Advanced Study Program

National Center for Atmospheric Research

Postdoctoral Fellows Handbook
Welcome to the Advanced Study Program!

The Advanced Study Program (ASP) postdoctoral fellowship is an excellent opportunity to conduct independent research at the National Center for Atmospheric Research (NCAR). ASP fellows are part of a collaborative cohort, are mentored by leading NCAR scientists and engineers, and benefit from the breadth of science and training happening at NCAR. The ASP Postdoctoral Fellowship Program has been a part of NCAR for over fifty years and has sponsored more than 600 postdoctoral scientists. Many former fellows now occupy prominent positions in the university community, at NCAR, and at other research labs and private industries. This handbook is intended to provide you with information about the ASP and working at NCAR.

Congratulations for having been selected to the program, we hope that NCAR and ASP will play a vital role in your scientific and engineering career!

The Role of NCAR and UCAR in the scientific community

NCAR was established by the National Science Foundation in 1960 to provide the university community with world-class facilities and services that were beyond the reach of any individual institution. More than a half-century later, we are still delivering on that mission. NCAR provides the atmospheric and related Earth system science community with state-of-the-art resources, including access to supercomputers, research aircraft, sophisticated computer models, and extensive data sets. NCAR’s in-house staff of preeminent researchers and engineers work with community collaborators to ensure that these resources and facilities are capable of meeting the demands of today’s greatest scientific challenges. Our scientists also delve into fundamental research questions, producing a wealth of scientific publications that help lead the way for the broader Earth system science community. NCAR also provides numerous education and outreach opportunities, from fellowships for early career scientists to free public lectures to scientific workshops. NCAR is composed of seven laboratories, some of which have multiple divisions (http://www.ncar.ucar.edu/). If you have been selected as an ASP fellow, your appointment at NCAR will be through ASP, but you will be working with scientists and engineers in one or more of the scientific divisions or programs. You will be located in the division or program that matches your research interests, not with other ASP postdocs. That division will be referred to as the host division in this document.

The University Corporation for Atmospheric Research (UCAR) is a nonprofit consortium of more than 115 member colleges and universities focused on research and training in the atmospheric and related Earth system sciences. UCAR manages the National Center for Atmospheric Research with sponsorship by the National Science Foundation. Our headquarters are in Boulder, Colorado, with additional facilities in Broomfield, Colorado, Wyoming, and Hawaii. UCAR provides many services such as Human Resources, Payroll,
Financial Management, Accounting, etc. Technically, if you are paid, you will be a UCAR employee, even though you are working at NCAR. UCAR also has programs that conduct research and produce scientific data and products. For more information, please see http://www.ucar.edu/.

The ASP Postdoctoral Fellowship
The goal of this fellowship is to support the career development of promising early career scientists in scientific areas that overlap with NCAR’s mission. The ASP Postdoctoral Fellowship allows recipients considerable freedom to pursue their research interests. Fellows are encouraged to consider all opportunities available to them before committing to a particular research project. This aspect of the ASP fellowship differs from project-funded postdoctoral positions in which the postdoctoral scientist is committed to working on a particular project under the supervision of a lead scientist. In the ASP, postdoctoral fellows are instead expected to define their own research projects and to assume responsibility for their successful completion. The ASP also has supplementary goals. Research in atmospheric science, computing, and engineering will increasingly require interdisciplinary approaches and it is expected that postdoctoral fellows will develop a broad appreciation for the full range of research at NCAR. It is also the intention that fellows will develop contacts and collaborations at NCAR that will persist after they leave ASP. The ASP promotes these goals through seminars, lecture series, research reviews, planning meetings, and networking opportunities.

