

JOB INFORMATION

Job Code	HA14
Job Description Title	Research Assoc II, GRACE
Pay Grade	RE07
Range Minimum	\$45,340
33rd %	\$54,410
Range Midpoint	\$58,940
67th %	\$63,470
Range Maximum	\$72,540
Exemption Status	Exempt
Organizational use restricted to the following divisions	120 College of Agriculture
Approved Date:	3/3/2025 2:43:51 PM

JOB FAMILY AND FUNCTION

Job Family:	Research
Job Function:	Disciplinary Research

JOB SUMMARY

Develops and implements complex project proposals, conducts research, oversees laboratory projects, and assists with managing daily activities directly related to the Green Reimagining of Agriculture in Controlled Environments (GRACE) project. This initiative aims to revolutionize Controlled Environment Agriculture (CEA) by enhancing its sustainability through strategic, managerial, technological, and social innovations. The objective is to establish CEA as a robust food production system capable of delivering ample and nutritious food within a low-carbon economy.

RESPONSIBILITIES

- Formulates intricate project proposals, plans, and protocols related to the Green Reimagining of Agriculture in Controlled Environments (GRACE) project, collaborating with various faculty, postdoctoral, and graduate student investigators. This includes the design and development of pilot-scale research systems.
- Prepares and submits scientific publications and presentations related to GRACE research, addressing both scientific and non-scientific audiences.
- Conducts sophisticated, non-routine experiments, and challenging analyses, including analytical chemistry and the development of novel laboratory protocols for the GRACE project. Additionally, conducts standardized laboratory analyses with precision and consistency.
- Provides expert advice and assistance to fellow researchers on best practices for conducting complex experiments pertinent to the GRACE project.
- Supports the GRACE project manager in the systematic organization and in convening sub-team research meetings and symposia.
- Provides comprehensive training to student researchers on the operation and calibration of laboratory instrumentation and advanced experimental techniques.
- Contributes to the development of new research directions and the preparation of grant proposals for the GRACE project.
- Oversees the management and meticulous maintenance of laboratory inventory. Organizes and optimizes laboratory space to enhance operational efficiency and compliance with safety standards. Coordinates the repair, calibration, and preventive maintenance of advanced analytical equipment.
- Performs additional related duties as assigned, ensuring alignment with the overarching research objectives.

SUPERVISORY RESPONSIBILITIES

Supervisory Responsibility	May be responsible for training, assisting or assigning tasks to others. May provide input to performance reviews of other employees.
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MINIMUM QUALIFICATIONS

To be eligible, an individual must meet all minimum requirements which are representative of the knowledge, skills, and abilities typically expected to be successful in the role. For education and experience, minimum requirements are listed on the top row below. If substitutions are available, they will be listed on subsequent rows and may only be utilized when the candidate does not meet the minimum requirements.

MINIMUM EDUCATION & EXPERIENCE

Education Level	Focus of Education		Years of Experience	Focus of Experience	
Master's Degree	Biology, Conservation, Biological Engineering, or Biosystems Engineering	and	2 years of	experience in research practices and protocols related to Controlled Environment Agriculture (CEA)	Or
PhD	Biology, Conservation, Biological Engineering, or Biosystems Engineering	and	0 years of	experience in research practices and protocols related to Controlled Environment Agriculture (CEA)	

MINIMUM KNOWLEDGE, SKILLS, & ABILITIES

Professional knowledge and expertise in experience in research practices and protocols related to Controlled Environment Agriculture (CEA).

Highly advanced knowledge in the field of research and the design of experiments and broad expert knowledge of a wide range of complex equipment, materials and processes related to research planning, funding, and operations.

Expertise in Laboratory Operations and Management Systems.

Advanced understanding of engineering design, analytical chemistry, and molecular biology concepts.

Enhanced problem-solving abilities to optimize and expand research system scalability.

Proficiency in coordinating research endeavors with a diverse array of subject matter experts to advance interdisciplinary research initiatives.

PHYSICAL DEMANDS & WORKING CONDITIONS

Physical Demands Category: Other

PHYSICAL DEMANDS

Physical Demand	Never	Rarely	Occasionally	Frequently	Constantly	Weight
Standing				X		
Walking			X			
Sitting				X		
Lifting		X				25 lbs
Climbing			X			
Stooping/ Kneeling/ Crouching			X			
Reaching			X			
Talking				X		
Hearing				X		
Repetitive Motions				X		
Eye/Hand/Foot Coordination				X		

WORKING ENVIRONMENT

Working Condition	Never	Rarely	Occasionally	Frequently	Constantly
Extreme cold			X		
Extreme heat			X		
Humidity			X		
Wet			X		
Noise			X		
Hazards			X		
Temperature Change			X		
Atmospheric Conditions			X		
Vibration			X		

Vision Requirements:

Ability to see information in print and/or electronically.