rights', 'Research Ethics' and has hosted the national conference of the Society for Applied Philosophy (2009), a major national conference on Privacy and Confidentiality (2010), an international conference on security, privacy and liberty (2012), a cohosted conference on 'Privacy and Confidentiality: Exploring the ethical issues arising for the Professions' featuring Baroness Onora O'Neill as keynote speaker, and a major international conference on Happiness (2012). It also supervises PhD students in areas such as Practical



Deliberation in Engineering, The Science of Well-Being, and Terrorism and Just War Theory.The CETL also strongly supports research impact activities and in the context of a University wide focus on cross-disciplinary research, supports such work in business, computing, engineering, medical and museum ethics. Together with the Centre for HPS, the CETL has been critically involved in the development of the Centre of Medical Humanities, which represents an interdisciplinary collaboration between the Faculties of Arts and Medicine and Health.

c. People, including:

i. Staffing strategy and staff development

Strategy The overall strategy has been to focus on building and sustaining critical research mass within the above Centres, while also ensuring succession planning and leadership development where appropriate. In that context, and with a view to ensuring appropriate balance between 'senior' and 'early career' posts, a series of new appointments have been made, including a Professorial appointment in Philosophy and Religion, an early career colleague in philosophy of language and a mid-career member of staff in moral psychology and political philosophy as well as colleagues in Religious Studies with backgrounds in philosophy.

Support All new staff are assigned mentors to support their induction into School procedures and standard University probation processes are applied. Further mentoring and training provision is available through the University's *Staff and Departmental Development Unit* (SDDU) and a *Next Generation Researcher* programme has been instigated, for the training and development of researchers. All members of staff have yearly review meetings as part of the institution's *Staff Review and Development Scheme*, as well as separate meetings with Centre Directors to discuss research matters. Early career researchers are supported through the above processes and specifically through lighter teaching and administrative workloads. They are also encouraged to contribute to the relevant Centre 'work-in-progress' seminars and have specific meetings with the appropriate Centre Director to discuss any research-related issues.

Research Leave All staff are covered by a research leave policy that provides a 1 semester sabbatical after 6 semesters of normal service. New staff and especially early career colleagues have benefited from accelerated consideration for such leave (after only 2-3 semesters, depending on the circumstances). All staff are also encouraged to apply for external funding to supplement such leave and five have benefitted from the competitive Faculty of Arts leave scheme with awards ranging from additional semesters leave to tutorial teaching relief. Early career staff, in particular, are given priority with regard to applications to the Faculty leave scheme. A 'teaching relief' scheme has provided project specific support by funding postgraduate tutors and relevant support has also been provided for the writing of grant applications etc.

Promotion Progression and promotion procedures are as laid down at the University level and all staff are appropriately supported in applying for promotion. Female staff in particular receive support via an informal, internal network at all career stages. Regular meetings are held with fixed-term and part-time staff to ensure that any progression concerns or issues are dealt with in a timely and supportive manner. The School's Equality Officer plays an active and engaged role in all job appointments, and is available to discuss any equality issues that may arise subsequently.

Postdoctoral Staff There has been a significant growth in postdoctoral 'presence' since RAE2008, with examples including: Stathis Arapostathis ('Owning and Disowning Invention', HPS); Elizabeth Bruton ('Innovating in Combat'; HPS); Jennifer Carr ('The Nature of Representation', CMM); Mike Finn (AHRC Cultural Engagement project, HPS); Rachel Goodman ('The Nature of Representation', CMM), Annie Jamieson ('Genetics Pedagogies Project', HPS); Claire Jones (Director of the University's History of Science Museum, HPS); Gelson Liston ('Carnap and Quine', supported by CAPES, Brazil; HPS); Margaret Moore ('Method in philosophical aesthetics: the challenge from the sciences', Aesthetics); Jamie Stark (AHRC Knowledge Transfer Fellow, 'The Role of Patents in the History of Medical Technologies', with the Thackray Medical Museum, HPS). Non-funded postdoctoral fellows include Kersten Hall ('Astbury's Contribution to Molecular Biology') and Fern Elsdon-Baker. The IDEA-CETL also hosts a Research Assistant in Medical Ethics. With regard to these colleagues, the UoA has followed national standards (as set down in the Concordat) and has gone beyond University of Leeds procedures with regard to research training and development, by integrating them fully into Centre research planning and strategy, including the regular grant application peer-review sessions, as well as in AHRC KT and 'Follow-On' funding schemes and as Co-Investigators in research funding applications in general. ii. **Research students**



