

### Gupta-Klinsky India Institute at Johns Hopkins University

# An Overview 2022-24



S	1. Message from the GKII
ent	2. Who We Are
	3. Johns Hopkins and Indi
Ę	4. GKII Mission Statement
E	5. GKII Activity Highlights
ŭ	6. Program Highlights
	7. Current GKII Priorities
	8. Research
	9. Education and Training
	10. Policy and Practice
	11. Community Engageme
	12. Events
	13. Key JHU Projects in Ind

14. Indian Partner Organiza

Leadership	5
	6
ia	10
t	12
5	13
	15
	16
	20
	26
	37
ent	41
	45
ndia	47
zations	49

# 1

# Message from the **GKII Leadership**



Since its inception, the Gupta-Klinsky India Institute made incredible progress toward its mission of catalyzing partnerships between JHU and India partners. With the support and guidance of our faculty steering committee, advisory board and alumni, GKII launched specialized research grants, incredibly meaningful student travel grants, and formed a number of lasting partnerships that will continue our goals of developing bilateral solutions to global issues.

**Dr Amita Gupta** GKII Faculty Co-Chair



Each time I visit India, I'm struck by the dynamism and rapid progress. It's exciting to see GKII and Johns Hopkins University's growing engagement with India, and we are immensely grateful for the support and sage advice of our Advisory Board and Steering Committee in guiding us towards greater engagement and impact.

**Dr Sara Bennett** GKII Faculty Co-Chair

# 2

## Who We Are

### **GKII** Advisory Board



Raj and Kamla Gupta Co-chair of Board of Advisors



Alexander Triantis, PhD Co-chair of Board of Advisors; Dean, Carey School of Business



Ashok Agarwal BSPH'84, Trustee and Founder, Indian Institute of Health Management Research; Trustee of Johns Hopkins India Foundation



Gitanjli Arora JHU'98 BSPH'99, Asst. Professor of Clinical Pediatrics, Keck School of Medicine, University of South California



Ritu Chhabria Co-Founder and Managing Trustee, Mukul Madhav Foundation

Ellen J MacKenzie

School of Public Health



Steven Klinsky Founder and Managing Director, New Mountain Capital





Dean, Johns Hopkins Bloomberg



Roopa Makhija President and Co-founder of GEP





**Amit Mehta** CFA, P'25, Managing Member of Crestwood Capital Management

**Neera Nundy** Co-founder and Partner, Dasra



Chairman, Pratham USA and Indian Philanthropy Alliance



Founder, Wadhwani Institute for Sustainable Healthcare (WISH) and the Wadhwani Institute for Artificial Intelligence (WIAI)

### **GKII Alumni Ambassadors**



Dr Indu Bhushan Ex-IAS Officer ('83 batch) and Former CEO Ayushman Bharat, Government of India





Sunil Kumar President **Tufts University** 







**Maureen Sherry** Novelist & Screenwriter





**Dr Anand Bang** Health Advisor, Tata Trust & Honorary Health Advisor to Chief Minister Maharashtra



### **GKII Faculty Steering Committee**



Amita Gupta Dr. Florence Sabin Professor in Infectious Diseases. Professor of Medicine and Public Health: Director. Division of Infectious Diseases: GKII Co-Founder and Faculty Co-Chair



Sara Bennett Professor & Associate Chair in the International Health Department; Director of the Health Systems Program; GKII Faculty Co-Chair



Smisha Agarwal PhD, MPH, MBA, Associate Professor, International Health, Bloomberg School of Public Health



Aniu Malhotra PhD, Distinguished Professor of the Practice, Bloomberg School of Public Health



**Kunal Parikh** PhD, Assistant Professor, JHU School of Medicine



Sridevi Sarma PhD, Associate Professor, Department of Biomedical Engineering; Vice Dean for Graduate Education, Whiting School of Engineering



MBBS, PhD, MPH, Professor of Medicine and Epidemiology, JHU School of Medicine



Vidya Mave MD, MPH & TM, Associate Professor, JHU School of Medicine; Director, Indo-JHU Research Program, Pune, India



**Nagpurnanand Prabhala** PhD, Professor of Finance and Francis J. Carey, Jr., Carey **Business School** 



Anita Shet MD, PhD, Director of Child Health. International Access Vaccine Bloomberg School of Public Health



Brian Wahl PhD. MPH. Assistant Scientist. Bloomberg School of Public Health



**Rina Agarwala** PhD, Associate Professor; Director of Undergraduate Studies, Krieger School of Arts and Sciences



**Ritu Agarwal** PhD, Wm. Polk Carey Distinguished Professor of Information Systems and Health, Carey Business School



Rama Chellappa PhD, Bloomberg Distinguished Professor, Whiting School of Engineering



**Pravin Krishna** PhD, Chung Ju Yung Distinguished Professor of International Economics and Business, SAIS



Nilanjan Chatterjee PhD, Bloomberg Distinguished Professor, Bloomberg School of Public Health



Somesh Kumar Senior Director Jhpiego Global Health



Dean of Undergraduate

Johns Hopkins University

Uttara Bharath Kumar Associate Faculty Bloomberg School of Public Health





Sunil Solomon





**Ellen Chow** 

Admissions



GKII Overview - 2022-24 9



Shruti H. Mehta PhD, Vice Chair for Research and Administration, Department of Epidemiology; Professor, Bloomberg School of Public Health



Nancy Reynolds PhD, Professor and Associate Dean, Johns Hopkins School of Nursing



Center,

Nakul Singh Shekhawat MD, MPH, Assistant Professor of Ophthalmology, JHU School of Medicine



Joshua White Professor of Practice of International Affairs, School of Advanced International Studies



### **GKII** Core Team



Kunal Pal Executive Director



Neetisha Besra Deputy Director



**Colter Billings** Communication s Specialist



April Wilson Administrative Coordinator



**Molly Bowen** Senior Communications Manager



**Jon Goldstein** Senior Associate Director of Development, International Programs



**Siddharth Mohite** Program Coordinator



**Ira Pundeer** Communications Specialist



**Beth Romanski** Program Manager



**Meghashish Sharma** Program Manager



GKII Overview - 2022-24 11



З

## Johns Hopkins and India

Johns Hopkins University and India have a century long partnership, resulting in critical breakthroughs in research and training which have not only contributed to India's public health landscape but also influenced global health practices.

In 1932, the All-India Institute of Hygiene and Public Health was inaugurated in Calcutta, marking the establishment of the first and foremost public health school in Asia, fashioned after the Johns Hopkins Bloomberg School of Public Health (BSPH). JHU, in partnering with Kolkata (Calcutta) hospital saved an estimated fifty million lives by developing oral rehydration therapy that became the global standard to manage childhood diarrhea. JHU assisted India in introducing the pneumococcal conjugate vaccine (PCV) in its routine immunization schedule, protecting twenty-seven million children annually.

A notable joint initiative was the Narangwal Study, orchestrated by Carl E Taylor with the support of an extensive Indian team, which demonstrated the superior cost-effectiveness and impact of unified nutrition, healthcare, and family planning services over separate services, resulting in a remarkable reduction of child mortality rates by nearly 45%. This approach of integrated services was later embraced by key international health bodies, including USAID, WHO, and the World Bank. The leadership of India's Family Planning Department within the Ministry of Health, steered from 1962 to 1967 by BSPH alumna Sushila Nayar, saw significant advancements under her tenure. Collaborating with Taylor, Nayar was instrumental in enhancing family planning services, anchoring them within a holistic health care delivery model. Over 1000+ Indian alumni have been influential in developing public health initiatives, shaping national policies, and driving the country's health advancements.  Established in 2020, the Gupta-Klinsky
 India Institute at
 Johns Hopkins builds
 upon a rich history
 of high-impact
 collaborations with
 Indian partners that
 is nearly a century
 old.

### **Commenced direct advisory and training**

Started direct work as an advisor for the WHO malaria control campaign, built human capacity by training engineers on India's water and sewer systems

### 1960s

1930s

### Developed low-cost intervention for village health

Demonstrated effectiveness of community health workers and combined family planning, nutrition, and primary health services

### 1990s

#### **Protected ~27M lives**

Helped prepare for introduction of PCV in India's routine immunization schedule. Protected ~27M children born each year from serious pneumococcal infections

### Built evidence for strengthening Informal Healthcare Providers (IHPs)

Surfaced inappropriate use of drugs in diagnosis and treatment practices of IHPs and recommended training and monitoring in basic healthcare

#### Led advocacy campaign for HiB vaccine

Catalyzed 5-year campaign to promote vaccine in partnership with medical professionals, policymakers, NGOs



#### **Established two new centers**

Center for Maternal and Child Health in India, Kolkata Center for Infectious Diseases in India, Pune



### JHU alumni played leadership roles

Founded and led eminent health institutions in India since before independence (e.g., All India Institute of Hygiene and Public Health)



### Saved ~50M lives through breakthrough innovations

Partnered with a Calcutta hospital to develop oral rehydration therapy that became the global standard for management of childhood diarrhea, and was credited with saving 50M lives





### Built clinical protocols to tackle HIV epidemic

Demonstrated high risk of HIV transmission for key populations, conducted clinical trials to prevent transmission, provided first genetic sequences of HIV virus in India



#### Improved provider performance for antenatal care



Created safe childbirth checklist to help health workers adhere to safe care practices during childbirth, resulting in 12% reduction in first two days of prenatal mortality







# **GKII Mission Statement**

GKII was established in 2020 to actively foster collaborations between JHU and India's leaders across government, academia, civil society, and the private sector. Our mission is to harness the collective expertise and resources from both entities to advance human knowledge and cultivate innovative solutions that benefit the global community.

GKII accomplishes its mission through 5Cs -Convening, Coordinating, Communicating, Creating Community, and Catalyzing efforts to create tangible impact in society. GKII works to create synergies across all divisions of the university that are working in partnership with India – creating a "Superhighway" of activity to enrich all communities. We build a sense of community across all audiences by raising awareness about our extensive activities and developments. We also coordinate events to maximize outcomes and convene stakeholders to share knowledge, foster collaboration, and build connections among the various individuals and groups at JHU who are interested in India. These efforts aim to generate results that benefit JHU, its partners in India, and the global community.

The GKII team is guided by both a distinguished Advisory Board and a faculty-driven Steering Committee that represents JHU schools. The team is based in both Baltimore at JHU and in New Delhi.



