About NCSA

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This page aims to collect together basic information about NCSA particularly for faculty affiliates, postdocs and students. Note it is a work in progress, and we would like to keep it as succinct and up-to-date as possible, so let us know if you have additional questions, something isn't clear, or looks wrong.

NCSA Organization

Directory and Org Chart

- A draft directory is available (from September 2018)

Directors Office

- **NCSA Director**: *Bill Gropp*
- **NCSA Interim Deputy Director:** *Scott Wilkin*
- **Senior Project Manager:** *Jay Roloff*

Projects Coordinated Through Directors Office

- Blue Waters (*Bill Kramer*)
- XSEDE (*John Towns*)
- National Data Service (*Kenton McHenry, Christine Kirkpatrick*)
- LSST (Large Synoptic Survey Telescope) (*Michelle Butler*)
- MidWest Big Data Hub (*Melissa Cragin*)
- Ilinois Data Science Institute (*Robert Brunner*)

Directorates

- **Research and Education (Acting, Donna Cox***)*
    - Assistant Director of Research (Amanda Lombardo)
    - Alice Delage (Associate Project Manager)
    - Education Coordinator (Olena Kindratenko)
    - Farzaneh Masoud (Interdisciplinary Research Development Officer)
    - Research Focus Areas:

- **Astronomy and Astrophysics**
- **Computational Biology and Health**
- **Computational Engineering**
- **Culture and Society**
- **Data Science**
- **Food, Energy, and Water**
  - Coordination with Educational Programs
    - [Computational Science and Engineering](#) (Luke Olson, Rm 2102F)
- **Integrated Cyberinfrastructure (Randy Butler)**
  - Data and Visualization
  - Scientific Software and Applications (Dan Katz)
  - Cybersecurity (Adam Slagell)
  - Scientific Computing Service (Daniel Lapine)
  - Innovative Technologies and Services (Douglas Fein)
- **Economic and Societal Impact (Scott Wilkin)**
  - Marketing and Public Affairs (Kristin Williamson)
  - NCSA Industry Program & New Business Development (Brendan McGinty)
  - Industrial Application Domains (Seid Koric)
  - Advancement & Government Relations (Scott Wilkin)
  - International Programs (Jay Roloff)

Administrative Support

Stacy Walker (4100) provides primary office support for Research and Education directorate, (with the exception of Deanna Spivey who is the backup for Culture and Society).

A full list of office support assignments is available on the [NCSA Staff Resources](#) wiki (accessible with an NCSA login)

Administrative Services

Below are listed some of the core administrative services at NCSA provided in the different departments. Depending on what you need, you should feel free to check with Stacy Walker or Amanda Lombardo for advice on what help is available and where to get it. Note that expensive or time consuming activities may require funds and/or negotiation of availability etc.

- **Office Manager:** Stacy Walker (Primary for Research and Education), Deanna Spivey (Culture and Society): The office managers will help you book and get reimbursed for NCSA related travel, reserve meeting spaces, find supplies for you or order supplies, equipment, catering etc (assuming you have a budget code to charge it to!), fill out paperwork for new employees and students, and help advise you on how to do nearly everything.
- **Facilities**: Tedra Tuttle (Ground Floor, 1008): Office keys, configuration of key cards, use of NCSA building, furniture requests. If you want to have white boards, monitors, pin boards etc hung in your office, this can be arranged through an appropriate office manager.
- **Public Affairs**: Kristin Williamson: External and internal communications, website design and development, design and production of promotional materials, media relations, event coordination and promotion (including event websites, registration forms, logistics, calls for participation, etc), tours of Blue Waters, Bytes and Pieces weekly NCSA newsletter, ACCESS external newsletter, design and production of promotional materials, copy-editing/proofreading, creation of graphics and info graphics, photography. Email news stories to the team at [newsdesk @ncsa.illinois.edu](mailto:newsdesk@ncsa.illinois.edu)
- **Finance**: Lara Rhoades: pre-award (budget preparation for proposals, proposal submission, etc), post-award, accounting/statements, audit support, government costing compliance, cost-recovery rate development, software expertise (Banner, BA3, Excel), budgeting, staff planning and other financial issues. Submit a JIRA ticket to the finance office at finance@ncsa.illinois.edu
- **Human Resources**: Emily Scherbring: recruiting and hiring NCSA-funded staff, postdocs and graduate students, appointment changes, visas. Note that if you have a 0% NCSA appointment, or are a sponsored guest, then your own HR issues (vacations, sick leave, salary, etc) should all be conducted through your home unit's office.
- **Information Technology Services**: Douglas Fein: desktop support, data backup, printers/copiers/fax, mailing lists, website hosting, issue tracking, wiki, FTP, AFS, version control servers, MySQL, wired/wireless networking, linux, jabber, portal development, internal administrative tools (MIS).

