

**WILDLIFE CONSERVATION SOCIETY
POSITION DESCRIPTION**

Term position (up to August 2025) associated with the SPASAK project

Title: Postdoctoral Surveillance Coordinator, SPASAK Project

Department and Program: WCS Beringia Program

Position Location: Alaska, with potential for synergies in Fairbanks or Anchorage

Reports To: Beringia Regional Director, Dr. Martin Robards, with dotted line to Director of Health Research, Dr. Sarah Olson

Coordinates with: SPASAK Project PIs and partners

Deadline to apply: Position open while posted

Planned trips: Regular (monthly) travel to project communities, as needed project meetings and scientific conferences

Organizational Background:

The Wildlife Conservation Society (WCS) is a US non-profit, tax-exempt, private organization established in 1895 that saves wildlife and wild places by understanding critical issues, crafting science-based solutions, and taking conservation actions that benefit nature and humanity. With more than a century of experience, long-term commitments in dozens of landscapes, presence in more than 60 nations, and experience helping to establish over 150 protected areas across the globe, WCS has amassed the biological knowledge, cultural understanding, and partnerships to ensure that vibrant, wild places and wildlife thrive alongside local communities. Working with local communities and organizations, that knowledge is applied to address species, habitat, and ecosystem management issues critical to improving the quality of life of poor rural people whose livelihoods depend on the direct utilization of natural resources.

Program Overview:

The WCS Health Program is central to delivering on our mission to save wildlife and wild places around the globe. Wildlife, livestock, and human diseases will likely have a significant impact on the future development of sustainable land uses, protected areas, transboundary natural resource management, other biodiversity conservation approaches, and livelihood opportunities in many of the landscapes and seascapes where we work. Our work at the interface of wildlife, domestic animal, and human health has demonstrated that a One Health approach can build new constituencies for conservation and strengthen existing ones, while mitigating a key threat to conservation. Health is one of WCS' key cross-cutting thematic programs, and a focus in the 2030 strategy, in recognition that a dynamic, transdisciplinary One Health approach is relevant across all the landscapes, seascapes, and regions where we work.

Position Description:

WCS seeks a post-doctoral researcher, ideally a biologist, wildlife disease ecologist, epidemiologist, environmental health or One Health specialist, or veterinarian, to lead the implementation and coordination of fieldwork, data collation, and analyses for the SARS-CoV-2 Participatory Animal Surveillance in Alaska (SPASAK). This position will work closely with the Postdoctoral Social Science Coordinator, SPASAK Project (see separate job description). WCS is partnering with the University of Alaska Anchorage (UAA), University of Alaska Fairbanks (UAF), the North Slope Borough NSB, and WCS Canada on the project, which is supported through a USDA APHIS American

Rescue Plan: SARS-CoV-2 in Animals cooperative agreement. The Principal Investigator (PI) on the project is Dr. Sarah Olson (WCS Health), with Co-PIs as follows: Dr. Eric Bortz (UAA); Dr. Amanda Bishop (UAA); Dr. Cristina Hansen (UAF); and Dr. Raphaela Stimmelmayer (NSB).

The overarching objective of the SPASAK project is to pilot participatory SARS-CoV-2 animal surveillance with underserved Indigenous and non-Indigenous communities in Alaska using approaches that empower these communities to fully participate in disease surveillance (hunted animals, peri-domestic small mammals, domestic dogs, and wastewater), investigations, result communication, and potential response measures. Integrating social science methods will support the co-development of a scientifically, socially, and culturally acceptable surveillance system, from sampling to communication of findings, to participatory investigations on spillover mechanisms and interventions. Combining Indigenous Knowledge with scientific understanding improves wildlife surveillance and advances Indigenous Peoples' self-determination in research, while creating mutual animal and human health benefits. Given past negative impacts on health determinants of Indigenous communities as a result of poorly designed outreach and communication on contaminants in traditional foods, attention will be given to safeguarding the cultural, socioeconomic, and nutritional dimensions of Indigenous rights and food sovereignty when discussing, studying, and addressing zoonotic risks.

