INAUGURAL FRANCE SCIENCE SUMME

What French Researchers Bring to Global Challenges

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AMBASSADE DE FRANCE AUX ÉTATS-UNIS Liberi Faute Stationes

Service pour la Science et la Technologie Office for Science and Technology



His Excellency Ambassador Laurent Bili



Mr. Laurent Bili is the Ambassador of France to the United States.

He was born on August 12, 1961 (61 years old). A graduate of the French National School of Public Administration (ENA) (Victor Hugo Year, 1989-91), Laurent Bili joined the French Foreign Ministry's Strategic Affairs and Disarmament Directorate (1991-93). Seconded to the Defense Ministry as Deputy Diplomatic Adviser (1993-95), he then held several positions at the Quai d'Orsay:

- First Secretary and then Second Counsellor at the Embassy of France in Ankara (1995-99),
- First Secretary, Permanent Representative of France to the Western European Union (WEU) (1998-2000),
- Adviser to the European Union's interim Political and Security Committee (PSC) in Brussels (2000-02),
- Head of Strategic Affairs (2002).

In 2002, he was Director of the Private Office of the Minister Delegate for European Affairs and became technical adviser at the Diplomatic Unit of the Presidency of the French Republic (2002-07). He successively held the positions of Ambassador to Thailand (2007-09), Director of the Defense Minister's Civilian and Military Office (2009-10), Ambassador to Turkey (2011-15) and then to Brazil (2015-17). Laurent Bili was then Director-General for Global Affairs, Culture, Education and International Development at the French Ministry for Europe and Foreign Affairs and G7/G20 Sous-Sherpa (2017-2019).

Prior to his appointment in Washington, Laurent Bili was Ambassador to China since September 2019.

Mireille Guyader,

Counselor for Science and Technology

Office for Science and Technology Embassy of France in the USA



Mireille Guyader is the Counselor for Science and Technology for the Embassy of France in the United States since September 1st, 2021, and director of research at the French National Institute for Health and Medical Research (Inserm) since 2015. She oversees the Office for Science and Technology apparatus with the goals of monitoring advances in science and technology in the US, promoting bilateral partnerships in science and technology, and fostering exchanges of students, researchers and entrepreneurs.

Prior to this position, she was Director of the Department for Research Mobilization and Innovation for Development at the French National Institute for Sustainable Development (IRD). Activities undertaken included research, consultancy, and capacity building activities in Africa, the Mediterranean basin, Latin America, and French overseas territories. Between 2011 and 2017, she was the Head of the Inserm Office in the United States. Her role was to be a liaison officer between Inserm's Headquarters and laboratories in France and US biomedical research institutions. From 2006 to 2011, she was Science Attaché for the Life Sciences and Biomedical Research at the Consulate General of France in Los Angeles. The duties for this posting consisted of monitoring advances in science and technology in the US, promoting bilateral partnerships in science and technology, and fostering exchanges of students, researchers, and entrepreneurs.

Previously, she was a researcher at Inserm for 18 years, with research focusing on the understanding of molecular biology of the HIV and related viruses, including species involved in mother-to-child transmission. During her scientific career that she started as a postdoctoral fellow at the Columbia University in New York City, she worked at the Pasteur Institute in France, as a visiting scientist at The Scripps Research Institute in La Jolla, California, where she worked to get a better understanding of mechanisms of HIV neutralization and at the Centre Medical Universitaire in Geneva (Switzerland) where she studied the mechanism of HIV entry into target cells. She received her Master's degree in Microbiology from the Université Paul Sabatier (Toulouse III) in 1987 and her PhD in Microbiology/Biochemistry from the Université Denis Diderot (Paris VII) in 1990.

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Sylvette Tourmente, Director of the CNRS Office for the USA and Mexico



Between 1997 and 2013, **Sylvette Tourmente** served as CNRS Research Director in Life Sciences, was the PI of a team entitled: Establishment, maintenance, and epigenetic regulation of Heterochromatin, in the GReD (Genetics, reproduction and Development) laboratory in Clermont-Ferrand (France). Meanwhile, she was the communication- correspondent for the GReD, in charge of the international affairs for the doctoral school in Life Sciences, Health, Agriculture and Environment and scientific delegate for the Hceres (Research and Higher Education Evaluation Committee). In 2013, she joined the French Embassy in Budapest (Hungary) as attaché for science and higher education cooperation and was assigned in Germany as scientific attaché at the French Embassy in Berlin in 2017. On October 1, 2019, she became Director of the CNRS Office for the USA and Mexico, in Washington D.C.



