# **Nobel Symposium Outreach Day**

# May 22, 2022

## Joint between the Nobel Symposia in Economics and Medicine



Room "Edsviken" (Main entrance, in front of the reception)

### Moderator: Katrine Marçal

9.50 Introduction

## 10.00-12.00 Theme: Goal conflicts in policy responses to pandemics

20-minute intro from each speaker each followed by panel discussion and Q&A. Speakers: **Penny Goldberg, Marc Lipsitch** and **Sergio Rebelo** 

12.00-13.30 LUNCH AND MINGLE

#### 13.30-15.30 Theme: Vaccines and vaccinations

20-minute intro from each speaker each followed by panel discussion and Q&A. Speakers: **Glenda Gray, Rachel Glennerster** and **Florian Krammer** 

15:35-16:00 Conclusions

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Participant biographies

## Theme: Goal conflicts in policy responses to pandemics

### **Penny Goldberg**

Pinelopi (Penny) Koujianou Goldberg is the Elihu Professor of Economics and an Affiliate of the Economic Growth Center at Yale University. From November 2018 to March 2020, she was the Chief Economist of the World Bank Group.

Goldberg was President of the Econometric Society in 2021 and has previously served as Vice-President of the American Economic Association. From 2011-2017 she was Editor-in-Chief of the American Economic Review. She is member of the National Academy of Sciences and the American Academy of Arts and Sciences, recipient of Guggenheim Memorial Foundation and Sloan Research Fellowships, and recipient of the Bodossaki Prize in Social Sciences. She is also a research associate at the National Bureau of Economics Research (NBER), Distinguished Fellow of the Centre for Economic Policy Research (CEPR), and board member of the Bureau of Research and Economic Analysis of Development (BREAD).



Goldberg is an applied microeconomist drawn to policy-relevant questions in trade and development. She has exploited a broad set of methodological approaches – ranging from estimation of structural industry equilibrium models to reduced form techniques – to provide insights into the determinants and effects of trade policies, trade and inequality, intellectual property rights protection in developing countries, exchange rate passthrough, pricing to market, and international price discrimination. Her most recent research examines the resurgence of protectionism in the U.S.; trade, poverty, and inequality; the interplay between informality and trade liberalization in the presence of labor market frictions; and discrimination against women in developing countries.

#### Marc Lipsitch

Marc Lipsitch is Professor of Epidemiology and Director of the Center for Communicable Disease Dynamics at the Harvard T.H. Chan School of Public Health. He is an internationally recognized expert in methods and disease transmission modelling and has been a leading scientific authority during the COVID-19 pandemic. Dr. Lipsitch is an author of more than 350 peer-reviewed publications on antimicrobial resistance, epidemiologic methods, mathematical modelling of infectious disease transmission, bacterial and human population genetics, immunity to *Streptococcus pneumoniae*, and COVID-19 epidemiology. His research informs the use of transmissiondynamic simulations to improve the design of randomized and observational studies of infectious diseases interventions, and bioethics related to infectious diseases and clinical trials in emergencies.



His recent COVID-19 research builds on 20 years of ground-breaking work on SARS, pandemic influenza, and other emerging infections, as well as on the seasonality of influenza and coronavirus disease, which has contributed to the foundation for modern pandemic response. This includes realtime estimation of SARS transmissibility and modelling of control measures, and calculating the reproductive number for the 1918 "Spanish flu" and severity of the 2009 H1N1 flu pandemic, which has informed non-pharmaceutical interventions such as physical distancing. During the present pandemic, Dr. Lipsitch has been featured in thousands of press articles and media interviews from CNN and BBC, to the Guardian and Wall Street Journal, and writes in and is interviewed regularly for outlets such as The New York Times and The Washington Post on COVID-19. Additionally, Dr. Lipsitch was a co-founder of the Cambridge Working Group in 2014, whose efforts helped to initiate a pause in US government funding for research involving the creation of potential pandemic pathogens, such as transmission-enhanced avian influenza strains. He has written extensively on aspects of science policy in relation to such studies.