The ASP Office
The ASP office is located on the first floor of the B-Tower (South) of the Mesa Lab. Please contact our team with any questions you might have:
Scott Landolt, ASP Science Advisor, landolt@ucar.edu, 303-497-2804
Scott Briggs, ASP Administrator, sbriggs@ucar.edu, 303-497-1607
John Ferrell, ASP Administrative Assistant, jferrell@ucar.edu, 303-497-1764

Expectations on ASP Fellows
In addition to conducting their research, ASP postdoctoral fellows are expected to participate in the following activities:

   a. Research Reviews
ASP Fellows meet bi-weekly to share updates on their research. Each fellow is expected to present at these reviews once a year. The fellow is also expected to complete one research review feedback form each month. The purpose of these research reviews is to foster scientific exchange and an appreciation for interdisciplinary work among the postdoctoral fellows, to provide advice and encourage new collaborations where appropriate, and to train in scientific communication. The Research Reviews are not intended to be mini-seminars, and should not overemphasize results. Instead, they should focus on motivation and strategy and on the broad
significance of the research endeavor. They may describe research currently underway or plans for new projects, as well as challenges and questions.

b. Professional Development
The ASP hosts workshops and seminars for all postdocs and graduate students at NCAR throughout the year. ASP postdocs are expected to attend the career development seminars whenever possible. Topics include:

- Preparing job application materials for academic positions
- Converting your CV to a resume for private sector jobs
- Honing your elevator speech and interview skills
- Media communications training and communicating science to general audiences
- Annual lecture series and mentoring events

c. Postdoctoral Individual Development Plans
NCAR/UCAR Postdoctoral Fellows must complete an Individual Development Plan (IDP) at the beginning of the postdoctoral appointment. Postdocs should take the lead in completing and updating the IDP, and should discuss progress regularly with their mentor. As a postdoc, you own your career. This means not only being responsible for your research, but also actively getting the training you need and seeking guidance from your mentors and hosts.

To learn more, visit Career Development for Postdocs

d. Service
ASP Postdocs are expected to participate in some form of service each year. This means serving on at least one of the ASP Committees, such as the Research Review Committee, the Fellows Networking Committee, the Professional Development Committee, The Lecture Series Committee, or as a representative on the Early Career Scientist Assembly steering committee. In addition, postdocs can engage in Education and Engagement activities such as mentoring or public outreach. The possibilities are fairly broad, but the expectation is that the Fellow will be an engaged member of the NCAR community. Any NCAR postdoc who wants to be involved in an education and engagement activity is encouraged to contact EdEC to learn about the range of opportunities available at NCAR and UCAR. See what EdEC does at: Education, Engagement & Early-Career Development
Resources for ASP Fellows

Slack Workspace

Postdoctoral Fellows are invited to join the NCAR Postdoctoral Fellows Slack Channel created for postdocs to share information, receive invitations to professional development events, discuss research and social activities. Please contact Scott Briggs for access to the channel.

General Computing

You will be provided with the computing equipment you need to perform your research. NCAR will purchase a new laptop for you. Logins and day-to-day computer support will come from your host division or the NCAR/UCAR help desk. Computers and peripherals are considered government property and must be returned to NCAR when the postdoc leaves NCAR/UCAR. Personal laptops must be approved for use before they may be connected to NCAR networks.

Supercomputing Allocations

ASP postdoctoral fellows requiring access to the supercomputers and mass storage systems will need an allocation of runtime. This may come from the ASP allocation, but this resource is modest and shared among all postdocs. Fellows with large computing needs will need to work with their respective laboratories to secure the requisite computing resources. The ASP allocation is for testing and debugging and occasional one-time simulations when other resources are not available. The intent to run large simulations must be communicated between fellows to ensure that there is not an overuse of the ASP allocation. ASP has limited allocation available to postdocs in order to supplement those provided by your host division for NCAR supercomputer use. For more information about NCAR supercomputers and the ASP allocation, please contact Scott Briggs.

Travel

Postdoctoral fellows receive a travel budget of $3500/year and are trusted to manage their travel funding wisely. It is expected that postdoctoral fellows have valid professional reasons for attending meetings or conferences, such as presenting a talk or serving on a committee.

The UCAR travel policies apply to all travel that ASP supports. All work-related travel must be approved before departure, by obtaining a Travel Authorization Number, even if costs are covered by another organization. You do not need approval for personal trips (e.g., vacation); however, if you are doing anything during that time that could be considered work-related, such as giving a talk at a school or meeting with colleagues at a university, you should get a travel authorization.

