

# ASILOMAR INTERNATIONAL CONFERENCE ON CLIMATE INTERVENTION

MARCH 22 – 26, 2010 - Pacific Grove, CA

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## Conference Attendee Biographies

### **Tom Ackerman**

*Professor of Atmospheric Sciences, University of Washington*

**Bio:** Professor of Atmospheric Sciences and Director of the Joint Institute for the Study of the Atmosphere and Ocean (JISAO), University of Washington; former positions: DOE ARM Chief Scientist and Professor, Penn State University

### **Roger Aines**

*Carbon Fuel Cycle Program Leader*

**Bio:** Roger Aines leads the Carbon Fuel Cycle Program at Lawrence Livermore National Laboratory where he has been involved in development of new carbon dioxide capture methods. He has studied the feasibility of large-scale capture from atmospheric sources by considering the overall energy and footprint issues associated with such an endeavor, focusing on research needs for capture methods and energy sources. Roger has a PhD in Geochemistry from Caltech.

### **Paola Alpresa**

*Aerospace Engineer. CEO of spin off LYNZOS S.L.*

**Bio:** Born in Algeciras, Spain (20-Oct.-1983). Received Master in Aerospace Engineering in Nov-2007, and Master in Astrophysics in 7-Jul-2009. I am currently CEO of a spin-off from the University of Sevilla, LYNZOS S.L.

### **Jim Amonette**

*Senior Research Scientist, Geochemistry Group*

**Bio:** PhD Soil Chemistry 1988 (Iowa State University); Joined PNNL as geochemist in 1986; Terrestrial C sequestration in soils since 2000; Biochar chemistry and global climate change mitigation potential since 2005.

### **Ivelisse Aviles**

*Senior General Engineer, GAO*

**Bio:** Ph.D.- Industrial Engineering & Management Sciences, Northwestern University. Research at NIST focused on statistical experimental design and mixed-effects models. Scientific Advisor to House-Member, 110<sup>th</sup> Congress. Currently managing GAO's Geoengineering Technology Assessment.

### **Govindasamy Bala**

*Associate Professor*

**Bio:** Dr. Bala is presently an Associate Professor at the Indian Institute of Science, Bangalore, India. Dr. Bala's main research interests are modeling climate change, geoengineering, global carbon cycle, and land cover change. He has published about 50 research papers on climate change.

**Scott Barrett**

*Professor*

**Bio:** Scott Barrett is Lenfest-Earth Institute Professor of Natural Resource Economics at Columbia University. His latest book is *Why Cooperate? The Incentive to Supply Global Public Goods* (Oxford University Press).

**Roger Barry**

*Distinguished Professor*

**Bio:** Roger moved to Boulder in 1968 and from 1976-2008 was Director of the National Snow & Ice Data Center. He focuses on Arctic and mountain climates and cryospheric science.

**Richard Benedick**

*Ambassador, ret.; President, National Council for Science and the Environment*

**Bio:** Benedick played a major role in global environmental affairs as chief US negotiator and a principal architect of the 1987 Montreal Protocol, and as Senior Advisor to major UN conferences and Pacific Northwest National Laboratory. McGraw-Hill selected his *Ozone Diplomacy* for an anthology of twentieth-century environmental classics.

**Gregory Benford**

*Professor of Physics*

**Bio:** Gregory Benford is a professor of physics at the University of California, Irvine. In 1995 he received the Lord Prize for contributions to science. His research in both astrophysics and plasma physics has been supported by NSF, NASA, AFOSR, DOE and other agencies. He is an ongoing advisor to NASA, DARPA (Defense Advanced Research Projects Agency) and other agencies.

**Robert J. Berg**

*Trustee, World Academy of Art and Science*

**Bio:** Private sector, government official, think tank senior fellow, NGO CEO, senior advisor to four parts of the UN. Cross-cutting theme: public administration implications of coping with climate change, particularly geo-engineering.

**Robert Bindschadler**

*Emeritus Scientist*

**Bio:** Expert in the dynamics of glaciers and ice sheets including their impact on global sea level. Experienced in theoretical, remote sensing and field work methods to monitor, study and predict ice sheet behavior.

**Jason Blackstock**

*Fellow, Centre for International Governance Innovation*

*Research Scholar, International Institute for Applied Systems Analysis*

**Bio:** Jason's research explores the intersection of science and international affairs, currently focusing on scientific and socio-political implications of geoengineering. He is a Research Scholar at IIASA and Fellow at CIGI.

**Daniel Bodansky**

*Professor*

**Bio:** Daniel Bodansky is the Woodruff Professor of International Law at the University of Georgia School of Law. He served as Climate Change Coordinator, US Department of State, from 1999-2001.

### **Peter Boyd**

*Director of Operations, Carbon War Room, Inc.*

**Bio:** Peter joined as Director of Operations after serving as Launch Project Director for the Carbon War Room since February 2009, following over ten years in the Virgin Group, serving his last two as CEO of Virgin Mobile South Africa.

### **Maxwell Boykoff**

*Assistant Professor, Environmental Studies Program*

*Fellow, Cooperative Institute for Research in Environmental Science (CIRES)*

**Bio:** Boykoff is an Assistant Professor in the Center for Science and Technology Policy, within the Cooperative Institute for Research in Environmental Science (CIRES) at the University of Colorado-Boulder, teaching in Environmental Studies.

### **Stewart Brand**

*Co-founder, Global Business Network; author, Whole Earth Discipline*

**Bio:** Stewart Brand is president of The Long Now Foundation and co-founder of Global Business Network. He created and edited the *Whole Earth Catalog* (National Book Award), and co-founded the Hackers Conference and The WELL. His books include *The Clock of the Long Now; How Buildings Learn;* and *The Media Lab*. His new book, titled *Whole Earth Discipline: An Ecopragmatist Manifesto*, is published by Viking in the US and Atlantic in the UK. He graduated in Biology from Stanford and served as an Infantry officer.

### **Peter Brewer**

*Senior Scientist, Monterey Bay Aquarium Research Institute (MBARI)*

**Bio:** Dr. Brewer is an ocean chemist whose current interests include the geochemistry of gas hydrates, the bio-geochemical impacts of the growing oceanic fossil fuel CO<sub>2</sub> signal and the multiple impacts of ocean acidification. He served as co-Chair of the NSF Decadal Report *Ocean Sciences at the New Millennium*, on the IPCC Carbon Capture and Storage special report, and on the US National Methane Hydrates Advisory Committee.

### **Mark Brown**

*Associate Professor, Department of Government*

**Bio:** Mark Brown studies political theory, research ethics, science policy, and the politics of expertise. He is the author of *Science in Democracy: Expertise, Institutions, and Representation* (MIT Press, 2009).

### **Lopa Brunjes**

*Executive VP, Biochar Engineering; Biochar Project Manager, Carbon War Room, Consultant, Global Cooling*

**Bio:** Lopa has been deeply involved in launching the biochar industry for the last 2 ½ years, and is interested in exploring biochar as a bridge to other climate intervention methods.

**Martin Bunzl**

*Professor of Philosophy, Director, Rutgers Initiative on Climate and Social Policy*

**Bio:** Martin Bunzl is a philosopher of science and directs the Rutgers Initiative on Climate and Social Policy. His climate policy work has focused three areas: geoengineering, Chinese development plans, and citizen attitudes toward government policy.

**Wil Burns**

*Co-Chair, International Environmental Law Committee, American Branch, International Law Association*

**Bio:** Dr. Wil Burns is Editor-in-Chief of the Journal of International Wildlife Law & Policy, as well as Co-Chair of the International Environmental Law Committee of the International Law Association. He is also the former Chair of the International Environmental Law section of the American Society of International Law.