Dr. Lipsitch has received awards for research, publications, mentoring, and journal reviewing. He was elected to the National Academies of Medicine in 2020, for his pre-COVID-19 scientific accomplishments. In 2015 he was elected a Fellow of the American Academy of Microbiology, and in 2014 he received the Robert Austrian Award for contributions to pneumococcal research. He is or was on the editorial advisory boards/associate editor of eLife, PLoS Medicine, Journal of Infectious Diseases, American Journal of Epidemiology, Epidemiology, and Epidemics. He currently serves on the Massachusetts Governor's Medical Advisory Committee, and both the Massachusetts and WHO COVID-19 Vaccine Working Groups. He has also served on the President's Council of Advisors on Science and Technology Working Group on H1N1 Influenza, as well as CDC's Team B for the 2009 H1N1 pandemic and several advisory groups during the 2014-5 Ebola outbreak in West Africa. He has provided advice to the Food and Drug Administration, Centers for Disease Control, World Health Organization, International Monetary Fund, Congressional Budget Office, Defense Science Board, several pharmaceutical companies and the governments of Canada, Mexico, India, Germany, Austria, and Luxembourg.

Dr. Lipsitch joined the faculty of the Harvard School of Public Health in 1999, after completing a postdoctoral fellowship at Emory University with Dr. Bruce Levin, and a visiting scientist appointment at CDC. He received a D.Phil. in Zoology as a Rhodes Scholar from the University of Oxford, where he studied with Drs. Robert May and Martin Nowak, and a B.A. in Philosophy from Yale University. In August 2021, Dr. Lipsitch was named Director for Science at the new Center for Forecasting and Outbreak Analytics at the US CDC, where he is on part-time loan from HSPH.

## Sergio Rebelo

Sergio Rebelo is the Tokai Bank Distinguished Professor of International Finance at the Kellogg School of Management, where he has served as Chair of the Finance Department. Professor Rebelo does research on macroeconomics and international finance. He has studied the causes of business cycles, the impact of economic policy on economic growth, and the behavior of exchange rates. His research has been funded by the National Science Foundation, the World Bank, the Sloan Foundation, and the Olin Foundation.

He is a fellow of the Econometric Society, the National Bureau of Economic Research, and the Center for Economic Policy Research. He has been a member of the editorial board of various academic journals, including the American Economic Review, the European Economic Review, the Journal of Monetary Economics, and the Journal of Economic Growth. He has won numerous teaching awards at the Kellogg School of Management, including the Professor of the Year Award and the Executive Masters Program Outstanding Professor Award.



Professor Rebelo has served as a consultant to the World Bank, the International Monetary Fund, the Board of Governors of the Federal Reserve System, the European Central Bank, the McKinsey Global Institute, the Global Markets Institute at Goldman Sachs, and other organizations. He received his Ph.D. in Economics from the University of Rochester.

## Theme: Vaccines and vaccinations

#### **Glenda Gray**

Prof Glenda Gray Prof Glenda Gray, MB BCh, FCPaeds (SA), DSc (honoris causa, Simon Fraser University 2013), DSc (honoris causa, Stellenbosch University 2018), Honorary Doctorate in Law (Rhodes University, 2019), and an NRF A-rated scientist, is the first female President and CEO of the South African Medical Research Council.

Prof Gray, who trained as a medical doctor and paediatrician at the University of the Witwatersrand, cofounded and led the internationally renowned Perinatal HIV Research Unit, based at the Chris Hani Baragwanath Hospital in Soweto, with James McIntyre. Internationally known for her research in HIV vaccines and interventions to prevent transmission of HIV from mother to child, she is the co-PI of the NIH-funded HIV Vaccine Trials Network and is responsible for the expansion of HIV vaccine research in Africa.



In 2002, she was awarded the Nelson Mandela Health and Human Rights Award together with James McIntyre. She has published more than 300 peer-reviewed scientific papers and is a member of the Academy of Science in South Africa, the African Academy of Science, and the World Academy of Sciences (TWAS). Prof Gray is one of a handful of South Africans who are foreign associates of the USA National Academy of Medicine, and the National Academies of Sciences, and who has served on their Global Health Board. She was also the Chair for the Global Alliance for Chronic Diseases (GACD).

Dr Gray has been awarded the IAPAC Hero of Medicine award and received the N'Galy-Mann lectureship with James McIntyre in 2009 in recognition of their HIV research contribution in South Africa. In June 2012, she received a DSc (honoris causa) from the Simon Fraser University, Vancouver, and she has also been admitted to the American Academy of Microbiology in 2012. In 2013, Prof Gray received the country's highest honour, the Order of Mapungubwe, granted by the President of SA for achievements in the international arena that served South Africa's interest, as well as the EDCTP's Outstanding African Scientist award. In 2017, she was listed among the Times 100 influential people in the world.