We pursue our mission in three strategic directions:

- Creating opportunities & lowering barriers for collaborative research, education, training, policy, and practice for social good
- 2. Amplifying current strengths of JHU work in India through targeted research initiatives that convene and stimulate innovation, partnerships, and knowledge sharing
- 3. Shaping the future through interdisciplinary scholarship and investment in new areas of knowledge and application to practice in emerging or neglected fields of potential impact



# **GKII Activity Highlights**

In its brief existence GKII has built a strong foundation of its operations at JHU and in India. It has raised **\$13.25 Million**+, offered **8 research grants** and sponsored **27 student** travel grants. GKII has built a prolific advisory board, a core team of **10 members**, established a strong representation of JHU schools through its Faculty Steering Committee. In 2023, GKII refined and focused into 3 key pillars, namely **Tuberculosis & Respiratory Infections, Artificial Intelligence & Digital Technologies, and Education & Training.** GKII is orchestrating new projects in these areas through working groups constituted by JHU and India experts. GKII's key programs until 2023 include:

### Johns Hopkins Center for Infectious Diseases in India

GKII has invested more than **\$4 Mn** to support the establishment of a new infectious disease research and education center in Pune. This collaboration between JHU School of Medicine, YRG Care, and other Indian partners features advanced laboratory facilities and aims to become a leader in infectious disease research and training.

### **Breakthrough Research Grants**

GKII offers catalytic funding to JHU faculty for research collaborations with Indian partners through a competitive process. As of date, GKII has awarded **3 grants of \$50,000** each in non-communicable diseases, **4 grants** in digital health, with co-funding from Indian partners IIT Bombay (**\$60,000**) and Ashoka University (**\$60,000**) and 1 grant (**\$45,000**) for Climate and Health.

### Girish and Himangi Rishi Student Travel Award

GKII supports students traveling to India to promote global experiential learning. JHU students across any school, division, department, or center, can apply for the



purpose of research and field practicums. In year 1, GKII supported **6 students** from JHU traveling to India and **2 students** from Indian partners for summer research. In 2024, GKII supported **6 students** to travel to India for Global Health Established Field Placement (GHEFP) projects.

### Sunil Kumar and Sumati Murali Student Training and Mentorship Fund

GKII has been gifted an endowment fund to support two PhD students annually at JHU for India-focused research and fieldwork. To date, over **\$400,000** has been raised in contributions toward this initiative.

### "Teeka Lagwaya Naa" Campaign

GKII sponsored a nationwide campaign to strengthen COVID-19 vaccine confidence among Indian citizens, thereby supporting and

supplementing the ongoing efforts of the Government of India and local organizations. JHU collaborated with **50**+ organizations in this effort and reached **25 Mn**+ viewers for the video campaign.



### GKII helped fundraise \$2.2 Mn for COVID-19 relief work in India

GKII led a fundraiser to donate \$2.2 Mn towards pandemic relief efforts in India, which included supplying medical kits, oxygen concentrators, vaccines, lab equipment and mobile health clinics. It worked with 30+ on ground partners in India and directly impacted 250,000+ individuals.

### **Provost Tour of India**

In April of 2022, a delegation led by then Provost Sunil Kumar and GKII Co-Chair Raj Gupta visited India for a formal one-week launch of the Gupta Klinsky India Institute. The delegation engaged with 40+ dignitaries from government, academia and private sector to build awareness about GKII, to explore collaborations and to recruit board members. The delegation met with JHU alumni, visited JHU project sites and partners. GKII organized multi-city events, meetings and media engagements.



Taranjit Singh Sandhu, India's former ambassador to the U.S., with then JHU Provost Sunil Kumar



From left to right: Balram Bhargava, Former Director General of Indian Council of Medical Research (ICMR); Amita Gupta, GKII Faculty Co-Chair; Naghma Sahar, News Anchor, NDTV; Naresh Trehan, Chairman and Managing Director, Medanta; Gagandeep Kang, Director-Enterics, Diagnostics, Genomics and Epidemiology, Global Health, Bill and Melinda Gates Foundation; and K. Srinath Reddy, Former President and Founding Member, Public Health Foundation of India

### **Program Highlights**

Students Travel Grants and Internships .....





Research Grants .....



Worth of research grants announced

JHU faculty supported

### Community Engaged



Students

300+ JHU faculty

Social Media and Newsletter

4000+ Followers



Alumni

### 3 Training Workshops Organized

Public Health Workshop - Oct 2023 & Jul 2024

### Trained 220+ IAS OFFICERS

at Lal Bahadur Shastri National Academy of Administration

### 7 Conferences & Roundtables Organized

#### April 2022, New Delhi

Applying Lessons Learned from COVID for a Stronger Health System

October 2023, Washington DC

Tech for Good: India Inc.'s Commitment to Research and Innovation

### January 2024, New Delhi

Symposium

Bridging the Gap: Exploring the role of AI in the Climate and Health Intersection

#### une 2024, New Delhi

Women in STEMM Roundtable

GKII Overview - 2022-24 15

**13 STUDENTS CBID** Summer Immersion Program

06 **GKII** Interns

S156 NNN Worth of travel awards offered

**30+** proposals **08** research projects received; **b** sponsored;

**N**A New research collaborations between JHU and India

Partners

NA MoUs Signed



Newsletter sign-ups

>411% Open rate

**Grant Writing Workshop - October 2023** 

Trained

### **15 RESEARCH SCIENTISTS**

working with government on improving grant proposals

April 2022, Mumbai

#### September 2022 (Virtual)

**Primary Healthcare** 

Climate, Health and Society: India's Challenges and Opportunities

### April 2024, New Delhi

**National Consultation** Workshop on Pediatric TB 7

# **Current GKII Priorities**

### **1. TB Free Schools Initiative**

Globally, active TB is the #1 infectious diseases killer and India accounts for 27% of the 10.6 million cases that occur each year. Furthermore, 1 in 4 (2 billion) people are estimated to be latently infected with TB and would benefit from preventive treatment. Additionally, 20% of Indian children are infected with latent TB by age 18 years and currently school-based children are not routinely screened for TB disease or infection. There's an urgent opportunity for prevention.

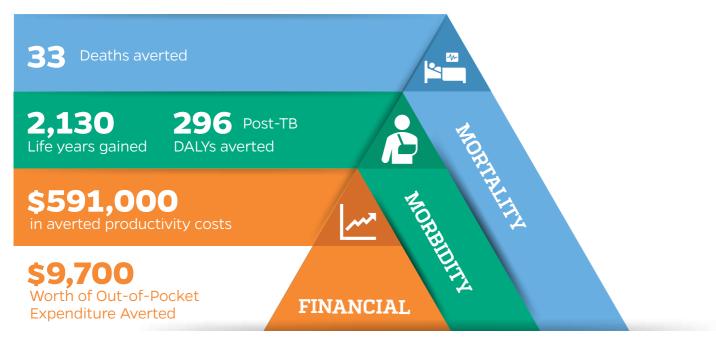
Johns Hopkins has led TB prevention therapeutics development. India and JHU TB research and

care partnerships are longstanding and have helped to define WHO and India TB treatment and prevention policies. India-JHU team led by Dr Kunchok Dorjee, reduced TB cases in schools in Dharamshala by 87% and showed it was cost effective.<sup>1</sup>

GKII has also prioritized its research efforts in TB and respiratory illness for the next three years. This focus aligns with the WHO's Sustainable Development Goals to eliminate TB by 2030 and the more ambitious goals of the Indian government to eliminate TB by 2025.

### **Impact Pyramid**

For every 10,000 school going children screened



1 Dorjee K, Topgyal S, Dorjee C, Tsundue T, Namdol T, Tsewang T, et al. High Prevalence of Active and Latent Tuberculosis in Children and Adolescents in Tibetan Schools in India: The Zero TB Kids Initiative in Tibetan Refugee Children. Clinical infectious diseases : an official publication of the Infectious Diseases Society of America. 2019;69(5):760-8. Engage key stakeholders (CTD, NTEP, State TB officers, schools, Community, NGOs, private sector) in the selected districts

Identify the blocks with highest TB notification rates through the data from Nikshay portal

Scale up across other geographies as per stewardship from Government of India and available funding resources We expect to screen 10,000 school going children through this initiative across our four sites

#### Pune and Satara, Maharashtra

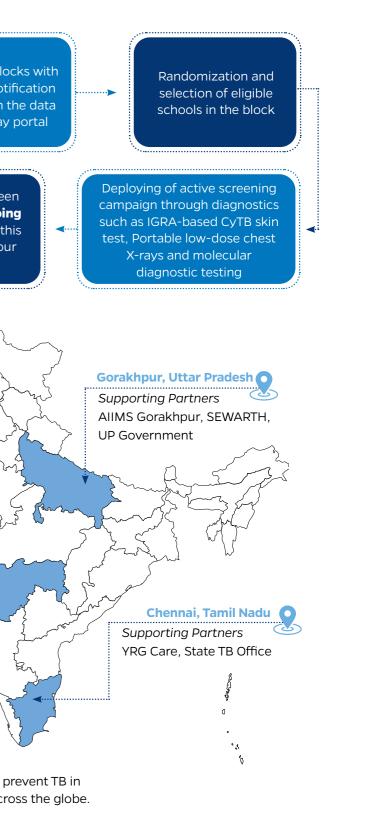
Supporting Partners PubMatic, Mukul Madhav Foundation, Serum Institute of India, State TB Office

In 2025, GKII is planning to launch the TB Free Schools Initiative. Through the TB Free Schools Initiative, GKII aims to build upon the proven work of Dr. Dorjee deploy a school-based TB screening intervention across four sites in three states (Maharashtra, Tamil Nadu & Uttar Pradesh) in partnership with Indian national and state governments, NGOs, and local communities.

For \$3 million TB Free Schools initiative will provide the necessary data to inform India and WHO policy to prevent TB in children, adolescents and young adults in India and across the globe.

To learn more about this project, donate or explore collaboration opportunities, please reach out to jhii@jh.edu

\*The above MAP depicts only pictorial representation of India and the States of India and does not purport to be the political map of India or its states.



### 2. Women in STEMM Initiative

Despite significant progress in women's education in India, women remain underrepresented in STEMM (Science, Technology, Engineering, Mathematics, and Medicine) careers. While 43% of STEM graduates in India are women, they comprise only 17% of the country's research workforce—a sharp contrast to the global benchmark of 30%. Furthermore, only four women hold leadership roles in major academic institutions, and only 14% hold C-suite positions in India's STEMM industries. This disparity highlights the "leaky pipeline" effect, where the representation of women significantly declines from entry-level roles to leadership positions.

To address these challenges, the Women in STEMM Initiative, a part of the U.S.-India Alliance for Women's Economic Empowerment, aims to empower early-career women in STEMM by creating leadership pathways and career support. This Alliance, a public-private partnership between the U.S. Department of State, USAID, Johns Hopkins University, and other leading organizations, is dedicated to fostering full participation of women in India's economy.

