Introduction to Universities Allied for Essential Medicines

- Student based organization
- Chapters on over 110 campuses across 14 countries
- We believe that every university-developed drug, diagnostic, vaccine, or medical device should be licensed with a concrete, effective, and transparent strategy to make affordable versions available in low-income countries for essential medical care.
Poor Access to Existing Medications

The World Health Organization estimates:

- 10 millions deaths annually due to lack of access to existing medications
- 100 million people pushed in to poverty annually due to cost of healthcare
- Vast social and economic effects due to the above numbers
How Universities Fit In

- 2000 US Senate Report found 15 of 21 drugs with the greatest therapeutic impact were developed using federally funded research.
- 137 FDA-approved drugs have been developed at public sector research institutions over the last 21 years. This does not include upstream development of drugs from primary research at universities or development of additional drugs in a class after the first drug in a class was developed at a university. (Stephens, Phil, Jensen, et al. The Role of Public-Sector Research in the Discovery of Drugs and Vaccines. N Engl J Med 2011; 364:535-541.)
Universities’ patent rights in key drugs on the market

- **Emtricitabine - Emory**
  Emtriva®, component of Truvada® & Atripla®

- **3TC - Emory**
  Epivir®, component of Combivir®, Epzicom® & Trizivir®

- **Staduvine - Yale**
  Zerit®

- **Abacavir - Minnesota**
  Ziagen® component of Trizivir® & Epzicom®

- **T-20 - Duke**
  Fuzeon®

- **Others:** carboplatin, cisplatin, HPV vaccine, pemetrexed, cetuximab, epoetin alfa, latanoprost
Stavudine, Yale, and Bristol-Myers Squib

2001: Yale and Bristol-Myers Squib renegotiate contract to allow generic manufacturing in low and middle income countries precipitating a 120 fold decrease in the price.
Since Renegotiating Contracts Is Not Always Possible...

...why not create licensing contracts from the beginning with mechanisms to increase access to the world’s poor.
Timeline for Global Access Licensing

- 2001 Yale renegotiates contract with Bristol Myers Squib to increase global access to stavudine under public and alumni pressure
- 2003 Gates Foundation starts its Fair Access Policy to affirm that products the foundation helps fund get to the world's poor
- 2005 UC Berkeley Socially Responsible Licensing Program
- 2006 Philadelphia Consensus Statement launches with 150 luminaries as signatories including 9 Nobel prize winners
- 2007 UBC's Principles for Global Access
- 2008 Emory University's Technology Transfer for Global Access: Guiding Principles
- 2009 University of Edinburgh commits to GAL initiative
- 2009 AUTM Statement of Principles and Strategies for the Equitable Dissemination of Medical Technologies is released with initial signatories
Signatories of the Statement of Principles and Strategies for the Equitable Dissemination of Medical Technologies

Boston University, Brown University, Harvard University, University of Pennsylvania, Yale University, Oregon Health & Science University, National Institutes of Health, University of Illinois Chicago, University of Illinois Urbana-Champaign, Centers for Disease Control and Prevention, University of Vermont and State Agricultural College, Duke University, University of British Columbia, Bilkent University, El Colegio de México, New York University, Tecnologico de Monterrey, Jawaharlal Nehru University, Najit Technologies, Inc., Brigham & Women's Hospital, Florida State University, Massachusetts General Hospital, National University of Science and Technology, Simon Fraser University
Indiana University Strategy for Global Access to Health

- Indiana University will develop and implement licensing mechanisms to increase access to university-developed technologies in developing countries.
- Indiana University will promote increased access to university-developed technologies for the world’s poor throughout the Big Ten, the nation, and the world.
- Indiana University will advocate for increased federal and private funding for research of ‘neglected diseases.’
- Indiana University will create benchmarks to measure the social and global uses of its intellectual property.
- Indiana University will form an ad hoc committee of faculty, administration, representatives of the IURTC, and students to research these issues and propose an implementation model for the university to proceed.
Signatories to the IU Strategy for Global Access to Health

