### Role profile

**Job title**: Research Associate/Fellow  
**Job family and level**: Research & Teaching Level 4 Training Grade/Level 4  
**School/Department**: Biosciences, Food Sciences/Nutritional Sciences/Plant and Crop Sciences  
**Location**: Sutton Bonington Campus

#### Purpose of role

To contribute to the achievement of the scientific objectives as defined by the GCRF grant application "Studying The Use Of Mezquite To Improve Welfare Of Communities In Arid And Semi-arid Zones Of The World" between the University of Nottingham; CIAD, CIIDIR, INIFAP, ITD, UTSLRRC, CONAFOR and COCYTED in Mexico; and U. of Nairobi and Sokoine University Agriculture, Tanzania in Africa. The RA will determine the nutritional, anti-nutritional and structural properties of pods and gum from the Mezquite (*Prosopis*) species of Mexico, Kenya and Tanzania using state-of-the-art equipment to explore mezquite uses as a food source for communities to improve their welfare. This is a part time (50%) fixed term contract funded by GCRF until 31 July 2020.

#### Main responsibilities

**Main responsibilities**  
(Primary accountabilities and responsibilities expected to fulfil the role)

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<tr>
<td>1</td>
<td>Carry out nutritional and anti-nutritional analyses of mezquite pods and gum, using recognized approaches, methodologies and techniques within the research area.</td>
<td>15%</td>
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<td>2</td>
<td>Carry out structural analyses of gum and pods; including viscosity, differential scanning calorimetry, X-ray diffraction and thermogravimetric &amp; dynamic mechanical analyses, using recognised approaches, methodologies and techniques within the research area.</td>
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<td>3</td>
<td>Assist with Chicken trials to determine nutrient absorption.</td>
<td>10%</td>
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<td>4</td>
<td>Supervision and training of UK and Mexican students learning the techniques applied to the project.</td>
<td>5%</td>
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<td>5</td>
<td>Keeping accurate records of work, presenting results at all regular meetings to project partners, stakeholders, and members of communities; and preparing interim and final reports for partners and sponsor.</td>
<td>10%</td>
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<td>6</td>
<td>To analyse and illuminate data, interpret reports, evaluate and criticize texts and bring new insights to the research area, and to prepare/contribute to draft manuscripts of research findings for publication in leading journals. To assist with the preparations, proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes.</td>
<td>10%</td>
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Attending a meeting in Mexico to share experiences with students and partners of the mezquite project, and to plan and manage own research activity and resolve problems, if required, in meeting own/team research objectives and deadlines in collaboration with others.

Person specification

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<tr>
<th>Skills</th>
<th>Essential</th>
<th>Desirable</th>
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|        | - Research laboratory experience.  
- Knowledge of food nutritional, anti-nutritional and structural analyses.  
- Analysis of laboratory data.  
- Excellent oral and written communication skills, including the ability to communicate with clarity on complex information.  
- Strong project management and time management skills.  
- Able to work unsupervised and as part of a wider team, including external partners.  
- Ability to apply relevant research approaches, models, techniques and methods in a creative way; and being able to contribute to method improvement.  
- Analytical ability to facilitate conceptual thinking, innovation and creativity.  
- Ability to build relationships and collaborate with others, internally and externally.  
- Proven ability to problem solve and to provide innovative solutions.  
- Ability to work effectively as part of a team or independently as required. | - Fluent in Spanish.  
- Ability to assess and organise resource requirements and deploy effectively.  
- Ability to foster a research culture and commitment to learn in others.  
- High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. |
| Knowledge and experience | - Evidence of sufficient breadth or depth of research methodologies and techniques to work in research area.  
- Some practical experience of applying the specialist skills approaches and techniques required for the role.  
- Statistical Analyses.  
- Ability to generate manuscripts from research.  
- Computer literacy in the use of standard computing tools for food | - Proven ability to effectively communicate research results to other team members and external audiences.  
- Experience of developing new approaches, models, techniques or methods in research area. |
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<th>Qualifications, certification and training (relevant to role)</th>
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<tr>
<td>PhD (or pending thesis period) in relevant area Food Sciences, Food Technology, Food Processing, Food Engineering, Nutritional Sciences.</td>
<td>Master's Degree, or equivalent in relevant subject area.</td>
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<th>Statutory, legal or special requirements</th>
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<td>An understanding of confidentiality and ethical issues; and to conduct themselves in a manner that protects any confidential information in their possession.</td>
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The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

**Expectations and behaviours**

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University’s strategy, vision and values. The following are essential to the role:

**Valuing people**

Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.

**Taking ownership**

Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.

**Forward thinking**

Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.

**Professional pride**

Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.

**Always inclusive**

Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.
Key relationships with others

Line managers

Dr Zinnia Gonzalez Carranza/ Prof. Tim Foster/ Prof. Tim Parr

Role holder

Research Associate/Fellow

Key stakeholder relationships

Visitors

Students