Session I - New applications in biological and medical research to handle health issues

Dr. Yasmine Belkaid, National Institute of Health



Dr. Yasmine Belkaid is a Distinguished Investigator at the National Institute of Allergy and Infectious Diseases at the National Institute of Health (Bethesda). She obtained her Master in Biochemistry at the University of Science and Technology Houari Boumediene in Algiers, Algeria and her Ph.D from Pasteur Institute in France. Following a postdoctoral fellowship at the National Institute of health (Bethesda) on immune regulation during infection, she started her research program at the Children's Hospital Research Foundation in Cincinnati. In 2005, she joined the National Institute of Allergy and Infectious Diseases (NIAID) and was appointed senior scientist in 2008.

Her laboratory explores fundamental mechanisms that regulate tissue homeostasis and host immune responses and uncovered key roles for the microbiota and dietary factors in the control of immunity and protection to pathogens. Dr Belkaid is the Chief of the Laboratory of Hist Immunity and Microbiome, the director of the trans NIH Center for Human immunology and is the founder and Director of the NIAID Microbiome program. Dr Belkaid is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, the National Academy of Medicine and recipient of numerous awards including the Lurie Prize in Biomedical Sciences, the Emil von Behring Prize, the Sanofi-Institut Pasteur Award, the Robert Koch Award and the AAI Excellence in Mentoring Award.

Dr. Naomi Taylor, National Institute of Health



Naomi Taylor pursued her MD/ PhD studies at Yale University School of Medicine followed by Pediatrics training at Yale New Haven Hospital and the Childrens Hospital of Los Angeles Bone Marrow Transplantation Program as a Howards Hughes Fellow. She then went on to begin her own group at the Institut de Génétique Moléculaire in Montpellier, France in 1996, where she also served as Deputy Director. In 2018, Naomi joined the Pediatric Oncology Branch of the National Cancer Institute as a Chief of the Immunology-Hematology Section and Director of Basic-to-Translational Research.

Her group's expertise in T cell-based gene/cell therapies, metabolic regulation of normal and malignant hematopoiesis and thymus differentiation have been internationally recognized, and their data has promoted the development of optimized T-cell based immunotherapy protocols for cancer patients. Furthermore, the group's recent innovative studies on the interplay between metabolite transporters and fuel choice have resulted in the identification of new metabolic programs regulating erythropoiesis, physiological and pathological hematopoietic lineage commitment, and the modulation of T cell effector function for chimeric antigen receptor (CAR) T-cell immunotherapies.

For Naomi Taylor, scientific research is a field that has the unique ability to bring together individuals from different backgrounds—it is a field that breaks down walls and fosters international cooperation. In this context, Dr. Taylor has promoted the careers of a diverse group of students/scientists from >30 different countries, spanning 6 continents. She has received numerous awards for her research and training including the French National Inserm Research Award (2010), the NCI Director's Award (2020), the NCI Women in Science Mentoring and Leadership Award (2021), and election to the Association of American Physicians (2023).

Dr. Jean-Laurent Casanova,

The Rockfeller University, St. Giles Laboratory of Human Genetics of Infectious Diseases, Howard Hughes Medical Institute, Université Paris Cité & Hôpital Necker Enfants Malades



Jean-Laurent Casanova received his M.D. in 1987 and his PhD in 1992, after training at the Pasteur Institute in Paris and the Ludwig Institute for Cancer Research in Lausanne. He was appointed professor at Necker in 1999 and with Laurent Abel, cofounded the Laboratory of Human Genetics of Infectious Diseases. He was appointed professor at Rockefeller University in 2008 and named HHMI investigator in 2014. He continues to partner with Dr. Abel, maintaining their lab in Paris and New York.

Casanova studies the human genetics and immunological determinants of life-threatening infectious diseases. He searches for rare and common single-gene mutations that selectively compromise immunity of otherwise healthy individuals who are vulnerable to specific infectious diseases. He then searches for other causes disrupting the same mechanisms of host defense, and thus characterizes the causal mechanisms of life-threatening infectious diseases.