The Women in STEMM Fellowship, the initiative's signature program in partnership with the Gupta-Klinsky India Institute at Johns Hopkins University, is designed to support early-career Indian women researchers, especially from diverse backgrounds, by creating leadership pathways through mentorship, networking and learning opportunities.

By addressing systemic barriers and fostering partnerships, the Women in STEMM Initiative works to increase women's representation and leadership in India's STEMM workforce, empowering the next generation of women leaders and advancing women's economic empowerment across India.



In September 2024, the U.S.-India Alliance for Women's Economic Empowerment organized its first in-person meeting in New Delhi where GKII presented the concept of the Women in STEMM fellowship. Credit: USIBC

### **3. Artificial Intelligence and Digital Health**

Guided by the advisory board's vision, the Institute<br/>has recognized the role of AI and digital solutions<br/>in transforming healthcare. As a first step, the GKII<br/>team has conducted a landscaping exercise to<br/>identify key stakeholders across India and JHU.develop a strategy to drive the AI efforts of the<br/>Institute. The two pillars of this strategy were,<br/>firstly, to drive the effort through Hopkins' domain<br/>expertise in global public health and healthcare<br/>research and secondly, to focus on training and<br/>capacity building of stakeholders in the research<br/>and academic sector.

The landscaping exercise identified 28 key organizations across government, private, academic research, and social impact sectors. Additionally, over 120 faculty members across 23 centers under the Data Science and AI center at JHU were identified along with their key areas of expertise. Subsequently, multiple rounds of iterations were undertaken across JHU schools such as Whiting School of Engineering, Krieger School of Arts and Sciences, School of Medicine, and the Bloomberg School of Public Health to

# 4. Education and Training of Health and Research Cadre

In the realm of education, GKII fosters impactful partnerships with Indian institutions like IITs and IISc, invigorating faculty research through workshops and laying groundwork for potential research collaborations between JHU and Indian entities. Concurrently, GKII is broadening its horizons by expanding its research fellowship programs, study abroad opportunities, and travel exchange initiatives.

GKII is planning to launch virtual and online training programs on Public Health & Medicine Research to meet the growing demand for expertise in these fields. Long-term goals include



Currently, the institute is developing a masterclass webinar series on AI and Public Health, featuring experts from JHU and India. The series will be rooted in the practical experience of experts within JHU and Indian partners and aims to share technical knowledge and stimulate thought leadership through real-world use cases of leveraging AI-based solutions.

collaborative degrees and Centers of Excellence, aligning with JHU's global education mission to foster innovation and academic excellence. Central to this strategy is cultivating a sustainable cohort of skilled researchers. By leveraging these efforts, GKII aims to disseminate the fruits of discovery globally, contributing to societal progress and advancement.

As JHU's India liaison, GKII strengthens educational initiatives across India, adopting a 'One JHU' approach to support a cohesive India education strategy, enhancing brand visibility, and influence in the Indian educational landscape.





# Research

### **Breakthrough Grants**

Breakthrough research grants are a flagship program of GKII to support early stage JHU faculty members to collaborate with an Indian partner offering potential co-funding to pilot projects in multidisciplinary and urgent areas of research.

The Gupta-Klinsky India Institute has launched three Breakthrough Research Grant challenges in the fields of Noncommunicable Diseases, Climate and Health, and Health Data Research. The Breakthrough Research Grants Program provided funding for six different pilot projects led by faculty members from Johns Hopkins University and applicable partner institutions that involved interdisciplinary collaborations.

### Noncommunicable Diseases

Project: Al and machine learning to predict cardiovascular and metabolic outcomes in South Asian urbanized population with Type 2 diabetes mellitus

### JHU Principal Investigator



**Prasanna Santhanam** MBBS, MD. Associate Director, Communications, Division of Endocrinology and Associate Professor, JHSOM



**India Partner** 

**Anoop Misra** Chairman, Fortis-C-DOC Centre of Excellence for Diabetes, Metabolic Diseases and Endocrinology; Chairman, National Diabetes, Obesity and Cholesterol Foundation (N-DOC)

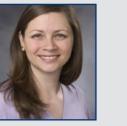
"Using AI techniques, this research hopes to identify factors like environmental pollution and socioeconomic status that might contribute to cardiometabolic disease in partnership with Indian clinical researchers based in New Delhi"

- Prasanna Santhanam

### **Project:** Maternal metabolites in pregnancy and child growth in India

#### JHU Principal Investigator

### **India Partners**





Sara Benjamin-Neelon PhD. JD. MPH. Director of the Lerner Center, Helaine and Sidney Lerner Professor of International Health. BSPH

**Giridhara Babu** MBBS. Professor and Head. Public Health Foundation of India (PHFI)

"I have collaborated with my colleagues at the PHFI for the past few years. I served as a mentor and collaborator to establish the birth cohort in Bengaluru examining diabetes risk in pregnancy and offspring health outcomes."

- Sara Benjamin-Neelon

Project: Formative assessment for peer-led mental health and TB services integration in India

### JHU Principal Investigator





**Christopher Kemp** Assistant Scientist BSPH

Nishi Suryavanshi Deputy Director for the **BJGMC-JHU Pune Clinical Research Site** 

**India Partners** 

"There are many barriers to effective mental health care in India, and most people who need care and treatment never receive it. The grant program has provided us with the opportunity to partner with people with lived experience of both tuberculosis and mental health conditions to co-design a peer-led mental health integration model for use in India's tuberculosis treatment centers."

- Christopher Kemp









**Debarati Mukherjee** PhD. Additional Professor. Indian Institute for Public Health, Bengaluru





Arjun Kakrani D.Y. Patil Medical College, Hospital and Research Centre



### **Climate and Health**

**Project:** Policy actions for India-U.S. collaborations on climate and health

#### JHU Principal Investigator



**Gigi Gronvall** Associate Professor, Department of Environmental Health and Engineering, BSPH

India Partner



**Regional Centre for Biotechnology** Department of Biotechnology, Ministry of Science and Technology. Government of India

"Our team will work to identify projects already underway which could use more support, or areas where the US and India are working separately but would benefit from a joint approach."

#### - Gigi Gronvall

### Health Data Research with Ashoka University

**Project:** Machine learning methods for enhanced forecasting of antiretroviral therapy demand in India

### JHU Principal Investigator



**Steven Clipman** Assistant Professor of Medicine. Division of Infectious Diseases, JHUSOM

"By harnessing the power of machine learning, we aim to refine methods for ART demand forecasting to ensure consistent treatment availability for millions of people living with **HIV** in India and establish a scalable model that could improve supply chain and healthcare delivery systems globally."

- Steven Clipman

### **India Partner**



Debayan Gupta Assistant Professor of Computer Science. Ashoka University

"We plan to attack one particularly impactful use case: forecasting demand for HIV medication in India. The careful and consistent balancing of stock required to do this is a complicated task; we aim to create a powerful model which can generalize and scale to other such systems across the world."

- Debayan Gupta

Project: Leveraging language models and a common data model to unlock real world evidence from unstructured electronic health record data in India

JHU Principal Investigator



**Matthew Robinson** Assistant Professor, **Division of Infectious** Diseases, JHUSOM

"We will apply modern natural language processing and large language model techniques to understand how clinicians in India and the US prescribe antibiotics with hope that these findings will inform efforts to use antibiotics more judiciously and effectively."

- Matthew Robinson

### **Digital Health with IIT Bombay**

**Project:** Leveraging India's digital surveillance system for tuberculosis to assess the effectiveness and impact of novel interventions

JHU Principal Investigator



**Emily A. Kendalln** Associate Professor of Medicine. Division of Infectious Diseases, Johns Hopkins School of Medicine

"This GKII breakthrough grant will allow our team from JHU and **IIT-Bombay to explore how routinely collected electronic health** data from India's National Tuberculosis Elimination Program can be leveraged to amplify the impact of clinical TB research."

-Emily Kendall



### India Partner



Rintu Kutum Faculty Fellow of Computer Science, Ashoka University

"This grant will foster the collective exchange of expertise in the field of AI and **Health Informatics leading** towards the understanding of. the landscape of antibiotics (prescriptions and usages) in a specific condition as a pilot observational study."

- Rinku Kutum

### India Partner



Mithun K. Mitra Professor of Physics at the Department of Physics, IIT Bombayy

**Project:** Development of a breast cancer risk prediction tool for the Indian population

#### JHU Principal Investigator



Nilanjan Chatterjee Bloomberg Distinguished Professor, Johns Hopkins School of Medicine

#### **India Partner**



Saket Choudhary Assistant Professor. Koita Centre for Digital Health, IIT Bombay

"Breast cancer rates are increasing in India over quite some time now. Our team, which includes faculties across IIT, Tata Memorial Cancer Hospital and Johns Hopkins, is really developing the firstever breast cancer risk prediction tool for India women and thus initiate more awareness about risks for primary and secondary prevention."

### - Nilanjan Chatterjee

Research

### **IN NEWS**

JHU and BJ Medical College jointly launched

a revolutionary new study to assess the

acceptability of an ultra-short tuberculosis

preventive therapy in people living with HIV in

Pune. The "One to Three HP" study compares the

treatment completion of daily dose Rifapentine

and Isoniazid for a month (1HP), to the weekly

months (3HP) in people living with HIV in Pune.

Drs. Amita Gupta and Vidya Mave lead the study.

dose of Rifapentine and Isoniazid for three

### **NEW COLLABORATION**

#### **Changing the Paradigm in TB Treatment -Collaboration Agreement signed with IIT** Bombay

Johns Hopkins University, through GKII, finalized a collaboration agreement with the Indian Institute of Bombay (IIT-B) in February 2023 with the goals of conducting joint research in digital health and provide training opportunities that build capacity in interdisciplinary health science research. This was announced during a panel discussion with IIT-B discussing future ways in which to empower health in the new digital landscape. This agreement has since led to the development of a Breakthrough Research Grant with IIT-B's Koita Centre for Digital Health.

### CASE STUDY

### Building clinical protocols and state capacity over three decades to tackle the HIV / AIDS epidemic in India



Issue: India has one of the largest burdens of HIV/AIDS globally, with the epidemic's first cases reported in 1986. Key populations, including infants born to HIV-positive mothers, commercial sex workers, men who have sex with men, and injecting drug users, bear the brunt of this public health challenge. Traditional strategies and global protocols, such as restricting breastfeeding for HIVpositive mothers, have inadvertently contributed to increased infant mortality rates. Furthermore, the country's HIV testing, prevention, and treatment services are often non-integrated, failing to meet the specific needs of these key populations.