Currently, her focus is on capacity development in science, with a special focus on transformation and increasing diversity in science, for which she received the Regional World Academy of Sciences award for science capacity development in Africa in 2018. Recently, she was listed by Forbes as one of Africa's 50 most powerful women. She is a member of the NRF board, sits on the Wits Council as a member, serves on the board of the international GARDP (Global Antimicrobial Research and Development Partnership), and was recently appointed to the WHO STAG for TB. She serves on the NDOH Ministerial Advisory Committee for COVID 19, and spearheads the SAMRC funding for COVID-19

### **Florian Krammer**

Prof. Florian Krammer received his advanced training in biotechnology and applied virology at the University of Natural Resources and Life Sciences, Vienna (Mentor: Dr. Reingard Grabherr), where he gained extensive experience with expression and purification of recombinant (glyco-)proteins and influenza virus-like particles. He established various expression systems for these proteins using insect cells/baculovirus, mammalian cells, bacteria, yeast, and plants. Furthermore, he worked on a novel influenza virus rescue system based on baculovirus transduction of mammalian cells and a novel bioassay to measure inhibition of the influenza virus polymerase complex by cap-snatching inhibitors. He graduated from the University of Natural Resources and Life Sciences, Vienna in 2010.

Prof. Krammer's post-doctoral work in the laboratory of Dr. Peter Palese at the Department of Microbiology at the Icahn School of Medicine at Mount Sinai, New York focused on the development of broadly neutralizing anti-hemagglutinin stalk



antibodies and the design of a universal influenza virus vaccine. The results of these studies have been very promising: After successful testing in animal models (mice, ferrets), studies with this universal influenza virus vaccine are now advancing to human clinical trials.

Currently Prof. Krammer holds a position as a Professor of Vaccinology at the Department of Microbiology at the Icahn School of Medicine at Mount Sinai. He has published more than 100 papers, is member of the editorial boards of the Journal of Virology, Plos One and Heliyon and is a peer reviewer for more than 30 journals. Dr. Krammer is also member of the Vaccine and Edward Jenner Society Young Investigator Program. In addition, he is a scientific adviser for enGenes and PathSensors.

Since 2019, Prof. Krammer is the Principal Investigator of the Sinai-Emory Multi-Institutional Collaborative Influenza Vaccine Innovation Center (SEM-CIVIC). Our CIVIC aims to develop improved seasonal and universal influenza virus vaccines that induce long lasting protection against drifted seasonal, zoonotic, and future pandemic influenza viruses. The Krammer laboratory – which is also part of the NIH-funded Centers for Excellence in Influenza Research and Surveillance (CEIRS) – focuses on understanding broadly-reactive immune responses against the surface glycoproteins of RNA viruses such as influenza with the goal to develop better vaccines and novel therapeutics.

#### **Rachel Glennerster**

Rachel Glennerster is an Associate Professor of Economics in the Division of Social Science at the University of Chicago. She uses randomized trials to study democracy and accountability, health, education, microfinance, and women's empowerment mainly in West Africa and South Asia. She has also written on strategies to stimulate innovation, promoting more equitable access to vaccines, and the response to Ebola and COVID-19 pandemics.

Dr. Glennerster joined the University of Chicago community after serving as Chief Economist at the Foreign Commonwealth & Development Office (FCDO) and the Department for International Development in the UK. From 2004 to 2017, she served as Executive Director of the Abdul Latif Jameel Poverty Action Lab (J-PAL) a center in the Economics Department at the Massachusetts Institute of Technology which seeks to reduce poverty by ensuring



policy is informed by scientific evidence and helped pioneer the use of randomized trials in development economics.

Dr. Glennerster helped to establish "Deworm the World", which has helped provide 1 billion deworming treatments to children worldwide. Her books include *Strong Medicine: Creating Incentives for Pharmaceutical Research on Neglected Diseases* (with Michael Kremer) and *Running Randomized Evaluations: A Practical Guide*, (with Kuzai Takavarasha).

In 2021, Dr. Glennerster was appointed Companion of the Order of St. Michael and St. George (CMG) for services in international development. She currently serves as the Chair of Teaching at the Right Level (TaRL), a development organization that utilizes evidence-backed educational approaches to help children develop basic reading and mathematical skills. Dr. Glennerster received her PhD in Economics from the Birkbeck College at the University of London.

### Katrine Marçal (moderator)

Katrine Marçal works for the national Swedish newspaper Dagens Nyheter. She is based on London, UK, and has covered the impact of the Covid-19 pandemic as a financial journalist. She has given keynotes at institutions such as Oxford University Business and Economics Programme, London School of Economics and The Royal School of Technology in Stockholm.

In her role as a financial journalist, she has interviewed many of the world's leading economic thinkers. Some of her interviews have been viewed more than a million times on Youtube.

