Washington, DC Trip 2010 Report

Bill Lockman

On behalf of

SLUO
SLAC USERS ORGANIZATION

DC 2010 trip participants
DC Trip 2010

Joint effort of 34 individuals from 3 users organizations:

SLUO (SLAC Users Organization):
9 delegates + 1 non-traveling member

Fermilab UEC (Users Executive Committee):
17 delegates

USLUO (US LHC Users Organization):
8 delegates

Visited 173 congressional DC offices with the message:

“Thank you for your past support of High Energy Physics.”
The ASK: “Please continue to support HEP research through the Department of Energy Office of Science and the National Science Foundation in the FY 2011 Budget”
SLUO: mix of new and veteran members:

- Lisa Kaufman (Maryland) Co-chair: EXO
- Bill Lockman (UC Santa Cruz) Co-chair: BABAR and ATLAS
- Nicole Ackerman (Stanford): EXO
- Matt Bellis (Stanford): BABAR
- Michael Busha (SLAC): DES
- David Doll (CALTECH): BABAR
- Norman Graf (SLAC): ATLAS and ILC
- Joe Tuggle (Chicago): ATLAS
- David Miller (Stanford): ATLAS

Non-traveling:

- Brian Gerke (SLAC): DES

جو We were extremely happy with the performance of the entire delegation, especially that of the 1st timers
DC Trip 2010

- Slated for February 24-26, 2010 just after the Washington APS meeting.
- *Budget limitations* (<$10K), and a *tight schedule* limited delegation to six veterans and three freshmen, co-chaired by Lisa Kaufman and Bill Lockman.
- DC trip based on model developed by Steve Sekula et al.
- Legislative office visits done in pairs: primary and secondary delegates:
  - primary assignments based on strength of constituent connection
    - primary responsible for contacting office, making appointment, establishing and leading the discussion with staffer or congress person
  - Secondaries assigned on eve of office visits by John Urheim (great job!)
- Executive branch delegations organized by USLUO, UEC and SLUO.
- SLUO DC trip delegates met weekly Jan.- Feb. 2010 (*see blog*):
  - DC news, office appointments, carry-along material, role playing, regional office visits, feedback from side meetings, post-trip debriefing.
The Department of Energy’s Office of Science and the National Science Foundation facilitate High Energy Physics research. DOE’s Office of Science funds the national labs that provide facilities for university-based High Energy Physics research. The DOE and NSF also fund peer-reviewed university research programs across the country. These programs produce scientists who will tackle tomorrow’s problems critical to the nation, including energy science and national security.

Fighting AIDS – Researchers used the Advanced Photon Source at Argonne National Laboratory to develop Kaletra, one of the world’s most-prescribed drugs to fight AIDS.

Securing Our Borders – Particle accelerator-based tools allow more accurate scanning of cargo. A new screening technology can now penetrate through steel four times farther than previous methods.

Making Tires Green – The auto industry uses particle accelerators to treat the material for radial tires, eliminating solvents that pollute the environment and reducing the amount of rubber needed by two to three pounds per tire.

We train the next generation of innovators.

High Energy Physics trains young people:
Educated workforce – Our training provides a highly educated workforce that contributes to many fields, including physics, medicine, materials science, and finance.

Science literacy – Our nationally recognized education programs, such as Quarknet and Saturday Morning Physics, promote interest in Science, Technology, Engineering, and Mathematics (STEM) to K-12 students.

We thank you for your support.

The American Recovery and Reinvestment Act of 2009 enabled the construction of new projects that led to new jobs throughout the industry sector. Continued support for High Energy Physics is essential to realize the full benefits of these projects.

America COMPETES
• The America COMPETES Act authorizes doubling of support for the physical sciences by fiscal year 2014.
• The America COMPETES Act seeks to restore the health of the nation’s science program.

Thank you for your support of High Energy Physics.