JHU's Role: Since the 1990s, JHU has partnered with local institutions to tackle India's HIV/ AIDS challenge. Collaborations like the Six-Week Extended-Dose Nevirapine (SWEN) trial with BJ Medical College drastically reduced mother-to-infant HIV transmission. Additionally, collaborations with YRG Care improved testing rates through integrated care centers. JHU's research highlighted HIV transmission risks among key populations and developed prevention strategies, culminating in India's first genetic sequencing of HIV strains.

Impact: The collaboration between JHU and its Indian counterparts has significantly impacted HIV/AIDS prevention and treatment. The SWEN trial influenced WHO guidelines on breastfeeding for HIV-positive mothers. The integrated care center model, developed through this partnership, outperformed traditional care sites, offering a scalable template. These initiatives bolstered HIV testing and treatment infrastructure, training over 2,000 Indian scientists, and enhancing flagship Indian institutions' capacity. Following the success of these programs, the Government of India is scaling up the integrated approach to other states, with JHU providing ongoing technical support.



# **Education and Training**

### **Girish and Himangi Rishi Student Travel Grant**

The Girish and Himangi Rishi Student Travel Grant aims to build the next generation of thought leaders and researchers in India. Supported by the generous contributions of Mr. Girish Rishi, an alumnus of the School of Advanced International Studies (SAIS), and his wife, Himangi Rishi, the grant facilitates Johns Hopkins students in conducting research and immersive field studies at JHU sites under the Center for Global Health.

In 2023, eight Hopkins students benefited from this grant. Projects spanned diverse areas, including addressing holistic needs for youths affected by HIV; exploring perceptions of young Indians towards security; and examining social security's intersection with identities in Mumbai.

### 2023 Cohort

### 01

### Siddhaparna Sannigrahi

Master of Science in Public Health, Johns Hopkins Bloomberg School of Public Health (Social and Behavioral Interventions)

JHU Faculty: Anita Shet Theme: Children living with HIV Project: I'mPossible Fellowship

The I'mPossible Fellowship is an initiative that offers support to children, adolescents, and youths affected by HIV by addressing their educational, health, skills development, selfefficacy, and psychosocial needs. The project empowered young people in India and helped them enact positive social and healthcare related changes through their own lived experiences.

### 02 Babu Seenappa

Consultant, Johns Hopkins Bloomberg School of Public Health



JHU Faculty: Anita Shet Theme: Children living with HIV Project: The Positive Running Program

The Positive Running Program incorporates nutrition, daily running, endurance training, psychological support, and confidence-building to empower vulnerable children and youth to pursue a healthy holistic lifestyle. These overlooked activities are particularly important for children from disadvantaged backgrounds such as orphans and those living with HIV.

### 03

### Rishabh Kumar

Bachelor of Arts in International Studies, Krieger, School of Arts and Sciences at JHU (International Development and South Asia)



JHU Faculty: Rina Agarwala Theme: Vulnerable populations Project: Social Insecurity Project

Rishabh's portion of the Social Insecurity Project interviewed people in India to understand their social and economic views on security to provide the foundation of a larger research project. He hypothesized that older groups prioritized social security, while younger ones would focus on individualistic terms, guiding future research into these demographics.

### 04

**Sherina Poyyail** Master of Public Policy, St. Xavier's College, Mumbai



JHU Faculty: Rina Agarwala Theme: Vulnerable populations Project: Social Insecurity Project

For the social insecurity project, Sherina interviewed young individuals in Mumbai, including students and working youth, to understand their perceptions of social security across caste, class, and gender. The interviews provided foundational insights, aiding in hypothesis building. The diverse population of identities in Mumbai offered valuable data for her ongoing research.

### 05

Sonal Sharma

Ph.D. Candidate, Department of Sociology, Johns Hopkins University



JHU Faculty: Rina Agarwala Theme: Vulnerable populations Project: Social Insecurity Project

Sonal investigated social insecurity among Indian The POINTER trial assessed same-day antiretroviral youth aged 17-25 in New Delhi and Mumbai, therapy (ART) and community-based ART effects examining gender and class differences. His on HIV viral suppression in people who inject gualitative research project aimed to create a new drugs to better support this vulnerable population. measure for social insecurity to affect change Rose worked with an in-country team to conduct in policy and explore India's post-pandemic site visits, recruited respondents, monitored data challenges, including safety, vulnerability, and collection, and analyzed interview data to identify barriers and facilitators for the trial. aspirations.

### 08

### Manvi Poddar

MSPH in International Health, Johns Hopkins Bloomberg School of Public Health



JHU Faculty: Christopher Kemp

**Theme**: Social Behavioral Interventions **Project**: Formative Assessment for Peer-Led Mental Health and TB Services Integration in India











Master of Science in Public Health (Health Studies), Johns Hopkins Bloomberg School of Public Health

JHU Faculty: Krishna Rao Theme: Health systems Project: India Primary Health Care Support Initiative

Austin's project worked to enhance primary healthcare coverage and performance in selected Indian states in support of the India Primary Health Care Support Initiative. She refined partner workplans, established milestones, and visited sites for context. The project also developed study designs and tools and contributed to manuscripts.

### 07

### **Rose Pollard Kaptchuk**

Ph.D. Candidate, Department of International Health, Johns Hopkins Bloomberg School of Public Health

JHU Faculty: Shruti MehtaTheme: Social Behavioral InterventionsProject: People Who Inject Drugs- Opportunities

to Improve, Treat & Retain (POINTER)

.....

Manvi's project worked to expand mental health services India, guided by individuals with firsthand experience of TB and mental health conditions. Her goal was to identify the characteristics of a peer-led tuberculosis-mental health integration model that would demonstrate effectiveness, cost-effectiveness, acceptability, feasibility, and sustainability that could be used by India's TB programs.





### **2024** Cohort

### 01

### Sahana Shekhar

Master of Science in Public Health, Johns Hopkins Bloomberg School of Public Health

JHU Faculty: Svea Closser Theme: Maternal and Child Health Project: Karnataka Health Promotion Trust (KHPT)

Under the mentorship of Professor Svea Closser, Sahana supported KHPT on implementation research to build institutional capacity and scale up the coverage and guality of Kangaroo Mother Care across selected districts of Karnataka through advocacy and technical support.

### 02

**Katherine Lim** 

MSPH in Health Systems, Johns Hopkins Bloomberg School of Public Health

JHU Faculty: Krishna Rao **Theme:** Health Systems **Project**: India Primary Health Care Support Initiative (IPSI)

Katherine worked under the mentorship of Professor Rao on the India Primary Health Care Support Initiative (IPSI). The initiative, spearheaded by JHU, in collaboration with AIIMS New Delhi and supported by the Bill and Melinda Gates Foundation, works under the guidance of the National Health Systems Resource Centre to strengthen delivery and performance assessments of primary healthcare systems across selected Indian states.

### **Hrishikesh Sathyamoorthy**

Master of Science (ScM) Epidemiology, Johns Hopkins



JHU Faculty: Anita Shet Theme: Children Living with HIV Project: Positive Running Program

Hrishikesh worked on the Positive Running program, a peer-led physical fitness initiative to improve outcomes among adolescents and youth living with HIV. He assisted in the recruitment of new participants, developed nutrition-related guidance, and provided insights for scaling up the program.



Divya Rao Master of Science (ScM) Epidemiology, Johns Hopkins Bloomberg School of Public Health



JHU Faculty: Kunchok Dorjee Theme: TB Impact on Children & Families Project: Zero TB Kids & Family

Divya Rao worked on the "Zero TB Kids & Family" project, a collaborative initiative between Johns Hopkins, India, and Nepal. The project leverages innovative technology, including AI-enabled x-rays, molecular diagnostics, and short-course preventive treatments to combat tuberculosis. Divya had the opportunity to engage in focus group discussions with the community, develop dedicated surveys, and help understand the factors that influence TB screening and therapy.

"Girish and Himangi Rishi Student Travel Award offered the opportunity to live among and teach 35 orphaned adolescents living with HIV at Snehagram special care home in Tamilnadu. Partnering with the field team in India, I learned about the social support systems which make up India's diverse healthcare landscape."

- Autumn Tangney

### 05

### **JaeLvnn Taylor**

MSPH in Health Education and Health Communications, Johns Hopkins Bloomberg School of Public Healthh



**Theme:** Primary Healthcare, NCDs Project: Supporting Equitable Wellness through Advanced Research and Training in Health (SEWARTH)

JaeLynn worked on the SEWARTH project, a collaboration between the Department of Medical Health and Family Welfare (Government of Uttar Pradesh), JHU and AIIMS Gorakhpur to partner in public health research and training. She supported the development of training modules to improve communication for efficient data collection under the SEWARTH-Health and Demographic Surveillance System.



BSPH student Autumn Tangney spent two months in Karnataka, India, working on the "I'mPossible Fellowship," where she provided insights to improve social support systems for adolescents living with HIV. Photo: Autumn Tangney



### **Autumn Tangney**

MSPH in Health Systems, Johns Hopkins Bloomberg School of Public Health



JHU Faculty: Anita Shet Theme: Children Living with HIV **Project**: I'mPossible Fellowship

### Autumn worked on the "I'mPossible Fellowship" project, that supports children, adolescents, and youths affected by HIV, addressing their educational, health, skills development, selfefficacy, and psychosocial needs.



### **CBID Immersion Program and GKII**

The Johns Hopkins Center for Bioengineering Innovation & Design (CBID) and GKII share a vision to develop impactful healthcare solutions that enhance the lives of patients, particularly in the context of India. Both organizations prioritize gaining a comprehensive understanding of patient and stakeholder needs, fostering iterative co-development of solutions to ensure their relevance and viability within the Indian healthcare ecosystem.

### Partnering to Explore Unmet Needs in Glaucoma Care Pathway



The Hopkins team, comprising Amina Ishrat, Lhotse Thompson, Sorush Rokui, and Luke Boyce, poses with a staff member at Aravind Eye Hospital. Photo: Lhotse Thompson

This year, GKII and CBID partnered with the Aravind Eye Care System, focusing on identifying unmet needs and crafting, testing, and validating a solution to prevent vision loss from glaucoma. In August 2023, GKII sponsored a team of CBID engineers to participate in a summer immersion program, engaging with the project on-site to deepen their insights. This initiative leverages CBID's ongoing work in telemedicine and artificial intelligence to enable accessible eye screening and referral services in India.

