

Ten Years of Fostering Innovation and Global Partnership through the President's Global Innovation Fund



COLUMBIA GLOBAL



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Introduction

The President's Global Innovation Fund (PGIF) was launched in early 2013 at a moment of tremendous opportunity: eight Columbia Global Centers had been launched in the preceding five years and were busy building relationships and collaborations with diverse local and regional actors. These emergent centers were established with the conviction that building collaborations across academic disciplines and with diverse external partners could generate innovative solutions to complex social challenges. The Centers bring together faculty and students from across Columbia University to engage in global research, scholarship, education, and social impact projects.

Over the past decade, PGIF awards have played a pivotal role in realizing President Lee C. Bollinger's vision for the Global Centers. The 118 grants awarded over ten years have fostered new, interdisciplinary collaborations among Columbia faculty and schools; they have accelerated innovation through collaborative research and global knowledge exchange; and they have provided rich, new learning opportunities for students of all levels to learn from the world. By providing faculty with resources to develop and implement projects enriched by the deep knowledge of Global Center staff—with their nuanced understanding of local cultures, languages, practices, and partners—PGIF has paved the way for Columbia University to embody the values of a truly global institution.

By the Numbers



118 awards

totaling more than \$5.3 million



>130 faculty

from 15 Columbia University schools supported



>500 collaborations

with external partners

COLUMBIA'S GROWING NETWORK OF GLOBAL CENTERS





ABOUT Columbia Global

Columbia Global is a dynamic hub of complementary initiatives working across geographic and disciplinary borders. We catalyze globally oriented research, education, and social impact, with each Columbia Global constituent initiative supporting the Columbia University community to engage with and learn from the world in critically important ways:

- The **Columbia Global Centers**, located in 11 cities across four continents, promote and facilitate engagement of the University's faculty, students, and alumni with in-country partners to advance knowledge and its exchange, and to address global challenges.
- **Columbia World Projects** mobilizes the university's researchers, scholars, practitioners, and students to advance scholarship and implement interdisciplinary solutions to complex societal challenges in partnership with policymakers, government agencies, non-governmental organizations, and corporations.
- The **Institute for Ideas and Imagination** brings together Columbia scholars with accomplished artists, writers, and creative thinkers from around the world to promote interdisciplinary collaboration and innovation in the arts, humanities, and sciences.
- The **Committee on Global Thought** works with scholars, students, and partners across disciplines and geographies to develop critical concepts and practical interventions necessary to address the complexities of a rapidly changing world.



Spotlights

Projects funded by the President’s Global Innovation Fund cut across a broad range of disciplines, from psychiatry to environmental engineering to art history. In the following pages, we feature nine spotlights that illustrate the remarkable depth and breadth of projects spearheaded by Columbia University faculty working in collaboration with Columbia Global Centers, students, and local partners:

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Examining Disaster Management and Recovery in Post-Disaster Chile

As natural disasters occur with increasing frequency and severity around the world, the need for policies that support the effective management of and recovery from disasters has become ever more urgent.

In 2017, the Chilean town of Santa Olga was devastated by the worst wildfire in the country's modern history. With support from the President's Global Innovation Fund and in partnership with the Columbia Global Center in Santiago, a multi-disciplinary team of faculty, students, and practitioners with expertise in architecture, urban planning, and public health collaborated to analyze the disaster management and recovery process unfolding in Santa Olga. With a focus on how public, private, and civil society stakeholders worked to rebuild, repair, and return Santa Olga to a functional community, the two-year initiative—which continues to inform the work of GSAPP and the Global Center in Santiago—included:

- A **workshop held in Chile** that convened a total of 70 experts from Columbia and representatives from various Chilean universities, government agencies, and non-governmental organizations to discuss and share experiences about how public, private, and academic stakeholders have coordinated to address natural disasters in Chile and how strategies and lessons learned can be applied in other settings around the world.
- **Field work** conducted by a team of faculty and student researchers to examine and learn from the post-disaster recovery process in Chile. The team included María Garcés, a Chilean architect and 2018 Master of Science in Urban Planning graduate of GSAPP.
- A **Graduate-level studio course** for Master of Science students in Urban Planning at GSAPP, which focused on the challenges and opportunities the Chilean government, businesses, and non-governmental organizations face in working together to respond effectively to disasters. As part of the course, students traveled to Chile in 2019 to meet with disaster management experts and other key stakeholders in several cities to gain a deeper understanding of how to plan for stability and peace after a natural disaster.



