

## UNIVERSITY OF LINCOLN JOB DESCRIPTION

JOB TITLE	Research Assistant in Microbiology and Microbial Genomics				
DEPARTMENT	National Centre for Food Manufacturing				
LOCATION	Holbeach Campus				
JOB NUMBER	CHS215	GRADE	6	DATE	April 2025
REPORTS TO	Dr Bukola Onarinde				

#### CONTEXT

The University of Lincoln is seeking to appoint a highly motivated Research Assistant in Microbiology and Microbial Genomics to join a research team investigating the mechanisms of antimicrobial resistance (AMR) and genetic evolution of zoonotic pathogens, with a focus on Salmonella serotypes derived from poultry and pork production systems in the UK and China.

This post sits within the School of Agri-food Technology and Manufacturing, in the university's College of Health and Science and will be based at the National Centre for Food Manufacturing (NCFM), Holbeach campus which is about 44 miles from the Lincoln campus. This is a 24-month part-time post (60% FTE), with the option to extend and/or increase hours if additional grants are obtained.

The successful candidate will support a Medical Research Council (MRC)-funded research project in collaboration with academic and industry partners, including the Quadram Institute Bioscience, Jiangsu Academy of Agricultural Sciences (JAAS) and Yangzhou University. This project aims to contribute new understanding to the global challenge of AMR by identifying genetic and environmental drivers of multiple drug resistance in foodborne *Salmonella* and evaluating the potential of phage-based biocontrol interventions.

It is expected that the successful candidate will have a strong academic and research background in the following areas: microbiology (particularly environmental microbiology and food microbiology), molecular biology, and bioinformatics, along with hands-on experience in laboratory-based microbiology and microbial genomics.

Specifically the successful candidate will (1) assist in field sampling across poultry and pork supply chains (farms, slaughterhouses, processing facilities), (2) conduct microbiological and molecular research on Multidrug (MDR) Salmonella isolates in a Category 2 laboratory setting, (3) conducting antimicrobial susceptibility testing (AST) and support whole genome sequencing (WGS) and metagenomic analysis, (4) maintain accurate laboratory records and contribute to data analysis and reporting, (5) prepare high-quality scientific publications and contribute to dissemination activities and (6) collaborate with national and international research partners and UK industry partners.

For informal enquiries about the post, please email Dr Bukola Onarinde (<a href="mailto:bonarinde@lincoln.ac.uk">bonarinde@lincoln.ac.uk</a>).

#### **JOB PURPOSE**

The Research Assistant is responsible for conducting research on their assigned project(s), as directed by the Principal Investigator. The Research Assistant will be expected to operate with a significant degree of autonomy but not expected to operate as an independent researcher.

The post is funded with support from Medical Research Council (MRC) grant that focuses investigating the mechanisms of antimicrobial resistance (AMR) and genetic evolution of zoonotic pathogens, with a focus on Salmonella serotypes derived from poultry and pork production systems.

Some aspects of the role will involve collection of samples from various UK chicken and pig farms, slaughterhouses and processing facilities and preparing samples for sequencing at Quadram Institute of Biosciences (QIB). Therefore, the Research Assistant will be expected to interact on a professional level with industrial partners and colleagues from QIB while collaborating internally with other researchers within the university's College of Health & Science.

Postholder with a PhD will be given opportunities to support supervision of Postgraduate Research (PGR) student(s) and/or postgraduate taught students' project and present at the departmental research forum meetings.

#### **KEY RESPONSIBILITIES**

### **Literature Surveys**

Undertake literature surveys and other investigations of the state-of-the-art and prepare reports as required.

### **Programme of Research**

To perform specified research under the direction and with advice from the Principal Investigator, to generate original knowledge, contribute to decisions about research direction, and to prepare reports on results, as required. The research assistant will not be expected to act as an independent researcher.

Plan own day-to-day research activity within the context of the required research programme, exhibiting a high degree of autonomy.

Contribute to the production of research outputs, including reports, papers and other publications, and preparation for and presentation at international research conferences.

#### **Liaison and Networking**

Liaise with internal and external collaborators, and with colleagues in the Department, maintaining positive and effective working relationships; this may include liaison with senior personnel in other organisations including collaborators, sponsors and clients.

#### **Internal Research Activities**

Participate in and help to organise internal research activities, including seminars, research meetings and conferences.

### **Teaching Support**

If required, engage in teaching support activities, up to a maximum of six hours per week. Aid in the supervision of postgraduate students' projects.

In addition to the above, undertake such duties as may reasonably be requested and that are commensurate with the nature and grade of the post.

## **ADDITIONAL INFORMATION**

### Scope and dimensions of the role

This is a research focussed role.

Key working relationships/networks							
Internal	External						
<ul> <li>Principal Investigator (Line Manager)</li> <li>Research Team</li> <li>Other research and academic staff within the school</li> <li>Administrative and technical staff within the school</li> </ul>	<ul> <li>Research collaborators, relevant academic and professional groups</li> <li>Chinese project partners</li> <li>Sponsors and clients, relevant national, regional and international networks in microbiology and molecular biology</li> </ul>						

# UNIVERSITY OF LINCOLN PERSON SPECIFICATION

JOB TITLE	Research Assistant in Microbiology and Microbial Genomics	JOB NUMBEI	R CHS215
Selection Criteria		Essential (E) or Desirable (D)	Where Evidenced Application (A) Interview (I) Presentation (P) References (R)
Qualification	ons:		
Honours degree in relevant subject (1st, 2.1 or equivalent), and/or master's degree in relevant subject area		E	A
PhD or equiv	valent in relevant subject area	D	Α
Knowledge specific to the following areas: microbiology (particularly environmental and food microbiology) and molecular biology		E	A/I
Experience	:		
Evidence of laboratory/research activity in microbiology (particularly environmental and food microbiology), microbial genomics and bioinformatics		E	A/I
Experience of	of relevant research methods	E	A/I
Experience of sample collection from farms, food processing facility and other environments		E	A/I
Working with industry partners to form long-term mutually beneficial partnerships		D	A/I
Teaching su	pport	D	A/I
Skills and I	(nowledge:		
	specific to project/area	E	A/I
Ability to conduct original research under supervision in the subject area		E	A/I
Excellent written communication, including the ability to write reports and research outputs		E	A/I
Ability to prioritise own workload and work to specified deadlines under pressure		E	A/I
Ability to co	mmunicate complex subjects orally	E	A/I
Skills specific to project/area		E	A/I
Competence	ies and Personal Attributes:		
Flexible approach to workload		E	I
Ability to work on own and as part of a team		E	I
Enthusiasm for and serious commitment to high-quality research		E	I
Good interpersonal skills		E	I
	ition to detail	E	I

**Essential Requirements** are those, without which, a candidate would not be able to do the job. **Desirable Requirements** are those which would be useful for the post holder to possess and will be considered when more than one applicant meets the essential requirements.

Author	во	PBP	AG
--------	----	-----	----