To address this transboundary challenge our team brings together leading experts on community-based wildlife surveillance from the U.S. and Canada. We will supplement focal community SARS-CoV-2 surveillance with opportunistic animal testing (archival samples, stranding events, wildlife management, working dogs, and research studies). Wildlife and domestic dogs will be screened for SARS-CoV-2 RNA (swab samples) and SARS-CoV-2 antibodies (blood/sera) to assess SARS-CoV-2 presence/absence and exposure, and estimate apparent prevalence. Full sequencing of genomes from RNA positives will identify variants and analyze mutational signatures and phylogenies for epidemiological links. Implementation of cost-effective wastewater surveillance with communities will identify trends in positivity and monitor for emergence and circulation of SARS-CoV-2 variants. The target audience is underserved Indigenous and non-Indigenous populations living along a rural-to-peri-urban gradient in boreal and Arctic biomes of Alaska, as well as local, state, and federal agencies and researchers spanning the human, animal, and environmental sectors working to understand the implications of SARS-CoV-2 in wildlife.

This position requires a range of skills, including disease surveillance in various wildlife species, project management, multi-disciplinary team coordination, scientific leadership, diverse data collection, management and analyses, and an understanding of drivers of emerging infectious diseases of wildlife origin, including the importance of integrating the social sciences, and public health implications. Post-doc will receive affiliate status at UAA/UAF.

Principal Responsibilities:

In consultation and coordination with the WCS's Beringia Regional Director and Director of Health Research as well as project partners:

- 1) Lead strategic surveillance research (including design, implementation, and analysis) to help the SPASAK project meet the following sub-objectives to conduct animal surveillance for SARS-CoV-2. These objectives include, (1) establishment of participatory community surveillance of wild/domestic animals and wastewater, development of state-wide (2) opportunistic and (3) archival surveillance of SARS-CoV-2 in wildlife

- 2) Contribute to the development of technical protocols for sample and data collection and submission of related IACUC and IRB applications.
- 3) Support the Postdoctoral Social Science Coordinator of the SPASAK Project in the application of social science methodologies to co-create scientifically robust & culturally acceptable surveillance & investigation protocols with communities.
- 4) Oversee standardized approaches and participate in implementation of all project sampling activities to ensure the best ethical and biosafe practices for environmental and animal sampling, sample management, storage, labeling, and transport. Support and advise community-based staff in these practices, who will report to their respective organizations.
- 5) Ensure human survey implementation follows the highest international standards in ethics and social safeguarding mechanisms for IPLCs.
- 6) Oversee and ensure standardization for data collection and management across project objectives, and facilitate data analyses to ensure project deliverables are met.
- 7) Contribute scientific and lay publications / other media products regarding this project, wildlife health, public health, and conservation.
- 8) Support technical reports relevant to the project in a timeframe and format as required by USDA APHIS.
- 9) Participate in project coordination calls, and project-related public speaking and public relations work.
- 10) Develop and build on collaborative relationships in Alaska, and the region, to promote multidisciplinary approaches to wildlife conservation and meet wildlife health challenges. Contribute to the development of proposals and funding applications for future research and capacity-building activities related to wildlife disease surveillance and management in the Alaskan Arctic.
- 11) Other related duties as assigned.

Required Education, Experience, etc.:

- 1) Postgraduate qualification (Ph.D.) in biology, wildlife disease ecology, epidemiology, environmental health or One Health, veterinary medicine, or another related field.
- 2) English fluency (written and spoken).
- 3) Ability to multi-task and lead a multidisciplinary international team.
- 4) Experience conducting independent applied scientific research on health and disease (preferably including wildlife populations); experience with epidemiological tools
- 5) Project management experience and strong organizational and coordination skills.
- 6) Comfortable working in complex traditional and diverse cultural settings; an ability to adapt approaches to local cultures and project situations, while maintaining a high professional standard.
- 7) Experience working with wildlife, livestock, or community health programs; familiarity with the ecology of emerging diseases preferred but not essential.
- 8) Strong interpersonal skills.
- 9) The willingness to work flexible hours that may include weekends and public holidays.

- 10) The willingness and ability to travel to field sites in both countries, and occasionally other locations e.g. laboratories or conferences, as needed to meet project deliverables.
- 11) Respect for WCS's goal, mission, and vision, and an ability to integrate WCS Core Values (respect, accountability & transparency, innovation, diversity, equity, & inclusion, collaboration, and integrity) into your work.

Interested candidates who meet the above qualifications should apply by sending an application letter and CV together with the names and contact information of three references to and Dr. Sarah Olson (solson@wcs.org). For more information about the Wildlife Conservation Society and the Health theme, please visit our websites at: <http://www.wcs.org> and <https://oneworldonehealth.wcs.org/>

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