Funding Leeds postgraduate research students (PGR) have been funded from a number of sources during the period since RAE08, including: AHRC funded studentships via the Block Grant Partnership (8), AHRC CDAs (19), University (8) and School scholarships (22) including Graduate Teaching Assistantships, and various international institutions (5). They perform strongly in specific national funding competitions such as the Darwin Trust Award and the Jacobsen Award and funding for HPS postgraduates is available through the White Rose ESRC Doctoral Training Centre, Science and Technology Studies Network. IDEA-CETL PGR students have also received scholarships from the Waterside Trust/Stichting Benevolentia Foundation. The recently successful White Rose Consortium bid for an AHRC Doctoral Training Partnership in Arts and Humanities (between Leeds, Sheffield and York) will provide funding of over £19 million to recruit and train more than 300 fully funded doctoral students over 5 years.

All such opportunities are advertised nationally and internationally (including via targeted 'mailshots') as part of a coordinated strategy to support and enhance postgraduate recruitment, which includes University-wide open days and various post-acceptance activities, as well as invitations to visit the School. All candidates with the appropriate grade average are sent a standard recruitment letter, with monitoring from the Equality Officer. A 'climate survey' is being undertaken to help underpin actions designed to support and increase applications from women. The recently refocused MA by Research programme is also expected to help improve conversion rates. There are regular visits from overseas postgraduate students and international recruitment has drawn in students from Argentina, Canada, Germany, Greece, Italy, Mexico, and Thailand. Building on international collaborations at School, Faculty and University level and developing existing links (EU, e.g. Copenhagen and non-EU, e.g. Chinese University of Hong Kong) also form part of the PGR recruitment strategy.

Support The University of Leeds operates a monitoring and support mechanism constructed around the Postgraduate Development Record (PDR), which is a web-based system for recording meetings with supervisors, training, and tracking postgraduate student progress. Each PGR student receives a minimum of 10 supervisory sessions with his/her supervisor per annum and agrees a training plan within one month of starting. Training and development falls within the University's Next Generation Researcher programme and is delivered by three faculty training hubs that work in collaboration with SDDU and other central services. There are regular reviews of progress built around but extending beyond a major transfer review at the end of the first year, involving the preparation of a body of work, a thesis plan and a meeting with a committee consisting of the relevant Postgraduate Tutor (Philosophy or HPS), the supervisor and another colleague with a relevant area of research interest. Joint supervision is encouraged where appropriate and research students are also assigned a pastoral advisor who provides further support and help beyond specific thesis related matters. Training and support is also provided via professional-preparation sessions on, e.g., preparing, presenting and publishing papers. Rehearsal sessions are organized for those students presenting at major conferences. Mock job talks and interviews are also arranged and the office of Postgraduate Employment Advisor has been instituted to provide specific careers advice. A recently introduced University policy on teaching is intended to ensure that PGR students get adequate teaching experience and individual staff mentors are assigned who observe classes and give feedback on performance and essay marking. In addition, PGR students may also be involved in the writing of grant applications. Those funded by CDAs are typically given the opportunity to develop a website and/or put on an exhibit and/or organize an archive etc. The HSTM Museum, a collaborative enterprise between staff and students, remains a major locus of research innovation and skills training in the history of science. Opportunities are also created for feedback from colleagues beyond the School (such as Anthony Taubman, Head of the IP Division, World Trade Organization and Lady Lisa Markham, patent attorney, at the IPBio workshop).

Seminars and Conferences Guaranteed funding for PGR students of £900 over the duration of their course is made available to support research expenses, including conferences and workshop attendance, as well as archive work (with a maximum set at £300 during their first year with further funding for exceptional circumstances). The support of their supervisor must be obtained for such requests, which are adjudicated by the Director of Postgraduate Studies. Leeds PGR students have presented their work at national and international venues, including Aarhus, Antwerp, Berlin, Bologna, Bristol, Budapest, Cambridge, Cleveland, Delft, Edinburgh, LSE, Montreal, Notre Dame, Oslo, Philadelphia, St. Andrews, Salt Lake City, Sheffield, Sussex, Sydney, Toronto, Western



Michigan, and Yale. They also regularly give papers at research seminars and weekly work-inprogress seminars and postgraduate-only discussion sessions are arranged with selected visiting speakers. In addition to a postgraduate run research seminar (which has funding for visiting postgraduate speakers), and participation in many of the School's numerous reading groups, Leeds PGR students also organize an annual postgraduate conference with invited external speakers. They are also significantly involved in the major research projects coordinated by the various Centres, including 'Metaphysical Indeterminacy' and 'Method in Philosophical Aesthetics' (for which a number of postgraduate workshops were arranged). PGR students in HPS have organised workshops on the Leeds Library, on 'Objects and Symmetries' and on 'the Wakefield Asylum', while those in the IDEA-CETL have also organised conferences on 'Privacy and Confidentiality' and 'Happiness'.