Faculty Lead:

Malo Hutson, former associate professor of urban planning at the Columbia Graduate School of Architecture, Planning, and Preservation (GSAPP) (now dean of the University of Virginia School of Architecture)



Spearheading Efforts to Address the Middle East's Growing Diabetes Epidemic

The Middle East is experiencing an alarming increase in the number of diabetes cases. Over the past two decades, the number has increased by 80 percent in Jordan alone, with an estimated one in five adults now suffering from the condition.

With support from the President's Global Innovation Fund, an interdisciplinary team of Columbia faculty collaborated with the Global Center in Amman to forge new partnerships with Jordan University of Technology and Science and its affiliated King Abdullah University Hospital to pursue innovative approaches to prevent, diagnose, and treat two serious diabetes-related complications—peripheral arterial disease and diabetic foot syndrome—both of which can lead to severe consequences (including gangrene and amputation).

Together, these partners convened a **symposium in Amman** that brought together experts from Columbia's Fu Foundation School of Engineering and Applied Science and Vagelos College of Physicians and Surgeons with leading scholars, practitioners, and research groups in the Middle East. The well-attended symposium, with more than 110 participants, incorporated perspectives from public health, internal medicine, vascular surgery, and biomedical engineering to examine challenges and opportunities in diagnosing, monitoring, and treating peripheral arterial disease and diabetic foot syndrome. In addition:

- Building on the overwhelming interest generated at the symposium, the **Mideast Limb Salvage Consortium** was established to unite engineers and medical experts to exchange ideas, collaborate on research, and seek joint funding.
- A **study exploring a novel optical technology** for assessing the vasculature in patients with peripheral arterial disease has been extended to two hospitals in Jordan. This includes building two imaging systems and transferring them to Jordan University of Technology and Science, where an engineering team has worked with physicians at King Abdullah University Hospital and Jordan University Hospital to conduct the study.



Faculty Lead:

Andreas Hielscher, professor of biomedical and electrical engineering and radiology at Columbia University (now chair of the Biomedical Engineering Department at New York University)

“Many at the symposium said they had never gotten a call from an engineer. They thought it was a great idea to combine forces—engineering and medicine—to address this problem and discuss what we can do together.”

Ioannis Kymissis, professor of electrical engineering at Columbia University



Mapping Mesopotamian Monuments to Prevent Erasure of the Past

War and conflict have led to the destruction of critically important cultural sites across Iraq and Turkey. With no efforts made to thoroughly document major historical monuments since the mid-twentieth century, Professor Zainab Bahrani spearheaded an initiative bringing together archaeologists, art historians, and heritage specialists from New York, Baghdad, Istanbul, and Iraqi Kurdistan to create a record of endangered monuments in the region and facilitate their preservation.

With support from the President’s Global Innovation Fund, the initiative has enabled:

- **Multiple field visits** by teams of faculty, students, and local partners, which have resulted in 50 endangered historical sites being assessed, mapped, and recorded with the latest imaging technologies. Sites, which are located across southeastern Anatolia and Iraq, range from ancient Mesopotamian rock reliefs carved into mountain cliffs, to early Christian monasteries, and early Islamic, Ottoman-era, and 20th-century monuments.
- **Three major workshops** (convened between 2015 and 2018) that leveraged the networks of the Columbia Global Centers in Amman and Istanbul, bringing together archaeologists and museum professionals from Iraq, Turkey, Syria, and the U.S. to discuss and plan how to best protect the region’s cultural heritage in the face of armed conflict.
- The creation of an **open access digital archive** that provides invaluable data for future preservation purposes. Content is available and accessible to both scholars and communities in Arabic, English, Kurdish, and Turkish.



Faculty Lead:

Zainab Bahrani, Edith Porada Professor and chair of the Department of Art History and Archaeology at Columbia University

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“I am very grateful for the President’s Global Innovation Fund grant that permitted me to jumpstart the ongoing Mapping Mesopotamian Monuments field survey of endangered heritage in Iraq and Turkey. Our ten years of work can now be accessed on a quadrilingual website.”

