

COVID-19 SEED GRANTS INITIATIVE: PROGRESS REPORT

Through its new seed grant initiative, the McDonnell Academy awarded **\$250,000 total to kick-start 10 research projects** on public health issues and the societal impact of COVID-19. Each research team includes a principal investigator (PI) from WashU and at least one international collaborator. Projects were funded for one year, starting in October 2020. Many of the projects are ongoing, with a few experiencing delays due to the pandemic.

Below is a snapshot of **immediate outcomes** as of October 2021. This initiative was also designed to have a **long-term impact** for WashU and the McDonnell Academy. First, it was intended to deepen or broaden international partnerships, which may yield future collaborative research and bring talented students or post docs to WashU. Second, the projects can facilitate cross-disciplinary international research within WashU. Finally, we note that several teams report that the extensive data collected is laying the foundation for future research directions, funding applications and clinical interventions that would not be possible without the connections forged through this initiative. The second page provides assessments and anecdotes received from PIs. Overall, the results are very strong on each dimension.

IMMEDIATE OUTCOMES



20+ research papers

(manuscripts in preparation or published)



policy engagement & impact

- reform recommendations submitted for review to the WHO
- presentations to the Knesset influenced policy in Israel



8 new external funding applications

- Mastercard & Centene *(awarded)*
- Pfizer Global Bridges, Gates Foundation, National Insurance Institute & American Jewish Joint Distribution Committee *(pending)*
- Sexual Violence Research Initiative & D43 Fogarty training grant *(forthcoming)*



70+ presentations & media coverage

- presentations at research or policy-focused meetings
- SPI's survey results featured in major outlets (*Time, Bloomberg, Haaretz*)

LONG-TERM IMPACT



Deepen & broaden international partnerships

10 international collaborations with
23 universities in **14** countries



Cross-disciplinary collaboration

7 projects fostered **collaboration across WashU schools, disciplines**

- faculty from every WashU School

FACULTY FEEDBACK

“I have to say that **this seed grant has been instrumental in building a very solid foundation with our Ghana colleagues**. We collected a very large amount of data that is not only valuable for research but also to plan for programs that our colleagues at UG are in desperate need for... Through the seed funding, we have established relationships with the leadership of the UGMC hospital, as well as conducted focus group interviews where health workers felt heard enabling us to work together with our local partners to **establish an Antimicrobial Stewardship and Infection Prevention program and eventually apply together for a D43 Fogarty training grant on the topic of antimicrobial resistance.**” – **Caline Mattar**

“We had ongoing research projects and they were interrupted (by the pandemic). This funding helped keep us going, keep our collaboration going, and really move from one project quickly to another one, and that was very helpful... We developed a protocol to work during COVID times, and this will help us to resume our filariasis research. We are actually **in negotiations with the Gates Foundation to start a new filariasis project** during the pandemic in Indonesia.” – **Peter Fischer**

“**For us and our team at Campinas, the seed grant initiative provided an opportunity for these two groups to come together, but also across WashU** – Arts & Sciences and Infectious Diseases, so it gave us a specific way that we could see how to combine the clinical with the qualitative. All of us appreciated that they spoke nicely to each other. And definitely the collaboration with Brazil was great. It helped us reveal things in our data that we hadn’t even thought about.” – **Shanti Parikh**

“We have found mountains of data on HIV that we didn’t even know about... **Without the funding, we would not have done this study in Ghana. It has been a huge avenue for us for bigger studies to come in the future.**” – **George Kyei**

“We really could not have done this work without the seed grant; it did indeed **allow me to broaden my area of expertise, work with new partners, and build a wonderful international team** that I know will be working together on this and many other international governance issues in the future. **It also allowed many of our students to be involved** both as direct researchers and participants.” – **Leila Sadat**