Publications Leeds PGR students have published (both individually and with members of staff) in a range of journals including: Australasian Journal of Philosophy; British Journal of Aesthetics; British Journal for the History of Science; British Journal for the Philosophy of Science; British Medical Journal; Dutch Academic Journal of Philosophy; Ethical Theory and Moral Practice; Hume Studies; Library and Information History (edited special issue); Museums and Galleries History Group; Philosophical Studies; Social History of Medicine; Studies in History and Philosophy of Modern Physics.

External Activities They have also been Visiting Research Students at CUNY and the Northern Institute for Philosophy, Aberdeen among other institutions. Society roles include Website Officer and Chairman of the Outreach and Education Committee for the *British Society for the History of Science*. There is also increasing development of links between postgraduate research and external institutions, with nine postgraduates currently funded through CDAs with British Telecom, the NIAB and a range of museums. Several CETL research students have also been recruited from business and medicine.

Placement Since RAE08 postdoctoral positions and lectureships have been held by former Leeds PGR students at Aarhus, Aberdeen, Bradford, Calgary, Cambridge, Cork, Durham, Exeter, Hamburg, Kent, Leeds, Manchester, Paris, Pittsburgh, Qena, Rome, Stockholm, Sydney, UNAM, Utrecht, Valencia, Valparaiso, Warwick, Western Ontario, York (Canada) and York (UK). Other placements include museum postings, Director of HSTM Museum (Leeds), and an AHRC Knowledge Transfer Fellowship (Leeds). The Postgraduate Employment Advisor now plays a key role in supporting such job applications.

d. Income, infrastructure and facilities

Research Income As a result of the focused research strategy of both the Centres and the unit as a whole, together with the support offered by the administrative structures detailed below, there has been a significant rise in research income to £1,501,895 (amounting to around £50,000 per colleague). This is largely associated with the following major projects, among others: 'Does the Teaching of Mendelian Concepts Promote Genetic Determinism?' (Faraday Institute for Science and Religion; £48,362); (Innovating in Combat: Telecommunications and Intellectual Property in the First World War' (AHRC; £36,976); 'Metaphysical Indeterminacy' (AHRC and the British Academy; £115,494); 'Method in Philosophical Aesthetics' (AHRC; £284,094 in overall research income for Leeds); 'The Nature of Representation' (European Research Council; £78,649); and 'Owning and Disowning Invention', (£233,553). Income associated with personal awards includes: Cameron, 'The Metaphysics of Time' (BA Mid-Career Award; £76,782); French, 'Physical Structuralism' (Leverhulme Major Research Scholarship; £83,441); Kieran, 'Creative Character: Creative Virtue, Vices and Fulfilment' (Leverhulme Research Fellowship; £39,609); Steward, 'Actions as Processes' (British Academy Research Development Awards; £54,632); Turner, 'Tractarian Metaphysics' (Mind Fellowship; £17,691); Vayrynen, 'The Lewd, the Rude and the Nasty' (AHRC Early Career Award; £64,813) and 'Thick Value Concepts' (Marie Curie International Reintegration Grant; £78,017); and Williams, 'The Cognitive Role of Indeterminacy' (British Academy Research Development Awards; £84,847). Recent awards also include: Heuer, 'The Moral Significance of Intentions' (BA Mid-Career Award; total award: £120,264); Radick, 'The Mendelian Turn in Biology: How it Happened, Why it Matters, and What Might Have Been' (BA Mid-Career Award; total award: £123,295).

Research funding associated with the IDEA CETL includes: 'Promoting Integrity in Organisations' (£46,123; Institute for Chartered Accountants in England and Wales); informed consent for research on sick and pre-term neonates (£42,000, funding a 0.4 FTE RA); AHRC



Network grant for research on ethics in museums (c£4,000, with Centre for Museum Studies, Leicester). Impact grants include an Ingenious grant from the Royal Academy of Engineering (£40,000).