**Antonio J Busalacchi Jr.**

*Director and Professor, Earth System Science Interdisciplinary Center*

**Bio:** Antonio Busalacchi is the Director of ESSIC and a Professor in the Department of Atmospheric & Oceanic Science. Tony came to the University of Maryland in 2000, after serving as Chief of the NASA/Goddard Laboratory for Hydrospheric Processes. Tony received his Ph.D. degree in oceanography from Florida State University in 1982. He has studied tropical ocean circulation and its role in the coupled climate system. His interests include the study of climate variability and prediction, tropical ocean modeling, ocean remote sensing, and data assimilation. His research in these areas has supported a range of international and national research programs dealing with global change and climate, particularly as affected by the oceans. Presently, he serves as Chairman of the Joint Scientific Committee for the World Climate Research Programme and Chairman of the NAS/NRC Board on Atmospheric Sciences and Climate. He is a Fellow of the American Meteorological Society (AMS), American Geophysical Union, and in 2006 was selected by the AMS to be the Walter Orr Roberts Interdisciplinary Science Lecturer.

**Christiano Campos**

*Environmental Engineer*

**Bio:** Master and doctorate on Climate Change. Environmental engineer at Petrobras R&D Center. Coordinating a research project about climate change impacts, Vulnerability and Adaptation of Petrobras.

**Fei Chai**

*Professor of Oceanography and Climate Change*

**Bio:** Dr. Chai is an oceanographer with interests in the role of iron in regulating biological productivity and carbon cycle and impact of climate change on marine ecosystems.

**Elizabeth Chalecki**

*Visiting Professor, International Studies Program, Boston College*

**Bio:** Elizabeth Chalecki is a Visiting Professor in International Studies at Boston College. Her expertise lies in the areas of climate change and security, international environmental policy, and non-traditional security threat analysis.

**Art Charo**

*Senior Program Officer, Space Studies Board, National Research Council*

**Bio:** Art Charo (Ph.D. Physics, 1981) directs studies at the National Research Council related to NASA and NOAA research and operational Earth observation programs. He also organized a recent NRC workshop on geoengineering.

**Francisco Chavez**

*Senior Scientist, MBARI*

**Bio:** Francisco Chavez is a biological oceanographer interested in climate change and variability regulation of ocean ecosystems and a Fellow of AAAS; honored for distinguished research on global carbon cycling.

**Frederick Childers**

*Senior Physical Scientist at GAO*

**Bio:** MS Physics, University of California, San Diego and SB Physics, MIT. Over 40 years of industrial R&D in tera Watt pulsed power engineering and pulsed intense relativistic electron beam physics. Helped set up the Department of Homeland Security's illicit nuclear material detection office.

**Rita Colwell**

*University of Maine*

**Garry Cook**

*Principal Research Scientist*

**Bio:** Dr. Cook is an ecologist working on the management of tropical savannas. His research is concerned with the impacts of fire management on geochemical cycling. With colleagues he quantified the emissions of greenhouse gases from Australian savanna burning and showed that they produce as much CO<sub>2</sub> per year as all Australian fossil fuel burning and through emissions of methane and nitrous oxide contribute to about 3 – 5 % of Australia's accountable emissions. He identified the potential to manage savannas to reduce their emissions. Working with Indigenous partners he helped provide the science behind the establishment land-based greenhouse gas abatement programs across the extensive Indigenous lands of northern Australia. He has developed a computer simulation model to track significance of savanna management regimes on emissions and carbon stocks.

**Paul Craig**

*Professor Emeritus, Engineering, UC Davis, Member Sierra Club National Energy Committee*

**Bio:** Physics, CalTech: Engineering Prof Emeritus at UCD specializing in environmental policy. Member and past chair of various Sierra Club National Energy Committees [ppcraig@ucdavis.edu](mailto:ppcraig@ucdavis.edu)

**Kim Cranston**

*CEO, TransparentDemocracy.org*

**Bio:** Kim Cranston is C.E.O. of TransparentDemocracy; Chair of the Board of the Global Security Institute; Board Member: Climate Response Fund & Los Altos Community Foundation; an investor; and a writer.

**Paul Crutzen**

### *Director Emeritus*

**Bio:** Born in Amsterdam in 1933, Paul J. Crutzen was trained as a civil engineer. In 1959 he joined Stockholm University to study mathematics, mathematical statistics, and meteorology. His research is especially concerned with the natural and anthropogenically disturbed photochemistry of ozone. He was Director of Research at the National Center of Atmospheric Research in Boulder, Colorado, 1977-1980, and thereafter until his retirement in 2000, at the Max Planck Institute for Chemistry in Mainz. He also conducted research at Scripps Institution of Oceanography. Crutzen received the Nobel Prize for Chemistry in 1995.

### **Duane Dale**

*DFD Associates*

### **David Dean**

*Senior Advisor*

**Bio:** David Dean is Senior Advisor to Under Secretary Steven Koonin at the Department of Energy.

### **Kenneth Denman**

*Senior Scientist and Adjunct Professor*

**Bio:** Dr. Denman is a senior scientist with Fisheries and Oceans Canada, located at the Canadian Centre for Climate Modeling and Analysis. He was a Coordinating Lead Author in Working Group 1 of the IPCC Second (SAR) and Fourth (AR4) assessment reports. He studies how ocean ecosystems and biogeochemical cycles are responding to climate change.

### **Floyd DesChamps**

*US Director, GLOBE International*

Mr. Floyd DesChamps is the US Director for GLOBE (Global Legislators Organisation) International. He has spent over a decade developing legislation on climate change, science, and technology in the US Senate. He also has extensive experience in the design and development of energy technologies.

### **Lisa Dilling**

*Assistant Professor, Environmental Studies and member of the Center for Science and Technology Policy, University of Colorado, Boulder*

**Bio:** Lisa Dilling is Assistant Professor of Environmental Studies at the University of Colorado, Boulder. Her current research focuses on the use of information in decision making related to climate change.

### **Judy Droitcour**

*Assistant Director, Center for Evaluation Methods and Issues, Applied Research and Methods, U.S. Government Accountability Office 2004 Test Drive User*

**Bio:** Sociology, George Washington University. Current focus: technology/foresight. Prior research: developing methods (i.e. cross design synthesis); analyzing record linkage and privacy; identifying bias in randomized studies; estimating hidden populations.

### **Melanie Fitzpatrick**

*Climate Scientist, Union of Concerned Scientists*

**Bio:** Melanie Fitzpatrick, a glaciologist with over 15 years of polar experience and a doctorate in Geophysics from the University of Washington in Seattle, is a climate scientist with the Union of Concerned Scientists in Cambridge, MA.

**James Fleming**

*Professor of Science, Technology and Society, Colby College*

**Bio:** James Fleming's latest book is *Fixing the Sky: The Checkered History of Weather and Climate Control* (Columbia University Press, 2010); his full profile is available at <http://www.colby.edu/profile/jfleming>

**James Fournier**

*President, Biochar Engineering*

**Bio:** Jim Fournier, president Biochar Engineering Corp; developing technology in Colorado; former industrial designer, software developer, industrial ecologist, serial entrepreneur; studied architecture, physics & chemistry; left MIT to found first company.

**Ed Frieman**

*Scripps*

**William Fulkerson**

*Senior Fellow at Institute for a Secure and Sustainable Environment, The University of Tennessee*

**Bio:** My professional career was at Oak Ridge National Lab involved energy and environmental R&D. I retired as an Associate Lab Director in 1994. Since retirement I have chaired the Laboratory Energy R&D Working Group or LERDWG of the DOE National Labs. I organize 5 one day meetings in D.C. to discuss energy R&D Policy and the latest developments in energy science and technology. The group has had a continuing interest in geoengineering thanks to Mike MacCracken, Ehsan Khan and others. PhD Rice in Chemical Engineering, 62.

