People

Ed Seidel
VP for Research and Innovation
Skolkovo Institute of Science and Technology
Moscow, Russia

Celeste Rohlfing
Acting AD, MPS

Gail Dodge
Program Director, Nuclear Physics
### Personnel on Awards (FY 11)

- **Senior Personnel**: 1,422
- **Active awards**: 1,302
- **Postdocs**: 534
- **Other Professionals**: 1,198
- **Graduate Students**: 1,208
- **Undergraduate Students**: 672* 
  
*Plus about 444 at REU Sites*
Facilities

- LIGO/AdvLIGO (construction to end in FY2015)
- LHC (began operating in FY 2010)
- IceCube (began operating in FY2011)
- NSCL (to be succeeded by FRIB)
- DUSEL (MREFC project cancelled in FY2011)
- CESR/CLEO (Phased out in FY2009)
- Midscale: ACT, SPT, Auger, CDMS, XENON, LUX, WARP, ZEPLIN, CoGeNT, COUPP, DArkside, DRIFT, MiniLens, Borexino, Double Chooz, Daya Bay, CUORE, Majorana, QUIET, HiRES, TA, Milagro, HAWC, Stacey, Veritas, MiniBoone, MicroBoone, Numi/MINOS, RHIC end-cap calorimeter, university based NP accelerators, several MRI projects, etc.
## R&RA Funding

(Dollars in Millions)

<table>
<thead>
<tr>
<th>Department</th>
<th>FY 2011 Actual</th>
<th>FY 2012 Estimate</th>
<th>FY 2013 Request</th>
<th>FY 2012 Estimate Amount</th>
<th>Change over Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences</td>
<td>$712.27</td>
<td>$712.38</td>
<td>$733.86</td>
<td>$21.48</td>
<td>3.0%</td>
</tr>
<tr>
<td>Computer &amp; Information Science &amp; Engineering</td>
<td>636.06</td>
<td>653.59</td>
<td>709.72</td>
<td>56.13</td>
<td>8.6%</td>
</tr>
<tr>
<td>Engineering</td>
<td>763.33</td>
<td>826.17</td>
<td>876.33</td>
<td>50.16</td>
<td>6.1%</td>
</tr>
<tr>
<td>Geosciences</td>
<td>885.32</td>
<td>885.27</td>
<td>906.44</td>
<td>21.17</td>
<td>2.4%</td>
</tr>
<tr>
<td>Mathematical &amp; Physical Sciences</td>
<td>1,312.42</td>
<td>1,308.94</td>
<td>1,345.18</td>
<td>36.24</td>
<td>2.8%</td>
</tr>
<tr>
<td>Social, Behavioral &amp; Economic Sciences</td>
<td>247.33</td>
<td>254.25</td>
<td>259.55</td>
<td>5.30</td>
<td>2.1%</td>
</tr>
<tr>
<td>Office of Cyberinfrastructure</td>
<td>300.75</td>
<td>211.64</td>
<td>218.27</td>
<td>6.63</td>
<td>3.1%</td>
</tr>
<tr>
<td>Office of International Science &amp; Engineering</td>
<td>49.03</td>
<td>49.85</td>
<td>51.28</td>
<td>1.43</td>
<td>2.9%</td>
</tr>
<tr>
<td>Office of Polar Programs¹</td>
<td>440.70</td>
<td>435.87</td>
<td>449.74</td>
<td>13.87</td>
<td>3.2%</td>
</tr>
<tr>
<td>Integrative Activities</td>
<td>259.60</td>
<td>349.59</td>
<td>431.52</td>
<td>81.93</td>
<td>23.4%</td>
</tr>
<tr>
<td>U.S. Arctic Research Commission</td>
<td>1.58</td>
<td>1.45</td>
<td>1.39</td>
<td>-0.06</td>
<td>-4.1%</td>
</tr>
<tr>
<td>Total, R&amp;RA</td>
<td>$5,608.38</td>
<td>$5,689.00</td>
<td>$5,983.28</td>
<td>$294.28</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Totals may not add due to rounding.

¹ Funding for FY 2011 Actual excludes a one-time appropriation transfer of $54.0 million, less the 0.2% rescission, to the U.S. Coast Guard per P.L. 112-110.
# MPS Funding

(Dollars in Millions)

<table>
<thead>
<tr>
<th>Division</th>
<th>FY 2011 Actual</th>
<th>FY 2012 Estimate</th>
<th>FY 2013 Request</th>
<th>Change Over FY 2012 Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division of Astronomical Sciences (AST)</td>
<td>$236.78</td>
<td>$234.55</td>
<td>$244.55</td>
<td>$10.00</td>
</tr>
<tr>
<td>Division of Chemistry (CHE)</td>
<td>233.55</td>
<td>234.06</td>
<td>243.85</td>
<td>9.79</td>
</tr>
<tr>
<td>Division of Materials Research (DMR)</td>
<td>294.91</td>
<td>294.55</td>
<td>302.63</td>
<td>8.08</td>
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<tr>
<td>Division of Mathematical Sciences (DMS)</td>
<td>239.79</td>
<td>237.77</td>
<td>245.00</td>
<td>7.23</td>
</tr>
<tr>
<td>Division of Physics (PHY)</td>
<td>280.34</td>
<td>277.37</td>
<td>280.08</td>
<td>2.71</td>
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<tr>
<td>Office of Multidisciplinary Activities (OMA)</td>
<td>27.06</td>
<td>30.64</td>
<td>29.07</td>
<td>-1.57</td>
</tr>
<tr>
<td><strong>Total, MPS</strong></td>
<td>$1,312.42</td>
<td>$1,308.94</td>
<td>$1,345.18</td>
<td>$36.24</td>
</tr>
</tbody>
</table>

Totals may not add due to rounding.
Underground Physics DCL

• NSF PHY has redirected its future-generation, facility investments in underground research to the site-independent, nearer-term development of individual underground experiments and experimental techniques. (HEPAP, March 2012)


• DCL review is complete and issuance of (FY2012) awards is underway
  – Received 24 proposals requesting a total of $78M
  – Reviewed by a combination of *ad hoc* reviews and two panels
  – Currently processing 9 awards totaling $13.6M over two years
  – Selected proposals include Dark Matter, Nuclear Astrophysics, Detector R&D, Electronics and Triggering, and common tools for underground physics
  – For Dark Matter, support of R&D allows preparation for G2 down-select.
DOE FOA for G2 DM published; proposal review in September.
  - One year of R&D support, followed by down-select for construction.
    • [Link](http://science.doe.gov/grants/pdf/SC_FOA_0000597.pdf)

G2 construction proposals* to be submitted to the agencies in 2013.
  - NSF Particle Astrophysics (PA) program (target deadline: Oct 2013).
  - *DOE lab FWPs for construction phase (end CY13, open only to those selected in initial round).

NSF & DOE will discuss and, as warranted, coordinate the funding for G2 construction awards. Award decisions will be made independently by each agency.
  - NSF/DOE co-review of the proposals under discussion.
PHY Budget Actions/Plans

- LHC, IceCube, NSCL flat, LIGO up $100K in FY12
- All programs cut 5% initially, with 2% restored when budget finalized
- Investments in BioMaPS, CIF21, SAVI
- Redirect S4 funding to underground science
- Midscale physics instrumentation is a priority for future budget cycles (FY14), and some funds are being applied to seed the activity
- Also discussing accelerator physics research at universities for possible investment in FY14
- The last two bullets express the APPI concept, and the last three bullets should benefit work at the three frontiers of particle physics