In cases where the travel is supported completely by another agency and involves no NCAR funds, a travel authorization is still required because it activates insurance coverage under NCAR’s accident policy. There are many different rules and regulations that ASP must follow, which means that if you want to be reimbursed for your travel, you must ensure that all of the
travel procedures are followed carefully. If you have any questions about procedures, be sure to contact Scott Briggs or John Ferrell.

The travel approval and planning process is done by John Ferrell in ASP (or in some cases your host division). To initiate it, please send an email at a minimum two weeks before your trip to the appropriate admin indicating the purpose of your trip and any details you have already (dates, location, possible hotels you will stay at etc.). NCAR’s travel agency Cain Travel is a convenient way to book airline travels and required for all international trips. It is expected that each fellow will have a Travel card (T-Card) or travel expenses. ASP staff can in some instances pay for registration fees. Travel advances can be requested to cover the costs of a trip, but such requests must be made at least two weeks in advance. On completion of a trip, you will submit all travel related receipts for the trip. ASP will create an expense report and attach all travel related expenses for the trip. Please work with ASP or your local administrative assistant to ensure the proper completion and submission of your expenses. We will go over more details regarding travel and travel related expenses upon arrival.

There are special procedures regarding use of US airlines for foreign travel (Fly America Act). For international travel, please always consult with ASP administrative staff first!

UCAR is authorized by NSF to use General Administration (GSA) including United States Federal Government per diem rates for lodging when on official business travel. Postdocs can download a letter here and here that provides documentation of that authorization. When providing this documentation to the hotel you must also provide your UCAR access badge/ID.

If funding permits, you will also be given the opportunity to write a proposal to ASP for additional travel funds. In addition, you are eligible for travel and visitor funds in the Early Career Scientists Assembly (ECSA) budget. The ECSA announces calls for travel/visitor applications 2-3 times/year.

**Local and UCAR Meetings**
ASP will cover the cost of registration fees for internal UCAR meetings such as the WRF Tutorial without the cost impacting the overall balance of the fellow’s travel stipend. In addition, ASP will cover the cost of registration fees for one local non-UCAR meeting during the fellow’s two-year term. Some meetings are sponsored by outside agencies, but arranged by local meeting organizers at UCAR. These meetings are not considered UCAR meetings. If you are not sure, please contact ASP staff.

**Poster Printing**
NCAR uses outside print shops for posters. The simplest way to do this is to work with the UCAR-approved printing companies. When you are ready to print a poster, please contact the ASP administrative office for the account key to use. Printing of posters for presentations at conferences does not count towards your travel budget.

Note: The NCAR and NSF logos must appear on any presentations & posters given.
Library Services
The NCAR library provides access to many major journals and books. https://library.ucar.edu/. The library has two physical locations at ML and FL. The staff are very helpful and happy to give an introduction to the library catalogs.

Publications and Submission of Manuscripts
Publishing as an ASP postdoc falls under UCAR policies and ASP specific requirements. UCAR policies regarding publications are defined in the UCAR Policy and Procedures Manual (https://sundog.ucar.edu/Interact/Pages/Section/Default.aspx?Section=4409). These policies specify requirements such as acknowledgment of sponsorship and in addition require that divisions and programs assume responsibility for the scientific and editorial quality of submitted manuscripts.

Therefore ASP requires the following steps for a manuscripts to be published:

1. Notify ASP Science Advisor of the intent to publish and share draft
2. Have the paper reviewed by at least one NCAR colleague who is not an author or coauthor and whose comments should be addressed before the manuscript is submitted.
3. Check if the hosting lab and division has additional requirements for publications.
4. Acknowledge NCAR on any of your NCAR publications. In a footnote or the acknowledgement section, please include "This material is based upon work supported by the NSF National Center for Atmospheric Research, which is a major facility sponsored by the U.S. National Science Foundation under Cooperative Agreement No. 1852977." That statement can be in smaller print, but it must be there. For more information about the NSF acknowledgment, please review the information about UCAR/NCAR brand standards here, Brand Standards | NCAR & UCAR News
5. Agree on paying for page charges with co-authors. For publications written jointly with authors from NCAR or other institutions, ASP asks that those authors pay a proportionate share of the page charges.
6. Fill out the publisher's journal payment and/or charge commitment form, in order to submit the article. Use the following Bill-to information, please remember to ask for an invoice to be sent to ASP.
   - Billing Name: Put your name and Scott Briggs
   - Institution: NCAR
   - Address: 3090 Center Green Drive Boulder, CO 80301
   - Email: please use your email address as well as Scott Briggs’ email
7. Fill out the page charges, payment, and purchasing requests form. The ASP office will submit the payment for you.
8. Send finalized paper to ASP Science Advisor with the name(s) of the internal reviewer(s)
9. After publication, submit full bibliographic information and an electronic version of the
published manuscript to ASP.
10. NCAR maintains its own open access repository called Open Sky and therefore will not
pay for open access fees charged by publishers. For more information on OpenSky, please go to
https://opensky.ucar.edu/. All published manuscripts must be uploaded to
Open Sky. The NCAR Library tracks manuscripts and maintains Open Sky. Any
missing documents will be requested typically in the fall at fiscal year end.

