

**RESEARCH** of **TODAY**



NATIONAL  
USER  
FACILITY  
ORGANIZATION

introducing the

# National User Facility Organization

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Executive Administrator, NUFO

Presentation at the 3-Way Meeting  
July 31, 2013

# National User Facility Organization: NUFO Represents

Federally-funded  
***scientists*** who conduct  
research at U.S. or  
non-U.S. scientific user  
facilities.



Users at U.S. User  
Facilities



Users representing  
U.S. experiments  
at Large Hadron  
Collider at CERN



Science at User  
Facilities



# NUFO is a collaboration between User Representatives (UEC Chairs) and User Administrators ([www.nufo.org](http://www.nufo.org))

- Steering Committee (3 elected User reps, 3 elected administrative reps, 3 elected general members, 3 appointed individuals)
- Membership (1 User Representative and 1 User Administrator)
- Six Working Groups
- In General
  - User Representatives focus on outreach activities
  - User Administrators focus on streamlining processes to facilitate access
  - Both branches work together closely to fulfill the overall NUFO mission
- Represents > 45,000 users from all 50 , 500 universities, 300 industrial firms, plus national and private research laboratories



# Educates and Advocates for User Facilities

Promotes the Four Pillars of Communication:

1. User Facilities are the birthplace of fundamental knowledge
  - Top Quark discovery by CDF and DZero experiments at Fermilab in 1995
2. User Facilities are the home of scientific achievements
  - 24 Nobel Prizes from 1939 to now
  - 2012 Nobel Prize in Chemistry for G-protein-coupled receptors (GPCRs) was based in part on research performed at the Argonne National Laboratory
3. User Facilities promote economic competitiveness
  - Industrial research leads to key discoveries, patents, and new technologies
  - Stimulates economic growth
4. User Facilities are the cradle of science education
  - 40% of users are graduate students or postdoctoral students.