Dr. Emmanuelle Passegué,

Ph.D., Alumni Professor of Genetics and Development, Director, Columbia Stem Cell Initiative, Columbia University, NYC



Dr. Emmanuelle Passegué, Ph.D. is the Alumni endowed Professor of Genetics & Development and the Director of the Columbia Stem Cell Initiative (CSCI) at Columbia University Irving Medical Center (CUIMC) in New York City. Dr. Passegué received her Ph.D. from the University Paris XI (France), and trained with Dr. Erwin Wagner (Institute for Molecular pathology, Vienna, Austria) and Dr. Irv Weissman (Stanford University, USA) before joining the University of California San Francisco (UCSF) in 2005. Dr. Passegué was a Professor of Medicine in the Hematology/Oncology Division and the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at UCSF until 2016 before joining CUIMC in January 2017. Her research investigates the biology of blood-forming hematopoietic stem cells in normal and deregulated contexts such as hematological malignancies and physiological aging.

Dr. Passegué has received a number of awards and prizes including a Scholar Award from the Lymphoma and Leukemia Society, an Outstanding Investigator Award from the NHLBI, and the 2019 William Dameshek Prize from the American Society of Hematology.

Kelly O'Shea,

Chateaubriand laureate, University of Illinois, Chicago



Kelly O'Shea is a Chateaubriand laureate who worked at *Institut national de la santé et de la recherche médicale* (INSERM) on surgical complications and endometriosis lesion locations. She holds an MPH from the University of Illinois Chicago (UIC) and a BA from Northern Illinois University (NIU) in anthropology.

She recently successfully defended her dissertation entitled Heterogeneity of Symptoms, Outcomes, and Characteristics in Patients undergoing Treatment for Endometriosis: The SPiTE Study also at the UIC. She is also the associate director of evaluation and tracking at the Center for Clinical and Translational Sciences at UIC, funded under the Clinical and Translational Science Awards program. Previously, she has worked at Northwestern University in perinatal psychiatry as well as in Medicaid payer and veterinary medicine spaces.



Session II - Environmental research at the crossroads of short and long-term global challenges

Stéphane Hallegatte,

Senior Climate Change Adviser, The World Bank, Washington D.C.



Stéphane Hallegatte is the Senior Climate Change Advisor of the World Bank Climate Change Group. He joined the World Bank in 2012 after 10 years of academic research. His research interests include the economics of natural disasters and risk management, climate change adaptation, urban policy and economics, climate change mitigation, and green growth. Mr. Hallegatte is the author of dozens of articles published in international journals in multiple disciplines and of several books. He also led several World Bank reports including <u>Shock Waves: Managing the Impacts of Climate Change on Poverty</u> in 2015, <u>Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters</u> in 2016, <u>Lifelines: The Resilient Infrastructure Opportunity</u> in 2019, and <u>the Adaptation Principles</u> in 2020. He also led the writing team of the <u>Stern-Stiglitz High-Level</u> Commission on Carbon Prices.

He was the team leader for the <u>2016-2020 World Bank Group Climate Change Action Plan</u>, a large internal coordination exercise to determine and explain how the Group will support countries in their implementation of the Paris Agreement. He also led the development of the <u>Resilience Rating</u> <u>System</u>, a tool to monitor and report on how resilience is included in public or private investments. In 2018, he received the <u>Burtoni Award</u> for his work on the link between climate change adaptation and poverty reduction. More recently, he has supervised the new World Bank Group diagnostic, the <u>Country Climate and Development Reports</u>, and has co-led the CCDRs for <u>Turkey</u> and <u>Brazil</u>. Mr. Hallegatte holds an engineering degree from the Ecole Polytechnique (Paris) and a Ph.D in economics from the Ecole des Hautes Etudes en Sciences Sociales (Paris).

Sky Dominguez,

MSc, Assistant Director of Engagement and Development for the CNRS International Research Center, The University of Arizona, Tucson



Sky Dominguez is Assistant Director of Engagement and Development for the France-Arizona **Institute**. She completed her Master's degree in environmental microbiology in 2008 at the University of Arizona in Tucson, U.S.A. After completing her master's degree, Sky transitioned out of the lab and to the administrative side of research programs – combining her passion for science with her desire to play a critical role in envisioning the supporting research programs. Since joining the UArizona as staff, after graduate school, she has managed multiple international research programs and was the Manager of Administration for the School of Anthropology. These positions focused on relationship building, program strategy, budget management, grant submissions, staff management, event coordination, and field campaign management (Northern Sweden and Amazon Forest in Brazil). In addition, Sky is the Owner/Founder of an organizing and goal couching business since 1997. Sky joined the France-Arizona Institute in March 2022.