Funding for conferences and workshops across all Centres has also been received from numerous sources such as the Analysis Trust, British Academy, British Society for the Philosophy of Science, Mind Association, Society for Applied Philosophy, and others.

Research Administration Philosophy (including History of Science) is now an integrated part of the School of Philosophy, Religion and History of Science, within the Faculty of Arts. Faculty research support is administered by the Pro-Dean for Research who chairs the Faculty Research and Innovation Committee, on which the School Director of Research and Innovation (DoRI) also sits. Grant applications and income are administered and supported by the Faculty level Leeds Humanities Research Institute which also offers pump-priming funding, supports post-doctoral research and graduate research groups, organises seminars and encourages interdisciplinary research in line with the University's overall aims. The University's Research and Innovation Service likewise provides generic support for grant applications, offers specific research training and funds research fellowships. Focused support is also provided by the relevant Centres, especially for ECRs, via close analysis and discussion of grant proposals. Research activities within the School are overseen by the DoRI who sits on the School Management Group (SMG), which ensures that specific strategic aims are prioritised and an appropriate balance achieved between the various competing demands on resources in the context of the School's scholarly, operational and organisational infrastructure. Impact development is supported and managed by the School's Director of Impact (also a member of SMG), together with the Faculty Director of Impact (also a School member for 2006-11). Research issues are dealt with by the School's Research and Innovation Committee (SRIC), which is answerable to the SMG, and sets the research strategy, reviews requests for research support and considers postdoctoral and other research oriented applications. As noted above, subject specific research support is devolved to the relevant Centres and Centre Directors are line managed by the DoRI and also sit on the SRIC.

Infrastructure Scholarly infrastructure includes excellent library facilities with extensive collections in both philosophy and history of science, including the archives of the British Society for the History of Science and the British Society for the Philosophy of Science. IT provision extends to dedicated research postgraduate 'clusters', and dedicated space for workshops, seminars etc. at the LHRI and elsewhere. A novel set of resources is also offered by the HSTM Museum ranging from historical matériel and apparatus to textual resources and digitized items on its website. There has been specific support at both University and School level for the museum (although over half of its income of £10,267 has come from external sources, with a further £50,000 requested from the Heritage Lottery Fund) as well as for local research clusters including those working on Intellectual Property, the history of medical technology and history of print communication.

e. Collaboration or contribution to the discipline or research base

Significant international leadership across the disciplines of Philosophy and History of Science has been manifested in the number and variety of leading journal editorships assumed, including: *British Journal for the Philosophy of Science* (French, Co-Editor), *Philosophical Perspectives* (Turner), *Philosophy Compass* (Barnes), *Religious Studies* (LePoidevin), *Studies in History and Philosophy of Biological and Biomedical Sciences* (Radick) and *Thought* (Divers). Further editorial support includes *British Journal of Aesthetics* (Meskin, Editorial Consultant), *Ergo* (Williams, section editor philosophy of language), *Journal of Applied Philosophy* (Lang, Associate Editor) *Philosophy Compass* (Cameron, subject editor, metaphysics); *Philosophical Explorations* (Steward, Associate Editor), *Semantics and Pragmatics* (Williams, editorial board) *Thought* (Cameron, subject editor, metaphysics; McGonigal, subject editor, philosophy of mind). Colleagues have also assumed the editorships of book series including, the *BSPR Monograph Series in Philosophy of Religion*, Ashgate (LePoidevin, Advisory Board), *Continuum Studies in Philosophy of Religion*, Continuum (Wynn, Advisory Board), *New Directions in Philosophy of Science*, Palgrave MacMillan (French, Editor-in-Chief) and *Science in Culture in the Nineteenth Century*, Pickering & Chatto (Topham, Advisory Board).