Getting Started at the NCSA

1. If you have not already, please go and visit Amanda Lombardo (Rm 4030) on the fourth floor of NCSA so that we can discuss how to get started at NCSA in person, and in particular discuss any space needs or items not described below. We will happily tell you people that you might want to get to know in the building, or give you a tour.
2. Obtain your NCSA Kerberos username and password from Assistant Dir. of Research (Amanda Lombardo, alombar@illinois.edu.).

3. If you have funds at NCSA (e.g. through the Faculty Fellows program or start up funds) you will be sent a budget code and you will be given a login on the BA3 accounting system (ba.eng.illinois.edu) through which you can check balances and receive monthly statements. If you need to spend against these funds before you receive the code, contact Amanda Lombardo.
4. Currently you will be given an NCSA email address (almost certainly with the same username as your Illinois address) e.g. <username>@ncsa. illinois.edu — email to this address which includes some important mail lists used by NCSA, will all be forwarded typically to your regular Illinois address. Without trying to rationalize why this is done, you should be aware that we've found some problems with either the forwarding not being set up, or if people already had accounts from way-back (e.g. as a TeraGrid user when at a different place) the wrong address is being used. We hope to fix this very soon, but for now, please send a mail to yourself at your NCSA address, and check that you receive it. If you do not, please tell Amanda Lombardo.
5. Review and sign-off on the NCSA Security Document using your login and Kerberos password. This document will be sent to you via email after your start date (see "*NCSA Security Strategy*" below.)
6. If you would like to have your students or postdocs working in the building as part of your NCSA-related work, please start by contacting Amanda Lombardo.
7. Add a photo and personalize information on your NCSA electronic directory profile at https://internal.ncsa.illinois.edu/mis/directory/. Go to "My Profile" on the left menu and be sure to fill in information on both the "Staff Directory Listing" and "Additional Information" tabs located at the top. To save changes, click "Publish" at bottom of the page.
8. If you will be spending regular time in the building, report anticipated office hours to Amanda Lombardo.
9. Make friends with the front line IT support, Alex Farthing and Brandon Carswell in Rm 4042, ask them to set up your laptop so you can print at NCSA.
10. Check that your ID swipe card works by running it through the reader at the NCSA front door and seeing that the led turns green (recommend that you try this during work hours before an urgent trip to NCSA out of hours).
11. Note that each floor of NCSA has a kitchen with a shared fridge/freezer and microwave. The ground floor has the Daily Byte II cafe as well as some vending machines by the class rooms.

More About Some Basic NCSA Services

Basic IT Services

- **General Help Desk** : For laptop or desktop issues, please contact Alex Farthing or Brandon Carswell at 244-5701, email help@ncsa.illinois.edu or stop by their office in Room 4042. Alex and Brandon can help with all your computer issues and will install and assist with NCSA supported hardware and software. The IT Services wiki can also assist with general issues: https://wiki.ncsa.illinois.edu/display/ITS/IT+Services . If you have general problems with getting IT services at NCSA, the first place to try is the desktop support team. If you can't find them or they are unable to answer your question (and the wiki URL did not help), send a note to help@ncsa.illinois.edu , and a ticket will be created for a group that can assist you. If you are not getting a response or your problem requires immediate results, you can also contact Doug Fein (dfein@ncsa.illinois.edu), manager of the NCSA IT Services group.
- **Network Issues***:* For wireless, it is recommended that you use the campus provided IllinoisNet. To connect, follow the instructions at http://www.cites.illinois.edu/wireless/wpa2/ or contact Alex or Brandon. To use this network, you will need your University of Illinois NetID and password.
- **Printing** : There are color and black and white printers dotted around the building. To start printing, we suggest you ask Alex at the help desk to set you up on the printers that you want to use.
- **NCSA Kerberos Username and Password***:* This is your NCSA username and password that allow you to access most of the NCSA resources. These include wikis, ticket systems and the internal website known as Savannah or MIS. You should receive this information from Amanda Lombardo. If you do not get this, or lose of forget it, you can have if reset by asking Alex in the Laptop Support office (Rm 4042).
- **Telephone** : NCSA uses the campus LYNC product which can be used via your laptop or mobile device and includes video and chat features. We are not providing physical telephones currently for faculty or students.