Sylvain Barone,

Researcher in political science at the National Research Institute for Agriculture, Food and the Environment (INRAE) in the G-EAU laboratory in Montpellier, and visiting scholar at the University of Arizona, Tucson



Sylvain Barone is a researcher in political science at the National Research Institute for Agriculture, Food and the Environment (INRAE) – in the G-EAU laboratory (Water Management, Actors, Uses). His research interest is in the implementation and the reconfiguring of public policy relating to the environment and climate change. His main focus is on water management and policy, more specifically on the tensions between water uses and sectoral policies, and the regulation of these tensions. His research also centers on the judicial treatment of violations against nature and on the politicizing of climate issues.

Dr. Gabrielle Dreyfus,

Chief scientist, Institute for Governance & Sustainable Development, Georgetown University, Washington D.C.



Gabrielle Dreyfus is the Chief Scientist at IGSD, where she collaborates with leading experts and international partners to conduct research, and craft and advance policies to slow global warming through strategies to control short-lived climate pollutants, improve energy efficiency, and protect carbon sinks. She is an adjunct lecturer at Georgetown University, where she teaches science policy. Dr. Dreyfus has authored over <u>a dozen scientific and technical publications</u> and is a member of the Climate and Clean Air Coalition's <u>Scientific Advisory Panel</u>, the Montreal Protocol's <u>Technology and Economic Assessment Panel</u>, and chair of the U.S. National Academies' committee on <u>Atmospheric Methane Removal</u>: <u>Development of a Research Agenda</u>. Previously, she was a member of the U.S. National Academies' committee on <u>Development of a Framework for Evaluating Global Greenhouse Gas Emissions Information for Decision Making</u> and the technical review committee of the <u>Global Cooling Prize</u>, and served as Chief Scientific Advisor to the Kigali Cooling Efficiency Program (now <u>Clean</u> Cooling Collaborative) housed at the ClimateWorks Foundation.

Prior to IGSD, Dr. Dreyfus served as the Deputy Director of the U.S. Department of Energy Office of International Climate and Clean Energy, where she led international initiatives and campaigns to strengthen and scale clean energy policy. She developed expertise in applying science to inform climate, energy, environmental, and international policy through a series of fellowships in the U.S. Senate, National Oceanic, and Atmospheric Administration (NOAA), and U.S. Department of Energy.

Dr. Dreyfus received a doctorate in Geosciences from Princeton University and Sorbonne Université (formerly University of Pierre and Marie Curie) for her research reconstructing climate change history from Antarctic ice core records conducted at the Laboratoire des sciences du climat et de l'environnement (LSCE) with Jean Jouzel and Princeton with Michael Bender.

Adam Chmurzynski,

PhD Candidate and Chateaubriand Laureate, Ecology & Evolutionary Biology, The University of Arizona, Tucson



Adam Chmurzynski is a biologist studying the evolution of plant form and function with an emphasis on applications to forest science. His dissertation work focuses on applying Terrestrial Laser Scanning (TLS) methods to functional models of tree architecture that incorporate elements of fractal geometry. With a background in computer science, Adam seeks to combine large-scale data analysis with powerful theory and visualizations to better understand the terrestrial biosphere. In the long-term this approach aims to help craft a global biodiversity observatory using remote sensing data and effective ecological theories, from hectare-scale forest plots in Costa Rica to global-scale satellite monitoring.



Session III - AI at the heart of tomorrow's challenges

Dr. Oussama Khatib,

Professor and Director of Stanford Robotics Lab and Department of Computer Science, Stanford University, Palo Alto, and co-leader of a CNRS International Research Project



Oussama Khatib received his PhD from Sup'Aero, Toulouse, France, in 1980. He is Professor of Computer Science and Director of the Robotics Laboratory at Stanford University. His research focuses on methodologies and technologies in human-centered robotics, haptic interactions, artificial intelligence, human motion synthesis and animation. He is President of the International Foundation of Robotics Research (IFRR) and an IEEE Fellow. He is Editor of the Springer STAR and SPAR series, and Springer Handbook of Robotics. He is recipient of the IEEE Robotics and Automation, Pioneering Award, the George Saridis Leadership Award, the Distinguished Service Award, the Japan Robot Association (JARA) Award, the Rudolf Kalman Award, and the IEEE Technical Field Award. Professor Khatib is Knight of the National Order of Merit and a member of the National Academy of Engineering.