Please support High Energy Physics research through the Department of Energy’s Office of Science and the National Science Foundation in the FY2011 budget.
### Other DC Trip 2010 Meetings

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>1/7/2010</td>
<td>Met with Rob Brown and David Harris (SLAC Communications) to discuss one-pager, possible SLAC material to carry along</td>
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<tr>
<td>1/13/2010</td>
<td>Met with Persis Drell and David MacFarlane to discuss message, mood in Washington</td>
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<td>2/4/2010</td>
<td>Met with Ryan Adesnik (Stanford Government Relations Office) to discuss message on one pager, budget, executive branch visits</td>
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<td>2/7/2010</td>
<td>SLUO, UEC, USLUO meeting at Fermilab. Included the Included perspectives from UEC, USLUO, SLAC and also the view in DC (Lewis-Burke and Associates, Bridget Glynn)</td>
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<td>2/24/2010</td>
<td>Breakfast pre-office visit briefing at the Universities Research Association in DC by Carol McGuire, from Lewis Burke Associates</td>
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<td>3/24/2010</td>
<td>SLUO Closeout meeting: trip reports, followup on Dear Colleague letters for America COMPETES reauthorization and 2011 budget, plans for additional regional office visits</td>
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**Distilled advice:**

**Legislative:** Express thanks for past support! Express enthusiasm for and relevance of your science. Request the “Ask” (augmented by “Dear Colleague” letter signing, floor speeches to support science in America COMPETES and 2011 Budget)

**Executive:** Feedback on legislative office visits, offer help to expedite the budget process
Out of 435 voting house members and 100 senators, 222 offices were contacted for appointments

Appointments made with 173 offices
  Appointment success rate: $\frac{173}{222} = 78\%$
  At-large coverage: $\frac{173}{535} = 32\%$

Appointments made with members of Science Committees

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<th>Committee</th>
<th># members</th>
<th># visited</th>
<th>%</th>
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<tr>
<td>Science and Technology (House)</td>
<td>42</td>
<td>14</td>
<td>32</td>
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<tr>
<td>Commerce, Science and Transportation (Senate)</td>
<td>25</td>
<td>12</td>
<td>48</td>
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<td>67</td>
<td>26</td>
<td>39</td>
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The time schedule for working on the appropriations bills has been set back a couple weeks from normal due to the debate on health care reform. It is expected that there may be a budget resolution in both houses to get the spending bills to be drafted. However, it is likely that in this election year, that there will be a continuing resolution until after the elections. There are some partisan differences regarding earmarks and the nature of the President’s proclamation that there will be a freeze on certain areas of discretionary spending.

For High Energy Physics, the hope is that President’s request of a 2.2% increase will turn into law. Within the House, “Dear Colleague” letters in support of the DOE Office of Science and a separate NSF letter are being circulated. Similar letters for the Senate are in the works.

Chairman Gordon (House Science and Technology Committee) wants to take the reauthorization of the America Competes Act to the House floor by Memorial Day. The DOE Office of Science Reauthorization bill should have the full committee mark-up by the end of April. The NSF reauthorization will follow. The current language is being worked upon to make sure HEP and nuclear physics are specifically mentioned along with other Office of Science programs.

It is true that the President’s budget has a reduction of more than $500M for the Army Corps of Engineers that the Energy & Water Appropriations subcommittees will have to address.
My Impressions

• The DC trip was a joint, coherent effort by 34 delegates from SLUO, USLUO and UEC to thank the legislators for their past support of High Energy Physics and to continue to support HEP through the DOE office of science and the NSF in the proposed 2011 budget to Congress.

• We came with a well thought-out "one-pager" covering the exciting science we are involved in, the training we provide to the workforce, the importance of STEM education and the applications our field has provided in areas affecting the general population, including the web, GPS, medical imaging, homeland security and green technology.

• The interactions that we had and feedback received from the legislative offices was very positive. They encouraged us to improve our outreach both to Congress and the general public.

• I really enjoyed putting together this year's trip and was extremely happy with the coherence of our message, and the enthusiasm and spirit with which it was delivered by our delegates.
The DC trip effort is a year-round activity focused on interacting with members of Congress and the executive branch to foster support for HEP. The main focus is the Washington, DC visit, where we ask Congress to continue to support HEP research through the Department of Energy’s Office of Science and the National Science Foundation in the FY budget by communicating clearly and enthusiastically that funding research is a good investment in taxpayer dollars:
– Fundamental research is an important aspect of cultural evolution
– Our field educates the next generation of innovators
– HEP has an excellent track record of yielding profound applications
  • e.g.: www, GPS, medical applications, homeland security, green technologies ...