Preparing and Submitting Proposals
ASP supports postdoc participation on grant proposals. Because postdoctoral fellows are on a
two-year term appointment at NCAR, strict guidelines apply anytime that a postdoc would like
to be named on a proposal. Most of the time a postdoc will appear on a proposal with another
NCAR staff member as the lead. If the postdoc plans to submit as a PI additional rules and
process have to be followed.

*If you have been asked to participate in a proposal, or if you wish to submit a proposal, even if
no funds are coming to NCAR, please notify the ASP Science Advisor and ASP Administrator
as soon as you know to ensure that we follow NCAR procedures.*

Performance Review Process
Postdocs are not part of the UCAR-Wide Performance Evaluation process that takes place in
spring/summer. Instead, ASP will schedule regular meetings between the postdoc and the ASP
Science Advisor or ASP Director to help plan and stay on track of progress. The required
meetings are:

- **Welcome and orientation:** in the first week of appointment, to set expectations and
  review any questions or concerns. The host is invited to attend this meeting.

- **Administration Meeting:** this meeting will take place shortly after the welcome meeting
  with administrators Scott Briggs and John Ferrell. They will go over the details of travel,
  funding, and other aspects of the fellowship.

- **Research Planning Meeting:** within three months of arrival; to review any revisions to
  the research proposal, to establish a work plan for year 1, and to discuss the individual
  Development Plan. The host is invited to attend this meeting.

- **One-year renewal meeting:** the postdoc completes the Year One Performance
  Evaluation documents and presents a working plan for year two. Feedback from hosts
is incorporated into the evaluation documentation. A successful Year-One review will result in promotion to Postdoctoral Fellow II. An unsuccessful review may result in termination or, at minimum, a setting of short term performance goals and frequent check ins for year two. This meeting is only between the postdoc and the ASP Science Advisor and/or ASP Director.

- **Year Two Review**: ASP Postdoctoral Fellowship appointments are limited to two years. As the appointment approaches its termination date, postdocs will be asked to submit the Year Two evaluation documents and meet with the ASP Science Advisor or ASP Director to discuss the transition to a new position.

**Moving to Boulder**

ASP will assist in paying travel costs for fellows, their partners, and their families to relocate to Boulder. The maximum allowable amount for reimbursement is $3,500.00. Reimbursement of relocation expenditures requires receipts. Relocation expenses will be handled as a reimbursement item like business travel expenses. Each relocating employee will be provided with a relocation agreement that sets forth the specific obligations of both UCAR and the employee. This agreement includes a provision that if the employee voluntarily leaves the company within 12 months of relocation to the new worksite, the employee will reimburse the company for costs incurred pro-rated by the 12 months. Postdocs who would like an advance on the relocation reimbursement need to contact ASP before making any arrangements. International relocation reimbursement requires additional steps, postdocs need to start this process as early as possible.

**Note for international postdocs**: Reimbursement for international flights are subject to the Fly America Act and we **strongly** encourage you to work with the ASP office to purchase your airline tickets, including tickets for your spouse/partner and/or children. If your airline ticket does not have an exception to the policy, you will **not** be reimbursed.

