Welcome

- President Donald D. Snyder
Highlights from FY14

- All Sponsored Research Metrics Improved
  - 617 Proposals Submitted ($286,087,223)
  - 377 Awards Funded ($59,636,152)
- State Investment in Research
- Connection of research with community needs
- Interdisciplinary Research
Proposals, FY08-FY14

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY08</td>
<td>$228,366,587</td>
</tr>
<tr>
<td>FY09</td>
<td>$326,594,089</td>
</tr>
<tr>
<td>FY10</td>
<td>$323,327,776</td>
</tr>
<tr>
<td>FY11</td>
<td>$210,857,602</td>
</tr>
<tr>
<td>FY12</td>
<td>$281,270,704</td>
</tr>
<tr>
<td>FY13</td>
<td>$203,337,011</td>
</tr>
<tr>
<td>FY14</td>
<td>$274,921,676</td>
</tr>
</tbody>
</table>
**Awards, FY08-FY14**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Sponsored Programs*</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY08</td>
<td>$61,139,758</td>
<td>$39,844,720</td>
</tr>
<tr>
<td>FY09</td>
<td>$59,874,418</td>
<td>$40,097,479</td>
</tr>
<tr>
<td>FY10</td>
<td>$65,222,872</td>
<td>$38,381,001</td>
</tr>
<tr>
<td>FY11</td>
<td>$56,090,962</td>
<td>$40,398,054</td>
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<tr>
<td>FY12</td>
<td>$40,772,216</td>
<td>$22,565,629</td>
</tr>
<tr>
<td>FY13</td>
<td>$43,204,579</td>
<td>$26,585,099</td>
</tr>
<tr>
<td>FY14</td>
<td>$59,636,152</td>
<td>$41,477,222</td>
</tr>
</tbody>
</table>

*Sponsored Programs includes Research, Instruction & Training, and Other Sponsored Activity (i.e. Public Service, Student Services, etc.), (Beginning in FY08 Financial Aid data was removed from Sponsored Program Reporting).
Expenditures, FY08-FY14

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Sponsored Programs*</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY08</td>
<td>$74,568,354</td>
<td>$46,765,293</td>
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<tr>
<td>FY09</td>
<td>$59,359,059</td>
<td>$36,156,589</td>
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<tr>
<td>FY10</td>
<td>$62,414,679</td>
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<tr>
<td>FY11</td>
<td>$50,210,861</td>
<td>$32,581,329</td>
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<tr>
<td>FY12</td>
<td>$42,924,520</td>
<td>$27,072,642</td>
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<tr>
<td>FY13</td>
<td>$44,593,471</td>
<td>$27,649,163</td>
</tr>
<tr>
<td>FY14</td>
<td>$48,144,405</td>
<td>$31,027,377</td>
</tr>
</tbody>
</table>

*Sponsored Programs includes Research, Instruction & Training, and Other Sponsored Activity (i.e. Public Service, Student Services, etc.), (Beginning in FY08 Financial Aid data was removed from Sponsored Program Reporting).

FY14 Research Expenditures +12%
FY14 Sources of Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Awards</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal*</td>
<td>108</td>
<td>$32,058,182</td>
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<tr>
<td>Federal Pass Through</td>
<td>164</td>
<td>$17,295,145</td>
</tr>
<tr>
<td>State</td>
<td>41</td>
<td>$8,098,629</td>
</tr>
<tr>
<td>Industry/Foundations</td>
<td>51</td>
<td>$1,524,526</td>
</tr>
<tr>
<td>Local</td>
<td>13</td>
<td>$659,670</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>377</td>
<td><strong>$59,636,152</strong></td>
</tr>
</tbody>
</table>

*Beginning in FY08 Financial Aid data was removed from Sponsored Programs Reporting*
Disclosures & Patent Applications

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Disclosures Submitted</th>
<th>Patents Filed</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY08</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>FY09</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>FY10</td>
<td>3</td>
<td>4</td>
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<tr>
<td>FY11</td>
<td>6</td>
<td>3</td>
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<td>FY12</td>
<td>9</td>
<td>5</td>
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<tr>
<td>FY13</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>FY14</td>
<td>37</td>
<td>28</td>
</tr>
</tbody>
</table>

FY14  
Research Disclosures +105%  Patent Applications Filed +100%
Institutional Review Board (IRB) Approvals

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Biomedical</th>
<th>Social/Behavioral</th>
<th>Total</th>
</tr>
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<tr>
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<td>61</td>
<td>235</td>
<td>296</td>
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<tr>
<td>FY09</td>
<td>75</td>
<td>254</td>
<td>329</td>
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<tr>
<td>FY10</td>
<td>91</td>
<td>228</td>
<td>319</td>
</tr>
<tr>
<td>FY11</td>
<td>93</td>
<td>230</td>
<td>323</td>
</tr>
<tr>
<td>FY12</td>
<td>75</td>
<td>214</td>
<td>289</td>
</tr>
<tr>
<td>FY13</td>
<td>77</td>
<td>184</td>
<td>261</td>
</tr>
<tr>
<td>FY14</td>
<td>122</td>
<td>200</td>
<td>322</td>
</tr>
</tbody>
</table>

