Overview:
Alliance for a Healthier World
Alliance Vision

Unleash the full range of scientific, analytic, and creative capabilities to solve the most complex global health equity challenges of our time.

Girls living in nunnery near Dharamsala in Northern India after receiving a skin test for latent TB.

Photo credit: Delek Hospital
Alliance Values

• Give voice to the poor and disadvantaged in tackling health inequities

• Place *global health equity* and social justice at the center of the JHU community

• Elevate diversity and inclusiveness in pursuit of a common goal

Female participants connect during an adolescent health program in Whiteriver, AZ/Fort Apache in 2016. Photo credit: Ed Cunicelli
Alliance Strategic Objectives

1. Generate collaborative and innovative research to influence policy on health equity

2. Fulfill scholarly, creative and educational agenda to support the research and influence public policy

3. Develop durable institutional arrangements, opportunities and capabilities to enhance global health research, education and policy engagement on health equity
Challenges and Opportunity

• JHU has many successful global health and development initiatives

• **How do we tackle difficult & inter-dependent equity and environmental justice problems?**
  • Take advantage of all Hopkins capabilities; work collectively and across disciplines
  • Provide support for sustained action informed by evidence

• Include participation of those affected – government, civil society, business, and especially the vulnerable and disadvantaged
1. Provide seed and growth funding for collaborative research & projects

2. Create networking opportunities for faculty, students and international partners

3. Synthesize and integrate global health equity and social justice knowledge and practice around the campus

4. Expand global health education & practice opportunities
SOLVING GLOBAL HEALTH EQUITY CHALLENGES

**FOOD & NUTRITION SECURITY**
- Approaches = Female-Led Innovation + Global to Local + Open Science + Food Systems Design
- Grants Program = Spark Grants + Launchpad Grants + Impact Grants
  - Building better food systems to create sustainable nutrition

**HEALTHY ENVIRONMENTS**
- Approaches = Mentorship + Research & Practical Training + Education
  - Working for clean air, water, and energy to improve health

**GENDER EQUITY & JUSTICE**
- Approaches = Female-Led Innovation + Global to Local + Open Science + Food Systems Design
- Grants Program = Spark Grants + Launchpad Grants + Impact Grants
  - Improving health and advancing opportunities for women and girls

**TRANSFORMATIVE TECHNOLOGIES & INSTITUTIONS**
- Approaches = Mentorship + Research & Practical Training + Education
  - Enabling innovation and access to tackle health disparities
AHW in Action: Multidisciplinary Grants

AHW supports the best and brightest ideas, promoting collaboration across disciplines

- Competitive grant programs
- Thematic Area Pilot grants that ensure continued leadership in AHW's core areas

<table>
<thead>
<tr>
<th>Grant Type</th>
<th>Grants</th>
<th>Total Amount</th>
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<tbody>
<tr>
<td>Launchpad Grants</td>
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<td>Impact Grains</td>
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Total funds distributed to date: $1,611,616.70
AHW in Action: Impact Grants

Promoting Safe Passage from Adolescence to Adulthood for Native American Women
Public Health, Nursing, Engineering

Transformative Technologies for Zero TB in Tibetan Kids
Medicine, Nursing, Public Health, Business, Education, Arts & Sciences

ADHINCRA Study: ADdressing Hypertension Care in AfRicA
Nursing, Medicine, Arts and Sciences

Testing a thermal cooker to reduce household air pollution and make cooking with LPG affordable & sustainable
Public Health, Medicine, Engineering, Business

GENDER EQUITY & JUSTICE
TRANSFORMATIVE TECHNOLOGIES & INSTITUTIONS

AMERICAN INDIAN NATIONS

GHANA

FOOD & NUTRITION SECURITY
TRANSFORMATIVE TECHNOLOGIES & INSTITUTIONS
GENDER EQUITY & JUSTICE

HEALTHY ENVIRONMENTS
TRANSFORMATIVE TECHNOLOGIES & INSTITUTIONS

INDIA

PERU
AHW Grant Sites

- Safe Passage for American Indian Adolescent Girls Impact Grant
- Thermal Cooker for Healthier Air Impact Grant
- ADHINCRA Hypertension Study Impact Grant
- Zero TB in Tibetan Kids Impact Grant

- site of Alliance Impact grant
- site of Alliance Launchpad grant
- site of Alliance Spark grant
AHW & Healthy Environments Focus
Global Air Pollution: A Health Equity Challenge

- 7 million deaths annually from ambient and indoor pollution
- More than 50% are in South-East Asia and Western Pacific regions
- Disproportionately impacts poor communities that are not able to protect themselves from the sources of indoor and outdoor pollution
Low and Middle Income Countries Are Most Exposed: Annual Average Concentrations of Ambient Fine Particulate Matter in $\mu/m^3$

World Health Organization 2018
Climate Change Affects Food & Nutrition Security

Climate Change → Lower Food Production & Price Volatility: The Poor are Most Affected

Estimated impact of +3 degrees C change on crop yields by 2050

-50% change 100% change No data

Source: World resources institute
Number of Natural Disasters Worldwide 1980-2017: Increase in Climate-Related Events

MunichRe (2019): NatCatSERVICE
Recorded climate-related disaster losses per income group compared to GDP losses 1998-2017

- Poor countries and poor people less likely insured
- Losses less reported in poor countries
- Social costs typically larger than direct costs
- Poor people are more exposed and more vulnerable to losses

Disaster deaths in absolute numbers and per million population potentially exposed 2000-2017

Air Pollution Factors Affecting Equity

**Emission Source**
- Industrial emissions
- Household emissions: Indoor cooking & heating fuel
- Type of transport (e.g. cars, public transport)

**Pollutant Type & Concentration**
- Proximity to green space
- Architecture high buildings

**Exposure**
- Ability to avoid pollution (indoors, traffic routing, distance from roads and polluting sources)
- Work & school location

**Health Effect**
- Vulnerabilities from poor diet, comorbidity, age
- Barriers to healthcare (financial, geographic, social)
How do we combine, re-design, and reconfigure expertise, infrastructure and financial assets across JHU in new ways to unleash breakthrough solutions to environmental challenges?
Policy Influence and Advocacy

• Engagement with SAIS, Carey School of Business and MICA faculty and students as examples of how to introduce new approaches to solve complex social challenges

• Harness the power of many JHU social media and communications platforms to make global air pollution a University priority topic

• As a collaboration and as individuals each of us can advocate for U.S. and global environmental policy that will solve this crisis
Forget Brexit and focus on climate change, Greta Thunberg tells EU

Teenager who started school strike movement urges MEPs to ‘wake up and take action’

“I want you to act as if the house is on fire.”
--Greta Thunberg April, 16th, 2019

The teenage climate activist Greta Thunberg has chided EU leaders for holding three emergency summits on Brexit and none on the threat posed by climate change.
Closing Thoughts:

• Global Air Pollution is beatable

• Johns Hopkins can exert an enormous influence on air pollution with a coordinated, concentrated effort to demonstrate proof points across our global research and influence

• AHW will play a role in removing barriers for collaboration and connecting researchers, implementers, policy makers and advocates to drive breakthrough solutions.
Thank You