PI SURVEY RESPONSES

To what extent do you agree with the following statements	Strongly Agree	Agree	Neutral or N/A	Disagree	Strongly Disagree
The MISA Seed Funding Program enabled me to establish a new collaboration.	8	2			
The MISA Seed Project was a collaborative effort between faculty at Washington University and an international partner.	10				
The MISA Seed Project was a collaborative effort between faculty across schools at Washington University.	7	1	2		
The MISA Seed Funding Program has allowed me to develop a new area of research.	8	1	1		
The MISA Seed Funding Program allowed me to pursue a project idea that could not be funded by traditional funding sources.	6	3	1		
The outputs of the seed funding program will have an impact on my field of study.	7	3			
I will be able to sustain funding for my seed funded research project.	3	2	5		

SUMMARY OF PROJECT RESULTS TO DATE

FISCHER, Peter

“Improved Antibody Surveillance for COVID-19 in Indonesia”

The goal of the project was to introduce antibody surveillance for COVID -19 in Indonesia using rapid point of care (POC) tests. From August 2020 to January 2021 a total of 1,823 antibody POC tests were performed in two islands. The study provided important, mostly pre-pandemic, data on the presence of cross-reactive SARS-CoV-2 antibodies in two areas in Indonesia. These data can be used as baseline for assessing the progress of the pandemic and the vaccination campaign. **The study has resulted in a manuscript (in preparation). The COVID mitigation protocol developed will also help the team resume filariasis research during the pandemic. The team is currently in discussions with the Gates Foundation to perform a new field study on surveillance of lymphatic filariasis elimination efforts in Indonesia.**

GRINSTEIN-WEISS, Michal

“Advancing Social Mobility in Israel’s COVID-19 Pandemic Recovery”

The Social Policy Institute (SPI) administered four waves of a survey investigating the socioeconomic impacts of COVID-19 in Israel between June 2020 and June 2021. Researchers in U.S. and Israel used the findings to investigate the disproportionate hardships and governmental support among religious sectors affected by the pandemic; the generational impact of young adults and women with young children leaving the workforce; and vaccination uptake and perceptions. **SPI and co-investigators have produced six peer-reviewed papers that are in various stages of editing or publication. The team has already secured additional external funding from Mastercard and Centene to continue this work and has two more grant applications currently under review. Insights from the survey have informed policy in Israel and received significant media coverage** in outlets such as *Time*, *Bloomberg*, *Haaretz*, *The Jerusalem Post*, *The Marker*, and on national TV in Israel. Additionally, the grant enabled SPI to launch several supplemental surveys to quickly respond to the needs to policymakers in the Knesset. For example, SPI provided the first food security evidence to the Knesset in several years. A supplemental survey was also used as evidence at Knesset demonstrating the negative behaviors and anxiety among children in isolation. These findings led to a change in policy enabling more non-infected students to stay in school pending specific health protocols.

KYEI, George

“Impact of COVID-19 on HIV Care in Ghana”

The project assessed PLHIV perceived barriers and facilitators to obtain healthcare in the setting of the COVID-19 pandemic and solicited ideas from providers and patients about what could be done about the problems identified. **The team interviewed, recorded and transcribed in-depth interviews for 20 healthcare personnel and 30 HIV patients. Currently the data is being analyzed, and the team hopes to submit a manuscript by the end of the year.** Preliminary findings include: (a) Patients feel uncomfortable coming to clinic due to the pandemic. (b) Those who come to clinic feel that their other problems like diabetes, hypertension are not being taken care of because they just come to pick their antiretroviral therapy drugs without actually seeing the providers. (c) This has grave implications for the patients especially those with co-morbid conditions.

MATTAR, Caline

“Investigating Infection Prevention and Antimicrobial Stewardship Opportunities at the University of Ghana Medical Center”

To date, the team has conducted 13 focus group interviews and 10 individual interviews with the leadership to investigate barriers, challenges and opportunities to implement stewardship and infection control programs at the

University of Ghana Medical Center. They are currently in the data analysis phases of the interviews. **The research team has identified areas for intervention and baseline quantitative data on resistance and has used those for a grant application for the implementation of a stewardship program. The new grant application for \$110K has been submitted to Pfizer Global Bridges. The team is currently preparing 5 manuscripts as a result of this seed funding.** In partnership with their colleagues at UGMC, the team also wants to eventually apply together for a D43 Fogarty training grant on the topic of antimicrobial resistance.