FY14 IRB Approvals +23%
Faculty Opportunity Awards
Faculty Opportunity Awards Impact

- **Investment Payout**: $1 : $5.70
- **Proposal Success**: ~31%
- **9 Research Disclosures Submitted & 7 Patent Applications Filed**
Rebecca Gill – Political Science

- Assessing Judicial Performance Evaluations for Race and Gender Bias

Libby Hausrath – Geoscience

- An Investigation into Transitions in Layer-Silicate Chemistry on Mars
Faculty Opportunity Awards FY15

- New solicitation announced end of October, 2014
- Submission date of approximately end of January, 2015
- Single Investigator
- Interdisciplinary Teams
- Reviewed by Research Council, CoRE Council, and external reviewers (where appropriate)
Research Infrastructure

- Research Computing Network
Research Infrastructure

- Animal Care Facility Expansion (2016)

- New construction for rats & mice "mouse house"

- Existing for other species—no renovation

- Provide 4'-6' setback from sidewalk on north and west sides of vivarium building

- Provide overhead sunshade between new vivarium and White Hall vivarium
Research Infrastructure

- Proposal Development Support
- Research Space
- Core Labs
Featured Research Initiatives

- Knowledge Fund Projects
- Unmanned Aerial Systems/Robotics
- Mountain West Clinical Translational Research – Infrastructure Network
- Solar Energy-Water-Environment Nexus
Knowledge Fund Projects

- Nevada Institute of Personalized Medicine
  - Martin Schiller, Executive Director
Knowledge Fund Projects

- Center for Gaming Innovation
  - Mark Yoseloff, Executive Director, Center for Gaming Innovation
  - Bo Bernhard, Executive Director, International Gaming Institute
Unmanned Aerial Systems/Robotics

- Paul Oh, Lincy Professor of Unmanned Aerial Systems

DRC-Hubo

DRC-HUBO Team

Hubo is a complete full-size humanoid. Its form and function are suited for all 8 events of the DARPA Robotics Challenge (DRC). Photos on right show Hubo manually configured into poses for the notional events.

DRC-Hubo will be a version with hardware retrofits and algorithms for autonomy. 7 Hubos exist at Drexel University (lead PI) and are immediately available for the DRC.

Our Team:
Unmanned Aerial Systems

- Two New Surveys Assess Public Attitudes Toward Unmanned Aerial Systems
  - Joel Lieberman, Professor/Chair
  - Terance Miethe, Professor

- Symposium on UAS in Nevada – Implications for Privacy, Law and Technology: Oct. 16, 2014
  - Dan Hamilton, Dean, William S. Boyd School of Law
  - Rebecca Scharf, Associate Professor
NIH Mountain West Clinical Translational Research – Infrastructure Network

- Bob Langer, Research Professor
- Carl Reiber, Vice Provost for Academic Affairs
- Carolyn Yucha, Dean, School of Nursing
- Jillian Inouye, Associate Dean, School of Nursing
NIH Mountain West Clinical Translational Research – Infrastructure Network (Pilot Grants)

- Wendy Woodall, Co-Associate Dean & Associate Professor, School of Dental Medicine
  - ERH screening Medical/Dental Risk Factors and Cardio Vascular Disease, Type 2 Diabetes, and Sleep Disorders

- Michael Neubauer, Associate Professor in Residence General Practice Residency Program
  - Impact of Periodontal Disease on Outcomes in Diabetes
NSF Solar Energy-Water-Environment Nexus

- Research to Explore Solar Energy, Water, and Environmental Issues
  - Bob Boehm, Distinguished Professor
  - Jaci Batista, Professor
Battery Research and Tesla
Recognition of Top Researchers
Community Health Sciences

- Melva Thompson-Robinson, Associate Professor
- Mark Buttner, Associate Professor
- Patricia Cruz Perez, Associate Professor
- Carolee Dodge Francis, Associate Professor
- Shawn Gerstenberger, Interim Dean, School of Community Health Sciences
HRSA Behavioral Health Workforce Education

- Ramona Denby-Brinson, Professor/Lincy Senior Resident Scholar of Social Services

- Joanne Thompson, Professor/Director of School of Social Work

  - Behavioral Health Workforce Education and Training for Professionals Grant
Health Care Design

- Attila Lawrence, Professor
Other Research Highlights

- **NEH Libraries Project**
  - Jason Vaughn, Director, Libraries Technologies
  - Cory Lampert, Head of Digital Collections

- **Business**
  - Darryl Seale, Professor
    - Cost-sharing Allocation in Directed Networks Project

- **Educational Psychology**
  - Gregg Schraw, Professor/Director of the Center for Research, Evaluation, and Assessment
Scholarship in Physics and Astronomy

- Bing Zhang, Professor
- Daniel Proga, Professor
- Changfeng Chen, Professor
- Yusheng Zhao, Professor
Human Health and Nutrition

- Anthropology
  - Alyssa Crittenden, Lincy Assistant Professor
Economic Development Highlights

- Chemistry and Biochemistry – Patent
  - Bryan Spangelo, Professor
  - Ernesto Abel-Santos, Professor

- Engineering – License Agreement
  - Kwang Kim, Professor
Thank you!

UNLV’s Science and Engineering Building