Johns Hopkins Medicine pushes the boundaries of discovery, transforms health care, advances medical education and creates hope for humanity. Together, we will deliver the promise of medicine.
Rising to the Occasion: The Johns Hopkins Medicine Spirit

Jay McLean
Johns Hopkins University
School of Medicine
Class of 1919
The focus of change efforts needs to be on “doing change with people, rather than doing change to them.”

(Higgs & Rowland, 2011)
Enhancing joy in medicine

Accelerating research and discovery

Innovating better care models

Achieving value for patients
Enhancing Joy in Medicine
Video: “What brings you joy on the job?”
Personal Connections Matter

A Physical Exam for the New Millennium: Merging Human Touch and Technology

Community Walks in East Baltimore
To Care for Others, Care for Yourself
Ensuring Opportunities for Advancement

JHM Executives/Senior Leadership

<table>
<thead>
<tr>
<th>Year</th>
<th>% Female</th>
<th>% Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>46</td>
<td>54</td>
</tr>
<tr>
<td>2015</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>2014</td>
<td>43</td>
<td>57</td>
</tr>
<tr>
<td>2013</td>
<td>39</td>
<td>61</td>
</tr>
</tbody>
</table>

Professional Development Guide for the Faculty of The Johns Hopkins University School of Medicine
Fifth Edition 2016
Training for the 21st Century

Medical Training in our Community

“Industry is the epitome of an academic model of training is intensive in students, and to stimulate new and executable ideas.”

Peter Espenshade
Director, New Physician-Scientist Training Program

Kathy Burns
Natalia Majewska

Dashboards for Residents
Accelerating Research and Discovery
Zika Virus Research and Response

William May
Co-director of Johns Hopkins Zika Center

Jeanne Sheffield
Director of the Division of Maternal-Fetal Medicine
"It was a six-year mission to show the need, show the impact, write the bill, get it passed, set up the policies and safety protocols, and then actually do it." – Dorry Segev
How Does the Brain “Know” When to Stop Eating?

A normal mouse (left) stops eating when certain nerve cells in the brain signal to do so. Nerve cells missing the enzyme OGT don’t signal, so those mice eat more at each meal and become obese (right).

Richard Huganir
Adaptation Revealed by Sustained Magnetic Field Stimulation of the Labyrinth

Graphical Abstract

Authors

Correspondence
dsze@jhu.edu

In Brief
Jareonsettasin et al. use 90-min MRI labyrinthine stimulation to elicit vestibular nystagmus and study set-point adaptation—how neural activity is rebalanced to ensure stable platforms for movement. They found multiple timescales of learning and developed a model in which a cascade of imperfect integrators acts toward removing an unwanted bias.
# Research Funding

## Johns Hopkins School of Medicine

### Sponsored Project Sources

#### Award $ per Fiscal Year (in Millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Commercial</th>
<th>Foundation/Non-Profit</th>
<th>State/Local/Other Govt</th>
<th>Educational Institution</th>
<th>Federal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>67.2</td>
<td>61.7</td>
<td>2.9</td>
<td>1.3</td>
<td>556.9</td>
</tr>
<tr>
<td>2013</td>
<td>85.4</td>
<td>76.5</td>
<td>5.9</td>
<td>0.8</td>
<td>580.5</td>
</tr>
<tr>
<td>2014</td>
<td>99.8</td>
<td>72</td>
<td>6.4</td>
<td>1.7</td>
<td>557.6</td>
</tr>
<tr>
<td>2015</td>
<td>121</td>
<td>99.2</td>
<td>7.1</td>
<td>1.1</td>
<td>512.1</td>
</tr>
<tr>
<td>2016</td>
<td>196.8</td>
<td>151.7</td>
<td>11.8</td>
<td>0.7</td>
<td>537.4</td>
</tr>
</tbody>
</table>

### Analysis

- **Commercial** funding has seen a steady increase over the years, with a notable jump in 2016 to $196.8 million.
- **Foundation/Non-Profit** funding has also increased, reaching $151.7 million in 2016.
- **State/Local/Other Govt** funding has remained relatively consistent, with slight fluctuations.
- **Educational Institution** funding has seen a significant decrease, dropping from $1.3 million in 2012 to $0.7 million in 2016.
- **Federal** funding has consistently provided the largest source of funding, peaking at $537.4 million in 2016.

The chart above illustrates the trend of funding sources over the fiscal years 2012 to 2016, with NIH contributions highlighted in green.
Philanthropy FY16 Results

- Raised $391M, up from $370M in FY15
- Helped university set a new record
- Secured gifts toward 9 professorships
- Launched new donor engagement strategies
- Kimmel, neurology, medicine and Wilmer recorded banner years
- Sibley, Suburban, HCGH, and JHACH raised $26M
Cancer “Moonshot” and Immunotherapy: Doing Our Part
School of Medicine Professor Wins 2016 Lasker Award

Gregg Semenza
C. Michael Armstrong Professor of Medicine
Director of the Vascular Program, Institute for Cell Engineering
"Precision medicine is not about making discoveries that are interesting. Precision medicine is about changing the world and bringing efficient health care of great value to society and the population." Antony Rosen
Innovating Better Care Models
Controlling the Flow of Patients at The Johns Hopkins Hospital