### Enhancing the Development of AI Tools to Assist Frontline Health Workers



The Hopkins team participates in an eye consultation at Nashik. Photo: Sandhya Tiku

Another team partnered with Intelehealth, a tech-for-impact organization with a mission to drive quality healthcare where there is no doctor through Ayu, an AI-based tool, empowering frontline health workers to enhance patient safety and outcomes. The JHU team is helping to develop a needs assessment that will inform the development and implementation of the AI tool to provide region-specific diagnoses and higher quality differential diagnoses.

"CBID Design Teams seek to design and develop better solutions for important healthcare challenges around the world. Support from the GKII has allowed our students to connect to the incredible energy and creativity in India. Thank you so much to the Institute and your supporters for enabling an experience which will inspire and inform their professional lives, and help to create impactful healthcare solutions."

- Youseph Yazdi, Executive Director, CBID

### Advancing Pediatric Tuberculosis Screening and Diagnosis in India

The Gupta-Klinsky India Institute is currently developing programming focused on a critical area of infectious diseases: pediatric tuberculosis. The "TB Free Schools" initiative is a multi-year, multi-site project aimed at generating empirical evidence on the current burden of latent TB cases in pediatric populations, as well as developing a robust, cost-effective screening strategy to facilitate early TB diagnosis in children.

The 2023 CBID cohort supported GKII with indepth landscape analyses to identify challenges and areas within the TB care cascade that could benefit from strategic planning and programming.

In August 2024, the current CBID Fellows cohort visited India to support the upcoming pediatric TB screening initiative. They traveled to three



CBID team observes healthcare workers during TB consultations at clinical sites in Dharamsala. Photo: Meghashish Sharma

"The visits to Pune, Gorakhpur and Dharamshala were deeply educational, and exposed us to the fundamentals of the Indian healthcare system, TB management in India, current digital solutions on the market, and cutting-edge clinical trials. The structure, order, and logistics of our site visits were thoughtfully organized and the CBID team is appreciative of the hospitality"

- Ishir Sharma, MSE Student, CBID

cities—Pune, Gorakhpur, and Dharamshala where JHU is deploying TB and other healthrelated interventions. The fellows completed over 19 clinical site visits, interviewing more than 40 clinicians and over 35 beneficiaries, amounting to over 700 hours of clinical immersion.

Through these visits, the fellows gained a comprehensive understanding of the clinical, technical, and programmatic aspects relevant to tuberculosis service delivery in India, along with an in-depth analysis of the Indian public health system. They are now developing a digital innovation model to enhance and accelerate TB diagnosis, especially among pediatric and adolescent populations.



### **Training Programs for Professionals**

Through faculty and alumni-led workshops and training, GKII aims to nurture leadership excellence, enhance skills, and foster collaboration among professionals in various fields, contributing to their personal and career development.

### **Nurturing Leadership Excellence at LBSNAA**

On October 30, 2023, in collaboration with the Johns Hopkins Bloomberg School of Public Health and the Lal Bahadur Shastri National Academy of Administration (LBSNAA), GKII conducted a Friday Night at the Emergency Room (FNER) session as part of a public health training program for mid-career civil servants from 14 All-India services. Hosted at LBSNAA, the engaging simulation board game, "Friday Night at the Emergency Room," facilitated by JHU alumni and IAS officers Dr. Rakesh Gupta (IAS '97) and Dr. Rajendra Shukla (IAS '86), served as a valuable tool for systems thinking in public administration. Attended by over 140 mid-career professionals civil servants from diverse services, the session aimed to enhance leadership capacities, foster collaboration, and ensure the delivery of citizen-centric services at the highest standard.



Civil servants from nine different services attended the training from IAS, IPS, IRS, IPOS, IFS, IRAS, IDAS, IPTAFS, IAAS cadre.

On 3rd July 2024, the Gupta Klinsky India Institute delivered the second iteration of the Emergency Room (FNER) simulation training session at LBSNAA. The session engaged 83 IAS Officers who have completed 10-15 years of service across diverse sectors. This collaborative training was led by distinguished JHU alumnus Dr.Rakesh Gupta (IAS '97, BSPH '11), Additional Secretary to the Government of India, and Dr. Brian Wahl, Associate Research Professor in the Department of International Health.

### **GKII Workshop Prepares Scientists for Grant Writing Success**



Grant Writing Workshop Participants

On October 13, 2023, GKII addressed the critical gap in formal education on effective grant writing through the "Grant Writing Workshop: Building Effective Specific Aims Pages." This workshop, attended by 15 senior scientists and researchers from top Indian institutes such as ICMR and AIIMS, focused on the essential skill of crafting impactful Specific Aims pages.

The workshop was facilitated by Johns Hopkins Whiting School of Engineering faculty. The session aimed to empower researchers to articulate their vision, showcase potential impact, and secure crucial funding for innovative projects. This strategic initiative recognizes the pivotal role grant writing plays in advancing high-impact research.

"Effective grant writing goes beyond securing funding; it fosters collaboration, enhances planning, promotes innovation, and amplifies voices advocating for crucial research and development work. These initiatives align with the Institute's mission to lower research barriers in India through collaborations with local partners and sharing expertise."

Dr. Sara Bennett, GKII Faculty Steering Committee Co-Chair

### FACILITATORS:

### Sri Sarma

PhD Vice Dean for Graduate Education and Lifelong Learning (GELL) in the Whiting School of Engineering

### **Dr Chuck Montague**

Director of Business Development, Biomedical Engineering, Johns Hopkins University.

### **Dr Patrick Myers**

Director of Product Development, Biomedical Engineering, Johns Hopkins University



### EDUCATION INITIATIVES BY JHU SCHOOLS IN INDIA

### The Whiting School of Engineering: Home-to-Hopkins Program

The Home-to-Hopkins is a master's degree program that gives students the opportunity to start their degree in one of five engineering disciplines remotely from their home country for the first year, then shift to on-campus study in Baltimore, Maryland in year two.

#### **Engagements and Partnerships Through the Johns Hopkins School of Nursing**

The Johns Hopkins School of Nursing (JHSON) maintains active engagement with several projects in India. In partnership with Christian Medical College Vellore, College of Nursing, JHSON obtained new funding for co-development of a novel virtual mental health and wellness center in Vellore, India. The project is currently under development with involvement from several graduate students, staff, and faculty.

JHSON also partnered with the India Ministry of Health, National Institute for Health and Family Welfare (NIHFW), and the JHU School of Public Health to develop and lead a first of its kind Trainthe-Trainer Course for development of Nurse Leaders in Infection Prevention and Control in Delhi, India. This is a nationwide initiative focused on developing a strong group of master trainers. Several live iterations of the course have been completed and will be rolled out at the grassroots level to 70,000 nurses in India.

#### **Carey School of Business Focusing on Outreach and Connection in India**

The Carey School of Business (CSB) has formed a special faculty task force to evaluate potential opportunities in India including creation of executive education programs. The faculty Task Force includes Rick Smith, Professor of Practice and Executive Advisor to the Dean; Nagpurnanand Prabhala, Francis J. Carey, Jr. (Endowed) Professor; Ritu Aggarwal, Wm. Polk Carey Distinguished Professor; Sudip Gupta, Associate Professor of Practice; and Supriya Munshaw, Associate Professor of Practice and Associate Dean for Academic Programs. The task force has conducted a series of meetings to discuss current academic and professional connections in India and has begun to evaluate potential opportunities for academic collaborations.

### School of Advanced International Studies (SAIS) Cohort Explores AI Governance in India

The IDEV Practicum at JHU SAIS allows students to work directly with public, private, and nongovernmental organizations as a capstone to their graduate studies. In 2023, the India practicum featured two groups focusing on AI governance and US-India bilateral space collaboration. From January 3 to 12, the cohort visited New Delhi and Bengaluru, engaging with stakeholders, researchers, and entrepreneurs in the AI and space industries. The students were hosted by the Ministry of External Affairs' New and Emerging Strategic Technologies division and the U.S. Department of State at the U.S. Embassy in Delhi. In Bengaluru, they interacted with students and researchers at the National Institute of Advanced Studies and held discussions at the Takshashila Institution, also connecting with innovative startups.

# Announcements

### Sunil Kumar and Sumati Murli Student Training and Mentorship Fund Established

In March 2023, GKII established the Sunil Kumar and Sumati Murli Student Training and Mentorship Fund to honor Sunil Kumar, the first JHU Provost of Indian origin and also a founding member of the Gupta-Klinsky India Institute. This fund will support two graduate level degree students each year at Johns Hopkins University conducting studies related to India. This fellowship allows GKII to honor the vision of Dr. Kumar towards creating equitable and quality educational opportunities and facilitating interatction between Johns Hopkins and Indian partners.

### Amita Gupta nominated as a member to the AAU US-India Task Force

Johns Hopkins University, a founding member of the Association of American Universities (AAU) since 1900, has been actively involved in enhancing U.S.-India educational relations. In April 2023, the AAU formed a Task Force to focus on expanding research and higher education partnerships between the two countries. Amita Gupta, GKII Faculty Co-Chair, joined this task force, contributing her expertise to the initiative.



Dr. Amita Gupta, GKII Faculty Co-Chair, with US Ambassador to India, Eric Garcetti and delegates from the Association of American Universities (AAU) in New Delhi.





### **CASE STUDY**

### **Impact of the Fogarty Training Program on Trainee** and Institutional Research Capacity Building at a **Government Medical College in India**



Dr. Bollinger led a scientific writing workshop for Fogarty scholars, BJGMC faculties, and students.

Issue: India bears the highest tuberculosis (TB) burden globally and ranks third in HIV prevalence. People living with HIV (PLHIV) are notably more susceptible to TB, the leading cause of death among PLHIV. The Fogarty Training Program aimed to bolster research capacities at an Indian public medical college, with a focus on HIV-TB research, addressing these pressing public health issues.

JHU's Role: JHU collaborated with BJ Medical College (BJGMC) in Pune, India, to establish the Fogarty HIV-TB Research Training Program. Initiated in April 2014 and supported by the US National Institutes of Health and the Fogarty International Center, the program aimed to enhance research capacities by training midlevel BJGMC faculty in HIV-TB research. Known as Fogarty Scholars, trainees underwent comprehensive training, including a three-week intensive course at JHU, mentoring by JHU faculty, and participation in monthly journal clubs and research presentations. The program emphasized the development of individual research projects for implementation and publication in peer-reviewed journals.

