

- [Resources](#)
- [Publications](#)
- [Topics](#)
- [Programs](#)
- [About Us](#)
- [Home](#)



**ABOUT US**

[About Us](#)

[Mission](#)

[History](#)

[Management](#)

[Board of Directors](#)

[Board of Advisors](#)

[Donors & Partners](#)

[Internships](#)

> [Internship Description](#)

> [Qualifications](#)

> [Dates & Deadlines](#)

> [How to Apply](#)

[Contact Us](#)

[Support Us](#)

**Michael MacCracken, Ph.D.  
Chief Scientist for Climate Change Programs,  
Climate Institute**



Michael MacCracken has been Chief Scientist for Climate Change Programs with the Climate Institute in Washington DC since 2002; he was also elected to its Board of Directors in 2006. Both of these positions are held on a volunteer basis.

Dr. MacCracken received his B.S. in Engineering degree from Princeton University in 1964 and his Ph.D. degree in Applied Science from the University of California Davis/Livermore in 1968. His dissertation used a 2-D climate model to evaluate the plausibility of several hypotheses of the causes of ice ages. Following his graduate work, he joined the Physics Department of the University of California's Lawrence Livermore National Laboratory (LLNL) as an atmospheric physicist. His research in the ensuing 25 years included numerical modeling of various causes of climate change (including study of the potential climatic effects of greenhouse gases, volcanic aerosols, land-cover change, and nuclear war)

and of factors affecting air quality (including photochemical pollution in the San Francisco Bay Area and sulfate air pollution in the northeastern United States). At LLNL, he also served as division leader for atmospheric and geophysical sciences from 1987-1993 and as deputy division leader from 1974-1987.

From 1993-2002, Dr. MacCracken was on assignment as senior global change scientist to the interagency Office of the U.S. Global Change Research Program (USGCRP) in Washington D.C., also serving as its first executive director from 1993-1997. From 1997-2001, he served as executive director of the USGCRP's National Assessment Coordination Office, which coordinated the efforts of 20 regional assessment teams, 5 sectoral teams, and the National Assessment Synthesis Team (which was constituted as a federal advisory committee) that prepared the national climate impacts assessment report that was forwarded to the President and on to the Congress in late 2000. During this period with the Office of the USGCRP, Dr. MacCracken also coordinated the official U.S. Government reviews of several of the assessment reports prepared by the Intergovernmental Panel on Climate Change (IPCC), and he was a co-author/contributing author for various chapters in the IPCC assessment reports.

When Dr. MacCracken's assignment with the Office of the USGCRP concluded on September 30, 2002, he simultaneously retired from LLNL. In addition to his activities with the Climate Institute, he served on the integration team for the Arctic Climate Impact Assessment from 2002-2004. Dr. MacCracken is also near completing a 4-year term (2003-2007) as president of the International Association of Meteorology and Atmospheric Sciences (IAMAS), members of which are the national academies of science or their equivalent in about 50 nations. As president of IAMAS, Dr. MacCracken also serves on the executive committees of International Union of Geodesy and Geophysics (IUGG) and the Scientific Committee for Oceanic Research (SCOR). From 2004 to 2005, he served on a panel of the Scientific Committee on Problems in the Environment that prepared a report on what is known about the likelihood and consequences of an asteroid or comet impact, and from 2004-2007 on a scientific expert group convened by Sigma Xi and the UN Foundation at the request of the UN's Commission on Sustainable Development to suggest the best measures for mitigating and adapting to global climate change.

Dr. MacCracken is a fellow of the American Association for the Advancement of Science (AAAS) and a member of the American Meteorological Society, the Oceanography Society, and the American Geophysical Union, among other organizations. His affidavit relating global climate change and impacts on particular regions was recently cited favorably by Justice Stevens in his opinion in the recent decision in Massachusetts et al. versus EPA.

### Essays & Other Writings:

[Climate Science in Six Well-Documented Findings](#)

[On the possible use of geoengineering to moderate specific climate change impacts](#) (Environ. Res. Lett. 4 (2009) 045107)

[Moderating Climate Change by Limiting Emissions of Both Short- and Long-Lived Greenhouse Gases](#) (PDF)

[The Science of Global Climate Change, Yale University, March 25, 2004](#) (PDF, 1.3 MB)

[Global Climate Change & Its Effects](#) (PDF)

[Uncertainties: How Little Do We Really Understand?](#) (PDF)

[National Assessment of the Consequences of Climate Variability & Change for the United States](#) (PDF)

A letter to Representatives Dingell and Boucher, March 17, 2007. [RE: Dealing with Transportation Emissions in Climate Change Legislation](#) (PDF)

[Confronting Climate Change: Avoiding the Unmanageable and Managing the Unavoidable](#), a report prepared for the UN Commission on Sustainable Development (Dr. MacCracken was one of the lead authors). (PDF)

[Beyond Mitigation: Potential Options for Counter-Balancing the Climatic and Environmental Consequences of the Rising Concentrations of Greenhouse Gases](#) (PDF). Background Paper to the 2010 World Development Report, prepared for the World Bank by Dr. MacCracken

### Articles, Statements and Presentations

[Michael MacCracken and Frances Moore Propose 'Lifetime Leveraging - An approach to reconciling the responsibilities of the developed and developing nations for reducing their emissions'](#)

[Michael MacCracken Proposes Aggressive and Equitable Framework for Reciprocal North-South Action to Phase Out Greenhouse Gas Emissions by 2100](#)

[Climate Change Impacts and Adaptation](#), recorded on January 8, 2010 in the United States House of Representatives Canon House Office Building.

[The Science of Climate Change](#) Feb 3, 2010. Dr. MacCracken's presentation at the Center for American Progress with Christopher Field. Also see [How We Know Humans Are Changing the Climate](#), an interview by Joe Romm.

[Climate Change: A Challenge We Must Address](#) (PDF) March 27, 2009. Presentation to Washington Area Model United Nations Conference

[Climate Change: The Evidence Mounts Up](#) (by Dr. MacCracken)

[Arctic Region Noticeably Changing](#) (by Dr. MacCracken)

[Prepared statement of Michael C. MacCracken, Ph.D. before the U. S. House of Representatives](#)

Power Point Presentation: [The Changing Climate: Our Responsibility](#) (PPT, 12.7MB)

[Michael MacCracken chosen to lead Climate Institute's Climate Science and Impacts programs](#)

Presentation at EESI briefing: [A Changing Climate: The Latest in Science, Policy, and International Negotiations](#) [ PDF ]

Photo Slideshow of presentation at Hofstra University: [The Increasing Pace of Climate Change and Its Impacts](#)

Join the Climate Institute e-news mailing list:

**Subscribe**

© 2007 - 2009  
Climate Institute  
All Rights Reserved

900 17th St. NW, Suite 700, Washington, DC 20006

Phone: +1-202-552-4723

Fax: +1-202-737-6410

[info@climate.org](mailto:info@climate.org)