Calendar

- There is an NCSA calendar of events, http://illinois.edu/calendar/list/772, note that you can have these appear on your own iCal or Outlook calendars, just click on the calendar icon on that page to see the instructions for this. Also, this master NCSA calendar is compiled from a number of other calendars, click on "i" or information icon to see a list of the constituent calendars.

Faculty Shared Office Space

- Shared work space for Faculty Affiliates is available. Please contact Amanda Lombardo for more information.

Snail Mail

- There are mailboxes located on each floor in the kitchen area. Those with an NCSA appointment (paid or unpaid) are assigned a mailbox.

Meetings and Workshop Planning

To reserve space for a meeting, contact your group's office manager. If your group is not listed or you are not sure who to contact, please contact Stacy Walker (dudzins@illinois.edu) for assistance.

Reservable Meeting Room Spaces for Small Meetings (free)

These rooms typically have a projectors, white board and a conference telephone.

- 2000 – Seats 15

- 2004 – Seats 8
- 2100 – Seats 20
- 3004 – Seats 8
- 3000 - Seats 15
- 3100 – Seats 20
- 4004 – Seats 8
- 4000 - Seats 15
- 4101 - Seats 12

Reservable Meeting Room Spaces for Larger Meetings (for a cost)

- 1030 – Seats around 45, typically laid out classroom style with desks each with microphones
- 1040 – Seats around 45, typically laid out classroom style with desks

Workshops, Conferences and Events

NCSA has superb event facilities on the ground floor, with an auditorium (Rm 1122) with seats 195, two training rooms, and an atrium equipped for receptions. Event services include projection, microphones, webcast and video capture, videoconferencing etc. If you are interested in hosting a workshop or conference that aligns with the NCSA mission, please contact Amanda Lombardo. Please note that it is currently not easy to support meetings at weekends or holidays, or late evenings, so please discuss your ideas and plans as soon as possible to find out what might be possible. The webpage http://events.ncsa.illinois.edu, has pages describing the facilities, services, and underlying costs, but it requires a VPN if off campus and an NCSA email address.

Mail Lists

Faculty are given an email address through NCSA that is automatically forwarded to your regular campus email. If you are not receiving NCSA emails, including the weekly NCSA newsletter "Bytes and Pieces", please contact Amanda Lombardo.

- *all-ncsa:* This low traffic lists provides the entire NCSA community with weekly news (Bytes and Pieces newsletter) or important information from the director's office. You will automatically be added to this list (all NCSA full time staff, affiliate faculty and staff, students, postdocs, and in-house sponsored guests are included).
- *Faculty, Postdocs, and Students lists:* A faculty email list (faculty@ncsa.illinois.edu) has been established for news and discussion. Faculty are encouraged to utilize this communication tool for information sharing within the Center faculty community. For other communications, there is also a postdoc mailing list (postdocs@ncsa.illinois.edu) and a student mailing list (students@ncsa.illinois.edu). Depending on whether you are a faculty, postdoc or student you will be automatically added to the relevant list. These are set up at the moment so that anyone on the list can post to the list, if this leads to too many mails we will make them moderated.
- *General lists:* A software mailing list (software@ncsa.illinois.edu) is used for news and discussion around software development and activities at NCSA.