**Impact:** The Fogarty Training Program significantly enhanced both individual and institutional research capacities. From April 2014 to April 2019,

13 Fogarty Scholars designed and implemented new Institutional Review Board-approved research studies, contributing to 49 PubMed-listed research publications, including 11 first-authored manuscripts. Additionally, they led 36 journal club discussions, mentored 58 student research projects, and facilitated 5 institutional research method workshops. Surveys and interviews revealed a perceived increase in institutional research capacity, particularly in TB research (epidemiology, clinical, and laboratory research). The Fogarty Training Program also provided training to 21 mid-level BJGMC faculty in HIV-TB research competencies. The program's impact on BJGMC's scientific output was noted as marginally improved, underscoring the significance of continuous support and resource allocation for sustained research capacity enhancement.



## **Policy and Practice**

### **PHC Symposium**

JHU faculty and India-based project teams gathered in Delhi on January 18th and 19th 2024, for the PHC Symposium, featuring engaging panel discussions and a series of interactive sessions on emerging issues in primary health care in India and potential research and collaboration opportunities to address them.

Its purpose was to tackle challenges, foster collaboration, and identify future research areas and partnerships for Primary Health Care (PHC) initiatives in India, thereby shaping the future of healthcare in the country. Organized by GKII and the Health Systems Program -



Department of International Health at the Johns Hopkins Bloomberg School of Public Health, this symposium served as a pivotal platform for faculty and researchers dedicated to PHC research projects in India.

The themes included finance and governance, meeting the needs of vulnerable populations, community engagement, integrated primary and secondary healthcare models in LMICs and leadership training initiatives, and health information systems. The discussions addressed emerging issues and challenges while exploring deeper insights into potential research areas and collaborations for future PHC initiatives in India.



### **Panel Discussions**

### Institutional Structures and Financing models for Building Robust Primary Healthcare Systems

#### Speakers:

Dr Atul Kotwal

Executive Director, National Health Systems Resource Centre, New Delhi

#### Dr Rajani Ved

Director Health, Bill & Melinda Gates Foundation New Delhi

### Dr Aarushi Bhatnagar

Senior Economist Health, World Bank, India

#### Sessions

### **1. Community Engagement**

The session shed light on projects and research endeavors aimed at fostering deeper connections between healthcare providers and the communities they serve.

#### Speakers:

#### Shalini Singh

Senior Researcher, Johns Hopkins India (JHPIEGO Community Engagement Project)

#### **Aditya Singh**

Executive Director and Deputy Chief of Party ACCELERATE

#### **Raghukul Ratan Pandey**

Senior Research Officer UP Project

### Developing Inclusive PHC Systems for Vulnerable Populations

### Speakers:

**Dr. Somesh Kumar** Country Director, Jhpiego India

### Dr. Devaki Nambiar

Program Director, Healthy Societies Strategy, The George Institute of Global Health

### **Meike Schleiff**

Scientist, Alliance for Health Policy, and Systems Research, World Health Organization

### 2. Promoting Teamwork and Interlinkages across Levels of the System and Developing Capacity

This session delved into the exploration of integrated primary-secondary healthcare models in Low- and Middle-Income Countries (LMICs) and leadership training initiatives within the Indian healthcare system.

#### Speakers:

Zabir Hasan Assistant Scientist, Health Systems, BSPH

### Aman M Mishra

Team Lead, Public Health Management & Leadership-UP Project

### **3. Exploring More about PHC – Health information systems, evidence and evidence use**

The session focused on unraveling the intricacies of Primary Health Care (PHC) in India, specifically delving into Health Information Systems (HIS), evidence, and its practical application.

#### Speakers:

**Subhash Ghosh**, Project Lead (YRG CARE, ACCELERATE)

Smisha Agarwal, Associate Professor, Director, Center for Global Digital Health Innovation, BSP

Akriti Mehta, Senior Public Health Specialist, India Primary Healthcare Support Initiative Swati Srivastava, Senior Program Officer, UP Project



To read the summary of the PHC Symposium <u>click here</u> or scan the QR code:

# Bridging the Gap: Exploring the role of AI in the Climate and Health Intersection



Our event, Bridging the Gap: Exploring the Role of AI in the Climate and Health Intersection, facilitated collaboratively by Dasra's ClimateRISE Alliance, Indiaspora, and GKII at Johns Hopkins University, explored how AI can be used as a tool to address up-stream and down-stream interventions.

Moderator: Neera Nundy, Founder, Dasra

#### Speakers:

- Sanjay Purohit, Ex-Infosys and Chief Curator,
  Societal Thinking
- Smisha Agarwal, Associate Professor and Director, Center for Global Digital Health Innovation, JHU
- Kate Schneider, DCS Co-Faculty Lead, School of Advanced International Studies, JHU

### Health Beyond the Headlines with Barkha Dutt

Award-winning Indian broadcast journalist and author Barkha Dutt explored learnings for the Indian healthcare system from COVID-19 and beyond, gender equity, community building, healthcare in the digital era in India, and the power of storytelling from her journalism perspective.

- Shefali V Mehta, Founder and Principal, Open Rivers Consulting Associates
- Abhirup Datta, Associate Professor, Department of Biostatistics, Bloomberg School of Public Health, JHU,



### **CASE STUDY**

### Improving provider performance during childbirth



Photo credit: Jhpiego

Issue: India accounted for 20% of global under-five deaths as of 2015. Despite doubling the rate of institutional deliveries between 2005-15, neonatal mortality rates (NMR) in India only saw a modest decline of 12 percentage points. This indicated that the quantity of healthcare has increased, but the guality remains a crucial factor that requires significant improvement to affect outcomes positively.

Jhpiego's Role: Jhpiego, with Children's Investment Fund Foundation (CIFF) funding, collaborated with the Government of Rajasthan in 2012 to implement the Safe Childbirth Checklist (SCC) program. The SCC, adapted from a safe surgery checklist by Dr. Atul Gawande, supports health workers in adhering to vital childbirth safety practices. Jhpiego's responsibilities included developing the SCC resources, ensuring the availability of essential drugs, supplies, and equipment, designing a training package for health workers, providing post-training support, and facilitating effective data collection and program monitoring. Their efforts were instrumental in translating learned skills into practice through structured mentorship and in

developing 'Dakshata,' a significant initiative by the Government of India, adopted in over 1,200 facilities across various states.

**Impact:** The direct impact of implementing the SCC was a significant 12% reduction in prenatal mortality in the first two days. The systemic impact was even broader; based on the success of 'Dakshata', the initiative has been scaled up to additional states across India, with Jhpiego continuing to offer crucial technical support. This scale-up process highlights the potential of well-crafted interventions to make far-reaching improvements in public health when supported by data-driven practices, reliable resource allocation, and consistent mentorship for healthcare workers.



## **Community Engagement**

### **Students**

### Student-Alumni Admissions Fair - New Delhi, India

On January 21, 2023, the United States-India Educational Foundation (USIEF), in collaboration with the American Center - the U.S. Embassy's Cultural Hub - conducted the 14th edition of the EducationUSA-USIEF Alumni Fair. GKII along with several alumni represented JHU at the event to share experiences, provide first-hand information and insights to prospective students on academic and campus life, as well as the socio-cultural environment in the U.S.

### Hopkins Engineering Exploratory Program (HEEP) Showcases Global Engagement and **Talent Development**

On March 11, 2023, Sridevi Sarma, Vice Dean for Graduate Education and Lifelong Learning, and Hong Lan, Director of Special Projects, hosted the inaugural Hopkins Engineering Exploratory Program (HEEP) for prospective graduate students. The seven-day event brought together 23 students, including 13 from India, to view 16 curated lectures by Whiting School of Engineering (WSE) faculty. HEEP offers exceptional junior undergraduates worldwide a brief, immersive experience at Johns Hopkins University's Whiting School of Engineering. It's a non-degree, noncredentialing program held on the Homewood Campus, combining engineering and STEM workshops/short courses with campus tours, lab visits, day trips, and panels about graduate school and engineering careers.

GKII Overview - 2022-24 41



"One of the most effective ways to showcase our faculty and research is to get prospective students on campus. Meeting faculty and attending lectures are key for understanding our atmosphere."

#### - Sridevi Sarma

Early outcomes show that among the 23 HEEP participants, eight seniors received offers from WSE Master of Science in Engineering programs. After attending, four students accepted offers to the Mechanical Engineering MS program, and one accepted an offer to the Electrical and Computer Engineering MS program. The other 15 participants were college juniors.



### Welcoming Students for Inaugural School Year Gathering

In September 2023 to mark the beginning of the new school year, GKII hosted a gathering of 50 students from India, the Indian diaspora, and any students with an interest in India. Brief remarks by GKII Executive Director Melody McCoy and co-chairs Amita Gupta and Sara Bennett covered the history of GKII and its mission, as well as current projects and efforts led by Johns Hopkins University in India.



### **Celebrating Shared Experiences with Parents**



During her December 2023 visit to India, Executive Director Melody McCoy met with parents of current students, along with alumni, in Delhi to celebrate shared experiences and aspirations. Notable attendees included Anshu and Deepak Azad, Hitesh and Rimy Oberoi, Dr. Indu Bhushan, and Damini Agarwal. In Mumbai, GKII convened a dinner with parents of current JHU students and listened to their thoughts and insights on their students' experience. These gatherings reaffirmed the profound impact of JHU's initiatives on students and their families, inspiring continued collaboration, and connection within the JHU community.

### **Student Spotlight Series**



Ishir Sharma WSE. '25

"Being an international student is a huge part of my identity."



### Aarna Sanghai WSE, '27

By being an inclusive and equitable home for all, JHU has fostered the perfect environment for crosscultural interactions."

### **GKII Interns**



Sangeeta Koilada WSE, GKII Data Analyst



Vibha Sathesh Kumar KSAS, GKII Communications Intern

### **Faculty**

- Stewardship by the Steering Committee: The Gupta-Klinsky India Insititute provides 20 spaces for JHU faculty members to sit on the GKII Faculty Steering Committee, providing opportunities for collaborative leadership and guidance on strategic and programmatic planning for GKII and its activities. The faculty body is a core pillar of GKII's framework and was established to promote and enhance collaborations with India related to research, education, policy, and practice to unite the JHU community with India to address global challenges.
- Linking Faculty with Grant Opportunities: The Breakthrough Research Grants Program is a core pillar of support GKII provides JHU

### **Highlighting the Work of Our Faculty**

Spotlight



**Kunal Parikh** PhD, Assistant Professor JHU School of Medicine



**Parul Christian** DrPH, Director of Program in Human Nutrition, Professor, BSPH



**Richard Chaisson** 

MD, Director, Center for Tuberculosis Research, Professor of Medicine, JHUSOM, BSPH



faculty. By providing funding in priority areas for pilot projects with India-based research institutes, we create important frameworks for continued collaboration. These crossdisciplinary objectives work to advance innovative solutions and promote equitable research partnerships among faculty.