Professor Zainab Bahrani

Enhancing Gender-Based Violence Services in Kisumu, Kenya

Gender-based violence affects women of every nation, culture, and socioeconomic status, with one in three women globally experiencing physical and/or sexual violence during their lifetime. In too many settings, public health and social service systems struggle to provide victims of gender-based violence with the medical and legal support they need.

With support from the President’s Global Innovation Fund, Columbia’s Mailman School of Public Health and Law School forged an innovative partnership, collaborating with the Columbia Global Center in Nairobi and Strathmore University in Kenya to support the provision and evaluation of paralegal services at the Gender-Based Violence Recovery Center (situated at Jaramogi Oginga Odinga Teaching and Referral Hospital) in Kisumu, Kenya. The project team:

- Created a new, **inter-disciplinary practicum program** pairing Columbia public health and law students with counterparts from Strathmore University to provide much-needed support to paralegals and health staff at the Gender-Based Violence Recovery Center in Kisumu. Student teams worked together to improve the monitoring and evaluation system for gender-based violence services, all while gaining valuable field-based experience.
- Co-designed and implemented a **collaborative research project** to evaluate the impact of paralegal services provided to survivors at the Gender-Based Violence Recovery Center.



Faculty Lead:

Terry McGovern, Harriet and Robert H. Heilbrunn Professor and chair of the Heilbrunn Department of Population and Family Health at Columbia University

“This project led to a deeper understanding of how to design effective interventions to reduce gender-based violence through health care delivery systems and advanced knowledge of the role of plural legal systems in allowing for gender-based discrimination.”

Dr. Terry McGovern

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Strategies for Growth: The Changing Role of the State

The global financial crisis of 2008 forced many countries to rethink established strategies for growth and development. In response to the difficulties faced by Europe, East Asia, and Latin America as a result of the crisis, Columbia University's Center on Global Economic Governance collaborated with Global Centers in Beijing, Paris, and Rio de Janeiro to convene a series of academic conferences examining the changing role of the state in these regions.

With support from the President's Global Innovation Fund, the initiative convened hundreds of world-renowned scholars, policymakers, economic experts, business leaders, and civil society representatives through seven conferences that fostered critical transnational discussion and generated pioneering policy ideas in a rapidly changing world:

- An **inaugural conference, held in Paris** in 2014, brought together experts and leaders from across Europe to discuss the role played by government and supranational European institutions in stimulating economic growth and possible alternative approaches.
- **Two convenings, held in Rio de Janeiro and São Paulo, Brazil** in 2016 and 2017, brought together academics, business leaders, and civil society representatives to discuss strategies for economic growth in the context of fiscal and structural reform policy, monetary and banking issues, and institutional legitimacy and transparency.
- **Four annual conferences, held in Beijing** between 2016 and 2019, brought together scholars and professionals to reflect on China's slowing growth and transition from an outward, export-oriented economy toward a service economy with strong domestic consumption.



Faculty Lead:

Jan Svejnar, Richard N. Gardner Professor of Economics and International Affairs and director of the Center on Global Economic Governance at Columbia University



Measuring Human Rights Violations and Deaths Among Migrants in the Sahel Region

The world is experiencing an unprecedented migration crisis: nearly 90 million people have been displaced from their homes and, every minute, an estimated 24 more are forced to flee conflict, persecution, climate threats, and poverty.

With support from the President's Global Innovation Fund, a team of faculty and students spearheaded an initiative to address the lack of reliable data documenting adverse outcomes experienced by migrants aiming to reach Europe by crossing the Sahara and Libya—one of the most dangerous treks in the world. In collaboration with the Columbia Global Center in Tunis, the project:

- **Convened a conference** that brought together representatives from more than 15 governmental, non-governmental, advocacy, and media organizations focused on migration in the region. Participants shared lessons from their efforts to collect data on human rights violations and deaths among migrants and discussed how to utilize these data for advocacy regarding the plight of migrants.
- Led to the publication of **articles in two major news outlets**—the [New York Times](#) and [Politico](#)—to call attention to the human rights crisis unfolding in the Sahel region.



