

**JOB#12629**

**Arizona State University  
School of Life Sciences  
Biodiversity Informatics**

**Postdoctoral Research Scholar**

The Biodiversity Knowledge Integration Center (BioKIC) at Arizona State University (ASU) invites applications for a postdoctoral position in biodiversity informatics and data publishing. The position is part of a new **Biodiversity Data Science Initiative** launched at ASU and led by [Beckett Sterner](#) and [Nico Franz](#). The initiative will develop a next-generation solution to overcome the performance limits of taxonomic names as fundamental categories for grouping all forms of data about living things into scientifically meaningful units. Prevalent existing solutions bundle data by names alone, without accounting for changes in their scientific meanings, which causes incorrect data packaging and decision-making. Taxonomic intelligence provides the mapping between names and concepts that is necessary to resolve names accurately into meanings despite changing relationships across time and experts. The initiative will focus on building and promoting an innovative web platform that leverages theoretical advancements and prototype software for [taxonomic concept alignment](#), with the goal to establish a scalable taxonomic intelligence service that will carry value for scientific audiences, science publishers, government agencies, and environmental consulting firms. The platform will accelerate the growth of high-quality, reproducible biological data by driving the adoption of taxonomic intelligence metadata in scientific datasets and journals.

### **Minimum qualifications**

A Ph.D. (doctoral degree) in biology, computer science, information science, or related field is preferred OR comparable qualifications (for instance a lower degree but six years or more experience in designing front-end services).

### **Desired qualifications**

This postdoctoral position will focus on connecting the taxonomic intelligence platform to users through designing high-impact use cases and front-end services for data discovery and integration. The position will also involve customer discovery to understand market demand and user specifications for taxonomic intelligence in order to validate and inform the underlying platform design. The successful candidate will therefore have a strong record of achievement in biodiversity informatics, such as implementing scalable queries for knowledge graphs, building data visualization tools, applying machine learning methods, and designing front-end systems. Experience working with external clients, digital curation of biological data, and research in the economic, social and ethical dimensions of data infrastructure are also preferred. Mentoring of students and co-/authorship of peer-reviewed publications, presentations, and of research proposals, will be strongly encouraged.

## **Working environment**

We are committed to open science and an inclusive, equitable, and team-oriented work environment that promotes the candidate's career and personal advancement. The Biodiversity Data Science Initiative is located within the School of Life Sciences and Natural History Collections at Arizona State University. This setting offers a supportive and stimulating environment, with a diverse collection of faculty with expertise across the life and computational sciences, as well as access to excellent academic and computing resources. The Initiative is further supported by faculty from ASU's School of Computing, Informatics, and Decision Systems Engineering and external experts in data science for systematic biology. In addition, the postdoctoral researcher will be able to take advantage of multiple seminar series and a large community of faculty, postdocs, and students. Arizona State University offers a rich environment for early-career researchers and a wide range of support programs for postdocs.

## **How to apply**

Exploratory e-mail inquiries are strongly encouraged. Interested applicants should send a one-page research statement, clearly indicating their qualifications and motivation to join the project, Curriculum Vitae, and contact information for three references to [beckett.sterner@asu.edu](mailto:beckett.sterner@asu.edu). The review of applications will begin November 8th, 2018 and will continue until a suitable candidate has been found. The start date is flexible, with a preference for January 1st, 2019.

Salary is commensurate with experience, with a range of \$55,000 to 75,000 annually, plus ASU benefits, for exceptionally well qualified applicants. Reasonable relocation funds are available.

A background check is required for employment.

For more information about hiring standards at Arizona State, please visit:

<https://www.asu.edu/titleIX> or <https://cfo.asu.edu/titleIX>

Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. ASU's full nondiscrimination statement (ACD 401) is located on the ASU website at <https://www.asu.edu/aad/manuals/acd/acd401.html> and <https://www.asu.edu/titleIX>

## **General Information:**

Arizona State University is a comprehensive public research university named #1 in the United States for innovation for the second consecutive year, followed by #2 Stanford and #3 MIT. We measure our success not by whom we exclude, but rather by whom we include and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities we serve. ASU's School of Life Sciences is home to innovative teachers who are guided by educational access, student success, applied learning, and interdisciplinary inquiry. We understand there are many paths to achieving a university education, and we build undergraduate and graduate degree programs and pathways that are flexible and relevant for a rapidly changing world.