- Reduce ED Patient Wait time before admission by 30%
- Decrease Wait Time for outside hospital transfers by 20%
- Reduce Delays in leaving the OR by 20%

GOALS of the Johns Hopkins Capacity Command Center
Clinical Pathways, Consistent Care

Calculated LOS by Service and Pathway

<table>
<thead>
<tr>
<th></th>
<th>On Pathway</th>
<th>Off Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ortho</td>
<td>1.63</td>
<td>2.71</td>
</tr>
<tr>
<td>Neuro</td>
<td>1.64</td>
<td>3.95</td>
</tr>
</tbody>
</table>
Surgical Extended Care Unit at Johns Hopkins All Children’s Hospital

The new SECU has:

- Reduced average length of stay from 30 hours to 14
- Freed up hospital beds for acutely ill kids
- Earned high family satisfaction rating (98 percent)
- Lowered direct care costs from $2,015 to $1,506
Whisper While You Work at Suburban Hospital and Johns Hopkins Bayview Medical Center

“Patients who get a good night’s sleep are happier, heal more quickly and cope better with the stress of being in the hospital.”

– Wink MacKay, M.S.N., R.N., C.C.R.N., lead author of Suburban’s new sleep protocol
The New Sibley Memorial Hospital: Oncology and More

First and only pediatric radiation oncology center in D.C.
In Pursuit of Value, Hopkins Radiology Leads the Way

"Why do we do it this way?"

Choosing Wisely and Image Wisely Target Combined Upper GI and Small Bowel Series Examinations

Elizabeth Snyder, M.D., Resident, Diagnostic Radiology

"Why do we do it this way?"

Advanced Decision Support: Radiology Resident Consultation Service for Guiding Exam Selection to Ensure Best Practice

Davood Abdollahian, M.D., Resident, Diagnostic Radiology

"Why do we do it this way?"

Improving Diagnosis Without Additional Testing: Applying Computed Tomography Textural Analysis (CTTA) to Diagnostic Dilemmas

James L. Schroeder, M.D., Ph.D., Resident, Diagnostic Radiology

"Why do we do it this way?"

Early Experience with 18F-DCFPPyL-PSMA Targeted PET/CT in Patients with Biochemically Recurrent Prostate Cancer

Steven P. Rowe, M.D., Ph.D., Resident, Diagnostic Radiology

"Why do we do it this way?"

Preoperative Evaluation of Small Renal Masses with 99mTc-Sestamibi SPECT/CT

Steven P. Rowe, M.D., Ph.D., Resident, Nuclear Medicine

Created by JHUSOM faculty to serve as a national forum
More than 60 partner institutions and growing
First national conference scheduled for Oct. 9, 2017
Unleashing the Potential of Telemedicine

Telemedicine cart for EDs
Johns Hopkins Aramco Healthcare and emergency telemedicine
## Financial Overview

### Johns Hopkins Medicine FY2016 Operating Figures (in thousands)

<table>
<thead>
<tr>
<th>Division</th>
<th>Operating Revenue</th>
<th>Operating Expense</th>
<th>Operating Margin</th>
<th>Operating Margin %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Hospital Division</td>
<td>$2,841,326</td>
<td>$2,749,029</td>
<td>$92,297</td>
<td>3.2%</td>
</tr>
<tr>
<td>Community Hospital Division</td>
<td>870,299</td>
<td>822,274</td>
<td>48,025</td>
<td>5.5%</td>
</tr>
<tr>
<td>Johns Hopkins All Children's Hospital</td>
<td>456,188</td>
<td>398,481</td>
<td>57,707</td>
<td>12.6%</td>
</tr>
<tr>
<td>Johns Hopkins University School of Medicine</td>
<td>2,154,089</td>
<td>2,147,672</td>
<td>6,417</td>
<td>0.3%</td>
</tr>
<tr>
<td>Johns Hopkins Health System - Other</td>
<td>1,204,145</td>
<td>1,204,635</td>
<td>(490)</td>
<td>0.0%</td>
</tr>
<tr>
<td>Johns Hopkins HealthCare LLC</td>
<td>1,697,147</td>
<td>1,686,637</td>
<td>10,510</td>
<td>0.6%</td>
</tr>
<tr>
<td>Johns Hopkins Medicine International, LLC</td>
<td>108,227</td>
<td>87,917</td>
<td>20,310</td>
<td>18.8%</td>
</tr>
<tr>
<td>Johns Hopkins Home Care Group, Inc.</td>
<td>151,640</td>
<td>147,782</td>
<td>3,858</td>
<td>2.5%</td>
</tr>
<tr>
<td>Eliminations</td>
<td>(1,929,202)</td>
<td>(1,866,489)</td>
<td>(62,713)</td>
<td></td>
</tr>
<tr>
<td><strong>FY2016 Total JHM</strong></td>
<td><strong>$7,553,859</strong></td>
<td><strong>$7,377,938</strong></td>
<td><strong>$175,921</strong></td>
<td><strong>2.3%</strong></td>
</tr>
</tbody>
</table>
Rising to the Occasion: The Blizzard of 2016
Thank You