**Alan Gadian**

*Senior Research Scientist, NCAS*

**Bio:** Research scientist with particular interest in the Cloud Whitening Geoengineering Scheme. My research background is in atmospheric modeling, from climate to microscale meteorological scales, with particular interest in cloud dynamics and microphysics.

**Alfonso Ganan-Calvo**

*Professor, Chair of Fluid Mechanics*

**Bio:** Born in Cordoba, Spain (11-Aug.-1962). Received PhD in Mechanical Engineering in 1989 at the University of Sevilla. I am Professor and Chair of Fluid Mechanics at the Department of Aerospace Engineering and Fluid Mechanics. Author of more than 75 papers in SCI journals with more than 1700 citations (H=21), and inventor in more than 140 patent files worldwide (about 50 currently allowed). President and co-founder of Ingeniatics, OneNeb and others. National Prize of Research "Juan de La Cierva" 2009.

**John Gibbons**

*S&T Advisor to Pres. Clinton (1993-8) Ret. Now semi-retired*

**Bio:** Physics, energy, environment, population, public policy, technology assessment. Duke; Oak Ridge, OTA, W.H. Office of Energy Conservation; OSTP (Dir), Asst. to Pres for S&T, Compton Fellow (MIT), Senior Fellow NAE.

### **Joseph Golden**

*Senior meteorologist, NOAA/CIRES-retired*

**Bio:** Joseph H. Golden had served NOAA in a number of progressively more responsible positions during his 42 years of Federal service. His early career began in Miami in the mid 1960's, as a Hurricane Specialist at the National Hurricane Center (hurricane forecasting in summer, and Public and Marine Forecaster during remainder of year), and he also worked as a research meteorologist at the National Hurricane Research Laboratory. He participated actively in NOAA's hurricane modification experiments during Project STORMFURY. In 1991, he was asked to assume the role of Director, NOAA Atmospheric Modification Program (AMP) in NOAA's Office of Oceanic and Atmospheric Research. Dr. Golden managed the AMP Program with six States and the Navajo Nation until its termination by the Congress in 1995. He moved to NOAA's Forecast Systems Lab in January, 2000 as a Senior Meteorologist.

### **Danielle Guttman Klein**

*President, Guttman Initiatives*

**Bio:** Danielle Guttman Klein is the President of Guttman Initiatives. In support of the Climate Response Fund, Ms. Guttman helped to design, develop and implement the International Conference On Climate Intervention Technologies.

### **Chuck Hakkarinen**

*Retired (previously, research manager at Electric Power Research Institute)*

**Bio:** Retired from EPRI in 2002 after 28 years managing geosciences research spanning all scales from building downwash to global climate change. Currently chairs the NSF Climate Simulation Laboratory Allocation Panel.

### **Steven Hamburg**

*Chief Scientist*

**Bio:** Steven Hamburg, EDF's Chief Scientist, is responsible for the scientific integrity of EDF's positions and programs. His research focuses on the terrestrial C cycle and the impacts of disturbance on ecosystem structure and function.

### **Daniel Harrison**

*Visiting Scholar, University of Southern California*

**Bio:** Daniel Harrison has a degree in engineering from the university of Sydney. He has worked as an ocean engineer both in industry and academia. His primary research interests are in ocean enrichment for enhanced food production and greenhouse gas mitigation, and in GIS applications to fisheries management.

### **Jennifer Haverkamp**

*Managing Director for International Policy and Negotiations, Environmental Defense Fund*



**Bio:** Jennifer is a former U.S. trade negotiator and an expert in international environmental and trade law. She leads EDF's international climate policy team and advises our domestic experts on the international aspects of U.S. climate legislation.

### **David Hawkins**

*Director, Climate Programs*

**Bio:** Staff Attorney, Natural Resources Defense Council (NRDC) 1971-1976; Assistant Administrator Air, Noise, and Radiation, US EPA, 1977-January 1981; Co-director Air Program, NRDC, 1981-1990; Director, Air and Energy Program, NRDC, 1990-2000; Director NRDC Climate Center 2000-2008; Director NRDC Climate Programs, 2008-present.

### **E. Dan Hirleman**

*Head, School of Mechanical Engineering, Purdue University*

**Bio:** E. Dan Hirleman is Professor and William E. and Florence E. Perry Head of the School of Mechanical Engineering at Purdue University. His research involves optical diagnostics of particles and sprays.

### **Martin Hoffert**

*Professor Emeritus of Physics (Earth Systems Group) New York University*

**Bio:** Former Chair, Dept. Applied Science, NYU. Fellow, AAAS; Presently Chief Scientist, Versatility Energy; Senior Fellow, Breakthrough Institute; COB, Aspen Global Change Institute. Education: B.S.'60, U. of Michigan, M.S.'64; Ph.D.'68, Polytech. Inst. of B'klyn, M.A.'69 New School Soc. Res.; Forty+ year career in aerospace, geophysics, climate modeling, terrestrial and space-based solar and wind power & policies enabling "transformative" high-tech to mitigate adverse global warming.

### **Andreas Felix Hofmann**

*Postdoctoral Researcher at MBARI*

**Bio:** Born in Bavaria, studies of biology and bioinformatics gave me the opportunity to conduct marine chemical PhD research at the Netherlands Institute of Ecology, which finally brought me to MBARI.

### **Deborah Iglesias-Rodriguez**

*National Oceanography Centre*

### **Robert Jackson**

*Nicholas Professor of Global Environmental Change and Professor of Biology, Duke University*

**Bio:** Rob Jackson's research examines how people affect the earth, including studies of the global carbon and water cycles, biosphere/atmosphere interactions, and global change. He directs Duke's Center on Global Change.

### **Dale Jamieson**

*Director of Environmental Studies; Professor of Environmental Studies and Philosophy, New York University*

**Bio:** Dale Jamieson is a philosopher by discipline, author of *Ethics and Intentional Climate Change* (1996), co-editor of *Climate Ethics* (2010), and now writing a book on ethics and climate change.

**Vladimir Jankovic**

*Lecturer*

**Bio:** Vladimir Jankovic is a climate historian whose publications include *Reading the Skies* (2000), *Confronting the Climate* (2010) and articles on the politics of environmental knowledge, sociology of atmospheric sciences and medical climatology.

**David Keith**

*Canada Research Chair in Energy and the Environment, Director, ISEEE Energy and Environmental Systems Group*

**Bio:** Professor Keith has worked near the interface between climate science, energy technology and public policy for twenty years. His work in technology and policy assessment has centered on the capture and storage of CO<sub>2</sub>, the technology and implications of global climate engineering, the economics and climatic impacts of large-scale wind power and the prospects for hydrogen fuel. As a technologist, David has built a high-accuracy infrared spectrometer for NASA's ER-2 and developed new methods for reservoir engineering increase the safety of stored CO<sub>2</sub>. He now leads a team of engineers developing technology to capture of CO<sub>2</sub> from ambient air at an industrial scale.

**Robert N. Klein II**

*President and CEO, Klein Financial Corporation; Chairman of the ICOC. California Institute of Regenerative Medicine*

**Bio:** Robert Klein, J.D. Pres. Klein Financial Corporation; author and Chairman Governing Board California Stem Cell Initiative; Board JDRF International; Time Magazine "World's 100 Most Influential" 2005; "Scientific American 50" —leaders shaping science.