Faculty Lead:

Craig Spencer, assistant professor of emergency medicine and population and family health; and **Monette Zard**, Allan Rosenfield Associate Professor of Forced Migration and Health



Collaborating Internationally to Increase Understanding of China’s Health Aid to Africa

China’s development assistance to Africa has increased dramatically in recent decades, yet there has been limited scholarship and dialogue on the extent and impact of China’s health-related aid to the region.

With support from the President’s Global Innovation Fund, an interdisciplinary team of faculty and students from Columbia University and Tsinghua University in Beijing conducted in-depth analysis of this issue, which sits at the intersection of public health, global health governance, and international development. The work, which leveraged the extensive networks of Columbia Global Centers in Beijing and Nairobi, catalyzed increased understanding through:

- An extensive **literature review** of existing information on China’s health aid to Africa, learnings from which were disseminated through the 2016 peer-reviewed publication, [China’s Health Assistance to Africa: Opportunism or Altruism?](#)
- A **qualitative study** that captured the perceptions and opinions of more than 50 Chinese and local representatives from health and government sectors in two African countries (Tanzania and Malawi). Findings were widely disseminated through the 2020 publication, [Challenges and Opportunities in China’s Health Aid to Africa: Findings from Qualitative Interviews in Tanzania and Malawi.](#)



Faculty Lead:

Wafaa El-Sadr, ICAP global director and professor of epidemiology and medicine, Mailman School of Public Health, Columbia University



Political Economy of Water and Environmental Sustainability in India

Inadequate water supply ranks among the most pressing challenges facing low-income people in the Global South. Although several countries are moving to expand environmentally sustainable water networks for drinking and sanitation, uptake of formalized, municipally provided water services is often low, with residents instead relying on private, informal, or illegal water sources that burden local ecosystems.

With support from the President’s Global Innovation Fund, Professor Nikhar Gaikwad expanded research and partnerships to better understand what determines citizen preferences—and ultimately constrains—access to water and public services. Through close collaboration with the Columbia Global Center in Mumbai, the initiative:

- Convened a **2020 symposium** that brought together interdisciplinary experts and government officials to share the latest research and lessons learned about the barriers to and opportunities for achieving water security in Mumbai and similar contexts.
- Catalyzed **new research**, including a large-scale randomized controlled trial to evaluate the efficacy of interventions designed to help low-income residents gain access to municipally provided water connections.
- Developed **new partnerships** with several non-governmental organizations (NGOs) and think tanks working on water and environmental issues in India, and served as an incubator for a new research collaboration to study how NGO efforts can raise citizen awareness and mobilization around climate-related topics.



Faculty Lead:

Nikhar Gaikwad, assistant professor of political science, Graduate School of Arts and Sciences, Columbia University



Using Photography to Engage and Empower Adolescents Living with HIV

HIV is a leading cause of death among adolescents in sub-Saharan Africa. While antiretroviral treatment is the key to staying healthy for adolescents living with HIV, in too many cases, stigma and other barriers prevent adolescents from starting and/or adhering to treatment.

With support from the President's Global Innovation Fund, a multi-disciplinary team of faculty, students, and photographers collaborated to demonstrate that photography can be an important medium for self-expression and validation for adolescents living with HIV. In collaboration with the Columbia Global Center in Nairobi, the project:

- Developed a **curriculum** designed to teach adolescents the fundamentals of photography and guide them through structured field practice.
- Conducted two, five-day **workshops** that engaged a total of 31 adolescents living with HIV in Kisumu, Kenya. Led by Columbia University School of the Arts alumnus Amy Bedik, in collaboration with two Kenyan photojournalists and a Columbia School of Journalism student, the workshops culminated with photo exhibitions for family, friends, and invited guests, which included the Kisumu County Minister of Health.
- Produced a **photo essay** that offers valuable insight into the lived experience of adolescents living with HIV.
- Conducted an **evaluation** of the workshops, which found that most participants found the workshops to be highly valuable.



Faculty Lead:

Elaine Abrams, professor of epidemiology and pediatrics, ICAP senior research director, Columbia University

“Using a camera was one way to express my feelings. Taking photos every day made me feel connected to everything around me.”

Mercy, participant in first photography workshop and mentor to participants in second photography workshop

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