



Job Description & Person Specification	
<b>Post title:</b> Novel Product Development Scientist in Smart Horticulture (KTP Associate)	<b>Post No:</b> 550513
<b>School or Department:</b> School of Animal, Rural and Environmental Sciences	<b>Date created:</b> March 2024
<b>Grade:</b> £30-35k per annum	<b>Hours per week:</b> 40 (Full Time)
<b>Fixed term end date</b> (if applicable): 24 months	
<b>Other requirements of the role:</b> In person and office based at FLOWERBX London premises and NTU. It is expected that there will be significant travel between Flowerbx and NTU particularly in the first year. Very occasional weekend working.	
<b>Immediate line manager:</b> Annabel Curtis (FLOWERBX), Prof Chungui Lu (NTU)	
<b>Title &amp; Grade of posts line managed by postholder:</b> na	

**Job purpose:**

The primary objective of this innovative project is to work with FLOWERBX and NTU to develop a pioneering, highly sustainable supply chain in the cut flower industry. The project offers an excellent chance for the academic team to contribute to societal and environmental well-being by reducing carbon emissions, conserving water, and curbing pollution. The partnership with FLOWERBX will provide an opportunity to translate extensive research and expertise into practical solutions that directly benefit the flower industry. The role will oversee the entire project by coordinating technical aspects, efficiently managing resources, and ensuring timely deliverables.

**Principal duties and responsibilities:** The role will encompass all of the following, but the balance of duties and responsibilities will be determined in discussion with the post holder’s line manager:

This role will work 60% of the time at the FLOWERBX London premises and 40% at NTU over the duration of the project.

- **Research, data analysis, and knowledge transfer**
  - Assist with general upkeep, calibration, and maintenance of research equipment.
  - Design and conduct experiments to evaluate the effectiveness and efficiency of smart horticulture methods in improving flower production, quality, and resource utilisation.
  - Innovate and develop practical applications to enhance smart horticulture techniques during the prototyping phase, ensuring efficient operation of the end solution.
  - Perform data analysis and interpret findings, prepare reports, presentations, and technical documentation to support a sustainable innovation, and share internally with relevant stakeholders.
  
- **Technology development and project management**
  - Manage the development and execution of the technology, supply chain, and go-to-market strategy.
  - Manage unforeseen issues throughout the process and drive innovative problem-solving.
  - The project will need to bridge the gap between academic research and practical business applications by encouraging collaboration between experts from fields such as horticulture, engineering, and sustainability, and stakeholders to ensure alignment of research activities with project goals and objectives.
  
- **Supply Chain and Logistic Operations**

- Build an understanding of supply chain and logistic operations for international sourcing and flower delivery, focusing on existing platform-driven markets with the goal of producing a first to market product.

**N.B.** The post-holder may be required to undertake any other duties which may reasonably be required as within the nature of the duties and responsibilities of the post as defined, subject to the proviso that normally any changes of a permanent nature shall be incorporated into the job description in specific terms.

<b>Personal Attributes</b>		
<b>Attributes</b>	<b>Essential</b>	<b>Desirable</b>
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>- Proficiency in plant and crop science, with a particular focus on flower plants.</li> <li>- Proficiency in data collection, organization, and analysis using statistical methods and software tools to derive meaningful insights from experimental results.</li> </ul>	<ul style="list-style-type: none"> <li>- An understanding of innovative technologies in smart horticulture</li> <li>- An understanding of supply chain and logistics operations, as well as knowledge of platform driven markets in the flower industry.</li> <li>- Good knowledge of data science (AI, sensors, IoT)</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>- Ability to build strong alliances and trust with colleagues across the business and the knowledge base to establish credibility and work cooperatively with others.</li> <li>- Excellent written and verbal communication skills to effectively collaborate with various stakeholders.</li> <li>- Strong organisational skills and the ability to prioritise tasks to meet deadlines in a fast-paced environment.</li> <li>- Ability to analyse complex business processes, identify inefficiencies, and recommend improvements.</li> <li>- Strong time management and management of delivery deadlines.</li> </ul>	<ul style="list-style-type: none"> <li>- Ability to present highly technical information to non-technical stakeholders.</li> <li>- Demonstrated ability to take initiative, work independently, and make informed decisions when required.</li> <li>- Ability to think critically and creatively to develop innovative solutions to complex challenges.</li> <li>- Willingness to learn new technologies and methodologies.</li> <li>- Proactive with strong leadership skills.</li> <li>- Strong problem solving skills</li> <li>- Awareness and understanding of the commercial drivers.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>- Strong experience in experimental design, data collection, data analysis and previous involvement in research teams, particularly in the field of protected environment horticulture, to facilitate rapid project integration.</li> <li>- Managing projects, including planning, execution, and monitoring progress.</li> </ul>	<ul style="list-style-type: none"> <li>- An experience of interdisciplinary collaboration. Experience in preparing research papers for publication in peer-reviewed journals, conference proceedings, or industry events.</li> </ul>
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>- Ph.D. in Horticulture or relevant subject such Plant or Crop Science-</li> <li>- Alternatively, candidates with a relevant Masters' degree may also be considered, especially if they have extensive research experience and expertise in smart horticulture technologies.</li> </ul>	<ul style="list-style-type: none"> <li>- Postgraduate qualification in data science</li> </ul>

<b>Competencies</b>	
<b>Essential Competencies</b>	<b>Desirable Competencies</b>
<p><b>Communicating and Influencing (Level 2)</b> Communicates information effectively to a wide range of diverse stakeholders, influencing events.</p> <p><b>Making informed decisions (Level 2)</b> Uses analyses, reports and data to test the validity of options and assess risk before taking decisions.</p> <p><b>Organisation and Delivery (Level 2)</b> Plans time taking account of organisational priorities and other colleagues' work roles to achieve results.</p> <p><b>Team Working (Level 2)</b> Works effectively as a member of a team. Takes responsibility for getting things done as part of a team.</p> <p><b>Creativity and innovation (Level 2)</b> Seeks out, reviews and implements new ways of working to improve delivery of service</p>	<p><b>Communicating and influencing (Level 3)</b> Communicates effectively with a wide range of diverse internal and external stakeholders, influencing and negotiating change. Networks internally to keep ahead of developments.</p> <p><b>Team working (Level 3)</b> Leads aspects of teamwork, seeking and implementing improvements to the team's outputs/service and developing colleagues within the team.</p> <p><b>Organisation and delivery (Level 3)</b> Takes account of organisational priorities to ensure that operational and strategic plans are being implemented and achieved.</p> <p><b>Creativity and innovation (Level 3)</b> Reviews, tests and implements new concepts, models and approaches to practice in support of service development and delivery</p>

Job Description and Person Specification created by (post title): **Professor Chungui Lu (NTU) & Andy Sweeting (FLOWERBX)**

---