**Gernot Klepper**

*Senior Scientist*

**Bio:** Gernot Klepper is senior scientist and expert in the field of environmental and resource economics at the Kiel Institute for the World Economy, Germany. His research interests are in climate change and global change aspects of resource economics. He is Co-Director of the Kiel Earth Institute, Chairman of the German National Committee on Global Change Research, and a member of the Scientific Committee of IHDP. All institutions have a special focus in interdisciplinary, integrative research.

**Tim Kruger**

*Founder, Cquestrate and Director, Oxford Geoengineering*

**Bio:** Founder of Cquestrate – adding alkalinity to enhance the carbon sink capacity of the oceans. Director of Oxford Geoengineering – addressing the technical and social aspects of all geoengineering concepts.

**Kelly Kryc**

*Program Officer, Gordon and Betty Moore Foundation*

**Bio:** Kelly Kryc is paleoceanographer with expertise in major and trace element sediment chemistry. She is currently a Program Officer for the Marine Microbiology Initiative at the Gordon and Betty Moore Foundation.

**Klaus Lackner**

*Professor*

**Bio:** Klaus Lackner is the Ewing Worzel Professor of Geophysics at Columbia University, the Chair of the Department of Earth and Environmental Engineering, and the Director of the Lenfest Center for Sustainable Energy at the Earth Institute.

**Richard Lampitt**

*Research Scientist*

**Bio:** I am an observational biogeochemist with a main focus on the factors that control the downward flux of material from the top of the ocean into the interior.

**Lee Lane**

*Resident Fellow, American Enterprise for Public Policy Research*

**Bio:** Lee Lane is a resident fellow at the American Enterprise Institute and co-director of the AEI Geoengineering Project. He has previously served as executive director of the Climate Policy Center.

**John Latham**

*Senior Research Associate, NCAR, Boulder, CO, USA, Professor Emeritus, University of Manchester, UK*

**Bio:** Working with others on the Cloud Whitening geoengineering idea, which I first proposed in "Nature" 1990. Formerly Head of Atmospheric Sciences, University of Manchester. Several awards from Royal Meteorological Society.

**Anthony Leiserowitz**

*Director, Yale Project on Climate Change*

**Bio:** Anthony Leiserowitz, Ph.D. is Director of the Yale Project on Climate Change. His research investigates the psychological, cultural, and political factors underlying public climate change risk perceptions, policy preferences, and behavior.

**Chris Lennard**

*Post Doctoral Fellow in Climatology, University of Cape Town*

**Bio:** Chris Lennard's research centers around understanding Southern African climate and the impact of climate change in the region through producing high resolution, regional-scale information using numerical and statistical downscaling techniques.

**Andrew Lenton**

*Research Scientist, CSIRO Division of Marine and Atmospheric Research*

**Bio:** I am a ocean biogeochemical modeler, my focus has been on the historical and future evolutions of the global and region carbon sinks and development of sampling strategies.

**Eli Lewine**

*Analyst*

**Bio:** Eli joined the Government Accountability Office in 2009 and is currently a member of the Natural Resources and Environment Team. He received his MPP from American University.

**Albert Lin**

*Professor of Law, University of California, Davis*

**Bio:** Al Lin has research interests in environmental law. Formerly a trial attorney for the U.S. Department of Justice, Al received a M.P.P. from the Kennedy School of Government and a J.D. from the UC Berkeley School of Law.

**Diana Liverman**

*Director, Institute of the Environment, University of Arizona and Senior Research Fellow, Environmental Change Institute, Oxford University*

**Bio:** Diana Liverman is a geographer with at the University of Arizona (directing the Institute of the Environment) and Oxford University. Her research focuses on the human dimensions of global environmental change including climate impacts and policy.

**Andrew Lockley**

*Environmentalist*

**Bio:** Long standing environmental campaigner, notably with Friends of the Earth (former board member). Currently writing paper on methane geoengineering, with the intention of starting a PhD at Leeds.

**Jane Long**

*Principle Associate Director at Large for Lawrence Livermore National Laboratory*

**Bio:** Dr. Long is currently the Principal Associate Director at Large for Lawrence Livermore National Laboratory working on energy and climate. She is also a Fellow in the LLNL Center for Global Security Research. Her current interests are in reinvention of the energy system and adaptation in response to climate change.

**Thomas E. Lovejoy**

*Biodiversity Chair*

**Bio:** Biodiversity Chair at the Heinz Center for Science, Economics, and the Environment based in Washington, DC and was President 2002-2008. Before assuming this position, Lovejoy was the World Bank's Chief Biodiversity Advisor and Lead Specialist for Environment for Latin America and the Caribbean as well as Senior Advisor to the President of the United Nations Foundation. In 2010 he was elected Professor in the Department of Environmental Science and Policy at George Mason University (initially he will devote 50% of his time to the Heinz Center). Lovejoy also developed the now ubiquitous "debt-for-nature" swap programs and led the Minimum Critical Size of Ecosystems project. He also founded the series *Nature*, the popular long-term series on public television. In 2001, Lovejoy was awarded the prestigious Tyler Prize for Environmental Achievement. In 2009 he was the winner of BBVA Foundation Frontiers of Knowledge Award in the Ecology and Conservation Biology Category. In 2009 he was appointed Conservation Fellow by the National Geographic. Lovejoy holds B.S. and Ph.D (biology) degrees from Yale University.

**Michael MacCracken**

*Chief Scientist for Climate Change Programs, Climate Institute*

**Bio:** Modeling air quality and natural and human-induced climate change (1968-1993); climate change and impact assessments while senior scientist with USGCRP Office (1993-2002); recently, importance of non-CO<sub>2</sub> GHGs and regionally focused geoengineering.

**Douglas MacMynowski**

*Senior Research Associate in Control and Dynamical Systems*

**Bio:** Douglas MacMynowski received his PhD at MIT in 1992, spent 6 years managing industrial research at UTRC, and has been at Caltech for 9 years working on dynamics and control in various fields including climate.

**Bryan Martel**

*Environmental Capital Group*

**Andrew Matthews**

*Assistant professor, Anthropology, UC Santa Cruz*

**Bio:** I am a forester turned environmental anthropologist, and am now working on carbon markets and forests in Mexico. I have an interest in how scientific knowledge of biogeochemical cycles is entering policy and proposed technologies of climate intervention.

**Katelin McQueen**

*Executive Assistant, Guttman Initiatives*

**Luiz Gylvan Meira Filho**

*Visiting Researcher, Institute for Advanced Studies, University of São Paulo*

**Bio:** Ph.D. University of Colorado, Dept. of Astro-geophysics, 1970. Co-chair of IPCC WG I, 1991-1995, vice president of IPCC, 1995-2001, President of Brazilian Space Agency, 1994-2001.

**Jerry Melillo**

*Senior Scientist*

**Bio:** Jerry Melillo, an ecologist focusing on biogeochemistry, is a Senior Scientist and Director Emeritus, The Ecosystems Center of the MBL, Woods Hole, Massachusetts and a Professor of Biology, Brown University.

**Janot Mendler de Suarez**

*International Expert in GEF-IW Project Processing, Interim Guinea Current Commission; Steering Committee, Global Forum on Oceans, Coasts and Islands and leader, Working Group on Climate, Oceans and Security*

**Bio:** Janot Mendler de Suarez has served for ten years with the GEF (Global Environment Facility) International Waters portfolio to strengthen participative, equitable and sustainable water governance through transboundary cooperation in knowledge-sharing and experiential learning for adaptive ecosystem-based management, in cooperation with governments and development organizations in over 180 countries, She is a former member of the Centre for Developing Areas Research, Department of Geography, Royal Holloway, University of London, with current research interest in climate equity.

