

## Vector Biology ORISE Fellow (Tick surveillance) - U.S. Air Force

[\\*\\*this opportunity will be posted on Zintellect in the next few weeks](#)

We have received funding for a one year ORISE Fellow opportunity for tick threat assessment at US Air Force Bases. [ORISE: Oak Ridge Institute for Science and Education]

\*\*this Fellowship is not yet posted in Zintellect, but should be posted by July – for questions, or to express interest, contact the POC listed below

Host Location: Wright-Patterson Air Force Base, Dayton OH 45433

<https://www.wpafb.af.mil/>;

[https://en.wikipedia.org/wiki/Dayton,\\_Ohio](https://en.wikipedia.org/wiki/Dayton,_Ohio);

<https://www.nationalgeographic.com/travel/destinations/north-america/united-states/ohio/dayton-rust-belt-revitalization-new-mecca-urban-parks/#close>

### Opportunity description:

Participant will investigate tick species presence, distribution and density at up to 8 Air Force Bases (TBD) in the United States. Activities will include:

- Environmental tick surveillance (e.g. flagging, dragging)
- Removal of ectoparasites from euthanized / nuisance killed wildlife
- Sampling of ticks and other ectoparasites from birds (TBD)
- Identification of tick samples to genus and species
- Extraction of nucleic acids to prepare samples for PCR and sequencing analysis
- Detection of tick-borne disease agents in samples
- PCR species ID, or genetic sequencing of samples (only as needed)
- Analyze nucleotide sequence data to confirm species identification or to reveal phylogenetic relationships (only as needed)
- Perform a comparative tick sampling study at the host location, using two different dry ice traps and two different tick drags.

The Fellow will also engage with Public Health at 2 - 3 bases to implement on-site tick testing of human biting *Ixodes scapularis* for *Borrelia burgdorferi*, and may participate in CDC's MALDI-TOF tick analysis project by submitting specimens to that program. The Fellow will be encouraged to submit all novel findings for presentation or publication. This opportunity has significant travel and field work components, and also lab work as specified above.

### Qualifications/Education:

Master's degree in Vector Biology, Entomology, Medical or Veterinary Entomology, or a related field, OR a combination of education and experience that prepares the applicant for the opportunity. Vector biology, entomology or related academic coursework is required, and experience in the identification and sampling of medically important arthropods is highly desirable. Education and/or experience, including academic lab work, in pathogen detection, molecular analysis and/or amplicon sequence analysis of arthropod samples is also desirable.

Yearly Stipend: \$50,000 – \$60,000 depending on education, qualifications and experience.

- Relocation incentive, and conference and training allowances are provided.
- Participant must provide their own health insurance, but a supplement is provided in addition to the stipend. Proof of health insurance is necessary to start the fellowship.
- Desired start date is Sept 2021, but this is open to negotiation.
- Applications will be reviewed on an on-going basis until the opportunity is filled.

Air Force POC:

Leah Colton, PhD

USAF Medical Entomology Program Manager

[leah.colton@us.af.mil](mailto:leah.colton@us.af.mil)

Phone: 937-938-3078