

PSES Graduate Assistantship

An interdisciplinary, Ph.D. graduate student assistantship is available in the Crops and Weed Sciences Division of the Department of Plant, Soil and Entomological Sciences at the University of Idaho.

The program direction for this assistantship will be Risk Assessment and Management of Virus Diseases of Cool Season Food Legumes with an emphasis on aphid-transmitted *Pea enation mosaic*, *Bean leafroll*, and *Pea streak viruses* and host resistance.

This assistantship will require close interactions with a research team of entomologists, geneticists, and virologists in University of Idaho and Washington State University, and will be based in Moscow, ID, at the main campus.

The research goal is to elucidate mechanisms of spread, survival, and evolution of pea viruses and further preliminary work on a pea virus ecology project.

Responsibilities would include:

- 1) Collection and characterization of pea viruses in the Palouse area of Idaho and Washington states
- 2) Sequencing genomes of local pea virus isolates
- 3) Bioinformatics analysis of virus genome sequences
- 4) Development of new, and improvement of available methods of pea virus detection, e.g. RT-PCR
- 5) With entomologists, establishing GIS-based models of virus risk from a landscape perspective
- 6) Developing and addressing additional questions related to the theme of the study as part of the dissertation research
- 7) Analyzing results using appropriate statistical programs
- 8) Writing papers for publication
- 9) Presenting experimental results at meetings.

Qualifications sought:

- 1) Knowledge of basic molecular laboratory practices
- 2) Knowledge of cloning procedures, RNA/DNA extraction
- 3) Knowledge of plant virology is a plus
- 4) Experience with RT-PCR and primer design
- 5) Good written/oral communication skills
- 6) Valid driver's license

A stipend of approximately \$22,500 per year (with a yearly cost of living adjustment) will be available for 3 years. Please contact Dr. Alexander Karasev for additional information at 208-885-2350 or email at akarasev@uidaho.edu.