**Juan Moreno-Cruz**

*Postdoctoral Fellow in the Energy and Environmental Systems group, University of Calgary*

**Bio:** Moreno-Cruz has a PhD in Economics from the University of Calgary and a B.Sc. and M.Sc. in Electrical Engineering from the University of Los Andes, in Bogota, Colombia. Moreno-Cruz's research focuses on the interaction of climate change, technological change and economic growth. His work

analyzes the role geoengineering technologies play in achieving sustainable economic development; considering uncertainty, strategic behavior and transitional dynamics.

### **M. Granger Morgan**

*Department Head and Professor*

**Bio:** M. Granger Morgan is Head of the Department of Engineering and Public Policy at Carnegie Mellon University. His research addresses problems in science, technology and public policy including climate change.

### **David Morrow**

*Candidate, A.M. in Public Policy, University of Chicago, Harris School of Public Policy Studies*

**Bio:** David Morrow holds a Ph.D. in Philosophy from The City University of New York. He recently co-authored a paper on research ethics for geoengineering with Bob Kopp and Michael Oppenheimer.

### **Susanne Moser**

*Director, Susanne Moser Research & Consulting*

**Bio:** Susanne Moser, Ph.D. (Geography, 1997, Clark U.) is Director of Susanne Moser Research & Consulting in Santa Cruz, CA; previously, she served as a Research Scientist at NCAR. Her work focuses on adaptation to climate change, resilience, decision support, and communication of climate change risks.

### **Armand Neukermans**

*Consultant*

**Bio:** Armand Neukermans leads a group of scientists and engineers that seeks to demonstrate feasibility of the tools needed for marine cloud whitening with seawater nuclei (Latham-Salter Cloud Albedo modification). He holds an MSEE and MSME from Louvain University and a PhD in applied physics from Stanford.

### **John Orcutt**

*Distinguished Professor of Geophysics/Director, NAF Ocean Observatories Initiative Cyberinfrastructure*

**Bio:** John Orcutt is at Scripps and received the Ewing Medal from USN & American Geophysical Union in 1994. He Chairs MEDEA's Ocean Panel and was elected to the American Philosophical Society in 2004.

### **Andreas Oschlies**

*Professor, Marine Biogeochemical Modelling, IFM-GEOMAR, University of Kiel, Germany*

**Bio:** Studied theoretical physics and physical oceanography (Cambridge(UK), Kiel, PhD in 1994), moved on to marine biogeochemical modeling (Toulouse, Kiel), then chair in physical oceanography (NOCS Southampton), since 2004 professor of marine biogeochemical modeling at IFM-GEOMAR.

### **Andy Parker**

*Senior Policy Adviser*

**Bio:** Andy works in the Royal Society's Science Policy Centre, focusing on climate change, energy and environment. He leads on the Society's geoengineering work, including the 2009 study *Geoengineering the Climate*.

**Edward Parson**

*Joseph L. Sax Collegiate Professor of Law, Professor of Environment & Natural Resources, University of Michigan*

**Bio:** Parson studies international environmental law and policy, the role of science and technology in policy-making, and the political economy of regulation. In addition to his research agenda, he has served in multiple policy and advisory positions in the United States, Canada, and internationally.

**Shobita Parthasarathy**

*Assistant Professor and Co-Director, Science, Technology, and Public Policy Program, Ford School of Public Policy, University of Michigan*

**Bio:** Parthasarathy's research focuses on the governance of controversial science and technology in comparative and international perspective. She is the author of multiple articles and a book, entitled: *Building Genetic Medicine: Breast Cancer, Technology, and the Comparative Politics of Health Care* (Cambridge, MA: MIT Press, 2007).

**Graeme Pearman**

*Director, Graeme Pearman Consulting Pty Ltd, formally Chief CSIRO Division of Atmospheric Research*

**Bio:** Dr Graeme I Pearman AM, FAA, ATSE, FRoySocVic, BSc(Hon), PhD. Graeme Chief of the CSIRO Atmospheric Research, 1992–2002. He contributed over 150 journal papers primarily on aspects of the global carbon budget; is now a consultant to private and public sector organisations and Adjunct Senior Research Fellow, School of Geography and Environmental Science, Monash University. Current interests include holistic strategies for resilient energy futures and emissions reductions; transport technologies/fuels; dimensions of human behaviour in the climate-change issue.

**Seth Perlman**

*Attorney*

**Bio:** Seth Perlman is the senior partner at Perlman & Perlman, LLP, a leading nonprofit law firm. Mr. Perlman has litigated in several state and federal jurisdictions on issues relevant to the philanthropic community.

**Timothy Persons**

*Chief Scientist, U.S. Government Accountability Office*

**Bio:** Dr. Persons leads the production of Technology Assessments for and serves as an expert science and technology advisor to the U.S. Congress and the GAO (e.g., key highly-specialized national and international systems, engineering policies, best practices, and original research studies in the fields of engineering, computer, and the physical and biological sciences to ensure efficient, effective, and economical use of S&T in government programs).

**Victor Perton**

*Victorian Commissioner to the Americas*

**Arthur Petersen**

*Program Director, Methodology and Modeling Program, Netherlands Environmental Assessment Agency (PBL); Visiting Professor, London School of Economics and Political Science (LSE); Research Affiliate, Massachusetts Institute of Technology (MIT)*

**Bio:** Arthur Petersen holds PhDs in atmospheric physics & chemistry and philosophy of science. At the Netherlands Environmental Assessment Agency he leads research projects on uncertainty assessment and sustainability assessment.

### **Venkatachalam Ramaswamy**

*Director, NOAA/ GFDL, and Lecturer with rank of Professor, Department of Geosciences and Princeton Environmental Institute, Princeton University*

**Bio:** Principal research areas: Numerical modeling of the global climate system; radiative and climatic influences of trace gases, aerosols and clouds; diagnoses of climate change through synthesis of observations and modeling.

### **Phil Rasch**

*Chief Scientist for Climate Science, PNNL Atmospheric Sciences and Global Change Division*

**Bio:** Dr. Philip Rasch serves as the Chief Scientist for Climate Science at the Pacific Northwest National Laboratory (PNNL), a Department of Energy Office of Science research laboratory. Dr. Rasch is known for his work in general circulation, atmospheric chemistry and climate modeling. He is particularly interested in the role of aerosols and clouds in the atmosphere, and has worked on the processes that describe these components of the atmosphere, the computational details that are needed to describe them in computer models, and on their impact on climate.

### **Greg Rau**

*Senior Research Scientist*

**Bio:** Thirty years experience in carbon cycling and mitigation research. Twenty+ years with Institute of Marine Sciences, UC - Santa Cruz; also with Carbon Management Program, Lawrence Livermore National Laboratory.

### **Steve Rayner**

*James Martin Professor of Science and Civilization, Director of the Institute for Science Innovation and Society, University of Oxford*

**Bio:** Formerly a member of IPCC WGIII, UK Royal Commission on Environmental Pollution, and Royal Society Working Group on Climate Geoengineering. With Elizabeth Malone he co-edited the four volume work "Human Choice and Climate Change".

### **Catherine Redgwell**

*Professor of International Law, University College London*

**Bio:** Catherine is an international lawyer specialising in international energy and environmental law. She was a member of the Royal Society Working Group on Geoengineering the Climate.

### **Jennie Rice**

*Senior Analyst, Strategic Planning, Pacific Northwest National Laboratory*



**Bio:** Jennie Rice has twenty years of experience integrating economics and management science techniques to provide insights, recommendations, and decision support tools for decisions complicated by uncertainty, risk, and multiple objectives.

