

**From:** Meredith, Laura - (laurameredith)  
**Subject:** Postdoctoral Position at the University of Arizona and Biosphere 2

---

## Postdoctoral Position at the University of Arizona and Biosphere 2

<https://uacareers.com/postings/15315>

Biosphere 2 is looking for a creative post-doctoral scientist with a strong background in instrumentation and isotope and/or trace gas biogeochemistry to join an interdisciplinary “ecosystem genomics” team seeking to link biotic and abiotic processes from pores to the ecosystem scale. This is a one-year position with the possibility of renewal.

The postdoc will take a leadership role in evaluating a suite of carbon cycle tracers including carbonyl sulfide (COS), oxygen isotopes of CO<sub>2</sub> (18O-CO<sub>2</sub>), and solar induced fluorescence (SIF). Photosynthesis cannot be directly measured at the ecosystem or global scale; thus independent tracers for photosynthesis are needed to reduce uncertainty in the responses of photosynthesis and respiration to global change to better project biosphere-atmosphere feedbacks. Carbon cycle tracers will be evaluated at Biosphere 2’s flagship research infrastructure, the Landscape Evolution Observatory (LEO, <http://biosphere2.org/research/projects/landscape-evolution-observatory>), which is the world’s largest laboratory experiment in the interdisciplinary Earth sciences and boasts an unrivaled capability to close water, carbon, and energy balance at the landscape scale. The cycling of these tracers in LEO and the B2 biomes (rainforest, desert, savanna, mangrove, ocean) will be compared to relevant genomic traits in leaves and soils.

The candidate will manage cutting edge trace gas and stable isotope instrumentation, deployed at Biosphere 2, lead interpretation of data collected from the hundreds of sampling locations in LEO, and work as part of a multidisciplinary team studying the co-evolution of biotic and abiotic features of landscapes. The candidate will add new measurement capabilities to the LEO system, which will involve the construction of new systems for gas flow, calibration, and data collection and their automation. The position is based at University Arizona, but will involve significant time commitments at Biosphere 2. These requirements will provide exceptional opportunities to learn new techniques and to make major scientific contributions to problems of both scientific and societal interest using cutting-edge technology.

Please send inquiries to Dr Laura Meredith ([laurameredith@email.arizona.edu](mailto:laurameredith@email.arizona.edu)) or Dr Peter Troch ([patroch@email.arizona.edu](mailto:patroch@email.arizona.edu)). We will review applications starting on March 1, 2017.

<https://uacareers.com/postings/15315>

<https://uacareers.com/> posting number P20304

Outstanding UA benefits include health, dental, vision, and life insurance; paid vacation, sick leave, and holidays; UA/ASU/NAU tuition reduction for the employee and qualified family members; access to UA recreation and cultural activities; and more!

Accepting a new position is a big life step. We want potential candidates and their families to be able to make informed decisions. Candidates who are considering relocation to the Tucson or Phoenix area, and have been offered an on-site interview, are encouraged to use the free services offered by Above & Beyond Relocation Services (ABRS). Ask your department contact to be introduced to ABRS prior to your visit.

The University of Arizona has been recognized on Forbes 2015 list of America’s Best Employers in the United States and has been awarded the 2015 Work-Life Seal of Distinction by the Alliance for Work-Life Progress! For more information about working at the University of Arizona, please click here.

At the University of Arizona, we value our inclusive climate because we know that diversity in experiences and perspectives is vital to advancing innovation, critical thinking, solving complex problems, and creating an inclusive academic community. We translate these values into action by seeking individuals who have experience and expertise working with diverse students, colleagues and constituencies. Because we seek a workforce with a wide range perspectives and experiences, we encourage diverse candidates to apply, including people of color,

women, veterans, and individuals with disabilities. As an Employer of National Service, we also welcome alumni of AmeriCorps, Peace Corps, and other national service programs and others who will help us advance our Inclusive Excellence initiative aimed at creating a university that values student, staff, and faculty engagement in addressing issues of diversity and inclusiveness.

Laura K Meredith

Assistant Professor, The University of Arizona

**School of Natural Resources and the Environment**

ENR2 Bldg., 1064 E. Lowell Street, Tucson, AZ 85721

Office: N225, Phone: 520 621 1052

**BIO5 Institute**

Keating Bldg., 1657 E. Helen Street, Tucson, AZ 85721

Office: 203, Lab: 202, Phone: 520 626 4213

[laurameredith@email.arizona.edu](mailto:laurameredith@email.arizona.edu)

<http://www.laurameredith.com/>