NCSA's Security Strategy

This document provides staff with tools and education concerning security policy and procedures. Relying on individuals to use these tools to implement security appropriate to their work, NCSA supports a variety of computing systems, services and research projects for a nationwide group of academic and industrial users. It is the responsibility of every employee to protect its assets and those of its staff and clients.

You can go to the following site or an email reminder will be sent to you within your first week of hire to electronically validate the NCSA's security document located at https://internal.ncsa.uiuc.edu.mis/securitydoc/.

Building Access

Anyone with a 0% NCSA appointment, or who is a sponsored guest with building access, should automatically be able to access the NCSA building via their university ID card outside of business hours. If you or your students are in an office with swipe card access you should also have access anytime to these rooms. (Please check this!). Any office keys you need will be provided by NCSA facilities — as usual we need to get the keys back when you leave, and for that reason you will find that we prefer to try and use swipe card access for rooms for students, visitors etc.

Communication and Social Media

To keep up to date with NCSA you should read the weekly Bytes and Pieces newsletter which is sent by email to the *all-ncsa* mail list, usually late in the day on Wednesday. Anyone without an NCSA affiliation can subscribe to a weekly news and events mail list which is the same news without the more internal items — see the NCSA Get Updates page at http://www.ncsa.illinois.edu/news/get_updates for how to subscribe. This page also links to our feeds on Facebook , Twitter , LinkedIn , Instagram , and YouTube .

Hiring Student Employees and Postdoctoral Researchers

If you have interest in employing an undergraduate or graduate student directly through NCSA, please coordinate this through Olena Kindratenko. Faculty sponsors will be responsible for approving student time sheets on a biweekly basis. To hire a postdoctoral researcher, please contact Amanda Lombardo.

Facilities Assistance

If you require furniture to be moved or pictures/white boards, etc. to be hung, please coordinate through Tedra Tuttle.

Cyberinfrastructure Resources

Useful Stuff

Bear in mind, that we have a lot of things around the center that have been purchased by different people – Occulus rifts, 4K screens, high definition video cameras, large printers, etc. If you want to know who might have something you should ask around (e.g. ask Doug Fein, Bob Patterson, ...)

Illinois Campus Cluster Nodes

NCSA is an investor in the Illinois Campus Cluster Program and currently holds sixteen nodes and three ten packs of disks. Specifically, the purchase was for:

- Eight 64 GB, 16 core nodes with Infiniband connection
- Eight 64 GB, 20 core nodes with Infiniband connection with K40 GPUs
- 90 TB of disk space which yields approximate 65 TB of useable space

These resources are available for appropriate NCSA staff and faculty use. To gain access you must first apply for an Illinois Campus Cluster Login at: https://campuscluster.illinois.edu/invest/user_form.html. Select "NCSA" as the primary queue. You will then be notified when your login has been created.

Tim Boerner (tboerner@illinois.edu) is the operations manager.

The Illinois Campus Cluster Program webpage https://campuscluster.illinois.edu/ offers additional information for all experience levels. If you have any additional questions please contact the help desk at help@campuscluster.illinois.edu.

Innovative Systems Laboratory

NCSA's Innovative Systems Laboratory (ISL) conducts research and development around mid- and long-term needs in core computing technology areas. ISL's focus is on new systems or impact on existing systems using emerging processing, storage and interconnect technologies and novel computing environments. ISL provides support for evaluating and developing new technologies of interest to NCSA programs and projects and NCSA academic and industrial partners.

Experimental platforms currently available or under development:

- Cloud computing
    - Virtual Lab for Advanced Design testbed consisting of 4 compute nodes, 3 storage nodes, 2 controller nodes, and 2 10Gb SDN switches.
    - OpenStack cloud deployed on a 32-node cluster with dual-CPU dual-core AMD chips, NVIDIA Tesla S1070 GPUs, and QDR InfiniBand interconnect.
    - Hadoop deployed on an 8-node cluster with dual-CPU 6-core AMD Istanbul chips, NVIDIA C2050 GPUs, and QDR InfiniBand interconnect.
- Storage
    - CEPH storage cluster consisting of 5 Supermicro storage nodes with 2 Intel Xeon E5-2650 v3 CPUs, 128 GB RAM, 10Gb interconnect.
- HPC clusters
    - HPC cluster consisting of 8 nodes with dual CPU 6-core E5-2620 v3 chips, 128 GB RAM, NBIDIA P100/V100 GPUs, and QDR InfiniBand interconnect.
    - HPC cluster consisting of 5 nodes with dual-CPU E5-2609 v3 chips, 2x Intel Xeon Phi 3120 co-processors, NVIDIA Quadro K420 GPU, and QDR InfiniBand interconnect.
- Unique capabilities/experimental platforms
    - IBM Power9 system with 4 NVIDIA V100 GPUs.
    - Dell PowerEdge R920 high-memory system with 48 CPU cores and 3TB of RAM.
    - Intel Xeon workstation with 8 Tesla C2050 GPUs.
    - Intel Xeon workstation with NVIDIA P100 GPUs.
    - AMD Opteron A1100-Series developer system with ARM Cortex-A57 SoC.

For more information or to collaborate, please contact Volodymyr Kindratenko (kindr@ncsa.illinois.edu) or visit http://www.ncsa.illinois.edu/about/org/isl.

Blue Waters

The NSF funded Blue Waters petascale supercomputer has a peak performance of over 13 petaflops, some 26 petabytes of disk storage, and up to 380 petabytes of tape storage. Although much of Blue Waters is allocated through an NSF review process, different mechanisms exists for Illinois faculty and researchers to take advantage of this resource. The different allocation mechanisms are described at https://bluewaters.ncsa.illinois.edu/illinois-allocations. Contact Jay Roloff (jayr@illinois.edu) for more information on Blue Waters allocations.

Ice House Long Term Data Storage

The NCSA Ice House facility provides reliable long-term storage for backups, archives, data needing mid to long term storage with only occasional access. The storage uses a disk cache to enhance data transfer performance and a tape library backend for reliable long term storage. Data can be deposited as a private archive or made available for others to download via Globus Data Sharing. Use cases suitable for this type of storage include research data that needs to be stored for future analysis, data that supports publications, backups or as a data replication site for existing services. Multiple classes of service are available on a consulting basis. Please contact Michelle Butler (mlbutler@illinois.edu) for more information.

Storage Condo

The NCSA storage condo provides mid-level scalable storage from 10 terabytes to over a petabyte. The cost-recovery fee-for-service model starts at around $100/terabyte/year. Each project gets a private file system/s, access to data is via file system (NFS) or Globus. Additional services and access options are available via additional consulting fees. Use cases for this type of storage are hosting of large data sets, operational data storage and scratch space for analysis, mid-term data storage for archival needs. Please contact Michelle Butler (mlbutler@illinois.edu) for more information.
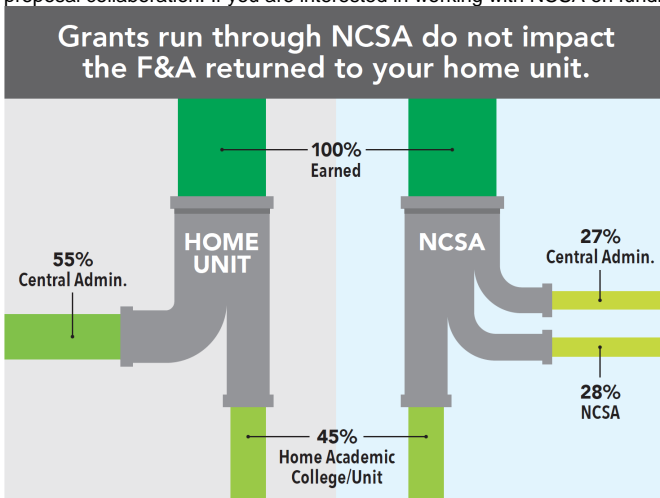
Creative Lab/e-Dream Lab

The Creative Lab contains an extensive list of equipment including audio, Mac and PC computers, projectors, network and video routing, camera equipment, cables/adapters/mics, lighting, and motion capture among others. For more information on the room or equipment, please contact Donna Cox (donnacox@illinois.edu).

