

**Molecular Biologist/Plant Pathologist Fixed Term Appointment to 31/03/2024  
£35,167 - £38,081 plus benefits.**

**Location: Alice Holt Research Station, Farnham, Surrey GU10 4LH**

**Background Information**

Forest Research (FR) is the research agency of the Forestry Commission, world leaders in applied forest science and trusted providers of expertise, data, products and services for governments and tree/wood/forest and natural resource sectors. See [www.forestresearch.gov.uk](http://www.forestresearch.gov.uk). We have two main research stations: Alice Holt Lodge (AH) in south east England and Northern Research Station (NRS) near Edinburgh, and a smaller research presence in Wales (Aberystwyth). The remit of FR is across Great Britain.

The Tree Health research group's role is to sustain the forestry and tree sector in Britain through:

- Provision of rapid diagnosis of tree health problems and response to invasive pest and disease outbreaks.
- Undertaking research of pests and pathogens threatening British trees to inform government policy, management and future proofing trees for resilience in changing climates.

The Oak Decline Research Group is world leading in Acute Oak Decline (AOD), which is a complex Decline disease of oak characterised by bacterial stem bleeding and beetle associations. The research is carried out by a dynamic multidisciplinary team covering bacteriology, pathology and molecular ecology, plant chemistry, entomology, biogeochemistry and social science. The teams' skills span culturomics, genomics, metabolomics and bioinformatics, transcriptomics, beetle microbiome/pathobiome interactions, biocontrol and chemical ecology, monitoring and spatial epidemiological modelling, soil science as well as citizen and social science aspects. Our holistic approach offers an exciting, unique opportunity to use a systems approach to investigate tree disease diagnosis and management.

We are seeking to appoint a Molecular Biologist/Plant Pathologist based at Alice Holt on a Fixed Term Appointment for 27 months. The project the successful candidate will take on is beetle transmission and vectoring of bacteria in AOD. It requires excellent bacteriological and bioinformatic skills

as well as the ability to work with live beetles. The project is part of WP1 in our BAC-STOP project in the Bacterial Plant Diseases Programme [https://bacterialplantdiseases.uk/wp-content/uploads/2021/10/BBSRC-BAC-STOP\\_-\\_General\\_Summary\\_FINAL\\_17-09-20.pdf](https://bacterialplantdiseases.uk/wp-content/uploads/2021/10/BBSRC-BAC-STOP_-_General_Summary_FINAL_17-09-20.pdf).

We are looking for a biological scientist with excellent bacteriological, molecular and bioinformatic skills who is able to work on live beetles and can build on existing data through: experiment planning and execution, bacterial isolation and identification, beetle rearing and dissection, data collection and analysis, scientific publication/report writing and presentation. The successful candidate will be able to demonstrate the above as well as laboratory and management skills, quality assurance, strong, integrated teamwork and the ability to help colleagues with bioinformatic analyses.

**The key responsibilities for the role will include:**

**Essential Criteria**

- Degree in plant/forest pathology or bacteriology/microbiology with strong molecular and bioinformatic skills and the ability to work with live beetles.
- Skilled in good laboratory practice with demonstrated pathology laboratory experience using traditional (culturomics) as well as molecular techniques such as nucleic acid extraction and quantification (DNA and RNA), conventional and real-time PCR.
- Evidence of strong bioinformatic experience and current usage of key software packages for microbiome/transcriptome analyses.
- Demonstrate good track record of scientific publications.
- Evidence of management of research projects.
- Good standard of verbal and written communication.
- Evidence of participation in knowledge exchange events and communication to non-scientific audiences.
- Competent IT user with experience of MS Office packages.

**Desirable Criteria**

- Entomological experience including insect rearing and dissection.
- Demonstration of up-to-date knowledge and experience of phylogenetic and transcriptomic analyses and software packages.
- Experience with statistical packages such as R.

**For more information and to apply, please visit: <https://www.civilservicejobs.service.gov.uk/csr/jobs.cgi?jcode=1766423>**

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hr.services@forestresearch.gov.uk

Please quote ref 179852. Closing date: DATE, 6 February 2022; TIME: 23:55

No recruitment agencies please.

We are committed to providing equal opportunities for all sectors of our diverse community.