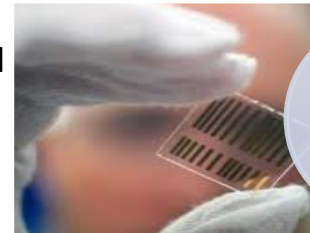


Knowledge

Achievements



Economic  
Competitive-  
ness

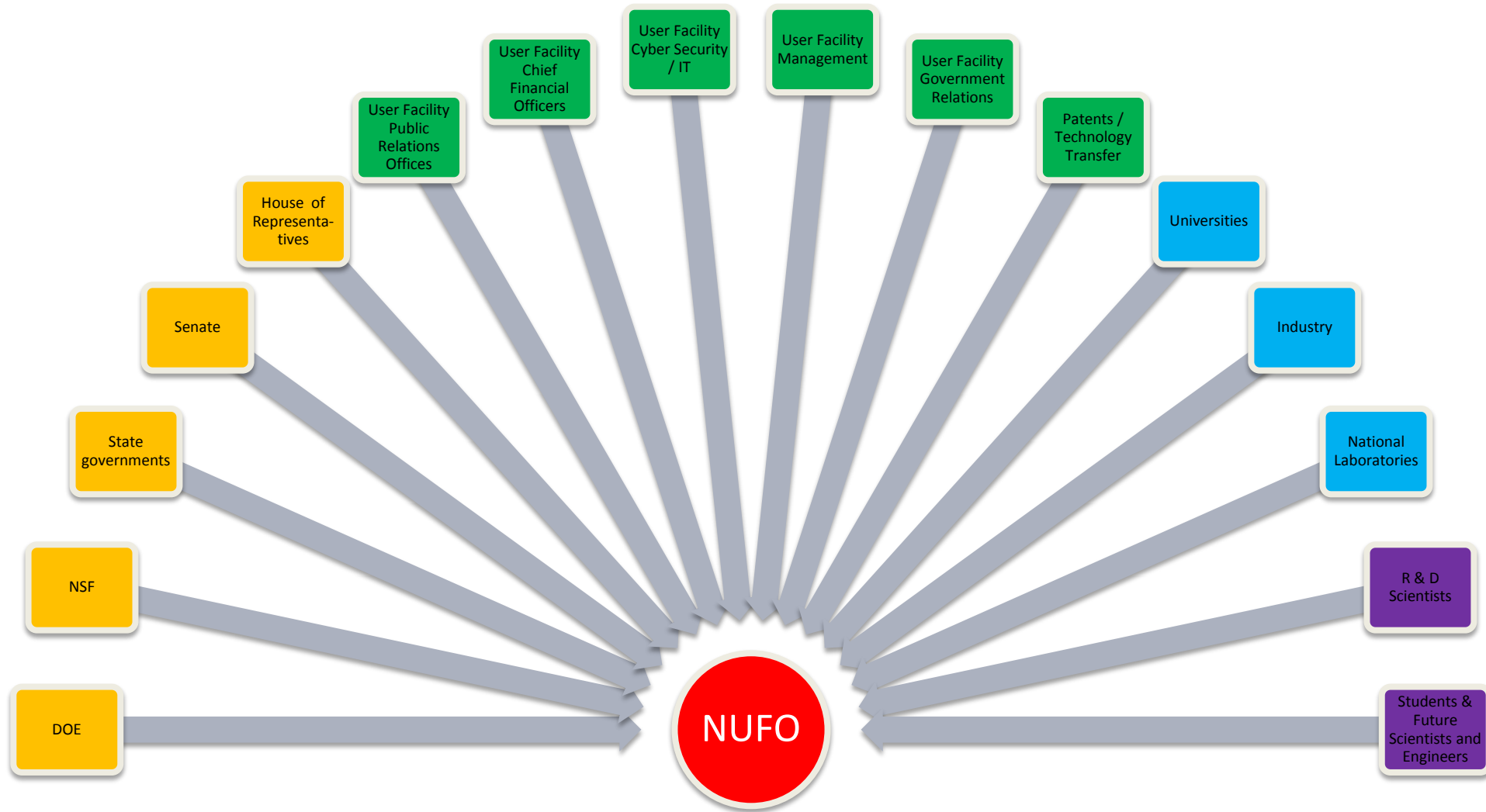


Education



# National Voice for Users

48 User Facilities, and Stakeholders at every level of government, industry and in university, find value in NUFO:



**NUFO** provides a *unified message* at the national level...

## To Congress, Industry, DOE, the Public

- **Congress**
  - Congress invites NUFO to hold yearly exhibitions on Capitol Hill
  - NUFO was invited to testify to Congress about User Facility
  
- **Industry**
  - NUFO Report led to a BESAC Study
  - BESAC recommended changes that directly track NUFO recommendations
  
- **DOE/Government**
  - NUFO involvement led to modification of DOE Order 142.3, Foreign Visits and Assignments – facilitating access for non-US citizen users
  
- **Public**
  - NUFO participates in the USA Science & Engineering Festival in Washington
  - NUFO attends professional society meetings to educate attendees about user facilities
  - NUFO conducts benchmarking studies to enable facilities to adopt best practices



# NUFO Annual Meetings

- 2009: Industry usage
- 2010: Educational outreach
- 2011: Access to user facilities
- 2012: University relations
- 2013: Big data

**NUFO** NATIONAL USER FACILITY ORGANIZATION

The **FUTURE** of America is the **RESEARCH** of **TODAY**

www.nufo.org Info@nufo.org July 9, 2013

## NEWS

### Big Data Draws Big Crowds

Attendees of the 2013 Annual Meeting

"Big Data" was the overall theme of the 2013 National User Facility Organizational Annual meeting held at Lawrence Berkeley National Laboratory and hosted by LBL's six user facilities: The Advanced Light Source, The Molecular Foundry, the Joint Genome Institute, the National Center for Electron Microscopy, ESNet and NERSC. Plenary sessions included talks on both technical and policy considerations of various aspects of big data: collection, analysis, maintenance/storage, and transmission. The opening session began with a review of NUFO activities during the past year and concluded with an initial presentation on a possible new structure for the organization.