Dr. Kenneth Fife - Professor of Medicine in the Division of Infectious Diseases
Dr. Margaret Gaffney - Clinical Associate Professor in the Department of Medicine
Dr. Eric Meslin - Associate Dean for Bioethics and Professor of Medicine, Medical and Molecular Genetics, Public Health and Philosophy
Fran Quigley - Visiting Professor of Law
Carrie Rouse - MS4, Co-Coordinator of IU Chapter of Universities Allied for Essential Medicines
Dr. William Schneider - Professor of History, Baker-Ort Chair of International Healthcare Philanthropy in the Center on Philanthropy at Indiana University, and Director the Medical Humanities
Dr. Anantha Shekhar - Associate Dean for Translational Research, Raymond E. Houk Professor of Psychiatry, Professor of Pharmacology and Neurobiology
Matthew Turissini - MS2, Co-Coordinator of IU Chapter of Universities Allied for Essential Medicines

IU School of Medicine Faculty Steering Committee

Dr. Craig Brater – Dean of the IU School of Medicine
## Indiana University and Global Health Technologies

<table>
<thead>
<tr>
<th>Technology Title</th>
<th>Technology Status</th>
<th>Patent Countries</th>
<th>Category*</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Rapid Test for Detection of Cervical Cancer</td>
<td>Unlicensed</td>
<td>None</td>
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</tr>
<tr>
<td>Amide-Based Small Molecule Prodrugs</td>
<td>Unlicensed</td>
<td>U.S.</td>
<td></td>
</tr>
<tr>
<td>Device for digital retinal imaging</td>
<td>Exclusive -&gt; License</td>
<td>U.S., Australia, Canada, Europe, Japan</td>
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<tr>
<td>Diagnostic Method for Determining Anti-TNF Therapy Efficacy</td>
<td>Unlicensed</td>
<td>PCT</td>
<td>3</td>
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<tr>
<td>Genetic Therapeutics</td>
<td>Exclusive -&gt; License</td>
<td>U.S.</td>
<td></td>
</tr>
<tr>
<td>Immunogenic epitopes of type V collagen</td>
<td>Unlicensed</td>
<td>None</td>
<td>6</td>
</tr>
<tr>
<td>Inflammatory model for lung cancer</td>
<td>Unlicensed</td>
<td>None</td>
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<tr>
<td>Insulin Chemical Synthesis Using a Two-Step Orthogonal Formation of the Three Disulfide Bonds.</td>
<td>Unlicensed</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Laser Scanning Digital Camera with Simplified Optics and Potential for Multiply Scattered Light Imaging</td>
<td>Exclusive -&gt; License</td>
<td>U.S., Australia, Brazil, Canada, Europe, India, Japan, Mexico</td>
<td></td>
</tr>
<tr>
<td>Method for Detecting and Treating Emphysema</td>
<td>Unlicensed</td>
<td>PCT</td>
<td>6</td>
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<tr>
<td>Mouse model for lung inflammation and tumorigenesis</td>
<td>Unlicensed</td>
<td>None</td>
<td></td>
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<tr>
<td>Neutralizing IL-17 to Block Fibrosis</td>
<td>Unlicensed</td>
<td>None</td>
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<tr>
<td>Small Molecule Inhibitors of Coronaviruses, including the SARS Coronavirus</td>
<td>Unlicensed</td>
<td>None</td>
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<tr>
<td>The Use of Adult Adipose Stem Cells to Treat Lung Disease</td>
<td>Unlicensed</td>
<td>U.S.</td>
<td>6</td>
</tr>
<tr>
<td>The Use of Bone Morphogenic Protein 10 as a Therapeutic Reagent in Treating Cardiac Fibrosis Caused by Various Cardiac Injuries</td>
<td>Unlicensed</td>
<td>U.S.</td>
<td>1,2</td>
</tr>
</tbody>
</table>

**Leading causes of death - low-income countries**

1. lower respiratory tract infections  
2. ischemic heart disease  
3. diarrheal diseases  
4. HIV/AIDS  
5. cerebrovascular disease  
6. chronic obstructive pulmonary disease  
7. tuberculosis  
8. neonatal infections  
9. malaria  
10. prematurity and low birth weight
What We are Asking

We request IUPUI Faculty Council endorsement of the IU Strategy for Global Access to Health. We hope to present to the University FC before approaching President McRobbie.

We believe the best way for the university to move forward from this strategy is to endorse The Statement of Principles and Strategies for the Equitable Dissemination of Medical Technologies.