

Research Associate

Job Description

This person will be primarily responsible for a project on pyramiding resistance genes employing marker-assisted breeding approach and will function in the Genetics, Genomics and Breeding program under the supervision of the Principal Investigator.

Formulate detailed plans and translate validation of resistance in the donor lines and linkage of molecular markers (5%)

Perform routine laboratory jobs including DNA extraction, PCR, agarose and polyacrylamide gel electrophoresis, maintenance of fungal spores and preparation of inoculum (25%)

Grow plants in greenhouse and growth chambers, inoculate plants/plant parts and evaluate host-pathogen interactions (25%)

Conduct hybridizations and identify resistant genotypes based on pathological and molecular techniques (25%)

Collect leaf tissues for DNA extraction and leaves for in vitro testing of host-pathogen interaction (10%)

Carry out other activities and responsibilities as directed (10%)

Required Skills

Background knowledge in plant genetics, pathology and biochemistry

Knowledge of conventional plant breeding, particularly hybridization

Practical experience in detection and utilization of molecular markers (e.g., RAPDs, SCARs, AFLPs, SSRs, SNPs, etc.) preferably in crop or model plants

Basic knowledge of statistics required for genetic analysis

Expertise on sequence analysis and designing primers

Functional bioinformatics experience desirable

Capability to work independently as well as member of a team

Sound knowledge of operation of routine computer programs particularly Microsoft programs

Strong analytical and reasoning abilities

Excellent interpersonal and communication skills - both in written and verbal

Strong urge for higher learning and acquiring new skills

Ability to assist in writing research articles, reports and grant proposals

Required Experience

Candidates should possess a Masters degree in Genetics, Breeding, Biochemistry, Molecular Biology, Biotechnology, Microbiology, Pathology, or a closely related field with experience of at least 2 years in a research laboratory.

Job Location

Clemson University, Clemson, SC, USA

Position Type

Full-Time/Regular

Monthly Salary

16-20K annually plus fringe benefits at university admissible rate depending on qualification and experience

Required Application Materials

Resume containing qualifications, experiences, list of publications and list of three references with direct relation through teaching and/or supervising research works should be sent to Dr. Chittaranjan Kole (ckole@clermson.edu).

Tenure

The position is funded by a grant for two years and continued employment is contingent upon availability of funds

Closing Date

February 1, 2011 or until suitable candidate is found

For more details contact Dr. Chittaranjan Kole through email at ckole@clermson.edu or phone at 864-656-5188 (office), 864-506-5715 (Cell)

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