

Job Title:	Assistant Professor or Associate Professor
Department:	Data Management
Faculty:	MRC Unit The Gambia
Location:	Fajara, The Gambia
FTE:	1.0
Grade:	Assistant Professor Grade 7 or Associate Professor Grade 8
Accountable to:	Unit Director
Job Summary:	The new Data Science cluster will translate the academic work into tangible e-health and AI public health applications. A key role of Head of Data Science will be to establish the Unit as a regional centre of excellence and expand the funding streams of the current departments.

## **GENERAL INFORMATION**

## The London School of Hygiene & Tropical Medicine

The London School of Hygiene & Tropical Medicine is a world-leading centre for research and postgraduate education in public and global health. Our mission is to improve health and health equity in the UK and worldwide; working in partnership to achieve excellence in public and global health research, education and translation of knowledge into policy and practice.

Founded in 1899, the School has expanded in recent years at its two main sites on Keppel Street and Tavistock Place. Our staff, students and alumni work in more than 150 countries in government, academia, international agencies and health services.

Research income has grown to more than £180 million per year from national and international funding sources including UK government and research councils, the European Union, the Wellcome Trust, Gates Foundation and other philanthropic sources.

Our diverse research talents, skills and experience, underpin our position as a leader in public and global health. These range from the molecular to the global, the theoretical to the applied, the analytical to the political. Our staff are conducting research in more than 100 countries.

We have 3,300 staff based all around the world with core hubs in London and at the MRC Units in The Gambia and Uganda, which joined LSHTM in February 2018. Our outstanding, diverse and committed staff make an impact where it is most needed - deploying research in real time in response to crises, developing innovative programmes for major health threats, or training the next generations of public and global health leaders and researchers.

Working in partnership is central to achieving our mission. Our strategic collaborations in the UK and across high-, middle- and low-income countries deliver health and socioeconomic benefits across the world, especially in the most disadvantaged communities.

LSHTM is also a member of the M8 Alliance of Academic Health Centers, Universities and National Academies, the Association of Schools of Public Health in the European Region, and the Consortium of Universities for Global Health.

We deliver research-led educational programmes to future health leaders, managers and researchers across the world. We have more than 1,200 face-to-face Master's and Doctoral students, 3,000 studying by distance learning, and 1,000 each year on short courses and continuous professional development. Our free online courses are studied by more than 70,000 participants globally.

LSHTM performs strongly in various global university league tables. In the 2019 CWTS Leiden Ranking LSHTM is ranked the UK's top university for the proportion of academic research with women listed as authors, first in Europe for publishing open access research, and first in Europe and eighth in the world for research impact in sciences (for the proportion of its total publications ranking in the top 10% of most cited research).

In the US News Best Global Universities Ranking 2019, we ranked ninth in the UK overall and 13th in the world in the fields of social sciences and public health. We ranked 27th for medicine in the 2019 QS World University Rankings.

In 2017, the inaugural Center for World University Rankings by Subject placed LSHTM first in the world for tropical medicine research, second for parasitology and seventh for infectious diseases, public, environment and occupational health, and social sciences and biomedical.

LSHTM was named University of the Year 2016 by Times Higher Education and awarded a Queen's Anniversary Prize for Higher and Further Education in 2017 in recognition of our response to the 2014 Ebola epidemic in West Africa. LSHTM does not appear in the Times Higher Education World University Rankings as universities are excluded if they do not teach undergraduates.

We seek to foster and sustain a creative and supportive working environment based upon an ethos of respect and rigorous scientific enquiry. We embrace and value the diversity of our staff and student population and seek to promote equality as an essential element in contribution to improving health worldwide.

LSHTM is one of around 20 specialist institutions that receive institution specific funding from the Office for Students (OfS). This funding recognises the additional costs that LSHTM incurs because of its unique range of teaching, specialist facilities, and the scale of its contributions to national and international agencies.