MYSOREKAR, Indira

“COVID-19 in the Placenta: Understanding the Consequences in Pregnancy”

This project examined COVID-19's effect on pregnancies in the United States and Brazil. In April 2021, **the team published a [paper in the journal Med](#) outlining how the COVID-19 virus presents itself in the placenta and explaining the possible health ramifications of such an infection. Additional publications followed in [Revista Brasileira de Ginecologia e Obstetrícia](#) (June 2021) and in [PLoS One](#) (July 2021).** The WashU PI was subsequently recruited by Baylor College of Medicine where she now serves as Chief of Basic and Translational Research. The co-PI from Unicamp, Maria Laura Costa, reported additional outcomes from the partnership, including securing funding from Roche for her team in Brazil and two more pending funding applications to Sao Paulo State Research Support Foundation and CNPq (National Council for Scientific and Technological Development).

PARIKH, Shanti

“Impact of the COVID-19 pandemic on HIV care in Campinas, Brazil and St. Louis, USA”

This team collected both clinical and qualitative data on HIV care in Campinas, Brazil and St. Louis, USA. Preliminary findings indicate that the HIV-care networks in the two cities quickly adjusted to the COVID-19 pandemic. Clinical data from 2019-2020 in both locations show that despite the abrupt change in service delivery, patients maintained the same level of viral suppression, medication adherence, and percentage of appointments kept during the first year of the pandemic. Qualitative data deepens understanding of the experiences of people living with HIV during the pandemic. The flexibility of being able to use telehealth visits or in-person visits increases engagement with care. People living with HIV tended to take COVID-19 seriously and limited their interactions thus experienced increased isolation and loneliness. **Data collection and analysis of the qualitative interviews in both locations continue, and the team is planning a joint publication. Areas of further investigation include urban and rural distinctions in telehealth use and distinctions in wellness among different racial and sexual orientation groups, as well as adaptations of the health system that may be beneficial to continue beyond the current pandemic.**

ROSAS, Guillermo

“Does Politics Make You Sick: Examining the Influence of Political Ideology on COVID-19 Mitigation Across the Americas”

The international collaborative team built a survey instrument and shepherded the process through the institutional review boards of four different institutions. **They completed the first wave of the survey in Brazil, Chile, Colombia, and Mexico in Jan. 2021. A second wave is expected in Jan. 2022. Based on the survey data so far, this research team has five manuscripts in progress.** The survey collected responses on beliefs about the prevalence and transmission mechanisms of COVID-19, perceived vulnerability to infection, perceptions about the adequacy of government response, adherence to preventive behaviors; in addition, the study collected indicators of respondents' health, political ideology, religious beliefs, attention to social media, reports of COVID-19-induced economic and financial duress, and attitudes toward COVID-19 mitigation policies.

SADAT, Leila

“Global Governance: The World Health Organization and the Need for Post-COVID-19 Reform”

The collaborative team convened via Zoom and produced 6 separate essays on various aspects of the WHO and global governance, the possible amendment of the IHR, towards a legal definition of a pandemic, on national responses to the pandemic and how they shaped success, on the possible need for new treaty instruments to address future public health emergencies and pandemics and updating the IHR to eliminate the Binary PHEIC Declaration System. **These papers were edited and discussed by the group, collected into a 102 pp. [White Paper](#), and submitted to the WHO as part of its comprehensive and ongoing review and reform process. They were also published in a dedicated volume of the *Washington University Global Studies Law Review*.** The findings were presented at the meetings of the International Law Association Biennial Conference in Tokyo, Japan (Dec. 2020) and at International Law Weekend in NYC (Oct. 2021). The team also produced a slick [policy document](#) containing the 10 recommendations that can be used for policy makers not wishing to read the 102 pp. White Paper.