Dr. Rémi Soummer,

Director of the Optics Lab at the Space Telescope Science Institute (STSI), Baltimore, and co-leader of a CNRS International Research Project



Dr. Rémi Soummer is an Associate Astronomer at the Space Telescope Science Institute and the head of the Russell B. Makidon Optics Laboratory. The goal of his research in Astronomical Instrumentation is to obtain images of other Earths in the Universe, and to search for life. For over 20 years, he has developed technology and algorithms to take images and spectra of faint exoplanets in orbit around their parent stars. He invented and developed the Apodized Pupil Lyot Coronagraph, and was the coronagraph architect for the Gemini Planet Imager and Palomar Project 1640.

As part of his responsibilities at STScI, Soummer has played a leadership role in the operations of current and future NASA space missions (Hubble, Webb, and Roman Space Telescopes). He guided the early development of coronagraphic operations for Webb, and managed for a few years the Telescope Group in charge of operations for the alignment of the Webb mirrors. Since 2017, he has dedicated himself entirely to STScI's Optics Laboratory to develop the technology needed for a future flagship mission to image other earths and search for life, which was recently recommended by the Astro 2020 Decadal Survey.

Dr. Manijeh Razeghi,

Walter P. Murphy professor of Electrical and Computer Engineering, and director and founder of Center for Quantum Device at Northwestern University, Chicago



Manijeh Razeghi received the Doctorate d'état ES Sciences Physiques from the Université de Paris, France, in 1980.

Manijeh Razeghi was the Head of the Exploratory Materials Laboratory at Central Research lab (LCR) at Thomson-CSF (France), Now Thales, during the 80's where she developed and implemented modern Epitaxial techniques for entire compositional ranges of III-V compound semiconductors from deep UV to THZ... She realized the first InP Quantum wells and Superlattices and demonstrated the marvels of quantum mechanics in the low dimensional world.

She joined Northwestern University, Evanston, IL, as a Walter P. Murphy Professor and Founder, Director of the Center for Quantum Devices in Fall 1991, where she created the undergraduate and graduate program in solid-state engineering. At Northwestern university.

She has authored or co-authored more than 1400 papers, more than 35 book chapters, and 20 books, including the textbooks *Technology of Quantum Devices* (Springer Science Business Media, Inc., New York, NY U.S.A. 2010) and *Fundamentals of Solid State Engineering, 4th Edition* (Springer Science Business Media, Inc., New York, NY U.S.A. 2018). Two of her books, *MOCVD Challenge Vol. 1* (IOP Publishing Ltd., Bristol, U.K., 1989) and *MOCVD Challenge Vol. 2* (IOP Publishing Ltd., Bristol, U.K., 1995), discuss some of her pioneering work in InP-GaInAsP and GaAs-GaInAsP based systems. *The MOCVD Challenge*, 2nd Edition (Taylor & Francis/CRC Press, 2010) represents the combined updated version of Volumes 1 and 2. She holds more than 60 U.S. patents and has given more than 1000 invited and plenary talks. Her current research interest is in nanoscale optoelectronic quantum devices.

Dr. Razeghi is a Fellow of MRS, IOP, IEEE, APS, SPIE, OSA, Fellow and Life Member of Society of Women Engineers (SWE), The first woman as Fellow of the International Engineering Consortium (IEC). She received the IBM Europe Science and Technology Prize in 1987, the Achievement Award from the SWE in 1995, the R.F. Bun shah Award in 2004, IBM Faculty Award 2013, the Jan Czochralski Gold Medal in 2016, the 2018 Benjamin Franklin Medal in Electrical Engineering, The member of Academy of Europe in 2021, and many best paper awards. She is an elected life-Fellow of SWE, IEEE, and MRS.

Dr. Anne-Elisabeth Courrier,

Associate Professor in Law, Nantes University, Visiting Fellow at the Center for Ethics, Emory University, Atlanta



Anne-Elisabeth Courrier is an Associate Professor in Public Law at the French University of Nantes. She joined the Center for Ethics, Emory University in April 2019 as a Visiting Fellow. From her PhD in Law on the "Ethos of Public Service in a comparative study between Great Britain and France" at the University of Paris I, Panthéon-Sorbonne, in collaboration with Oxford University, she has centered her research interests to the relationship between Law and Ethics from a comparative perspective. With Postdoctorate Fellowships at the European University Institute (Florence, Italy) and at the Corvinus University of Budapest in Hungary, she has become more specialized on Ethics and the Law in social corporate responsibility, public governance, and, more recently, on Big Data and Artificial Intelligence, through European and American perspectives. Taking part in the French Research group Data-Santé and working with the French Laboratory "Droit et Changement Social" (Law and societal changes) (UMR CNRS 6297), she is, within the Emory Center for Ethics, involved in different perspectives of collaboration between universities to help students and academic teams benefit from the diversity of approaches and the exchange agreements she deeply enjoyed when she was a student.