#### FACULTY INFORMATION

MRC Unit The Gambia (MRCG) at the London School of Hygiene and Tropical Medicine is a leading research centre in sub-Saharan Africa. Research is carried out by three major Research Themes (Disease Control & Elimination; Vaccines & Immunity; and Nutrition & Planetary Health) that benefit from the core-supported strategic platforms and of the research services. Disease Control & Elimination investigates the interactions between hosts, pathogens and vectors; and evaluates interventions aimed at interrupting transmission and/or reducing the burden of diseases. Research is multidisciplinary and include a large epidemiological component complemented by social sciences and combined with strong laboratory and genomics support. Vaccines & Immunity studies the ontogeny of immunity as a baseline to inform the design of vaccines and maximise their impact. It hosts a portfolio of Phase 1-4 clinical trials of existing and novel vaccines and employs cuttingedge system biology methods to understand host responses to infection and vaccination. The Theme is also working on tuberculosis by examining host/pathogen interactions in adults and children. Nutrition & Planetary Health aims to understand the pathophysiology of diet-disease interactions in order to accelerate the development of more effective next-generation community and clinical interventions, and to build a major new program in planetary health. Two Cross-Cutting Programs, i.e. Maternal & Neonatal Health and West Africa, involve all Themes, often in synergy, and underpin the Unit's commitment to carry out research to decrease the current high burden of maternal and neonatal mortality in sub-Saharan Africa and the Unit's vocation as a Regional Centre of Excellence for Research and Training. A third cross-cutting Program, Planetary Health, is currently being developed.

Research activities are supported by Research Services currently including two clusters, namely Laboratory Services and Research Governance & Support Services. The latter includes, among others, the departments of bioinformatics and statistics, and of data management & archives. We are planning to create, within the Research Services, a new cluster, i.e. Data Science, to accommodate the substantial growth of the Unit's capacity in information technology and data management. With the increased complexity of data sources, bioinformatics research and the emergence of e-health and artificial intelligence, the Data Science cluster is the ideal platform to reorganize the established departments as the key components in a data science centre of excellence. This cluster will translate the academic work into tangible e-health and Artificial Intelligence.

The Data Science cluster will include Data Architecture/Management/Analytics, Statistics and Computational Bioinformatics, Applications development and e-Health, all supported by 1,000 CPU capacity High Performance Computing (HPC). Besides supporting the Unit's research projects, the data science cluster will prototype new technologies to achieve improved health care within the constraints of the local health services. The new Data Science cluster will translate the academic work into tangible e-health and AI public health applications. Indeed, the Unit plans to leverage the use of AI algorithms in the large amount of health imaging data it has obtained to provide for more accurate diagnosis of diseases like TB, pneumonia and rheumatic heart disease. Research on climate change and its impacts on health will increasingly depend on a highly complex computational data analysis infrastructure. A key role of Head of Data Science will be to establish the Unit as a regional centre of excellence and expand the funding streams of the current departments.

The portfolio of duties outlined below will vary in accordance with the detailed expectations of the role (attached), which may be varied from time to time, and agreed at your annual Performance and Development Review (PDR).

#### **JOB DESCRIPTION**

#### Main Activities and Responsibilities

#### KNOWLEDGE GENERATION

#### **Assistant Professor**

- To deliver high quality research & scholarship in your field of study, individually and in collaboration with others, by applying for external grants/fellowships from good<sup>1</sup> research funders, and publishing peer-reviewed outputs as lead and co-author;
- 2. To contribute to research degree student supervision;
- To manage research grants and promote and ensure compliance with good practice in relation to the conduct of research, the ethics policy, and other relevant School policies;
- 4. To support the development of early-career researchers;
- 5. To contribute to establishing the Unit as a regional centre of excellence in Data Science.
- 6. To conduct research and be a key partner to advance the collective knowledge and skills of our Data Science practice across the Unit.
- 7. To lead data mining and collection procedures;
- 8. To work on challenging fundamental data science issues where necessary, and develop solutions;
- 9. To evaluate analytics and machine learning technologies;
- 10.To lead the application of data science methods to leverage new insights from legacy data;

## **Associate Professor**

- To deliver high quality research & scholarship in your field of study, individually and in collaboration with others, by developing and maintaining a research grant portfolio from good<sup>2</sup> research funders, publishing peer-reviewed outputs and generating and securing (where relevant) intellectual property;
- 2. To participate in research degree supervision and examination;
- 3. To lead and manage research teams and promote and ensure compliance of self and others with good practice in relation to the conduct of research, the ethics policy, and other relevant School policies;
- 4. To support the development of early-career researchers;
- 5. To contribute to establishing the Unit as a regional centre of excellence in Data Science
- 6. To conduct research and be a key partner to advance the collective knowledge and skills of our Data Science practice across the Unit.
- 7. To lead data mining and collection procedures;
- 8. To work on challenging fundamental data science issues where necessary, and develop solutions;
- 9. To evaluate analytics and machine learning technologies;
- 10. To lead the application of data science methods to leverage new insights from legacy data;