### **James Rhodes**

*Post Graduate Researcher, Scripps Institute of Oceanography, UCSD*

**Bio:** James Rhodes conducts research on technical, economic, and policy dimensions of energy and environmental issues with particular emphasis on bio-energy, climate change, and associated policy frameworks.

### **Allison Robertshaw**

*Director, Zennström Philanthropies*

**Bio:** Allison joined Zennström Philanthropies in 2008 and brings with her over ten years experience in climate and energy issues from the NGO, business, government and philanthropic sectors in both Europe and the United States. Allison holds a BSFS in Economics from the School of Foreign Service at Georgetown University, and an MSc in the History of Economic Development from the London School of Economics.

### **Alan Robock**

*Professor II (Distinguished Professor)*

**Bio:** Ph.D. in Meteorology, MIT; Professor, University of Maryland, 1977-1997; State Climatologist of Maryland, 1991-1997; Professor, Rutgers 1998-present; Fellow, American Meteorological Society and American Association for the Advancement of Science (AAAS); President, Atmospheric Sciences Section, American Geophysical Union; Chair-Elect, Atmospheric and Hydropheric Sciences Section, AAAS.

### **Daniel Rosenfeld**

*Professor*

**Bio:** My specialty is cloud-aerosol interactions impacts on cloud microstructure, precipitation and climate, focusing on the issue aircraft, satellite and measurements and model simulations, as well as experimenting with cloud seeding. I am the Chair of the AMS committee for planned and inadvertent weather modification, and the chair of Atmospheric Science program at the Hebrew University of Jerusalem.

### **Lew Rothstein**

*Professor of Oceanography, University of Rhode Island*

**Bio:** Lew Rothstein designs models of the fundamental processes associated with the ocean circulation, ecology and biogeochemistry on scales relevant to global and regional climate dynamics and extreme weather events.

### **Lynn Russell**

*Professor*

**Bio:** Lynn M. Russell is a Professor of Atmospheric Chemistry at Scripps Institution of Oceanography. Her research interests are in aerosol evolution composition, and dynamics in the troposphere. Dr.

Russell received her B.S. in chemical engineering and A.B. in international relations from Stanford University. She received her Ph.D. from the California Institute of Technology.

### **Stephen Salter**

*Emeritus Professor of Engineering Design; Director Artemis Intelligent Power*

**Bio:** Mechanics electronics invention. Cambridge University Physics. Edinburgh University AI robotics. Renewable energy, wave, wind tidal-stream. Mine clearance, explosion suppression, wave tanks traffic congestion, flood prevention, digital hydraulics, cloud albedo geoengineering.

### **Stephen Schneider**

*Melvin and Joan Lane Professor for Interdisciplinary Environmental Studies, Professor, Department of Biology and Senior Fellow, Woods Institute for the Environment*

### **Jerry Schubel**

*President & CEO, Aquarium of the Pacific*

**Bio:** Dr. Jerry R. Schubel is president and CEO of the Aquarium of the Pacific. Schubel holds a Ph.D. in oceanography from Johns Hopkins University. He is a member of NOAA Science Advisory Board.

### **Stephen Seidel**

*Vice-President for Policy Analysis and General Counsel*

**Bio:** Steve Seidel has been involved in global environmental issues for over 25 years. While at the US EPA, he played a leading role in the development and implementation of the Montreal Protocol and at the Council on Environmental Quality, he supported efforts that resulted in the Kyoto Protocol.

### **Russell Seitz**

*Fellow of the Department of Physics, Harvard University*

**Bio:** Physicist Russell Seitz focused on diplomatic perceptions of models while at Harvard's Center For International Affairs. He now works on conserving water and reducing climate forcing with "bright water" hydrosols.

### **Sybil Seitzinger**

*Executive Director, International Geosphere-Biosphere Programme (IGBP)*

**Bio:** Sybil Seitzinger is Executive Director of IGBP, a research programme that studies the phenomenon of Global Change including the interactive physical/chemical/biological processes that define Earth System dynamics, and the role of human activities on these changes.

### **John Shepherd**

*Professorial Research Fellow in Earth System Science, School of Ocean & Earth Science, University of Southampton*

**Bio:** John Shepherd is an oceanographer and Earth system scientist with a special interest in the role of the oceans in climate change, especially in past natural changes of climate. He was a founder member of the GENIE modeling project and of the Tyndall Centre for Climate Change Research, and recently chaired the Royal Society study on "Geoengineering the Climate: Science, Governance and Uncertainty"

**Steven Smith**

*Senior Scientist, Joint Global Change Research Institute*

**Bio:** Smith's research focuses on long-term socio-economic scenarios and the interface between socio-economic systems and the climate system in the areas of aerosols/pollutants/greenhouse gases, historical sulfur dioxide emissions, energy efficiency, renewable energy, and the carbon-cycle.

**Robert Socolow**

*Professor, Mechanical and Aerospace Engineering, Princeton University*

**Bio:** Robert H. Socolow teaches in both the School of Engineering and Applied Science and the Woodrow Wilson School of Public and International Affairs. With ecologist Stephen Pacala, Socolow leads the University's Carbon Mitigation Initiative. His research focuses on technology and policy for fossil fuels under climate constraints. He was awarded the 2003 Leo Szilard Lectureship Award by the American Physical Society: "For leadership in establishing energy and environmental problems as legitimate research fields for physicists, and for demonstrating that these broadly defined problems can be addressed with the highest scientific standards." Socolow earned a B.A. in 1959 (summa cum laude) and Ph.D. in theoretical high energy physics in 1964 from Harvard University.

**Richard Somerville**

*Distinguished Professor Emeritus and Research Professor, Scripps Institution of Oceanography, University of California, San Diego*

**Bio:** Richard Somerville, professor at Scripps Institution of Oceanography since 1979, is a Coordinating Lead Author of the IPCC Fourth Assessment Report and a co-author of the 2009 "Copenhagen Diagnosis" ([www.copenhagendiagnosis.org](http://www.copenhagendiagnosis.org)).

**Jayaraman Srinivasan**

*Chairman, Divecha centre for Climate Change, Indian Institute of Science, Bangalore, India*

**Bio:** I am interested in understanding the impact of climate change on monsoons. I was a lead author in the second and fourth assessment of IPCC(WG1)

**Courtney St. John**

*Outreach Coordinator for Navy's Task Force Climate Change, Office of the Oceanographer of the Navy*

**Bio:** Courtney St. John received a master's degree in environmental planning from Clemson University and prior to her current position was a John A. Knauss Marine Policy Fellow in the Office of the Oceanographer of the Navy.

**Stuart Strand**

*Research Professor in Department of Civil and Environmental Engineering, University of Washington*

**Bio:** Dr. Strand has been a pioneer in research on biotreatment of wastewaters, bioremediation, and phytoremediation. Recent work includes a carbon balance of sequestration of crop residues in the deep ocean.

**Pablo Suarez**

*Associate director of programs, Red Cross / Red Crescent Climate Centre; Research Scholar, International Institute for Applied Systems Analysis (IIASA)*

**Bio:** Dr. Pablo Suarez is a researcher and practitioner on climate risk management, addressing institutional integration across disciplines and geographic scales. He has worked with humanitarian and development organizations in over 40 countries.

**Masahiro Sugiyama**

*Researcher, Central Research Institute of Electric Power Industry, Socio-Economic Research Center*

**Bio:** Researcher at CIREPI in Japan (electric utilities' research institute) with a background of climate science and technology policy. Current working on both mitigation (with electric technologies) and geoengineering.