Research and Education Programs

The research and education directorate at NCSA coordinates the following programs and activities at NCSA. To find out any more about these programs please ask Amanda Thibault.

- NCSA Fellows program - Awards typically of around $25K to fund new collaborations between NCSA staff and Campus faculty and researchers. The call for proposals comes out around the end of the calendar year, with a review panel in spring, and new fellows starting in the summer. The solicitation is targeted at areas of strategic importance for NCSA.
- SPIN program - Undergraduates are encouraged to take part in research, development and innovation projects at NCSA both during the academic year and the summer. The Students Pushing Innovation (SPIN) program at NCSA runs a matchmaking open day in the Spring semester where students from across the campus meet with NCSA staff and faculty. The SPIN program is particularly interested in facilitating projects that support new application areas and encourage more diversity at NCSA.
- NCSA REU INCLUSION program - INCLUSION (Incubating a New Community of Leaders Using Software, Inclusion, Innovation, Interdisciplinary and OpeN-Science) is a 10-week software-in-research training experience at NCSA during the summer. Funded by NSF, pairs of students will work on socially-impactful research centered around open source software, guided by pairs of mentors.
- **Interdisciplinary Proposal Development** - NCSA offers proposal development assistance for large, interdisciplinary proposals submitted through NCSA. The recent change to the ICR funding structure is now friendly to both the Center and home units and encourages strategic proposal collaboration. If you are interested in working with NCSA on funding opportunity, please contact Farzaneh Masoud.

Grants run through NCSA do not impact the F&A returned to your home unit.

100% Earned

HOME UNIT — 55% Central Admin. — 45% Home Academic College/Unit

NCSA — 27% Central Admin. — 28% NCSA

- Colloquia series - NCSA brings in a number of distinguished and visionary speakers each semester, typically the colloquia are from 11 to noon on a Friday in the NCSA auditorium. We try and organize a schedule so that visitors get to interact with different groups at NCSA and the campus, and welcome partnering with other units. We would like suggestions for colloquia speakers! Note that the talks are recorded and available on our NCSA YouTube channel.
- Postdoc Program - We are rolling out a program to ensure that postdocs have the best experience during their time at NCSA, with mentoring, training, and exposure to many different areas of research and cyberinfrastructure development and operations. We believe NCSA can provide a unique interdisciplinary and computational experience.

More Information and Communication

General Mail Lists of Potential Interest

- all-ncsa@ncsa.illinois.edu – everyone (NCSA employees, sponsored guests who are permanent residents)
- staff@ncsa.illinois.edu – maybe just NCSA employees, includes postdocs but not students ❓
- software@ncsa.illinois.edu – cross cutting NCSA interest group
- faculty@ncsa.illinois.edu, postdocs@ncsa.illinois.edu

Women at NCSA

Women@NCSA provides professional development and networking opportunities for employees, affiliates, and students. Our objective is to create a more diverse and inclusive environment through outreach, talks and events. The monthly events will be structured to drive conversations around our experiences as women in the workplace, develop professional skills, and to create and strengthen professional relationships. W@NCSA hopes to empower women and provide a network of support within NCSA and the community. Subscribe to the mailing list here for more information on upcoming events and opportunities.

General NCSA Pages or Wikis of Potential Interest (some may have restrictions)

- https://internal.ncsa.illinois.edu– internal administrative tools, different people see different things
    - https://internal.ncsa.illinois.edu/mis/orgChart/all.php— this link gives you the actual organization, you can click to see with/without students etc
- NCSA Research and Education

Addressing Discrimination and Harassment

NCSA and the University of Illinois at Urbana-Champaign are committed to the prompt and equitable resolution of all alleged or suspected violations of the Discrimination and Harassment policy about which the University knows or reasonably should know, regardless of whether a complaint alleging a violation of this policy has been filed and regardless of where the conduct at issue occurred.

If you are concerned that this policy has been violated, please contact Amanda Lombardo (alombar@illinois.edu).

For more on the University's procedures for addressing discrimination and harassment, please see http://cam.illinois.edu/ix/ix-b/ix-b-3.htm.