<sup>&</sup>lt;sup>1</sup> Good research funders are: Research Councils; Government Departments; NIHR; National and overseas charities recognised by HEFCE for QR; Overseas research councils or equivalent including NIH; EU; other agencies (eg NGOs, commercial companies) supporting commissioned research that is consistent with School's mission and meets School's cost recovery targets

<sup>&</sup>lt;sup>2</sup> Good research funders are: Research Councils; Government Departments; NIHR; National and overseas charities recognised by HEFCE for QR; Overseas research councils or equivalent including NIH; EU; other agencies (eg NGOs, commercial companies) supporting commissioned research that is consistent with School's mission and meets School's cost recovery targets Page 4 of 14

#### **EDUCATION**

## **Assistant Professor**

- To deliver high quality, research-informed teaching and assessment in relation to your specific subject and within the broader area covered by your department/disciplinary field;
- To contribute to the improvement of the quality of the School's education, by participating in the development of new and updated learning and, teaching materials or approaches, and/or improving assessment practices, and/or improving aspects of the student experience;
- To support educational leadership and management by active participation in selected aspects of the curriculum, as appropriate, and by collaborating with professional services staff, centrally and in the Faculty, in carrying out relevant administrative processes;
- 4. To develop capacity building projects relevant to Data Science;

## INTERNAL CONTRIBUTION

## **Assistant Professor**

- 1. To undertake activities that support the Department, Faculty or School, including Committee membership;
- 2. To participate in own PDR and undertake those of others;
- To coordinate the different departments within the cluster, i.e. Data Architecture/Management, Analytics, Statistics and Computational Bioinformatics, Application Developments and e-Health.
- 4. To manage the Data Science budget.

## **Associate Professor**

- To deliver high quality education and assessment in relation to your specific subject and within the broader area covered by your department and disciplinary field;
- To contribute to the improvement of the quality of the School's education, by participating in the development and review of new and updated learning and teaching materials or approaches, and/or improving assessment practices, and/or improving aspects of the student experience;
- To support educational leadership and management by active participation in Faculty and Programme or curriculum leadership roles, as appropriate, and by collaborating with professional services staff both centrally and in the Faculty office in carrying out relevant administrative processes;
- 4. To develop capacity building projects relevant to Data Science;

## **Associate Professor**

- To demonstrate good internal citizenship by undertaking PDRs and promoting staff development, and by participating in the recruitment, mentoring and support of more junior colleagues as appropriate;
- 2. To participate in the activities of School committees and undertake a leadership or administrative role at School/Faculty/Department level, as appropriate;
- To coordinate the different departments within the cluster, i.e. Data Architecture/Management, Analytics, Statistics and Computational Bioinformatics, Application Developments and e-Health
- 4. To manage the Data Science budget.

# ASSISTANT PROFESSOR OR ASSOCIATE PROFESSOR



## EXTERNAL CONTRIBUTION

#### **Assistant Professor**

- To demonstrate good external citizenship by contributing to the external academic community;
- 2. To promote knowledge translation and enterprise by participating in networks and activities that disseminate research-based knowledge beyond academia;

#### **PROFESSIONAL DEVELOPMENT & TRAINING**

#### **Assistant Professor**

- To keep up-to-date with the latest research/thinking in your academic field and with changes to pedagogic practice within the School and more generally;
- 2. To undertake and successfully complete the mandatory training required by the School appropriate to the role;

#### **Associate Professor**

- To demonstrate good external citizenship by linking with and supporting appropriate external organisations;
- To promote knowledge translation and enterprise by exploiting academic knowledge beyond academia;

## **Associate Professor**

- To keep up-to-date with the latest research/thinking in your academic field and with changes to pedagogic practice within the School and more generally;
- 2. To undertake and successfully complete the mandatory training required by the School appropriate to the role;

#### GENERAL

All academic staff are free within the law to question and test received wisdom, and put forward new ideas and controversial or unpopular opinions, to enable the School to engage in research and promote learning to the highest possible standards.

