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**Job Description**

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| **Job title** | Professor in Environmental Microbiomics |
| **Department/School** | Life Sciences |
| **Job family** | Education and Research |
| **Reporting to** | Head of Department |
| **Responsible for** | Any research staff/students |
| **Location** | University of Bath premises |

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| **Background and context** |
| The Department of Life Sciences at the University of Bath was established in August 2022 through merger of the Departments of Biology & Biochemistry and Pharmacy & Pharmacology. It is home to over 100 academic staff with expertise in a variety of disciplines including bioinformatics, cell and developmental biology, evolution, epidemiology, genetics, microbiology, medicinal chemistry, pharmacology, pharmaceutics and structural biology. Many of the academic staff are also members of the Milner Centre for Evolution (<https://www.bath.ac.uk/research-centres/milner-centre-for-evolution/>), a particular strength of which is microbial evolution.  An emerging theme within the department is the microbiome, with current research projects addressing different aspects of the gut, skin, plant and soil microbiota. We now seek to grow this microbiome focus across all the research domains of the department, building on the foundations of the current projects whilst drawing on the established strengths in microbial evolution within the Milner Centre as well as in model organism and organoid-based disease modelling more broadly across the department. The successful candidate will have an active, internationally recognised research programme and a proven track record of innovation and high impact publication in any aspect of environmental microbiomics, including, but not restricted to:• aquatic, air or soil microbial ecology• bioremediation• microbiomes in the urban environment• microbiomes and biodiversity• wild and crop plant-microbe interactions. The department is located on the main University campus, in close proximity to the Departments of Chemistry, Chemical Engineering, Computer Science, Mathematics and Physics. There is a strong interdisciplinary and collaborative culture across departments, fostered by a number of research centres including those for Therapeutic Innovation (CTI), Mathematical Biology (CMB) and Bioengineering and Biomedical Technologies (CBio). The department boasts a suite of environmentally controlled culture rooms as well as greenhouses, a zebrafish aquarium, Drosophila laboratory, a GridION and PromethION 2 Solo nanopore sequencing facility and a range of dedicated microscopes including confocal, 2-photon, light-sheet and TIRF. Researchers within the department also have access to the university’s central imaging and mass spectrometry facilities as well as the GW4 Cryo-EM facility located at nearby Bristol University (<https://www.bristol.ac.uk/gw4-electron-cryo-microscopy/equipment/>). The Department of Life Sciences is committed to supporting excellence in research and teaching and offers both undergraduate and postgraduate programmes in Biosciences and Biomedical sciences including Pharmacy and Pharmacology.   |

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| **Job purpose** |
| To lead research with high international impact and profile; lead teaching at undergraduate and postgraduate level and undertake management and leadership duties commensurate with the role. |

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| **Main duties and responsibilities**  |
| The job duties and responsibilities listed below are intended to describe the general nature of the role. The duties and responsibilities and the balance between the elements in the role may change or vary over time depending on the specific needs at a specific point in time, or due to changing needs in the department/group. Jobholders should note that there may not be an immediate requirement to carry out all the activities listed below. |
| **1** | **Research & scholarship** |
| a | Demonstrate research leadership to ensure the highest standards of ethics and integrity in research, with international collaborations as appropriate to the discipline. |
| b | Lead major collaborative research activity with other institutions or bodies to bring significant benefit to the University’s national and international standing. |
| c | Attract external funding to support major activity in collaboration with other Universities or organisations. |
| d | Maintain a regular output of highest quality research which is published in leading research journals and national/international conferences or other outputs as appropriate to the discipline.  |
| e | Present research (often by invitation) at international conferences and/ or at other appropriate high-profile events. |
| f | Provide leadership to maximise the non-academic impact of research, including substantial knowledge or technology exchange and/or public engagement activities, including a range of partnerships with external organisations. |
| g | Contribute significantly to the development and implementation of research strategies in the Department/School |
| h | Contribute to the enhancement of postgraduate research student environment, including through leadership of doctoral training centres and partnerships. |
| **2** | **Teaching**  |
| a | Deliver a wide range of effective and inclusive teaching and supporting learning activities |
| b | Assess the work and progress of students and provide them with constructive feedback. |
| c | Seek ways of improving performance by reflecting on teaching design and delivery and obtaining and analysing feedback. |
| d | Lead and develop innovative approaches to improving the learning environment, including use of learning technologies and techniques. |
| e | Engage in professional development in relation to teaching, learning and assessment, related to academic, institutional and/or other professional practises. |
| f | Write/author teaching materials in appropriate discipline area. |
| g | Develop and market curricula or methods of teaching designed to attract new client groups.  |
| h | Engage in pedagogic research or practitioner research and other scholarly activities |
| i | Contribute to outreach and/or Widening Participation public engagement activity within the Department, Faculty/School or University. |
| j | Act as a Personal Tutor to students in each year group |
| **3** | **Management and leadership**  |
| a | Represent the University as an acknowledged expert in the appropriate discipline e.g. participate as an expert witness or give professional advice to government bodies and other agencies. |
| b | Provide leadership that will influence and shape the output of their department and contribute directly to the level of success of the department. |
| c | Represent the Department/Faculty’s activities with groups beyond the University – especially internationally – bringing benefit to the University over a sustained period. |
| d | Establish and develop sustainable academic networks with other HE/FE institutions nationally and internationally which bring benefit to the Department/School/University. |

**Person Specification**

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| **Criteria** | **Essential** | **Desirable** |
| **Qualifications** |  |  |
| PhD or equivalent in relevant disciplineMembership of professional body (Royal Society of Biology)Higher education teaching qualification or professional recognition (e.g. PGCert, FHEA or equivalent) | √ | √√ |
| **Experience/Knowledge** |  |  |
| Acknowledged expert in appropriate discipline Sustained record of publications in leading peer-reviewed journals at a national and normally international level Sustained record of research funding as appropriate to the disciplineAble to show evidence of international recognition and esteem (such as journal editorships, invitations to be conference organisers, research council board membership)Evidence of effective achievements in teaching and/or supported learning | √√√√√ |  |
| **Skills** |  |  |
| Academic leadership Ability to articulate a research vision and strategy for development, implementation and delivery of successful research projectsExcellent written and verbal communication skills including presentation skillsExcellent interpersonal skills, communication style and team workingEvidence of positive working relationships within the University, community, business and other partners | √√√√√ |  |
| **Attributes** |  |  |
| Commitment to excellence in research and teaching and to providing the highest quality experience for studentsCommitment to working within professional and ethical codes of conduct | √√ |  |