Position Title: Bio-Acoustical Engineer (Colorado State University – Research Associate I or II dependent upon qualifications)

Location: Fort Collins, Colorado

Salary: \$35,000 – \$45,000 (dependent on experience) plus benefits

Full Consideration Date: October 31, 2014

Start date: January 2015

Tour of Duty: Full-time (includes benefits) One year initial term with possible extension depending on performance and project funding. The position is funded entirely from federal sources under an NPS Cooperative Agreement.

Duties:

The National Park Service (NPS), Natural Sounds and Night Skies Division (NSNSD) is part of the Natural Resource Stewardship and Science Directorate (NRSS), a national office, located in Fort Collins, Colorado. The NSNSD assists park units in monitoring and managing acoustical environments. This position will lead equipment development for scientific projects, and will be supervised through the department of Fish, Wildlife, and Conservation Biology at Colorado State University (CSU). The position will also assist NSNSD staff and CSU students in collecting and analyzing acoustical data. Applicants must be adaptable, available for short term travel, capable of working in wilderness, and possess a keen interest in engineering or scientific analysis.

The incumbent's primary duties include:

Equipment design and maintenance

- 1. Collaborate with CSU faculty, staff, and students on equipment design for bioacoustical research
- 2. Lead the development of novel instrumentation to address scientific questions in natural areas
- 3. Create and maintain user manuals or standard operating procedures for instrumentation
- 4. Provide training in the use of equipment to diverse groups, including NPS staff, graduate students, undergraduate students, and CSU staff
- 5. Diagnose equipment failures and perform repairs

Outreach

- 1. Produce written reports (including appropriate scientific graphics) summarizing the results of acoustic monitoring projects in which instrumentation was used, and submit for publication if appropriate
- 2. Conduct verbal presentations to technical and lay audiences

Data Processing

- 1. Process data to extract quantitative measures and facilitate equipment design and testing
- 2. Provide technical assistance to others in data analysis

The incumbent's additional responsibilities may include:

- 1. Provide technical assistance to park staff and other personnel associated with the Natural Sounds and Night Skies Division
- 2. Prepare graphical displays of data and results for technical and lay audiences
- 3. Contribute to meetings with NSNSD to determine the scope of work, identify local priorities, designate projects that merit engineering effort, provide updates on progress, and provide summaries at the end of a project
- 4. Perform data entry and other data formatting as needed to populate acoustics databases

5. Other duties as assigned by project managers

Supervisory Controls:

The position reports to the CSU Principal Investigator in the Department of Fish, Wildlife, and Conservation Biology, working closely with the NPS Natural Sounds and Night Skies Division manager and staff.

Required Job Qualifications

- 1. Master's degree or 5 years relevant experience (preferably in natural/physical science, engineering, or natural resources)
- 2. Experience collaborating with diverse groups including academic faculty, staff, and graduate/undergraduate students on data analysis and research
- 3. Available for travel (up to three weeks at a time)
- 4. Demonstrated engineering ability
- 5. Experience with specialized programming software (MATLAB, R, Python, Soildworks etc.)
- 6. Field experience in physical or biological sciences

Preferred Job Qualifications

- 1. PhD in natural/physical science, engineering or natural resources
- 2. Experience using and maintaining scientific instruments or electronics in a physical or biological field setting
- 3. Experience using or developing acoustic instruments
- 4. Experience using 3D modeling software and 3D printing equipment for fabrication of prototypes
- 5. Experience diagnosing and/or repairing equipment failures
- 6. Experience practicing and/or promoting safety in the workplace
- 7. Personal and professional commitment to diversity as demonstrated by involvement in teaching, research, creative activity, service to the profession and/or diversity/inclusion activities.

Diversity Statement

Reflecting departmental and institutional values, candidates are expected to have the ability to advance the Department's commitment to diversity and inclusion.

Essential Job Duties

Application Details

Special Instructions to Applicants

Application Process:

Submit as ONE PDF with your last name and position as the file name:

- 1. Letter of interest. In the letter, please include a detailed description of an engineering project that you have been involved with, your role and responsibilities on the project, and your experience using/troubleshooting/repairing scientific instruments in the field. Please explicitly mention which required and desired attributes you possess.
- 2. Resume
- 3. Names, email addresses, and phone numbers of three references. References will not be contacted without prior notification of candidates.
- 4. Copy of college transcripts (unofficial OK)

Applications will be accepted until the position is filled; however, for full consideration submit application materials by October 31, 2014.

Please apply at http://warnercnr.colostate.edu/employment-opportunities.html Questions: g.wittemyer@colostate.edu.

Reflecting departmental and institutional values, candidates are expected to have the ability to advance the Department's commitment to diversity and inclusion.

Conditions of Employment

Search Contact George Wittemyer, Search Chair EEO Statement Colorado State University is committed to providing an environment that is free from discrimination and harassment based on race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or pregnancy. Colorado State University is an equal opportunity/equal access/affirmative action employer fully committed to achieving a diverse workforce and complies with all Federal and Colorado State laws, regulations, and executive orders regarding non-discrimination and affirmative action. The Office of Equal Opportunity is located in 101 Student Services.

Background Check Policy Statement

Colorado State University is committed to providing a safe and productive learning and living community. To achieve that goal, we conduct background investigations for all final candidates being considered for employment. Background checks may include, but are not limited to, criminal history, national sex offender search and motor vehicle history.