Follow up by:
– Emailing legislators to sign Dear Colleague letters supporting, e.g., America COMPETES reauthorization and later, the proposed budget
– Visiting district offices at key intervals
Next Year

- Encourage increased participation from SLUO exec members
  - Some experienced members of this year's delegation moving on
- Planning must start in Fall for next year’s trip
  - Communications Office needs lead time to help with carry along material
- Ensure the trip reporting mechanism is functional again
- Need statistics from labs/universities on community impact
Extra Material
Handout Material: Three Frontiers

Frontiers of Particle Physics

To discover what the universe is made of and how it works is the challenge of particle physics. From the science and technology of particle physics have come a profound understanding of the universe and many benefits to society. Current and future experiments give scientists the capability to address a well-defined set of questions about the basic physical laws that govern the universe. These questions define the path for particle physics in the 21st century.

- Are there undiscovered principles of nature: new symmetries, new physical laws?
- How can we solve the mystery of dark energy?
- Are there extra dimensions of space?
- Do all the forces become one?
- Why are there so many kinds of particles?
- What is dark matter? How can we make it?
- What are neutrinos telling us?
- How did the universe come to be?
- What happened to the antimatter?

Scientists have identified three frontiers of scientific opportunity for the field of particle physics: the Energy Frontier, the Intensity Frontier and the Cosmic Frontier. Answers to the most challenging questions about the fundamental physics of the universe will come from combining the most powerful insights and discoveries at each of the three frontiers.

The Energy Frontier

Particle accelerators at the Energy Frontier produce high-energy collisions that signal new phenomena, from the origin of mass to the nature of dark matter and extra dimensions of space. Fermilab’s Tevatron experiments, CDF and DZero, continue to set new records in a physics program of exciting discoveries and ultra-precise measurements, involving over 1,000 scientists from 150 institutions in some 30 states and 30 countries. Some 1,700 U.S. scientists from 87 universities and seven national laboratories carry out research at the LHC, the world’s new energy-frontier accelerator.
Handout Material: **Accelerators**

Accelerators and Beams

Tools of Discovery and Innovation

Published by the Division of Physics of Beams of the American Physical Society
Physicists have been inventing new types of accelerators to propel charged particles to higher and higher energies for more than 80 years. Today, scientists estimate that more than 17,000 accelerators are in operation around the world—in industry, in hospitals and at research institutions. The following benefits are just a few examples on a growing list of practical applications.

**Semi-conductors:** The semi-conductor industry relies on accelerator technology to implant ions in silicon chips, making them more effective in consumer electronic products such as computers, smart phones and MP3 players.

**Clean air and water:** Studies show that blasts of electrons from a particle accelerator are an effective way to clean up dirty water, sewage sludge and polluted gas from smokestacks.

**Medical diagnostics:** Accelerators are needed to produce a range of radionuclides for medical diagnostics and treatments that are routinely applied at hospitals worldwide in millions of procedures annually.

**Pharmaceutical research:** Powerful X-ray beams from synchrotron light sources allow scientists to analyze protein structures quickly and accurately, leading to the development of new drugs to treat major diseases such as cancer, diabetes, malaria and AIDS.

**Nuclear energy:** Particle accelerators have the potential to treat nuclear waste and enable the use of an alternative fuel, thorium, for the production of nuclear energy.

**Shrink wrap:** Industry uses particle accelerators to produce the sturdy, heat-shrinkable film that keeps such items as turkey, produce and baked goods fresh and protects board games, DVDs, and CDs.

**DNA research:** Synchrotron light sources allowed scientists to analyze and define how the ribosome translates DNA information into life, earning them the 2009 Nobel Prize in Chemistry. Their research could lead to the development of new antibiotics.

**Cancer therapy:** When it comes to treating certain kinds of cancer, the best tool may be a particle beam. Hospitals use particle accelerator technology to treat thousands of patients per year, with fewer side effects than traditional treatments.
Symmetry Magazine

• Past Issues relevant to particular office visit
Science Committees Coverage

### At-large Sciences Committees Coverage: 26/67 = 39%

### California coverage: 3/5 = 60%