**Judith Swift**

*Director, Coastal Institute & Professor of Communication Studies, University of Rhode Island (URI)*

**Bio:** Swift's research focuses on the communication of science to the public including training doctoral students in techniques for translation. She also develops theatrical works to promote science literacy through emotional learning.

**Sam Thernstrom**

*Resident Fellow and Co-Director, AEI Geoengineering Project, American Enterprise Institute*

**Bio:** I am a resident fellow at the American Enterprise Institute, where I co-direct a project exploring the policy implications of, and questions related to, geoengineering.

**Bob Thronson**

*Vice President, Gryphon Capital Management*

**Bio:** Business executive focused on turning potential climate change solutions into reality. Involved in energy efficiency and carbon sequestration projects, and efforts to educate the general public about ocean acidification

**Simone Tilmes**

*Project Scientist*

**Bio:** Simone Tilmes is interested stratospheric chemistry and dynamics, Upper Troposphere Lower Stratosphere, long-range impact of troposphere pollutions, the evaluation of Chemistry Climate models, and the impact of geo-engineering on stratospheric chemistry and climate.

**Dennis Tirpak**

*Senior Fellow, World Resources Institute*

**Bio:** Dennis Tirpak has worked on climate change since 1985. He has held positions with Texaco and Alcoa, the US EPA; the UN Secretariat for the UNFCCC and OECD. He is currently a Senior Fellow at the WRI in Washington D.C, advising businesses, governments, and international organizations.

**Claire Tomkins**

*Director of Research, Carbon War Room*

**Bio:** Claire Danielle Tomkins is an expert in resource markets and environmental management, with 10 years experience working on a broad range of environmental issues and, recently, assessing energy technologies. She holds a PhD from Stanford University in MS&E.

**William Travis**

*Director, Center for Science and Technology Policy Research, Cooperative Institute for Research in Environmental Science (CIRES); Associate Professor, Department of Geography*

**Bio:** Bill Travis studies the human dimensions of climate change, land use and natural hazards, with projects on social response to extreme climate change and potential early warnings of abrupt change.

**Lisa Van Arsdale**

*Senior Analyst in the Natural Resources and Environment Division, US Government Accountability Office*

**Bio:** Lisa is currently leading a GAO project examining geoengineering for the Chair of the House Committee on Science and Technology. Education: Undergraduate degree in geology, graduate degree in public administration.

**Naomi Vaughan**

*Senior Research Associate*

**Bio:** I recently completed my PhD thesis, 'Climate Change Mitigation and Geoengineering' and now have a three-year post at the Tyndall Centre as a Research Fellow to pursue my research interests.

**David Victor**

*Professor/ Director of the Laboratory on International Law and Regulation*

**Bio:** David Victor is a professor at the School of International Relations and Pacific Studies and director of the School's Laboratory on International Law and Regulation, which explores when (and why) international laws work.

**Chris Vivian**

*Principal Scientific Advisor*

**Bio:** Chris advises UK government on issues relating to the marine environmental impacts of human activities. He is currently the Chairman of the Scientific Groups of the London Convention and Protocol.

**Gernot Wagner**

*Economist, Environmental Defense Fund*

**Bio:** Gernot Wagner is an economist in the Climate and Air Program. He specializes on global greenhouse gas emission reduction pathways and works on developing and applying economically sound climate policy in the U.S. and internationally.

**James Wang**

*Scientist, Environmental Defense Fund*

**Bio:** An atmospheric scientist with a Ph.D. from Harvard, I conduct research and educate the public on scientific and policy aspects of global warming, air quality, and anthropogenic perturbation of the nitrogen cycle.

**Greg Wannier**

*Editor, Stanford Journal of Law, Science and Policy*

**Kelly Wanser**

*eCert, Inc*

**Andrew Watson**

*Royal Society Research Professor, University of East Anglia*

**Bio:** Fields of research: The “Earth system”, in particular the marine carbon cycle and air-sea interactions, and controls on atmospheric and oceanic composition through time.

**Naomi Webber**

*Deputy Director, RCUK Office in the US*

**Bio:** Naomi Webber is the Deputy Director for the Research Councils UK (RCUK) Office in the US. RCUK invests \$4.2 billion per year in the UK in basic research, training and innovation activities.

**A. Joshua West**

*Assistant Professor (Zinsmeyer Early Career Chair in Geochemistry), USC Earth Sciences*

*Visiting Researcher, University of Oxford Earth Sciences*

**Bio:** An early-career researcher who focuses on chemical weathering and the global carbon cycle, with interest in developing technologies and methods for using accelerated/enhanced weathering to remove CO<sub>2</sub> from the atmosphere.

**Jameson Wetmore**

*Assistant Professor, Consortium for Science, Policy & Outcomes, Arizona State University*

**Bio:** Jameson Wetmore studies the history, sociology, politics, and ethics of technology to better understand how to reflect on, shape, and direct social and technological change. He co-edited *Technology & Society: Building our Sociotechnical Future* (MIT Press, 2008)

**Daniel Whaley**

*CEO, Climos*

**Bio:** Dan Whaley is the CEO of Climos, a San Francisco based research services company founded to advance early stage trials of climate intervention techniques. Previously he started the first online travel company.

**Kevin Whilden**

*Climos*

**Roy Whitehurst**

*US Government Analyst*

**Leslie Wickman**

*Research Scientist*

**Bio:** Leslie Wickman currently works as a Senior Engineering Specialist at The Aerospace Corporation, as well as director of the Center for Research in Science (CRIS) at Azusa Pacific University (APU). She is an internationally respected research scientist and engineering consultant. Her current projects include research on global climate change and national security issues, assessment of future space mission technologies, human factors issues in extreme environments, and sustainable water reclamation systems.

**Tom Wigley**

*Retired*

**Bio:** Wigley trained as a meteorologist in Australia. He was Director of the Climatic Research Unit, University of East Anglia from 1979 to 1993, before moving to NCAR, Boulder, CO as a Senior Scientist.

**James Wilsdon**

*Director, Royal Society Science Policy Centre*

**Bio:** James became Director of the Science Policy Centre in September 2008. He is responsible for the development of the centre, and for the Society's UK and international policy work.

**Oliver Wingenter**

*Associate Professor of Atmospheric Chemistry; Co-Director Geophysical Research Center*

**Bio:** Wingenter works on atmospheric, ocean and climate research and solutions using various empirical and theoretical approaches.

**David Winickoff**

*Assistant Professor of Bioethics and Society, Department of Environmental Science, Policy and Management, UC Berkeley*

**Bio:** An assistant professor at UC Berkeley and a Harvard trained lawyer, Winickoff writes and teaches on the governance of science and technology, sits on a number of ethics advisory boards at Academic Medical Centers, and has been involved in litigation at the World Trade Organization on GMO regulation.

**Oran Young**

*Professor, University of California at Santa Barbara*

**Bio:** Oran Young is a renowned Arctic expert and world leader in the fields of international governance and environmental institutions. His research focus includes collective choice, social institutions and international regimes.

**Frank Zeman**

*Assistant Professor – New York Institute of Technology*

**Bio:** Dr. Zeman is the director of the Center for Metropolitan Sustainability at the New York Institute of Technology. He also teaches graduate level courses in Energy Management and Environmental Technology

**Charlie Zender**

*Professor of Earth System Science, UC Irvine*

**Bio:** My group studies dust, snow, fire, wind, and their interactions with climate and health. I also teach undergraduates about geoengineering. We discuss scientific, technical, economic, and ethical issues. It's provocative!