All staff at LSHTM are also expected to:

- 1. Act at all times in the School's best interests;
- 2. Treat School staff, students and visitors with courtesy and respect at all times;
- 3. Comply fully with School policies, procedures and administrative processes relevant to the role, including when acting as Principal Investigator, accepting academic, managerial, financing and ethical responsibility for a project;
- 4. Uphold and support the School's values (as set out in the School Strategy document);
- 5. Act as ambassadors for the School when hosting visitors or attending external events;
- 6. Define high performance and cloud computing requirements and policy;
- 7. Promote innovative ideas for long term impact on product development and placement;
- 8. Develop and utilise advanced analytics on the Unit's data assets on both structured and unstructured data;

The above list of duties is not exclusive or exhaustive and the role holder will be required to undertake such tasks as may reasonably be expected within the scope and grading of the role.

Role descriptions should be regularly reviewed to ensure they are an accurate representation of the role.

[FEB 2020]

## PERSON SPECIFICATION

This form lists the essential and desirable requirements needed by the post holder to be able to perform the job effectively.

Applicants will be shortlisted solely on the extent to which they meet these requirements.

## **ESSENTIAL CRITERIA:**

#### Assistant Professor

- 1. A doctoral degree in Statistics, Machine Learning, Mathematics, Computer Science or any other quantitative field.
- 2. Expertise in the core areas of data science, data mining, statistical modelling, data management and architecture, machine learning, web and mobile technologies and data strategies.
- Contributions as lead and co-author in peerreviewed outputs, as expected by the subject area/discipline in terms of types and volume of output; significant contributions to at least four outputs within the most recent 5 years which are at least internationally excellent<sup>3</sup>.
- 4. Proven ability to work independently, as well as collaboratively as part of a research team, and to meet research deadlines.
- 5. Evidence of excellent interpersonal skills, including ability to communicate effectively both orally and in writing.
- 6. Evidence of good organizational skills, including effective time management.

## **Associate Professor**

- 1. A doctoral degree in Statistics, Machine Learning, Mathematics, Computer Science or any other quantitative field.
- 2. Expertise in the core areas of data science, data mining, statistical modelling, data management and architecture, machine learning, web and mobile technologies and data strategies.
- A consistent and significant track record of attracting research grant income, including salary recovery, from major research funders (PI, co-PI or leadership within a large proposal such as work-package lead).
- 4. A track record of contributions as lead and coauthor to peer-reviewed outputs, as expected by the subject area/discipline in terms of types and volume of output; significant contributions to at least four outputs within the most recent 5 years that are at least internationally excellent<sup>4</sup>.
- Proven ability to work independently, as well as collaboratively as part of a research team, including experience of supervising and supporting junior researchers and nonacademic staff and proven ability to meet research deadlines.
- 6. Some experience of doctoral degree supervision.
- 7. Proven ability to build collaborative research relationships with external researchers and/or /institutions, or industry (where relevant).
- 8. Evidence of ability to deliver high quality research-informed teaching.
- 9. Evidence of excellent interpersonal skills, including the ability to communicate effectively both orally and in writing.

<sup>&</sup>lt;sup>3</sup> i.e. of a quality that would be rated highly in assessments of research quality such as those done by UK government, and in peer review processes used by funders

<sup>&</sup>lt;sup>4</sup> i.e. of a quality that would be rated highly in assessments of research quality such as those done by UK government, and in peer review processes used by funders

- Experience in using machine learning algorithms such as Regression Models, Random Forests, Naïve Bays or similar models.
- 8. Experience in leading high performing data analyst teams through the successful performance of advanced quantitative analyses of statistical modelling.
- Evidence of competence in the fundamentals of neural networks and Deep Learning models like Tensor Flow or Kera and the mechanics of Convolutional Neural networks.

## DESIRABLE CRITERIA

#### **Assistant Professor**

- 1. Experience of generating research income such as fellowships, and/or small project grants, and/or supporting grant applications of others.
- Some experience of supervising and supporting junior researchers and/or research degree students, and non-academic staff.
- 3. Some experience of undertaking teaching and assessment.
- 4. A teaching qualification.
- 5. Experience in the analysis of genetic data
- 6. Experience of working in capacity development in resource-limited settings.