Anne-Elisabeth Courrier also loves teaching, especially through innovative channels and was awarded with the Nantes University, the 2017 Price for Passion in Pedagogy in Higher Education (PEPS) from the French Ministry of Higher Education, Innovation and Research for simulations on the European Council where students had to play the role of journalists, lobbyists and European Heads of Government, to negotiate a common position on a given topic. Passionate about education, she has also launched with Emory University an online certification on <u>AI ethics</u> and an <u>international AI simulation program</u> for university students.

Anne-Elisabeth received the Chevalier dans l'Ordre des Palmes Académiques Award on June 7, 2022, at the Consulat General de France in Atlanta, a prestigious academic award that honors "devotion to accomplishment in teaching, scholarship, and research", and given to French citizens living abroad and foreign nationals for contributing significantly to furthering French intellectual, scientific, and artistic achievements in the world.

Raza Sheikh,

Chateaubriand Laureate, Graduate Student Researcher, University of Pittsburgh



Raza Sheikh was born in West Chester, Pennsylvania, PA, USA in 1998. He received a B.S. degree in mechanical engineering from the University of Pittsburgh in 2020 and is currently a graduate student pursuing a Ph.D. in mechanical engineering at the University of Pittsburgh (Pitt). Since 2020, he has been a Graduate Student Researcher in the Multiscale Thermophysics Laboratory at Pitt. In 2021, he became a Chateaubriand Fellow, and in 2022 he went to *L'Institut de Thermique, Mécanique, Matériaux* (ITheMM) at the University of Reims Champagne-Ardenne to conduct research related to photothermal radiometry. In 2023 he returned to Pitt to continue his graduate studies.



Overview of Franco-American Partnerships

Dr. George F. Koob,

Director, National Institute on Alcohol Abuse and Alcoholism and Senior Investigator, Intramural Research Program, National Institute on Drug Abuse at NIH, Bethesda (virtual)



George F. Koob is Director of the National Institute on Alcohol Abuse and Alcoholism (NIAAA). He is also a Senior Investigator at the Intramural Research Program of the National Institute on Drug Abuse where he directs the Neurobiology of Addiction Laboratory in the Integrative Neurosciences Research Branch.

As an authority on alcohol use disorder, drug addiction and stress, he has contributed to our understanding of the neurocircuitry associated with the acute reinforcing effects of alcohol and drugs and the neuroadaptations of the reward and stress circuits associated with the transition to dependence. He has published over 750 peer reviewed papers, mentored 13 Ph. D students and 85 post-doctoral fellows, and authored several books including the "Neurobiology of Addiction". He received his Ph.D. in Behavioral Physiology from Johns Hopkins University in 1972. He did post-doctoral studies at Walter Reed Army Institute of Research and the University of Cambridge (England). He subsequently held positions at The Salk Institute and the Scripps Research Institute. Dr. Koob is the recipient of many honors, including membership in the National Academy of Medicine (USA) and award of the Legion of Honor (France).

Dr. José-Alain Sahel,

Distinguished Professor and Endowed Chair of Ophthalmology, University of Pittsburgh School of Medicine, Director of the Vision institute at University of Pittsburgh Medical Center; Emeritus Professor of Ophthalmology, Sorbonne University; Honorary Professor of Biomedical Sciences, Institute of Ophthalmology University College London; Adjunct Professor, Carnegie Mellon University, Pittsburgh and Hebrew University of Jerusalem, Israel



José-Alain Sahel, MD, trained at Paris University Medical School, Louis Pasteur University, Strasbourg, and Harvard University. He is the Endowed Distinguished Professor and Chairman of the Department of Ophthalmology at the University of Pittsburgh School of Medicine/UPMC, The Eye and Ear Foundation Endowed Chair. He founded the Vision Institute (Sorbonne Université-Inserm-CNRS) in Paris, France, and the Vision Institute at University of Pittsburgh Medical Center (UPMC), opening in May 2023, two large interdisciplinary research centers. His work has contributed to the understanding and prevention of vision loss from photoreceptor cell degeneration. He conducted dozens of clinical trials on retinal conditions, including first in human trials of artificial retina, gene therapy, optogenetics.