**RAPPORTEURS****Bidisha Banerjee**

*M.E.M. candidate at Yale Forestry & Environment School*

**Bio:** Bidisha Banerjee studies fast-track climate mitigation strategies (including black carbon control and biochar production), geo-engineering governance, and climate policy in China, India and small island states.

### **Noah Bonnheim**

*B.A. candidate at Colby College; B.E. candidate at Dartmouth College*

**Bio:** I am currently pursuing a B.A. in Science, Technology, & Society at Colby College and a B.E. in mechanical engineering at Dartmouth College. I have written an article on the history of geoengineering for *Wiley Interdisciplinary Review: Climate Change* which has been accepted for publication in 2010.

### **George Collins**

*J.D. candidate at Yale Law School; M.E.M. candidate at Yale Forestry & Environment School*

**Bio:** George Collins studies the law and socioecology of climate change, examining questions of risk, responsibility, and economics in light of actually existing worldwide flows of materials, energy, and greenhouse gases.

### **Rachel Hauser**

*Science writer/MSc candidate in Environmental Sciences at CU as of Fall 2010*

**Bio:** A science writer for the past 12 years, Rachel works at the National Center for Atmospheric Research. She will begin a masters degree in science policy at the University of Colorado in Fall 2010.

### **Benjamin Kravitz**

*Graduate assistant in atmospheric sciences program, Rutgers University*

**Bio:** Ben is a 3rd Ph.D. student in the atmospheric sciences program at Rutgers University. His research involves climate model simulations of geoengineering with stratospheric sulfate aerosols.

### **Ashley Mercer**

*Graduate Student, University of California, Berkeley*

**Bio:** My Ph.D. research is focused on how emerging science intersects with public policy and managing uncertainty. I have an MPA in environmental science and worked as a regulator of scientific research in the Canadian Arctic.

### **Amanda Reynolds**

*Student, Colby College*

**Bio:** I study Science, Technology and Society. I am interested in Environmental Science and the historical aspects that surround geoengineering.

### **Jesse Reynolds**

*Graduate student, University of Tilburg Institute for Law, Technology, and Society*

**Bio:** Jesse will soon begin a Ph.D.-track project examining the development and implementation of the oversight of geoengineering. He has studied the impacts and governance of emerging technologies academically and professionally.



**Kate Ricke**

*PhD student*

**Bio:** Kate Ricke is a doctoral student in the Department of Engineering and Public Policy at Carnegie Mellon University. Her dissertation research focuses on large-ensemble modeling of stratospheric SRM.

**Gabrielle Wong-Parodi**

*PhD Candidate in the Energy and Resources Group at UC Berkeley*

**Bio:** Gabrielle is a PhD candidate in the Energy and Resources Group at UC Berkeley. Her work focuses on evaluating the quality decisions made from public participation approaches designed to help non-experts make thoughtful choices about climate change mitigation technologies.

MEDIA**Chris Aikenhead**

*Audio Visual Support*

**Bio:** I will be working with the CBC television crew which is filming a documentary about Geo-Engineering.

**Lee Buric**

*Independent Filmmaker*

**Patrick Brereton**

*Television Documentary Sound Recordist*

**Bio:** I am the Sound Recordist for the CBC television documentary about Geo-Engineering.

**Christopher Cokinos**

*Associate Professor of English/Writer*

**Bio:** The author of *The Fallen Sky: An Intimate History of Shooting Stars* (Tarcher/Penguin), I've had work recently in the L.A. Times and am writing about geoengineering for *The American Scholar*.

**John Collins**

*Television Documentary Director of Photography*

**Bio:** I am the Director of Photography (cameraman) of the CBC television documentary about Geo-Engineering.

**Gwyneth Cravens**

*Writer*

**Bio:** "Power to Save the World: The Truth About Nuclear Energy" (Knopf, 2007; Vintage 2008). Articles on science, other topics for *The New Yorker*, *New York Times*, *Washington Post*, other periodicals.

**Gwynne Dyer**

*Freelance Journalist*

**Bio:** PhD history King's College London. Twice-weekly column: 175 papers in 45 countries. Various TV series ("War", PBS 1985; "The Human Race", CBC/ABC 1996). Last book: "Climate Wars"

### **Erika Engelhaupt**

*Deputy News Editor*

**Bio:** Erika Engelhaupt edits news and features as *Science News* magazine's deputy news editor. She has reported on science and environment for *Environmental Science & Technology*, the *Philadelphia Inquirer* and NPR.

### **Jeff Goodell**

*Writer*

**Bio:** Jeff Goodell is a best-selling author and journalist. His latest book, *How to Cool the Planet: Geoengineering and the Audacious Quest to Fix Earth's Climate* will be published in April by Houghton Mifflin Harcourt. He is a Contributing Editor at *Rolling Stone*, and his work has appeared in many publications, including *The New Republic*, *The Washington Post*, and *The New York Times Magazine*.

### **Cheryl Hogue**

*Senior correspondent, Chemical & Engineering News*

**Bio:** Based in Washington, D.C., Cheryl Hogue reports on climate change policy for *Chemical & Engineering News*. She is on the board of directors of the Society of Environmental Journalists.

### **Ben Kalina**

*Independent Film Producer*

**Bio:** I produce documentaries about subjects related to science and the environment. I am currently producing a documentary about geo-engineering and climate interventions, which is why I'm interested in attending the conference at Asilomar.

### **Eli Kintisch**

*Reporter, Science magazine*

**Bio:** Out in April, my new book on geoengineering, *Hack the Planet* will be published by Wiley and Sons. I cover climate and energy policy for Science.

### **Oliver Morton**

*Energy and Environment Editor, The Economist*

**Bio:** Former Chief News and Features Editor, Nature, Editor in Chief, Wired UK, Science and Technology. Editor, The Economist. Author of Mapping Mars and Eating the Sun.

### **Jim Rendon**

*Freelance writer with Mother Jones magazine*

**Bio:** Jim Rendon is a freelance journalist based in Brooklyn, NY. He's written for The New York Times Magazine, the Times newspaper, SmartMoney, Metropolis, Men's Journal and other publications.

### **Shannon Service**

*Journalist*

**Bio:** Shannon Service has 10 years of media experience on projects for HBO, PBS and satellite

television. Her work has ranged from war reporting to live-streaming video on Mount Everest. She is now a Masters candidate at UC Berkeley.

**Jeff Tollefson**

*Journalist*

**Bio:** Jeff Tollefson is a Washington correspondent for Nature magazine. He covers energy and environmental issues, including science and the international climate policy.

**Bette Thompson**

*Documentary Film Producer*

**Bio:** I am the producer of the CBC television documentary about Geo-Engineering.

**Jerry Thompson**

*Documentary Filmmaker*

**Bio:** I am the director and writer of the CBC television documentary about Geo-Engineering.

CLIMATE RESPONSE FUND and CLIMATE INSTITUTE STAFF

**Bill Bennett**

*Marketing/communications consultant*

**Bio:** Bill Bennett is a writer and issues management consultant based in the San Francisco Bay area.

**Cathy Cook**

*Communications for Climate Response Fund*

**Bio:** For over 20 years, Cathy Cook has been a communication and strategic planning consultant focused on the high tech industry.

**John-Michael Cross**

*Research Associate, Climate Institute*

**Corinne Kisner**

*Director of Operations, Climate Institute*

**Bill Kohrs**

*VP. Finance and Administration*

**Bio:** Financial advisor to Climate Response Fund

**Edward Sullivan**

*Clean Technology Marketing and Communications Consultant*

**Bio:** Edward Sullivan helps cleantech and renewable energy companies bring innovative, carbon reducing technologies to market through targeted marketing and strategic communications campaigns.