- Experience in using machine learning algorithms such as Regression Models, Random Forests, Naïve Bays or similar models.
- 11. Experience in leading high performing data analyst teams through the successful performance of advanced quantitative analyses of statistical modelling.
- 12. Evidence of competence in the fundamentals of neural networks and Deep Learning models like Tensor Flow or Kera and the mechanics of Convolutional Neural networks.

#### **Associate Professor**

- 1. Teaching qualification (or Fellow/ Senior Fellow of HEA).
- 2. Experience of building and leading a research team.
- 3. Experience of innovation in teaching delivery and assessment and/or senior teaching management such as Programme Director, Exam Board member, Periodic Review panel member.
- 4. Experience of engagement with national and/or international research and/or policy advisory bodies.
- 5. Experience in the analysis of genetic data
- 6. Experience of working in capacity development in resource-limited settings

E-Essential: Requirement without which the job could not be done

D-Desirable: Requirements that would enable the candidate to perform the job well

#### SALARY AND CONDITIONS OF APPOINTMENT

The post is funded until July 2024 (3 years). The salary will be on the Academic scale, Grade 8 scale for Associate Professor in the range £56,473 - £64,817 and Grade 7 for Assistant Professor in the range of £46,704 - £54,948 per annum (inclusive of London Weighting). The post will be subject to the LSHTM terms and conditions of service. Annual leave entitlement is 30 working days per year, pro rata for part time staff. In addition to this there are discretionary "Director's Days". Membership of the Pension Scheme is available.

This post is based overseas and candidates will be required to email a copy of their passport (and visa if applicable) to HR prior to their interview and if appointed will be asked to send a notarised copy of their passport prior to their start date.

Applicants will be required to have the right to work in the country in which the post is based (or be eligible to apply for a suitable work visa).

## Academic Expectations: Assistant Professor

Examples of expected types of activities are listed; the selection of activities will vary from year to year and not all activities in each category would necessarily be done in any one year. The statement in each shaded heading summarises the general expectations for contributions in each category.

**Knowledge generation:** Independent researcher with excellent contributions, supporting less experienced researchers and with growing leadership skills

Research and scholarship

- Undertaking research individually and as part of a team
- Applying for external grants and/or fellowships primarily from 'good'<sup>5</sup> research funders; contributing to work packages or elements within a large proposal
- For those on without duration contracts, salary recovery from research grants (whether as direct costs or directly allocated costs) and consultancy, on a rolling 3 year average, of not less than around 40% of salary (for those with substantial teaching or managerial responsibilities), and up to around 80% of salary for those spending the majority of their time on research; fellowship holders will usually recover 100% of their FTE<sup>6</sup>; these salary recovery expectations will be applied flexibly, allowing for individual circumstances and the balance of activities
- Contributing to financial sustainability of research group including exploring opportunities for industry funding for laboratory research
- Contributing as lead and co-author in peer-reviewed outputs, as expected by the subject area/discipline in terms of types and volume of output; significant contributions to at least four outputs within the most recent 3 years which are at least internationally excellent<sup>6</sup>
- Engaging in other research dissemination including competitively selected oral and poster presentations at leading conferences, invited seminars and talks, and social media contributions such as twitter, blogs, webinars

Doctoral degree supervision

- Contributing to doctoral degree supervision<sup>7</sup> of at least one student, working within supervision team(s), supporting timely completions and peer-reviewed outputs
- Contributing to summative assessment processes (e.g. upgrade assessments, pre- and postviva support for students)

Research management, leadership and support

- Management of entire research process or significant parts of it, including line and team management, grants management, management of research partner relationships
- Supporting career development of research team members (eg informal mentoring, reviewing draft papers, advising on specific issues e.g. statistical issues, methodology)

Professional development referenced to RDF

 Courses and other development activities, including mid-level management and leadership development

Page 10 of 14

<sup>&</sup>lt;sup>5</sup> Good research funders are: Research Councils; Government Departments; NIHR; National and overseas charities recognised by HEFCE for QR; Overseas research councils or equivalent including NIH; EU; other agencies (eg NGOs, commercial companies) supporting commissioned research that is consistent with School's mission and meets School's cost recovery targets

<sup>&</sup>lt;sup>6</sup> Exceptions include, for example, where staff hold prestigious fellowships which do not pay salary (eg Wellcome)

<sup>&</sup>lt;sup>6</sup>i.e. of a quality that would be rated highly in assessments of research quality such as those done by UK government, and in peer review processes used by funders

<sup>&</sup>lt;sup>7</sup> Students registered external to the School can be included (subject to agreement of DDDC/FDDD) where these fulfil capacitybuilding aims, support important research collaborations, or are a result of a recent move to the School.