He is Director of the Institut Hospitalo-Universitaire FOReSIGHT, Adjunct Professor of Robotics and Bioengineering, Carnegie Mellon University, Pittsburgh, Adjunct Professor of Ophthalmology, Hebrew University of Jerusalem, Israel, Honorary Professor, Institute of Ophthalmology, University College London.

He co-authored over 700 peer-reviewed articles and 40 patents. He has cofounded companies developing innovative therapies for vision restoration. He is a member of the Académie des Sciences-Institut de France, the Académie des Technologies, the Association of American Physicians, the American Ophthalmology Society, the German National Academy of Sciences Leopoldina. He holds a Honoris Causa Doctorate from the University of Geneva and held the Chaire d'Innovation Technologique Liliane Bettencourt at Collège de France (2015-2016). He received, among numerous awards the Foundation Fighting Blindness (FFB) Trustee Award, the Alcon Research Institute Award for Excellence in Vision Research, the Grand Prix NRJ-Neurosciences-Institut de France, the 2015 Foundation Fighting Blindness Llura Liggett Gund lifetime achievement Award, the Médaille Grand Vermeil, Ville de Paris (2019), the 2021 Breakthrough in the Life Sciences – Falling Walls Foundation, Berlin, Germany, the 2022 Chica and Heinz Schaller Foundation Award for Translational Neuroscience. And the 2023 International Prize for Translational Neuroscience from the Max Planck Society, Germany.

Dr. Régis Ferrière,

Deputy Director, France-Arizona Institute for Global Grand Challenges, Director, CNRS International Research Laboratory iGLOBES, Professor, Ecology and Evolutionary Biology.



Dr. Ferriere is a mathematical ecologist who studies a broad array of questions about life on Earth and off Earth. He is particularly interested in how ecological systems emerge and evolve, how they adapt to environmental challenges and how their adaptation reshapes the environment. He obtained his doctoral degree in mathematical ecology at Paris University and subsequently worked as a research associate at the University of Arizona and the International Institute for Applied Systems Analysis in Laxenburg, Austria. With collaborators in Austria and The Netherlands, Dr. Ferriere pioneered the field of eco-evolutionary mathematics, that he has been expanding ever since. As a professor at Ecole Normale Supérieure in Paris, France, Dr. Ferriere was the founding director of the CNRS-ENS Ecotron IleDeFrance. In 2012, Dr. Ferriere was appointed as an Associate Professor at the University of Arizona. With support from the Partner University Fund, he established a collaboration bridge through research and advanced training between UArizona and ENS. In 2017, he extended the cooperation program as he became director of the iGLOBES (Interdisciplinary and Global Environmental Studies. iGLOBES has been instrumental in the creation, in 2021, of the France-Arizona Institute for Global Grand Challenges, intended to foster existing and new collaborations between the French scientific community and UArizona in all disciplines. A strong advocate for respect, diversity, and inclusion in the scientific endeavor, Dr. Ferriere strives to nurture and promote the best talents and ideas to advance the science that can help solve the global grand challenges of our time.

Dr. Lisa Bernstein,

Ph.D., Academic Exchange Specialist at the Department of State, Washington D.C., and responsible for the Fulbright exchange programs with France, Germany, Italy, Malta, and Switzerland



Lisa Bernstein is an Academic Exchange Specialist in the European and Eurasian Programs Branch of the U.S. Department of State's Office of Academic Exchange Programs in the Bureau of Educational and Cultural Affairs (ECA). She is currently responsible for Fulbright exchange programs with France, Germany, Italy, Malta, and Switzerland. Prior to joining ECA, Lisa was Professor of English and Women's Studies and Director of the University of Maryland Global College's Writing Program. In previous positions at the National Endowment for Humanities and the Association of American Colleges and Universities, she worked in areas of diversity, equity, and global education. Dr. Bernstein earned her bachelor's degree at Wellesley College, master's in German literature and linguistics from Georgetown University, and Ph.D. in comparative literature from the University of Maryland at College Park. She has lived and studied in France and Germany, and speaks French, German, and Italian.