Further evidence of contribution to the discipline is manifested through involvement in the peer review processes of national and international funding bodies, such as the AHRC, Israeli Science Foundation, Italian National Agency for the Evaluation of the University System and Research, Netherlands Organisation for Scientific Research, South African National Research



Foundation and the US National Science Foundation, as well as in RAE08 (LePoidevin). Colleagues also sit on a wide range of Academic Boards including the AHRC advisory board on 'Science in Culture' Emerging Theme (Kieran); AHRC Peer Review College (French, Gooday, Kieran): American Society for Aesthetics (Meskin, Executive Committee, 2013 Annual Meeting Program Chair); Analysis Committee (Barnes; LePoidevin; Williams); Aristotelian Society (Steward, Executive Committee); Arizona Workshop in Normative Ethics (Heuer, Program Committee); Bellingham Summer Philosophy Conference (Barnes, 2011 co-organizer; Turner 2009 co-organizer); British Society of Aesthetics (Meskin, Treasurer); British Society for Ethical Theory (Heuer, Lang, Vayrynen, Executive Committee); British Society for the History of Science (Radick, Vice-President 2013; Communications Coordination Committee); British Society for the Philosophy of Religion (LePoidevin, President 2009-11); European Philosophy of Action Network (Steward, member); European Philosophy of Science Association (French, Standing Committee); International Society for the History, Philosophy and Social Studies of Biology (Radick, Council); Philosophy of Science Association (French, Program Committee 2012); Royal Institute of Philosophy (LePoidevin, Executive Committee, Council); Society for Applied Philosophy (Megone, Executive Committee); Wisconsin Metaethics Workshop (Vayrynen, Program Committee).

Invitations to present at major national and international conferences include the Eastern, Central and Pacific Division Meetings of the American Philosophical Association and the Joint Session of the Aristotelian Society and the Mind Association, as well as at area-specific conferences such as the American Society of Aesthetics, British Society for Ethical Theory, British Society for the Philosophy of Religion, British Society for the Philosophy of Science, European Society for Philosophy of Religion, History of Science Society, Philosophy of Science Association. Other major conferences include 'Ethics and Explanation', 'Evaluative Perception', 'Philosophy in the Forest', 'The Gettier Problem at 50' and 'Thick Concepts'. Colleagues have also served as Visiting Research Scholars and Fellows at the Australian National University (**McGonigal**; **Williams**); Universities of Cornell (**McGonigal**); Durham (**LePoidevin**; **Saatsi**); Harvard (**Heuer**); New York (**Smith**; **Williams**), Oslo (**Steward**); Rhodes (**Lang**); Sydney (**Saatsi**); and Toronto (**French**), as well as the Max Planck Institute, Berlin (**Radick**). They have served as external PhD examiners at institutions including: Aarhus, Australian National University, Birmingham, Bristol, Cambridge, Cape Town, Durham, Edinburgh, Kent, Lausanne, LSE, Manchester, Miami, Oxford, Reading, Rome, Royal Holloway, Sheffield, UCL, York and Warwick.

Major collaborative enterprises that have been developed in the period since RAE08 include: *Centre for Aesthetics*: 'Method in Philosophical Aesthetics: the Challenge from the Sciences', jointly held with the University of Nottingham, which has supported a postdoctoral fellow and a PhD student at Leeds, as well as an 'Experimental Aesthetics Workshop' at Leeds together with two major conferences: 'The State of Aesthetics', June 2011, Institute of Philosophy, London and 'Philosophical Aesthetics and the Sciences of Art?' (Royal Institute of Philosophy Conference) June 2012, University of Leeds/Leeds City Art Gallery. The Centre also plans to further develop its work on the philosophical psychology of aesthetics and to cultivate cross-disciplinary links and collaborations, in particular with psychologists at the Institute of Psychological Sciences.

Centre for HPS: collaborative research has been established with various non-HE institutions, both local (Leeds Library, Thackray Museum) and national (Archives of Institution of Engineering & Technology, BT Archives, National Institute for Agricultural Botany, National Maritime Museum, Oxford Museum of the History of Science). Such partnerships are also supported by the HSTM Museum.

Centre for Metaphysics and Mind: the Centre will foster further collaborative research efforts, with the LOGOS centre in Barcelona (building on the 'Vagueness in physics, metaphysics and metametaphysics' and the 'The Makings of Truth' projects) and with Hamburg, via grant applications such as 'Ontology After Quine'.

IDEA CETL: the Centre works closely with the UK Inter-Professional Group, the ICAEW, Institute for Engineering and Technology, Royal Academy of Engineering, Institute and Faculty of Actuaries, and Chartered Institute of Insurance, as well as with organisations such as the National Nuclear Laboratory, leading to research on the development of good judgement and practical wisdom in professional contexts (see case study 1).

Finally, external honours include the 2010 Levinson Prize of the History of Science Society (**Radick**) and the Oxford Studies in Metaphysics Younger Scholar Prize (**Turner**).