**Education:** Undertaking teaching and assessment, and developing as a researchinformed educator within higher education

Teaching and assessment

- Research-informed teaching, supervision and assessment
- Contributions to personal tutoring and/or development of less experienced educators (e.g. as peer-observer for PGCILT; as mentor; through leading staff development activities)
- Participation in programme committees and/or exam boards

Educational development and innovation

- · Contributions to research-informed educational developments and innovations
- Activities aimed at improving some aspect(s) of the student experience, or quality of education programme(s).

Education leadership and management

- Leadership and/or management of selected aspects of the curriculum (e.g. as module organiser/deputy, or responsibility for another aspect of the student experience)
- Supporting others to provide an excellent student experience and solve significant problems
- · Contributions to Education Task & Finish Group, periodic reviews, or similar

Professional development referenced to UKPSF

- Activities which lead to PGCILT or equivalent and Fellow of HEA or equivalent; thereafter continuing professional development.
- Activities that support professional development as an educator (e.g. training/educational studies, work-shadowing, use of feedback from students/colleagues)

#### Internal contribution: Contributions to School functioning and development

Internal citizenship

 Engagement in any one year of at least one of: Senate or Senate subcommittee, Ethics Committees, MRC Unit, Faculty and Departmental committees; MRC Unit Department, Faculty, School, Centre events or special interest groups; support to external collaborations/partnerships (beyond own research or education role); involvement in mentoring scheme

School leadership and management roles

Not expected

## External contribution: Contribution beyond the School

#### External citizenship

- Membership of society/conference committees
- Journal, book and/or grant reviews
- Invited presentations

Knowledge translation and enterprise: options include:

- Exploiting research-based knowledge beyond academia, e.g. through IP exploitation, consultancies
- Participation in and development of external networks for the School's benefit, such as identifying sources of funding, contributing to student recruitment, securing student placements, marketing the institution, facilitating outreach work, or building relationships for future activities
- · Collecting evidence of research impact for impact case studies
- Supporting public engagement including MOOCs/OERs or other educational outreach

## Academic Expectations: Associate Professor

Examples of expected types of activities are listed; the selection of activities will vary from year to year and not all activities in each category would necessarily be done in any one year. The statement in each shaded heading summarises the general expectations for contributions in each category.

*Knowledge generation:* Excellent academic research, effective support to doctoral degree students and effective research leadership and management

- Research and scholarship
- Research grant portfolio from good<sup>8</sup> research funders (PI, co-PI or leadership within a large proposal such as work-package lead) that is consistent with the requirements for financial sustainability across the Department/Faculty
- For those on without duration contracts, salary recovery from research grants (whether as direct costs or directly allocated costs) and consultancy, on a rolling 3 year average, of not less than around 40% of salary (for those with substantial teaching or managerial responsibilities), and up to around 80% of salary for those spending the majority of their time on research; fellowship holders will usually recover 100% of their FTE<sup>9</sup>; these salary recovery expectations will be applied flexibly, allowing for individual circumstances and the balance of activities
- Collaborations with other research teams/institutions/industry
- Contributions, including as lead, to peer-reviewed outputs, as expected by the subject area/discipline in terms of types and volume of output; significant contributions to at least four outputs within the most recent 3 years that are at least internationally excellent<sup>10 11</sup>; Generation and securing of intellectual property including patents as appropriate
- At least one oral presentation at international conference and one invited seminar or other talk per year over 3 year rolling average

Doctoral degree supervision

- Effective doctoral degree supervision within the supervision teams of at least two students, and contribution to at least two advisory panels or serving as chair of two final viva examinations, on average over a year
- Supporting timely completions and peer-reviewed outputs
- Examination as internal and/or external examiner

