

Job Description

Research Assistant

Salary:	Grade 6
Contract:	Part time, Fixed term for two years
School/Department:	School of Natural Sciences
Location:	Canterbury
Responsible to:	Dr Peter Ellis

Job purpose

We are seeking a motivated Research Assistant to work within the Centre for Advanced Diagnostics Development and Application (CADD) at the University of Kent to help ensure timely delivery of CADD activities and outputs as outlined in the grant proposal. This CADD post will be situated within Dr Ellis' research group within the School of Natural Sciences that has a focus on developing and providing diagnostic services to the human and livestock fertility industries. In this role you will provide essential support in all aspects of the diagnostic pipeline from assay design to delivery and work closely with collaborators and industrial partners. The role will involve liaising with industrial partners to extend the partner base, conducting diagnostic tests on samples, reporting results, and designing research programmes to extend and improve the services provided. The role provides an opportunity to work closely with Dr Ellis' group, CADD and other partners, to provide diagnostics to healthcare and livestock breeding industries and to carry out cutting edge applied research in related technology development.

For further information about the role please contact Dr Ellis on p.j.i.ellis@kent.ac.uk.

Key accountabilities and Duties

CADD:

- Draft reports, maintain statistics and interactions so that these can be reported back to the funder.
- Participate in CADD events and activities as required by the CADD management and in line with the grant agreement.
- Interact with other stakeholders through CADD as agreed with the line manager and CADD management team.

DIAGNOSTICS and KNOWLEDGE EXCHANGE:

- Liaise with existing and new partners to increase awareness and uptake of the assays we provide by relevant stakeholders including IVF clinics and andrology clinics (for human diagnostics), livestock breeders and genetics companies (for animal diagnostics).
- Carry out diagnostic procedures on blood and semen samples, adhering strictly to standard operating procedures. Specific tasks may include cell culture, fluorescence in situ hybridization, fluorescence microscopy, flow cytometry, DNA sequencing and analysis.
- Report results using approved channels and data formats, with due regard to principles of data security, patient confidentiality / GDPR (for human work) and commercial confidentiality (for livestock work) as applicable.

RESEARCH AND DEVELOPMENT:

- Undertake basic research tasks such as designing and conducting experiments, and performing comprehensive literature and database searches to support ongoing research.
- Document research outputs, maintaining records and databases.
- Analyse and interpret research results, generating original ideas and solving problems that arise during research.
- Write up research results and contribute to reports, publications, and presentations.
- Plan and coordinate day-to-day research activities and contribute to project planning.
- Liaise with research colleagues and build relationships for future collaboration.
- Actively participate in research team meetings and activities.
- Provide guidance to support staff and students assisting with research.

Internal & external relationships

Internal: Wider research and diagnostics teams, academic supervisor/principal investigator, support staff, students

External: External researchers/collaborators, funding bodies, project participants, external institutions/organisations where necessary including service customers

Health, safety & wellbeing considerations

This job involves undertaking duties which include the following health, safety and wellbeing considerations:

- Regular use of Screen Display Equipment
- Repetitive limb movements
- Working with machinery including Class 1 laser products (flow cytometer, confocal microscope)
- Working with chemicals including routine cell culture fixatives, solvents and histological stains
- Biological Agents including animal and human blood and semen.
- Working in confined spaces (microscope darkroom)
- Conflict resolution
- Pressure to meet important deadlines for diagnostic provision
- There may be a requirement to work evenings and weekends
- Ability to occasionally travel in a timely and efficient manner between Canterbury and collaborating organisations

Person specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications will be measured against the criteria published below.

Selection panels will be looking for clear evidence and examples in an application, or cover letter (where applicable), which back-up any assertions made in relation to each criterion.

Essential Criteria:

- A relevant degree or equivalent in a discipline related to the research project (e.g. biomedical science, genetics, biology, biochemistry) (A)
- Experience in conducting basic research tasks, such as experiments, fieldwork, surveys, or literature reviews (A,I,T)
- Expertise in or theoretical knowledge of reproductive biology and gametogenesis (A,I,T)
- Expertise in or theoretical knowledge of male fertility assessment (A,I,T)
- Experience of analysis and interpretation of data using appropriate research methods and techniques (A,I)

- Strong organisational skills, with the ability to plan and manage day-to-day research activities while meeting deadlines (I,T)
- Strong written and verbal communication skills, particularly the ability to write up research results and contribute to reports or publications (I,T)
- Firm commitment to achieving the University's vision and values, with a passion for a transformative student experience and multidisciplinary, impactful research (I)
- Commitment to deliver and promote equality, diversity and inclusivity in the day-to-day work of the role (I)

Desirable Criteria:

- A relevant postgraduate degree (e.g., Master's or PhD in reproductive biology, reproductive genetics, cell biology or similar) (A)
- Vaccination against Hepatitis B (A)
- Familiarity with flow cytometry, fluorescence microscopy (A,I)
- Familiarity with semen analysis including count, motility, morphology according to WHO criteria (A,I)
- Familiarity with mammalian cell culture and fluorescence in situ hybridisation (A,I)
- Experience working with relevant stakeholders in the area of fertility diagnostics such as patients, clinicians, diagnostic service providers (A,I)

Assessment stage: A - Application; I - Interview; T - Test/presentation at interview stage