Thought Leadership in Action: GKII hosted four webinars and panel discussions with JHU faculty members, pulling from many schools within the university. We aim to showcase the important work that these faculty members are doing, while also ensuring that education opportunities remain accessible and relevant to everyone.

"My mission is to create a world where no person is limited by the circumstances of their birth."

"I'm passionate about the work that I do, and I speak up about maternal nutrition to push the agenda forward. Everything being done right now is limited and we need to double down."

"There are literally billions of people in the world who are infected with TB already and are at risk of getting sick with it in the future. It's a problem that will stick around for a long time to come, even if we developed the most perfect tools imaginable."



### Alumni

### **Alumni Meet GKII Executive Director**

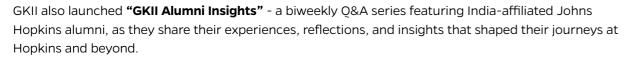
In December 2023, GKII Executive Director Melody McCoy visited India and had the privilege of meeting esteemed JHU alumni in Delhi and Mumbai. They shared their remarkable achievements and experiences, further highlighting the significant impact of our JHU community in the region. We look forward to teaming more with this tremendous resource as we grow our footprint within India.



Scan for the survey

### **Building a stronger community of JHU India Alumni**

GKII launched a first-of-its-kind effort to consolidate a community of JHU alumni from India, those currently working or based in the country, as well as those who are part of the Indian diaspora. The goal is to mobilize a community of thousands of Johns Hopkins alumni with multidisciplinary backgrounds and a collective vision to deepen the relationship between Johns Hopkins and India. If you're an India-affiliated JHU alumni, stay connected with us by filling out our short online survey.



### Spotlights

Indu Bhushan, Ex-IAS Officer '83, JHU alumnus, and Former CEO-Ayushman Bharat, Government of India



### "It helped me develop an interest in public health and changed my life forever."

Originally an electrical engineer, Indu Bhushan has carved a career path that exemplifies openness to following one's interest and pursing life's opportunities with excellence. From his early days as a student at Johns Hopkins University, to his role as the Director General of the Asian Development Bank, and the founding CEO of India's flagship public health insurance program, Ayushman Bharat, Bhushan's trajectory is one of innovation and public health.

#### Ankita Kakkar, SAIS '23 Graduate



An exclusive invitation-only Washington Welcome, held on the White House Lawn, brought together alumni of Johns Hopkins University. Among the attendees was Ankita Kakkar representing JHU with pride.

'As a professional focused on Indo-Pacific affairs, witnessing the ceremony was a profound experience, as it was symbolic of the strengthening ties between the world's oldest and largest democracies, from diplomacy to defense cooperation and peopleto-people exchanges."



### **Events**

### **Panel Discussions**

Empowering Health for All- Exploring Digital Innovations for Health Equity: This special hybrid event marking a new collaboration between Johns Hopkins University and the Koita Centre for Digital Health at Indian Institute of Technology Bombay. Hosted at JHU's Whiting School of Engineering. Prof. Ramakrishnan, Drs. Ritu Agarwal, William Polk Carey Distinguished Professor, Rama Chellappa, Bloomberg Distinguished Professor, Kunal Parikh, Research Associate, and Sridevi Sarma, Associate Professor, Vice Dean for Graduate Education were panelists while Dr. Brian Hasselfeld, Senior Medical Director of Digital Health and Innovation acted as Moderator.



Pictured, from left to right: Nitish Thakor (Professor of Biomedical Engineering), Brian Hasselfeld, Kunal Parikh, Sridevi Sarma, Ritu Agarwal, Ganesh Ramakrishnan, and Melody McCoy.

### Webinars and Workshops

### **Diabetes and CVD Risk Among South**

Asians: Dr. Sheela Magge, Chief of Division of Pediatric Endocrinology and Diabetes, Associate Professor of Pediatrics and Lawson Wilkins Endowed Chair of Pediatric Endocrinology at Johns Hopkins University School of Medicine, discussed her NIHfunded research on ancestry-related differences in body composition and the impact on cardiometabolic risk.

Gange.

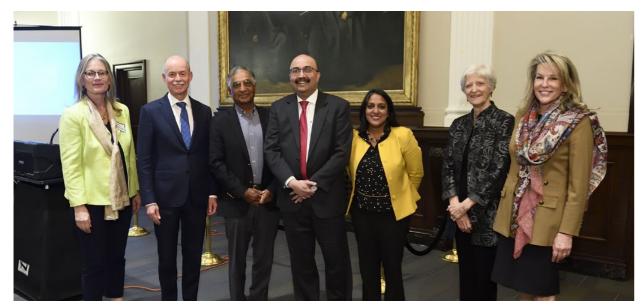
Pride & Beyond: Addressing Health Equity for LGBTOIA+

**People in India:** The Center for Infectious Diseases in India celebrated Pride Month at the event "Pride & Beyond: Addressing Health Equity for LGBTOIA+ People in India." Simran Bharucha, Director of Transgender Health for Project ACCELERATE, led discussion about India's first comprehensive clinic the for the Transgender Community and screened the documentary "Mitr Clinic - Pride and Beyond." Honored presenters included Dr. Sunil Solomon, Dr. Shruti Mehta, Dr. Helene Hedian, and Dr. Stephen

Opportunities for One Health Research in India: The Gupta-Klinsky India Institute and the Center for Infectious Diseases in India co-hosted this webinar presented by Ramanan Laxminarayan, President and Founder of One Health Trust, and Senior Associate, Bloomberg School of Public Health. The discussion focused on the rural/urban divide in healthcare access, the future of antimicrobial resistance, and the importance of community participation in health research.

### **Felicitation Events**

Farewell Dinner for the Provost: In March 2023, GKII hosted a gathering of Johns Hopkins University Deans, faculty, staff, and students to celebrate the outstanding leadership and contributions of JHU Provost Dr. Sunil Kumar as he transitioned to become the 14th president of Tufts University. The occasion was a tribute to Dr. Kumar's strategic guidance and support during the founding years of GKII, and his tireless dedication to the JHU community. The event was also the launch point of the announcement of the Sunil Kumar and Sumati Murli Endowment Fund.



Pictured, from left to right: GKII Faculty Co-Chair Sara Bennett, Dean Theodore DeWeese, GKII Advisory Board Co-Chair Raj Gupta, Former Provost Sunil Kumar, GKII Faculty Co-Chair Amita Gupta, Dean Ellen Mackenzie and GKII Executive Director Melody McCoy.

#### **Amita Gupta Named to Florence Sabin**

Professorship: GKII co-chair Dr. Amita Gupta was installed as the recipient of the Dr. Florence Sabin Professorship in Infectious Diseases by Theodore L. DeWeese, Dean of the Medical Faculty, CEO, Johns Hopkins Medicine, and Nadia Hansel, Interim Director; Department of Medicine Professor of Medicine, Interim Physician-in-Chief, The Johns Hopkins Hospital. This permanent endowment established an endowed Chair of Infectious Diseases in the Division of Infectious Disease in the Department of Medicine.

#### **Rama Chellappa Elected to National Academy**

of Engineering: Rama Chellappa, a Bloomberg Distinguished Professor in electrical and computer engineering and biomedical engineering was among 106 new members and 18 international members elected to the National Academy of Engineering (NAE) in February. This highly distinguished membership is awarded to those who have made outstanding contributions to engineering research, practice, or education and advise the U.S. government on matters pertaining to engineering and technology. He was formally inducted during the NAE's annual meeting on Oct. 1.



# **Key JHU Projects in India**

**1.** Center for Infectious Diseases in India (CIDI) Established in 2022 with support from GKII, the Center for Infectious Diseases in India works to improve health outcomes and ensure access to healthcare among people who have or are at risk for infectious diseases through research, education, and community-based outreach.

- ► CIDI focused on HIV, Tuberculosis, Hepatitis and COVID-19 and studies conditions and comorbidities that undermine or complicate infectious diseases treatment like AMR, heart diseases, diabetes, substance abuse and poor nutrition.
- CIDI focused on disease treatment among understudied populations like neonates, children and postpartum women.
- CIDI develops inclusive care strategies for marginalized and vulnerable populations and finds solutions for factors that inhibit patients to seek care, like social stigma and genderbased violence.

2. Program ACCELERATE Program ACCELERATE focuses on increasing access to HIV prevention and treatment services for vulnerable populations, including key populations (KPs) and People Living with HIV (PLHIV). The program provides technical assistance to HIV/AIDS programs in India, implementing innovative approaches like PrEP, HIV self-testing, and Mitr clinics for transgender communities. It aims to improve HIV service uptake, adherence to antiretroviral therapy, and the well-being of orphans and vulnerable children through community-led initiatives and integration with public health systems.

**3. Uttar Pradesh Health Systems Strengthening** Project (HSSP) The Uttar Pradesh Health Systems Strengthening Project supports the enhancement of health systems in Uttar Pradesh, India, focusing on human resources for health, public health capacity strengthening, and the SEWARTH collaboration with AIIMS Gorakhpur. The project employs various methodologies to assess health workforce issues, strengthen public health training, and support health research and education. It aims to provide evidencebased recommendations for health systems interventions, improving health outcomes and service quality through local ownership and sustainability.

4. India Primary Healthcare Support Initiative (IPSI) The India Primary Healthcare Support Initiative, in collaboration with AIIMS Delhi and NHSRC, supports Comprehensive Primary Health Care (CPHC) delivery in India. It focuses on developing a performance measurement index for primary healthcare systems, providing implementation support for health service improvement at HWCs, and recognizing district performance. The initiative's multi-faceted approach aims to strengthen primary healthcare through measurement, demonstration, and

recognition strategies.

### 5. Arogya Sangama - 3 Way Partnership of People Providers and Panchayat Arogya

Sangama is a pilot project in Karnataka aiming to improve primary health systems in rural Health and Wellness Centers (HWCs) through the establishment of a "3-way partnership platform" comprising community ownership, grassroots



convergence, and collaborative governance. It focuses on leveraging the capacities of Gram Panchayat Task Forces (GPTFs) to enhance community engagement, service utilization, and the quality of responsive care, particularly for pregnant and lactating women and persons with non-communicable diseases (NCDs).

#### 6. Digital Health Exemplars (Exemplars in Global

Health) This project explores the transformation of primary healthcare systems through digital technologies in India, Ghana, Rwanda, Finland, and Brazil. It aims to understand the digital health ecosystem, capture evidence on effective digital health solutions, and build a supportive ecosystem for digital health innovation. The project identifies successful strategies for digital health implementation, focusing on government commitment, digital infrastructure, and stakeholder engagement to improve healthcare service delivery and outcomes.