Parallel sessions were held for meetings of the NUFO Working Groups: Administrative Affairs, Facility Financial Best Practices, Communication and Outreach, Industrial Access and Interactions, and Computing and Data Access. Summaries of these sessions were presented at the end of each day. The final session included an interactive video teleconference with Ben Brown, DOE office of Science, who discussed the DOE-SC definitions of User facilities and users.

Approximately 100 registered to attend the meeting in person; an additional 70 logged in to view live video streams.

**Jerry Kekos (LBL)**  
Financial Best Practices Chair

**Chelsea Whyte (NSLS)**  
Introduces Tumblr

**Greg Bell (ESNET)**  
discusses big data

**Massie Ballon (JGI) and Linda Vu (LBL)**  
social media specialists

**Yves Izardis,**  
NUFO Chair

# 2013 User Science Exhibition



The screenshot shows the top of the NUFO website. The header features the NUFO logo (National User Facility Organization) and the slogan "The FUTURE of America is the RESEARCH of TODAY". Below the header, there is a navigation bar with the website URL "www.nufo.org", the contact email "info@nufo.org", and the date "July 25, 2013". The main content area is titled "NEWS" and features a photograph of Congressman Randy Hultgren and Chris Benmore (AP5) at the exhibition. To the right of the photo is a short article titled "2013 User Science Exhibition" with several paragraphs of text. The article describes the exhibition's focus on energy, health, and innovation, and mentions that it was held at the Rayburn House Office Building on June 26, 2013. It also notes that attendees included members of the U.S. House of Representatives and their staffs.

**2013 User Science Exhibition**

Balls suspended in air by sound. New detectors for breast cancer. Ice cut by coins coated with diamond. Roofing shingles that generate electricity.

These were some of the demonstrations seen by members of the U.S. House of Representatives and their staffs during NUFO's Exhibition on Scientific User Facilities on June 26, 2013. The exhibition, sponsored by NUFO at the invitation of the House Science and National Labs Caucus, was held in the Rayburn House Office Building. The attendees learned first hand about the wide-range of research and innovation undertaken at the National User Facilities. They were also able to interact directly with more than 60 users and facility representatives who traveled to Washington to participate in the exhibition.

The exhibition focused on three themes in research: Energy, Health, and Innovation. In addition to the demonstrations, videos and posters presented examples of the impact of research at user facilities, with a special emphasis on accomplishments by industry. Additional posters described initiatives in science education and the geographic diversity of facility users.

Remarks delivered during the event by Congressmen Chaka Fattah and Randy Hultgren, two of the co-Chairs of the Science Caucus, emphasized the importance of

## Attendees

- Seven members of the House attended
- Staff from 35 Congressional Offices
- Funding agencies
- Professional societies

## Exhibition

- 16 demonstrations and videos
- Faces and Places posters
- Posters in theme areas of energy, health, and innovation



# NUFO Plans for 2014

- NUFO, Office of Science, and the National Science Foundation are jointly sponsoring a User Facility Symposium at the 2014 AAAS Meeting
- Science & Engineering Festival in Washington, DC
- NUFO plans to visits each user facility and speak to User Organizations
- Investigating incorporation



# NUFO Web Page



NATIONAL  
USER  
FACILITY  
ORGANIZATION

The **FUTURE** of America is the  
**RESEARCH** of TODAY

[login]

HOME NEWS EVENTS CHARTER ORGANIZATION FACILITIES MEETINGS REPORTS OUTREACH CONTACTS



## NUFO NEWS

**NEW** NUFO News -- 2013 Exhibition in DC  
(7/25/2013)

**NEW** NUFO News--2013 Annual Meeting  
(7/12/2013)

NUFO Testifies at the House on User Facilities  
(6/25/2012)