**Finding housing in Boulder**

UCAR Housing Office: [https://housing.ucar.edu/](https://housing.ucar.edu/) The Housing Office provides a service to new employees of UCAR/NCAR/UCP relocating to the Boulder area. The Housing Office can also assist current employees by giving them access to listings not currently being used by visitors. Most of the available listings are in Boulder, however there are also some listings in the surrounding cities.

More helpful websites include:
Ralphie’s List https://ralphieslist.colorado.edu/
Apartment List http://www.apartmentlist.com/
BCN Housing http://bcn.boulder.co.us/housing/
Cort Furniture http://www.cort.com (for furniture rentals)
You will be required to provide a security deposit on any type of property that you rent. Work with the landlord or management company to determine your water, gas, electric, trash and recycling service providers.

Transportation

a. UCAR has its own shuttle system that runs between the main campuses and picks up at a few locations around Boulder. More information on the shuttle routes and schedules can be found at https://sundog.ucar.edu/Interact/Pages/Section/SubFullOne.aspx?subsection=4657.

b. Boulder has a good public bus system, and as a UCAR employee, you receive a free bus pass. For more information about the bus system, please see http://www.rtd-denver.com/.

c. Boulder is known for its bike paths and UCAR employees may participate in the Boulder B-Cycle bicycle-sharing program, which allows members to borrow bikes around Boulder at no cost to them. https://operations.ucar.edu/sustainability/boulder-b-cycle

NCAR/UCAR Campuses

Mesa Lab (ML)
Located in South Boulder. Houses EdEC and Advanced Study Program (ASP), the Climate and Global Dynamics Division (CGD), and the Computational & Information Systems Laboratory (CISL).

Foothills Lab (FL)
Located in Northeast Boulder. Houses Atmospheric Chemistry, Observations and Modeling (ACOM), the Mesoscale & Microscale Meteorology Lab (MMM), the Research Applications Lab (RAL), the Earth Observing Laboratory (EOL), and several UCAR Programs.

Center Green Campus (CG)
This campus is located about 5 minutes away from the Foothills Lab Campus and is connected by a bike path. Houses the High Altitude Observatory (HAO)

Research Aviation Facility (RAF)
This facility is located at the Jefferson County Airport and is part of EOL. This is the location of NCAR's aircraft fleet.

Wyoming SuperComputing Center. in Cheyenne WY.
Mauna Loa Solar Observatory.
NCAR Cafeteria
Each of the main campuses of NCAR (ML, FL, CG) has a cafeteria that is open for breakfast and lunch daily. Employees receive a 10% discount off published prices and a 15% discount if an employee badge is used to pay. Any charges to your employee badge come out of a paycheck.
UCAR Human Resources

Orientation
Please follow the ASP Administrators guidance on orientation, you will receive most of the general orientation for all UCAR employees through our online portal. ASP will also hold an in person/hybrid orientation for postdocs specifically. Dates and times are shared via email once you are onboarded.

Code of Conduct
As a custodian of public funds and manager of research projects and facilities, UCAR has an obligation to act in a manner deserving of public trust and respect in all that we do. The UCAR Code of Conduct reflects this commitment. It is important for everyone to become familiar and comply with the laws, rules, and regulations, as well as UCAR policies and procedures that apply to their work, funding agreements, and research results.
https://www.ucar.edu/who-we-are/ethics-integrity/codes-conduct/everyone

Diversity, Equity and Inclusion at UCAR
UCAR is committed to increasing its diversity and fostering a workplace culture where everyone feels welcome and supported. Not just because it's the right thing to do (it is), but because we know that individuals from a broad range of backgrounds working together are better able to solve the toughest and most complex scientific challenges. Increasing and maintaining our diversity requires recruitment, development, and retention of individuals with different perspectives, experiences, and values. These include but are not limited to the dimensions and intersections of race, ethnicity, gender identity and expression, sexual orientation, socio-economic status, age, physical ability, neurodiversity, body shape and size, veteran status, religious beliefs, political beliefs, country of origin, discipline, job category, education level, cultural background, and marital and parental status. Staff resources and DEI trainings can be found at: https://www.ucar.edu/who-we-are/diversity-inclusion