SEELINGER, Kim Thuy

“Determining relationships between COVID-19 and Intimate Partner Violence: A mixed methods study in St. Louis, Uganda, and Chile”

For the quantitative data portion, the collaborating research teams secured an impressive array of de-identified IPV-related service records from police, courts, shelters, hotlines, and women’s rights organizations in St. Louis, Kampala and Santiago to analyze how IPV reports and response may have differed in 2020 during the COVID-19 pandemic compared to 2018-19. The team also conducted interviews with dozens of service providers in the three cities to better understand the stories behind these statistics and the ways in which service provision was adapted, succeeded, and occasionally failed during the pandemic. Data analysis is expected to be completed by the end of October 2021. **The team is drafting a comparative article and a separate brief with policy recommendations. They plan to submit the article to 1-2 leading public health or social work journals. They have also been invited to submit a piece to a special issue focused on “Intimate Partner Violence and Mental Health in Low- and Middle-Income Settings,” forthcoming from the *International Journal of Environmental Research and Public Health*. To continue this work, the team plans to apply for additional funds from the Sexual Violence Research Initiative out of South Africa, with Makerere University partners as lead applicants.**

ZHAO, Minyuan & AN, Charlie

“COVID-19 and Its Impact on the Global Innovation and Intellectual Property System”

This was a two-part project on COVID-19 and the global innovation and IP system. Part 1 has been delayed due to the lingering effects of the pandemic, but the team has made good progress on part 2. The team [published](#) a paper in *Peking University Financial Review* as an introduction to the kick-off meeting in Beijing/Singapore, but the meeting has been postponed. In the meantime, the team is using the data purchased with the seed grant to deepen their understanding of the global innovation and IP system. **The team has written two working papers on the location choices of global patent litigation, which were presented at various conferences and nominated for best paper and best research method awards at the recent Strategic Management Society annual conference. They also wrote a book chapter on the changing role of emerging markets, particularly India and China, in global innovation and IP.** The team has also made progress on a number of other related studies, which will be useful for the main COVID project later on. They believe “the comprehensive dataset we constructed will allow us to explore a wide range of topics involving the global innovation and intellectual property system.”

APPENDIX

1. Dissemination of program outcomes & next steps

- Project outcomes featured in *The Record/The Source*:
 - [Researchers keep international COVID-19 projects moving forward, June 2, 2021](#)
 - [Who accepts COVID-19 reform recommendations from Harris Institute, May 24, 2021](#)
 - [Comparing pandemic spending patterns in U.S. and Israel, March 9, 2021](#)
- Project outcomes presented at the McDonnell Academy International Symposium's Research Forum on *Resilience and Reinvention: Lessons from the Pandemic*, Oct. 15, 2021
 - Video from event: <https://mcdonnell.wustl.edu/international-symposium-2021/>
- Presentations of additional research arising from the grants (*in partnership with the Global Health Center's Speaker Series*)
- Create seed grant "Success stories" series on the global website (*forthcoming*)
- Track additional funding and publications resulting from the grants (*6-12 months later*)
- Based on faculty input, one way to further strengthen the program in the future would be a more dedicated focus on building the international partnership through mutual goal setting. Concretely, it has been proposed that in the review process we assign more points to the potential for partnership, add a category in the grant proposal asking about the roles of both universities in the development of the idea and specific roles, and add a question regarding how this seed grant will lead to growth of the partnership.
- Reduce some of the institutional administrative hurdles to doing international research experienced by grant recipients, e.g. delay in payments to international vendors for IRB approval fees. This has been attributed to the WorkDay transition.

2. List of collaborating institutions

1. Georgetown University
2. Haifa University, Israel
3. Instituto Nacional de Salud Publica, Mexico
4. Florida State University
5. Makerere University
6. Max Planck Institute for Comparative Public Law & International Law
7. Melbourne Law School
8. National University of Singapore
9. Seoul National University
10. Shanghai University of Finance and Economics
11. Peking University
12. Pontifícia Universidade Católica do Paraná, Brazil
13. Reichman University (IDC Herzliya), Israel
14. Tec de Monterrey, Mexico
15. Tel Aviv University
16. The Hebrew University of Jerusalem
17. Universidad Alberto Hurtado, Chile
18. Universidad de Los Andes, Colombia
19. University of Campinas, Brazil
20. University of Chile
21. University of Ghana
22. University of Indonesia
23. Zhejiang University