Laetitia Zecchini,

CNRS researcher, and project manager of a CNRS-UChicago International Research Laboratory



Laetitia Zecchini is a research fellow at CNRS. Her research interests focus on contemporary Indian poetry, postcolonial modernisms and print cultures, and the politics of literature. She has authored a monograph on the poet Arun Kolatkar (Bloomsbury, 2014) whom she has also translated into French for Gallimard, and her latest publications include several co-edited or co-authored volumes: "The Locations of (World) Literature: Perspectives from Africa and South Asia" (2019), PEN International: An Illustrated History (2021), The Form of Ideology and the Ideology of Form: Cold War, Decolonization and Third World Print *Cultures* (2022). She was co-investigator of the AHRC-funded project 'writers and free expression' (2017-21) and coordinates the International Research Network on Postcolonial Print Cultures funded by CNRS (2023-2027) with UChicago and NYU as partner institutions. She is also project manager for the CNRS-UChicago Humanities and Social Sciences International Research Laboratory.

Dr. Albert Ruhí Vidal,

Assistant Professor of Freshwater Ecology and Conservation at the University of California, Berkeley, and co-coordinator of the INRAE International Associated Laboratory MacLife, on climate change ecology



Albert Ruhi is a freshwater ecologist and Assistant Professor at the University of California, Berkeley (Dept. Environmental Science, Policy, and Management). His group develops experiments and large-scale data analysis to advance current understanding of the ecology and conservation of rivers and wetlands, focusing on how freshwater biodiversity responds to climate change and extreme events. Prof. Ruhi received a B.Sc. in Biology and a Ph.D. in Ecology from the University of Girona (Catalonia), and has conducted most of his research in water-scarce regions of the world--namely the Mediterranean basin and the American Southwest. Before joining UC Berkeley, he was a postdoctoral researcher at Arizona State University, and a Fellow at the National Socio-Environmental Synthesis Center (SESYNC) in Maryland, where he studied impacts of flow alteration by U.S. dams. Prof. Ruhi has published over 60 papers, is an Associate Editor for the journal Conservation Letters, and has received numerous awards recognizing his research, such as a U.S. National Science Foundation CAREER award, a California Sea Grant New Faculty Award, a Hellman Fellow Award, and University of Girona's Extraordinary Doctoral Degree Award in Environmental Sciences (for his Ph.D. work). In Spring 2021 he also received a UC Berkeley teaching award ("Extraordinary Teaching in Extraordinary Times") for an undergraduate course on time series analysis applied to ecological and environmental data.



Closing Remarks

Dr. Kendra Sharp,

Office Head, Office of International Science and Engineering, National Science Foundation



Dr. Sharp has been a faculty member in mechanical engineering at Oregon State University (OSU) since 2010 and held the Richard and Gretchen Evans Professorship of Humanitarian Engineering from 2015 to 2020. Her research and teaching interests include engineering design for international development, applications of technology in humanitarian engineering, and sustainable water and energy systems. Sharp founded and directed the school's humanitarian engineering program until 2020. She also served as the university's Senior Advisor for Global Affairs, providing leadership for the development and implementation of strategic initiatives in internationalization and global engagement at OSU, and as Associate Vice Provost for Faculty Development, prior to joining NSF as Head of the Office of International Science and Engineering (OISE) in February 2021.

OISE catalyzes international partnerships to advance research, building and leveraging productive international collaborations to serve the US science and engineering research enterprise; seeks to build a more diverse, globally-engaged STEM workforce; and strengthens U.S. global leadership in science and engineering.

Sharp has extensive international research and teaching experience, including as a visiting researcher at the Delft University of Technology in The Netherlands; a Visiting Erskine Fellow at the University of Canterbury in New Zealand; and as part of the organizing and instructional teams at multi-week international development design summits in India, Pakistan and Thailand. Sharp also led OSU's participation in the United States Agency for International Development-funded Partner Center of Advanced Studies in Energy with Arizona State University and two universities in Pakistan.

Dr. Jason Donovan,

Office Head, Office for Science and Technology Cooperation, Department of State



Jason Donovan has been Director of OSTC at the Department of State (DOS) since September **2022.** After working in academia and the private sector, Jason joined the U.S. Foreign Service in 1999. A career diplomat, he has worked as an advisor in Guatemala, Italy and India. He headed the International Narcotics and Law Enforcement Section at the U.S. Mission in Pakistan before joining the U.S. Embassy in London as Political Counselor (2019). In between, he also worked in Washington on the coordination of regional security initiatives in Southeast Asia (2007-2009), served as Director for South Asia at the National Security Council (2012), as Deputy Director for Western Europe at the Department of State, and then as Director for Multilateral and Global Affairs (2015). Jason studied at Haverford College (Pennsylvania) and MIT, has received numerous awards for innovative diplomacy and speaks French.

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