Research management, leadership and support

- Leading and managing research teams
- Support to career development of research team members (e.g. named as mentor on fellowship application)

Professional development referenced to RDF

• Senior management/leadership development and other development activities (e.g. advanced methods training, methods/conceptual development workshops, doctoral degree examiner training/observation)

<sup>&</sup>lt;sup>8</sup> Good research funders are: Research Councils; Government Departments; NIHR; National and overseas charities recognised by HEFCE for QR; Overseas research councils or equivalent including NIH; EU; other agencies (eg NGOs, philanthropy, commercial companies) supporting commissioned research that is consistent with School's mission and meets School's cost recovery targets

<sup>&</sup>lt;sup>9</sup> exceptions include, for example, where staff hold prestigious fellowships which do not pay salary (eg Wellcome)

<sup>&</sup>lt;sup>10</sup> i.e. of a quality that would be rated highly in assessments of research quality such as those done by UK government, and in peer review processes used by funders

<sup>&</sup>lt;sup>11</sup> Where publications are co-authored with other School staff, the volume should be such that each person has at least 4 distinct outputs

Education: Delivering and developing high-quality research-informed education

Teaching and assessment

- High quality research-informed teaching, supervision and assessment, demonstrating adaptability to different needs and contexts; participation in quality assurance and quality enhancement processes, course committees and examination boards
- Personal tutoring allocation and/or specialist support for particular student groups (e.g. international, disability, student representatives)
- Development of less experienced educators (e.g. as peer-observer/mentor or leading staff development activities)

Educational development and innovation

- Research-informed educational development and innovation, including acting on student feedback; evaluation of selected aspects of developments/innovations
- Contributions to solving significant learning, teaching or assessment challenges; contributions to Education Task & Finish Group, Review Group, or similar
- Soliciting and using peer review of education delivery and/or development<sup>12</sup>

Education leadership and management

- A leadership role at Programme or School level<sup>13</sup>
- Contributions to education strategies, policies and development through committees, forums or review groups
- Leadership and/or management of selected aspects of the curriculum, (e.g. as module organiser/deputy, responsibility for another aspect of the student experience), or engagement in periodic reviews

Professional development referenced to UKPSF

• Working towards fulfilling the criteria for Senior Fellow HEA through ongoing commitment to professional development activities

## Internal contribution: Contributions to School functioning and development

Internal citizenship

- Contributing as mentor (both within formal scheme and informally) to help develop and motivate colleagues
- Engagement in: Council; Senate or Senate subcommittees; Ethics, Biological Safety, AWERB and other safety committees;
- Ongoing contributions to School/Faculty/Department/MRC Unit interview panels and committees; organising events (e.g. related to education, research, capacity strengthening, research uptake); supporting broader education and doctoral degree processes; contributing to research proposal reviews and mock interview panels

School leadership and management roles

- ADoE, TPD, FDDD, DDDC, Centre Director/Deputy Director or theme leader, safety officer roles, Chair of Faculty or School committees
- Supporting School partnerships (beyond own specific research activities)

<sup>&</sup>lt;sup>12</sup> e.g. publication, conference presentation, special interest group, engagement with external examiners or reviewers, peerobservation

<sup>&</sup>lt;sup>13</sup> For example, Programme Director/deputy, Admissions Tutor, leadership role within collaborative education programme with other institution(s), representing Programme Directors'/Module Organisers' Forums on SLTC, Chair of Education Task & Finish Group, Exam Board Chair; (Co-)Lead for education Quality Assurance processes

## External contribution: Broad engagement in activities beyond the School

External citizenship

• Invited research and/or educational contributions to peer review bodies/roles, DSMBs, journal leadership, participation in professional organisations, learned societies, government and or parliamentary (e.g. APPG) committees, national/international meetings/working groups etc. *Knowledge translation and enterprise* 

Knowledge translation and enterprise

- Exploiting research-based knowledge beyond academia, e.g. through IP exploitation, consultancies
- Participating in and developing external networks for the School's benefit, such as identifying sources of funding, contributing to student recruitment, securing student placements, marketing the institution, facilitating outreach work, or building relationships for future activities
- Documenting impact of research and helping prepare impact case studies
- Supporting public engagement including MOOCs/OERs or other educational outreach