## NUFO IN THE NEWS

**NEW** Ph.D. physics student urges members of  
Congress to support science and  
technology research (7/15/2013)

**NEW** Light Leads the Way to 2012 Chemistry

The Advanced Photon Source is an Office of Science User Facility operated for the DOE by Argonne National Laboratory



# NUFO Data

Archive: Upcoming Events | 2013 | 2012 | 2011 |

## UPCOMING EVENTS

08.05.2013	NUFO @ the Denver X-ray Conference
08.10.2013	National School on Neutron and X-ray Scattering
08.12.2013	Neutrons and Nano User Meeting @ ORNL
08.25.2013	2013 Optics + Photonics
10.16.2013	2013 LANSCE School on Neutron Scattering - Geosciences & Materials in Extreme Environments
11.04.2013	2013 Joint TMF-NCEM Annual Users Meeting
05.12.2014	2014 APS/CNM/EMC Users Meeting
06.02.2014	2014 Users Group Workshop and Annual Meeting

## FACILITIES

Advanced Photon Source (APS)



## MEETINGS



June 19-21, 2013 - Lawrence Berkeley National Laboratory | Meeting Website

"Big Data" was the overall theme of the 2013 National User Facility Organizational Annual meeting held at Lawrence Berkeley National Laboratory and hosted by LBL's six user facilities: The Advanced Light Source, The Molecular Foundry, the Joint Genome Institute, the National Center for Electron Microscopy, ESNet and NERSC. Plenary sessions included talks on both technical and policy considerations of various aspects of big data: collection, analysis, maintenance/storage, and transmission. The opening session began with a review of NUFO activities during the past year and concluded with an initial presentation on a possible new structure for the organization.

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June 18-20, 2012 - Los Alamos National Laboratory | Agenda/Talks/Participants

The meeting was focused on "Strengthening the Relationship Between University Research and National User Facilities". The two-and-a-half day meeting was held primarily in historic Santa Fe, New Mexico and included tours of some of LANL's National User Facilities: The Center for Integrated Nanotechnologies (CIINT), the National High Magnetic Field Laboratory (NHMFL), and the Los Alamos Neutron Science Center (LANSCE). Breakout sessions and working group topics included: University Relations, Industrial Access and Interactions, and Nanotechnology Security, to name a few.



## LINKS

Facility Website

Fact Sheet

Poster

Scientific Accomplishments

## REPORTS

### NUFO Reports

- Industrial Usage Report
- Educational Outreach Report
- 2011 Annual Meeting Report

### Benchmarking Results

- Multilingual Websites
- DOE User Agreements
- First Aid to Users
- Publication Tracking
- Proposal Call Closure
- Foreign Visits & Assignments
- Shipping Policies & Procedures
- Insurance for Users
- Publication Acknowledgements
- Housing

### Related Links

- BESAC Report

## OUTREACH

### Outreach Materials

- Facility Fact Sheets
- Scientific Accomplishments
- NUFO Brochure
- NUFO Correspondence
- Guidelines for Outreach Meetings
- Outreach Contacts
- NUFO Presentation

### Outreach Activities

- USA Science & Engineering Festival
- User Science Exhibition

The Advanced Photon Source is an Office of Science User Facility operated for the DOE by Argonne National Laboratory

# Facility Contacts

- User Administrator
- User Representatives
- Facility Directors
- Communications Directors
- Government Relations Contacts
- Funding Agency Contact
- Science Funding Agencies
- Industrial User Science Contacts
- University User Science Contact

\*\*\*\*\* Maintain list servers for all categories \*\*\*\*\*



# Facility Information

- Fact Sheets
- Posters
- Scientific Accomplishments
- R&D Awards
- Photos
- List Servers
- User Statistics

# Become a Friend of NUFO

go to [www.nufo.org/organization/friends-of\\_nufo.aspx](http://www.nufo.org/organization/friends-of_nufo.aspx)