

Postdoctoral Research Associate – Research Chemist; USDA-ARS, Chemistry Research Unit

Description

Job Description – The USDA-ARS Chemistry Research Unit at the Center for Medical, Agricultural, and Veterinary Entomology is seeking highly qualified candidates for a temporary full-time Post-Doctoral Scientist position in Gainesville FL. The position may be extended at the end of each year for maximum of four years. The overall goals of the assigned project are to identify and characterize semiochemicals in maize or other crops involved in protection of plants from agricultural pests and determine how environmental stress impacts these chemicals. Specifically, the candidate will use GC-MS and LC-MS based approaches to identify novel compounds, profile the production of known compounds in stress treated plant tissues, perform bioassays to assess compound activities, and carry out metabolomics on plant-stressor systems. The candidate will work closely with scientists in molecular biology, genetics, chemical ecology, and entomology to identify and functionally characterize genes and biochemical pathways involved in plant response or semiochemical production, with the objective of producing crops with enhanced resistance to pests and environmental stress. GS-11 starting salary of \$64,649. This is a US federal government position. USDA-ARS is an equal opportunity employer and provider.

Responsibilities – As an investigator the incumbent helps design, develop, and implement independent research projects in support of ARS National Program (NP) 301 Plant Genetic Resources, Genomics, and Genetic Improvement. As a team member of the Research Project 6036-11210-001-00D, the incumbent designs, develops and implements projects to understand the molecular underpinnings of defense signaling in maize, with an emphasis on the regulation of chemical defense pathways by plant hormones, the genetic regulation of defense response pathways, and impact of environmental stresses on defense signaling. The incumbent will evaluate and interpret data and disseminate research findings in peer-reviewed journals. Specific skills the incumbent should possess include demonstrated expertise using HPLC, GCMS, and LCMS. Other skills could include professional knowledge of GWAS, CRISPR/Cas9, and VIGS.

Qualifications – Please send the following items to John Beck, Research Leader at john.beck@usda.gov – CV that includes education; memberships in professional or honor societies; invitations to make presentations at scientific/technical meetings; scientific society membership; and, publications (please denote corresponding author pubs)- list of names, addresses, and phone numbers of persons familiar with your stature, contributions, and recognition- Cover letter that specifically addresses how your expertise will add to that of the Chemistry Research Unit Applications will be reviewed as they are received

Job Confirmation # – 205678566

Hiring organization

USDA-ARS, Chemistry Research Unit, Gainesville, FL; <https://www.ars.usda.gov/southeast-area/gainesville-fl/center-for-medical-agricultural-and-veterinary-entomology/chemistry-research/>

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Email – john.beck@usda.gov

Contacts

john.beck@usda.gov

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