UK Senate: Research

Lisa A. Cassis, PhD
Professor, Department of Pharmacology and Nutritional Sciences
Vice President for Research
UKRF FY15 Budget Breakdown ($44 million)

- Research Support Units: 25% of budget
- Enrichment program: ≈14% of budget
- RAA (to Deans): 5% of budget
- Start-up (formulaic): 20% of budget
- Transfers to UK: 26% of budget
- General support: 10% of budget

100%
Strategic Plan: Research

Expand our scholarship, creative endeavors, and research across the full range of disciplines to focus on the most important challenges of the Commonwealth, our nation, and the world.
Strategic Plan: Research

I. Invest in UK's existing strengths and areas of growth in selected focus areas that benefit and enrich the lives of the citizens of the Commonwealth and beyond.

II. Recruit and retain outstanding faculty, staff and students that support our research and scholarship across the range of disciplines at the University.

III. Improve the quality of the research infrastructure across campus.

IV. Strengthen engagement efforts and translation of research and creative work for the benefit of the Commonwealth of Kentucky, the nation and the world.
Board level metrics around these initiatives

- R&D Expenditures: 1.9% increase/year
- Doctoral program quality: 6 within top quartile
- Research Laboratory Space: 20% increase of space at $300/square foot
- License #, royalty income: 10 and 1% CAGR
How might we achieve these goals?

- Rodney Andrews, PhD
- Professor, Director of Center for Applied Energy Research
- Associate VPR, Research Development
Modeling and Visualizing the UK Research Landscape

The ultimate goal: to model UK’s research landscape by applying computational methods to the grant submission data. The model will

- Inform high level decision making
- Guide resource distribution across units
- Identify PIs and teams for limited submissions
- Foster new collaborations across campus
- Reveal trends across time

**Methods**: Descriptive statistics, information retrieval (IR), and topic modeling (TM)
New Disclosure / Patent Process

• Disclosures made via current online system
• Intellectual Property Committee chair / IPDO director determine “track”
  – Incomplete, not viable, not UK’s, patentable, etc
• Patentable disclosures are sent for outside evaluation by IP assessment firm based on:
  – Patentability
  – Marketability
• Evaluation sent to IPC for go/no-go decision
  – No-go returned for further development or released to inventors
How might we achieve these goals?

• Alan Daugherty, PhD
• Professor and Chair, Dept of Physiology
• Senior Associate Dean for Research, COM
• Associate VPR, Research Infrastructure (Cores)
Service Cores Reporting to the Office of the VPR

- Department of Laboratory Animals (DLAR)
- Flow cytometry
- Imaging
- Magnetic Resonance Imaging and Spectroscopy Center (MRISC)
- Mass Spectrometry
- Proteomics
- Rodent Behavior
- Survey Research Center
# Faculty Membership of the Service Core Scientific Advisory Committee

<table>
<thead>
<tr>
<th>Member</th>
<th>College</th>
<th>Core Use</th>
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<tr>
<td>Udeni Balasuriya</td>
<td>Agriculture</td>
<td>Imaging, Flow</td>
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<td>D Allan Butterfield</td>
<td>Arts and Sciences</td>
<td>Mass Spec, Proteomics</td>
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<tr>
<td>Alan Daugherty</td>
<td>Medicine</td>
<td>DLAR, Flow, MRISC</td>
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<td>David Feola</td>
<td>Pharmacy</td>
<td>DLAR, Flow, Transgenic</td>
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<td>Beth Garvy</td>
<td>Medicine</td>
<td>Flow, DLAR</td>
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<td>Octavio Gonzalez</td>
<td>Dentistry</td>
<td>Microarray</td>
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<td>Greg Graf</td>
<td>Pharmacy</td>
<td>DLAR, Microarray, Proteomics</td>
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<td>Eric Grulke</td>
<td>Engineering</td>
<td>DLAR, Imaging</td>
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<td>Linda Van Eldik</td>
<td>Medicine</td>
<td>DLAR, MRISC, Rodent Behav.</td>
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<td>Sydney Whiteheart</td>
<td>Medicine</td>
<td>DLAR, Imaging, Proteomics</td>
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<td>S Randal Voss</td>
<td>Arts and Sciences</td>
<td>DLAR, Microarray</td>
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How might we achieve these goals?

• Allan Butterfield, PhD
• Professor, Department of Chemistry
• Associate VPR, Research Infrastructure (Centers)
Research Centers

• Some Centers are College-specific
• Some Centers that cross College boundaries are managed by the VPR, including:
  – Center for Applied Energy Research (CAER)
  – Center for Computational Sciences (CCS)
  – Center for Research on Violence Against Women
  – Center for Structural Biology
  – Center of Membrane Sciences
  – Human Development Institute (HDI)
  – Kentucky Geological Survey (KGS)
  – Kentucky Water Resources Research Institute
  – Survey Research Center
  – Tracy Farmer Institute for Sustainability and the Environment (TFISE)
Center Activities

• New Center Directors
  – Center for Computational Sciences: James Griffioen
  – Human Development Institute: Kathy Sheppard-Jones
  – Ongoing searches: Center for Membrane Sciences, Kentucky Geological Survey
  – Upcoming search: Tracy Farmer Center for Sustainability and the Environment

• Development of process for Center support
How might we achieve these goals?

- Martha Peterson, PhD
- Professor, Department of Microbiology and Immunology
- Senior Associate VPR
Senior Associate VPR: Offerings

- Research Support Grants
- Equipment Maintenance Program
- Conference/Workshop Grants
- Summer Faculty Research Fellowship
- University Research Professors
- Service Center Pilot Grants
- Complex Research Grants
- Limited Submissions
- All activities of the Offices of Research

- Look for changes in how these programs will be offered
Your feedback and input are valued