Timecards
Employees are required to complete time cards every two weeks. If you are going to be away, please make sure that you have access to the time card system, or arrange to have ASP staff fill in your hours for you. You will receive a paycheck every two weeks, via direct deposit. For more information about time cards and payroll, please open this URL in Sundog, https://sundog.ucar.edu/Interact/Pages/Content/Document.aspx?id=5684&SearchId=905554
Benefits and services
You will learn about your benefits through our onboarding process. For more info about them please see, https://sundog.ucar.edu/Interact/Pages/Content/Document.aspx?id=4750&SearchId=905561 Participation in the UCAR retirement plan is mandatory. Every pay period, 5% of your salary will be deducted pre-tax automatically from your paycheck for retirement; UCAR matches that by contributing 10% of your salary per pay period to the plan. There are many additional services that the benefits office provides including employment verification, notary services, etc. For additional details please click here, https://sundog.ucar.edu/Interact/Pages/Content/Document.aspx?id=5095

Vacation and Sick Leave
Postdoctoral fellows accrue 20 days of personal time off (PTO) per year (1.666 days/mo). This time is used for both vacation and sick leave. Fellows work 40 hours a week (less any PTO taken). These hours are flexible, as long as there is significant overlap with the hours worked by other fellows and scientists so that research progress is not hindered. Significant departures from normal work hours must be approved by the ASP Science Advisor.

Child Care
UCAR sponsors a childcare center, which gives a discount and priority to UCAR employees. For more information, please see https://www.kindercare.com/our-centers/boulder/co/00067

Information for International Employees
It is recommended that you go to the UCAR international Visitor & Scholar Services page at https://sundog.ucar.edu/Interact/Pages/Content/Document.aspx?id=3043&SearchId=0. Much of the information below is summarized from that page.

Visas
Acquiring a visa to work in the U.S. can sometimes take as long as 3 months, so it is important to begin working on this process as soon as possible. UCAR employs a visa specialist who will assist in this process. Please see the link in the above paragraph to learn more.

Social Security Card
Getting your social security card is probably one of the highest priorities once you get here. All postdocs must have a social security number for UCAR payroll purposes. A social security card can be applied for at a local Social Security office. The Social Security office in Boulder is
located at 4949 Pearl East Circle, Suite 101, Boulder, CO 80301. Applications can happen after being in the U.S. for at least two weeks and must take place in person. Sometimes social security cards may not be received before the start/ hire date. In that case, please present the receipt from the Social Security office to the Human Resources office to prevent any delays in receiving a paycheck. Additional information and Social Security office locations can be found at: http://www.ssa.gov.

To apply for the card, please bring the following to the Social Security office:

- DS-2019 form,
- ASP Offer letter,
- I-94 card,
- Social Security Form SS-5, available here: https://www.ssa.gov/forms/ss-5.pdf,
- At least two documents that establish identity and age. One of those documents must be a passport.

Social Security numbers may be requested and used by many agencies, specifically, financial agencies. Once you receive your social security number, please give that number to Human Resources by phone.

**Driver’s License**

International postdocs are allowed to drive using an international license for 6 months, but must take a driving test at the end of this period to get a U.S. driver’s license. The Boulder Department of Motor Vehicle (DMV) is located at 2850 Iris Avenue, tel: (303) 442-3006. For more information about obtaining a driver’s license, please go to https://dmv.colorado.gov/. Several postdocs have noted that car insurance is much cheaper if you have a Colorado Driver’s License rather than an international license. The Colorado driver’s handbook can be obtained from the NCAR library or online here, https://dmv.colorado.gov/sites/dmv/files/DR2337.pdf

**Bank Accounts**

We suggest opening an account at the Elevations Federal Credit Union which is aware of UCAR as an employer. There is a branch in the Table Mesa shopping center (Table Mesa and Broadway). A social security card is needed before opening a bank account. You may cash UCAR checks at any Chase bank branch in Boulder even if you do not have an account. You will be required to present identification.

**Tax Treaties**

Many countries have a tax treaty with the US. It is important that you fill out the appropriate tax forms in April to avoid a large fine. For more information, please go to www.irs.gov and look for IRS publication 519, *U.S. Tax Guide for Aliens*. 
Change of Address

If you are here on a visa and you change your address, you must complete an AR-11 form. You may find the form here: [http://www.uscis.gov](http://www.uscis.gov)