7. Improving Community Partnership for **Comprehensive Primary Health Care Focused** on Chhattisgarh and Jharkhand, this project develops a community engagement strategy for Health and Wellness Centers (HWCs). Utilizing participatory research methods, it aims to enhance community participation in primary healthcare by understanding current engagement methods, identifying facilitators and challenges, and creating a toolkit for effective community engagement. The strategy is developed through formative research, design thinking workshops, and expert consultations, prioritizing sociocultural and economic contexts.

8. India's Aspirational District Program This project conducts an ethnographic study of India's Aspirational District program, aiming to improve health, wellbeing, and productivity in disadvantaged districts. It seeks to understand the policy processes of multisectoral collaboration, the adaptation and implementation of public health guidance across levels of governance, and the program's impact on health inequality. The research includes ethnography across national, state, and district levels, focusing on the complex interactions among individuals, governance structures, and international agencies.

#### 9. International Vaccine Access Centre (IVAC)

The IVAC center focuses on immunization coverage and equity, disease epidemiology, technical advocacy and policy, in addition to capacity strengthening in select states of India. The important research studies done by IVAC includes Impact of Measles-Rubella vaccination campaign on population immunity in India and Impact of routine infant vaccination with PCV.

### **10. Maternal and Child Health Center India**

The Johns Hopkins Maternal and Child Health Center in India works to strengthen public health education and accelerate research in maternal and child health. It prioritizes participatory and design thinking approaches in research and implementation of public health interventions to amplify people's voices and community ownership to improve health outcomes for women and children from vulnerable sections and enable equitable progress towards achieving SDGs.

#### **11.** Center for Bioengineering Innovation and

Design (CBID) CBID offers one of the best medical device design programs globally. In India, CBID works with Aravind Eye Hospital (AEH) in Tamil Nadu to understand the unmet eye care needs and develop solutions uniquely tailored to the patients, providers and context of care in low and middle income countries.

12. RISE program for Epidemic Control Jhpiego worked in 28 states and 1000+facilities in India under the Reaching Impact, Saturation and Epidemic Control (RISE) program, which is a global project to drive health system preparedness for respiratory emergencies aimed at building sustainable, self-reliant, and resilient health systems.

> Access the Full Compendium of JHU Projects in India





## **Indian Partner Organizations**

	Compa
Abbott India Ltd Mumbai, Maharashtra Accenture Multiple Locations BBC Media Action New Delhi Bharat Biotech Hyderabad, Telangana	DAP E-nnovative S Ltd. Bengaluru, Karnat Medgenome Bengaluru, Karnat Oxford Policy Mar (OPM) India New Delhi PepsiCo Dubai, UAE
	Conso
American Institute of Indian Studies New Delhi	Maharashtra Char Commerce Pune, Maharashtra
	Governmen
Central Tibetan Administration	Government of An Andhra Pradesh

**Central Tibetan** Administration Dharamshala, Himachal Pradesh

**Department of** 

**Biotechnology (DBT);** Translational Health Science and Technology Institute New Delhi

**World Bank** New Delhi

**World Health Organization (WHO)** New Delhi

Highways

New Delhi

New Delhi

### nies Solutions Pvt. Persistent Pune, Maharashtra taka Serum Institute of India Pune, Maharashtra taka **Strand Life Sciences** anagement Bengaluru, Karnataka **Sun Pharma** Mumbai, Maharashtra TetraTech New Delhi ortia mber of **South Asia Consortium** for Interdisciplinary **Water Resources Studies** ra (SACIWaters) Hyderabad, Telangana t Entities Andhra Pradesh **National AIDS Control Organization (NACO)** New Delhi **Ministry of Road Transport and**

**Ministry of Statistics and Programme Implementation**  **National TB Elimination** Program **Uttar Pradesh Government** Uttar Pradesh **NITI Aayog** New Delhi

### **International Agencies**



### Colleges / Universities / Medical Institutions

**Ahmedebad Radiology** Ahmedabad, Gujarat

AIIMS **Multiple Locations** 

Aravind Eye Care System, Aravind Eye Hospital, Aravind **Eye Institute** Multiple Locations (South India)

**BALCO Medical Centre** Chattisgarh

**Delek Hospital** Dharamshala, Himachal Pradesh

**Fortis Hospital** Mumbai, Maharashtra

**Institute of Liver and Biliary Sciences (ILBS)** 

New Delhi

**Maulana Azad Medical College** New Delhi

Medica Superspeciality Hospital Kolkata, West Bengal

**PD Hinduja Hospital and Medical Research Centre** Mumbai, Maharashtra

Shroff's Charity Eye Hospital New Delhi

**Tata Memorial Cancer Hospital** Mumbai, Maharashtra

LV Prasad Eye Institute Multiple Locations (South India) National Institute of Cholera and Enteric Disease (ICMR) Kolkata, West Bengal

**BMMRC-Bhagwan Mahavir Medical Research Centre** Hyderabad, Telegana

**HCL Healthcare, HCL** Foundation

Jawaharlal Institute of **Postgraduate Medical Education and Research** (JIPMER) Puducherry, Puducherry

Uttar Pradesh

**KEM Hospital** Pune. Maharashtra Medanta, The Medicity Gurugram, Haryana

**MV Hospital for Diabetes** Chennai, Tamil Nadu

**National Institute of Mental Health and Neuro-Sciences** (NIMHANS)

Bengaluru, Karnataka Sangath (Goa)

Porvorim, Goa

**All India Institute of Medical Sciences (AIIMS) Gorakhpur** Gorakhpur, Uttar Pradesh

**Aligarh Muslim University (AMU)** Aligarh, Uttar Pradesh

**Ashoka University** 

Sonipat, Haryana **Bharati Vidyapeeth Hospital** Pune, Maharashtra

**BITS Pilani Hyderabad** Hyderabad, Telangana

BJ Medical College, BJMC Hospital, BJMC National TB and

**HIV program** Pune, Maharashtra

**Chandigarh University** Chandigarh, Punjab

**Chennai Mathematical Institute** Chennai, Tamil Nadu

**Christian Medical College, College** of Nursing Vellore, Tamil Nadu

Dr. D. Y. Patil Medical College, **Hospital & Research Centre** Mumbai, Maharashtra

**GSVM Medical College** Kanpur, Uttar Pradesh

**Gujarat University** Ahmedabad, Gujarat

**Indian Institute of Health Management Research (IIHMR)** Jaipur, Rajasthan

**Indian Institute of Management** (IIM) Ahmedabad Ahmedabad, Gujarat

Management (IIM) Bengaluru Bengaluru, Karnataka Indian Institute of Management (IIM) Kozhikode Kozhikode. Kerala **Indian Institute of** Management (IIM) Lucknow Lucknow, Uttar Pradesh Indian Institute of **Management (IIM) Calcutta** Kolkata, West Bengal **Indian Institute of Public** Health (IIPH) Gandhinagar Gandhinagar, Gujarat **Indian Institute of Public** Health (IIPH) Hyderabad Hvderabad. Telanga **Indian Institute of Science Education and Research** (IISER) Pune, Maharashtra **Indian Institute of Technology** (IIT) Bombay Mumbai, Maharashtra **Indian Institute of Technology** (IIT) Gandhinagar Gandhinagar, Gujarat Indian Institute of Technology (IIT) Hyderabad Hyderabad, Telangana **Indian Institute of Technology** (IIT) Kanpur Kanpur, Uttar Pradesh Indian Institute of Technology (IIT) Kharagpur Kharagpur, West Bengal **Indian Institute of Technology** (IIT) Varanasi Varansi, Uttar Pradesh **Indian School of Business** Hyderabad, Telangana **Jawaharlal Nehru University** New Delhi **JHU Pune** Pune, Maharashtra

Indian Institute of

**Maulana Azad Medical College (MAMC)** New Delhi **Postgraduate Institute** 

of Medical Education and **Research (PGIMER)** Chandigarh, Punjab **Pramukhswami Medical** College Anand, Gujarat **Rajasthan University** 

Jaipur, Rajasthan

Kolkata

Dasra

EQUIP

Education

Centre

New Delhi

**IDFC Institute** 

Faridabad, Haryana

**Bhabha Atomic Research** 

**CSIR-Institute of Genomics** 

Mumbai, Maharashtra

and Integrative Biology

Mumbai, Maharashtra

Bengaluru, Karnataka

**Indian Institute of Science** 

St Xaviers College, Mumbai Mumbai, Maharashtra **Tata Institute of Fundamental** Research Mumbai, Maharashtra

The Maharaja Sayajirao **University of Baroda** Vadodra, Gujarat The TN Dr MGR Medical University Chennai, Tamil Nadu

### NGOs

**Bal Umang Drishya Sanstha** Intelehealth New Delhi Thane, Maharashtra **Centre for Policy Research** New Delhi **Child in Need Institute** (BPHRC) **Clinton Foundation** Telangana New York, New York **Mother and Child** Mumbai, Maharashtra New Delhi Jupiter, Florida **India Health Action Trust** Uttar Pradesh **Pathfinder India Institute for Road Traffic** New Delhi

### **Research Institutions**

**Indian Statistical Institute** Kolkata, West Bengal **International Centre for Theoretical Sciences (Tata** Institute of Fundamental **Research**) Bengaluru, Karnataka **Madras Institute of Development Studies** Madras, Tamil Nadu

**University of Lucknow** Lucknow, Uttar Pradesh **University of Pune** Pune. Maharashtra **Vellore Institute of** Technology (VIT) Vellore, Tamil Nadu Yenepoya Medical College Mangalore, Karnataka

**Infosys Science Foundation** Bengaluru, Karnataka **LEPRA Society/Blue Peter Public Health and Research Centre** 

**MAMTA Health Institute for** 

**Narmada Kidney Foundation** Mumbai, Maharashtra **Operation Smile India** 

**Population Foundation of** India New Delhi **Public Health Foundation of** India New Delhi **Sneha Charitable Trust** Bengaluru Wadhwani Al Mumbai, Maharashtra WRI India Mumbai, Maharashtra **YRG CARE** Chennai. Tamil Nadu

**National Brain Research** Centre Gurugram, Haryana **National Council of Applied Economic Research (NCAER)** New Delhi **National Institute of Research** in Tuberculosis (ICMR) Chennai, Tamil Nadu **Translational Health Science** and Technology Institute Faridabad, Haryana



# FLASHBACK



















••••••	 	 	
<u>.</u>	 	 	
·····	 	 	
••••••	 	 	
I			







615 N. Wolfe Street, E8638 Baltimore, MD 21205 https://indiainstitute.jhu.edu/