Post-Doctoral Research Associate (2-year position)
Focus: Carbon cycle science/atmospheric chemistry/infrared absorption spectroscopy
Institution: Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ
Start Date: September 2005 (pending approval of funding)

We seek a post-doctoral scientist with a strong background in the empirical physical sciences or engineering to work with an interdisciplinary team studying mechanisms controlling of forest-atmosphere carbon exchange in a northeastern temperate forest (Harvard Forest, Massachusetts). The successful candidate will be responsible for working with a development team from a small business expert in optical instrument design (Aerodyne Research, Inc., Billerica, MA) on all aspects of design, configuration, and testing of a new isotope-ratio absorption spectrometer using a new class of infrared light sources based on quantum cascade laser technology. The successful applicant will also be the primary scientist in charge of instrument deployment and of analysis and interpretation of resultant scientific data from Harvard Forest, where it will be used in conjunction with eddy covariance techniques to make continuous measurements of the isotopic composition ($^{13}$C and $^{18}$O) of CO$_2$ fluxes into and out of the forest.

The position is based at University Arizona, but will involve significant time commitments in Massachusetts – as a visiting scientist at Aerodyne Research laboratories and at Harvard University’s laboratory for atmospheric chemistry – both for instrument assembly (year 1) and field deployment at Harvard Forest (year 2).

This position provides exceptional opportunities to learn new techniques and to make major scientific contributions to problems of both scientific and societal interest using cutting-edge technology. This is an interdisciplinary research program, and we do not expect candidates to be familiar with all of the relevant methods and techniques, although strong physical sciences background relevant to atmospheric chemistry or spectroscopic techniques is strongly desired. We expect to train the successful candidate in the relevant additional disciplines and skills (possibly including micrometeorology, forest ecophysiology and carbon cycling, isotope ecology).

Competitive salary and benefits are provided. The University of Arizona is an equal-opportunity employer.

To apply, send (electronically) a description of research interests, CV, and the names and contact information of three references to:

Dr. Scott Saleska
Ecology & Evolutionary Biology
University of Arizona
saleska@email.arizona.edu

For more information on this project see our web site:
http://eebweb.arizona.edu/faculty/saleska/index.htm (Saleska lab)
http://eebweb.arizona.edu/faculty/saleska/research.htm (isotope research project)