



**David Percival (Ph.D.)**  
Professor of Whole Plant Physiology  
Director, Wild Blueberry Research Program  
Department of Plant, Food, and  
Environmental Sciences  
Telephone: +01 902 893-7852  
Cell/Mobile: +01 902 893-9130  
E-mail: David.Percival@DAL.ca



**DALHOUSIE  
UNIVERSITY**

## **Molecular Responses of Wild Blueberries to *Monilinia vacciniae-corymbosi* and *Botrytis cinerea***

A postdoctoral research associate position is available in the Department of Plant, Food, and Environmental Sciences at the Truro Agricultural Campus of Dalhousie University. Funding is available for two years, and is renewable on an annual basis.

### **Specific duties and responsibilities**

The Wild Blueberry Research Program is seeking a postdoctoral research fellow to lead research into the molecular responses of wild blueberries (*Vaccinium angustifolium* Ait. and *V. myrtilloides* Michx.) to *Monilinia vacciniae-corymbosi* (Read) Honey and *Botrytis cinerea* Pers.:Fr. which are the causal pathogens of Monilinia blight and Botrytis blossom blight respectively. Substantial variability in the response of wild blueberries to these fungal organisms exists, and the intent of this research is to determine the mechanisms conferring disease resistance. This will allow for the eventual development of disease management practices that focus only on the susceptible portion of the population structure situated in fields.

Primary responsibilities of the researcher will be to examine the biochemical and genetic basis of defense responses. This will include the use of real-time PCR, the examination of host-induced defense mechanisms, and further complemented with the examination of compounds with emphasis on the phenolic compounds and plant hormones. The initial emphasis will be on the primary infection of Monilinia blight, and this will be expanded to also include the secondary infection of floral tissue. Secondary responsibilities will be to characterize the infection processes using advanced microscopic techniques. Opportunities for additional projects of particular interest to the candidate are available. The researcher is expected to conduct statistical analysis and summarize data in a timely and efficient manner, interpret the findings within the context of the pathosystem, and present results in peer reviewed journals and professional conferences. The researcher will also have the opportunity to work with the lab to develop and deliver extension materials to wild blueberry industry and producers and collaborate with researchers at other research institutions on related projects. This is an exciting opportunity for a young scientist looking to be involved at the forefront of a new area of research!

### **Qualifications**

Please note that Postdoctoral Fellowships at Dalhousie can be held for a maximum of 6 years following the completion of a PhD. The ideal candidate should be comfortable with statistical analyses, qPCR, and primer/probe design, and experience with advanced microscopy. Additional desired skills include excellent verbal and written skills, accountability, and outstanding problem solving skills. This

individual will be involved with mentoring undergraduate and graduate students, and must be able to work alone as well as part of a group.

**To Apply**

Applications should be submitted to David Percival (David.Percival@DAL.ca) as a single PDF file that includes the following: A one-page cover letter, a one-page statement of research interests related to the stated project area, a current curriculum vitae, and contact information for three references. Individuals interested in pursuing a future career in either the public or private sector are encouraged to apply. Screening of applicants will begin immediately and continue until a suitable candidate is found.