

scientists and a recipient scientist or technician and/or contemplation by NOAA of detailing Federal personnel to work on proposed projects. NOAA will make decisions regarding the use of a cooperative agreement on a case-by-case basis. Funding for contractual arrangements for services and products for delivery to NOAA is not available under this announcement. Matching share is not required by this program.

## 2. Program Authority

49 U.S.C. 44720 (b); 33 U.S.C. 883d; 15 U.S.C. 2904; 15 U.S.C. 2931–2934; (CFDA No. 11.431)—Climate and Atmospheric Research.

## 3. Program Elements

In FY 2004, NOAA will only accept individual proposals in the Main Program Elements listed below. The names, affiliations and phone numbers of relevant Climate and Global Change Program Managers are provided. Investigators are encouraged to visit the Climate & Global Change Program Web page (<http://www.ogp.noaa.gov/>) for general program information prior to submitting full proposals. Applicants may also communicate with Program Managers for information.

### (A) Atmospheric Composition and Climate (ACC)

The Atmospheric Composition and Climate Program pursues two overall research objectives: (1) to improve the predictive understanding of the radiative forcing of the climate system by aerosols and by chemically-active greenhouse gases, such as tropospheric ozone and methane, and (2) to better characterize the recovery of the stratospheric ozone layer, including its role in climate change. The integrated research activities that address these objectives involve instrument development, global observations, laboratory studies, and theoretical modeling by NOAA and extramural partners. A hallmark of the Program is that its objectives are cooperatively framed with both national and international collaborators. Nationally, the Program's aerosol research is part of the interagency National Aerosol Climate Interaction Program (NACIP). Internationally, the Program's research contributes to the projects of the International Global Atmospheric Chemistry (IGAC) program of the International Geosphere-Biosphere Program (IGBP), and the Stratospheric Processes and their role in Climate (SPARC) program of the World Climate Research Program (WCRP).

For FY 2004, proposals are encouraged that support three activities:

(1) *Intercontinental Transport and Chemical Transformation (ITCT)*—a part of IGAC. The interagency-international ITCT-2K4 study is aimed at providing observational data and diagnostic studies needed to evaluate and improve model estimates of the outflow of chemicals from North America across the Atlantic Ocean and to evaluate the impact of these compounds on the radiative balance and chemistry of the atmosphere over the Eastern United States and North Atlantic. Proposals are encouraged that target: (a) Development of measurement techniques related to this study (and other such field studies), (b) carrying out atmospheric measurements needed to determine the sources and processes that govern the distribution of ozone and the distribution and chemical/radiative properties of aerosols over this region, and (c) development, evaluation, and application of theoretical models that can simulate these chemical/radiative effects and their influence on the radiative balance in the earth's atmosphere.

(2) *Regular vertical profiling of aerosols*. NOAA is expanding its effort at carrying out regular measurements of aerosols and their properties at selected sites using small aircraft. Proposals are sought that focus on developing measurement techniques that are applicable to such studies.

(3) *Aerosol indirect effects*. In addition, proposals are encouraged for developing and carrying out new techniques and approaches to understanding the relation between the atmospheric concentration and chemical composition of aerosols and their effect on cloud microphysics and radiative properties.

More information about these activities can be found on the Internet: <http://www.al.noaa.gov/WWWHD/pubdocs/> and the Atmospheric Composition and Climate Home page: <http://www.ogp.noaa.gov/mpe/atmochem>. For further information, investigators may contact one of the NOAA program managers, Kea Duckenfield of the Office of Global Programs ([Kea.Duckenfield@noaa.gov](mailto:Kea.Duckenfield@noaa.gov), 301–427–2089 ext. 112, fax: 301–427–2073) or Fred C. Fehsenfeld of the Aeronomy Laboratory ([fcf@al.noaa.gov](mailto:fcf@al.noaa.gov), 303–497–5819).

### (B) Climate Observation

The goal of this element is to build and sustain the global climate observing system that is needed to satisfy the long-term observational requirements of the operational forecast centers, international research programs, and major scientific assessments. The

element supports in-situ ocean components that contribute to global networks for understanding climate variability and change, the global water cycle, and the global carbon cycle, and looks for efficiencies to be gained by utilizing common platforms/sites/data infrastructure for several objectives in parallel. This program element will not accept applications for new projects in FY 2004. For further information, investigators may contact the NOAA program manager, Michael Johnson ([Mike.Johnson@noaa.gov](mailto:Mike.Johnson@noaa.gov), 301–427–2089 ext. 169, fax: 301–427–2073).

### (C) Climate and Societal Interactions (CSI)

Research on Vulnerability, Opportunities, and Response Options. Variability, change, and surprise results from a wide variety of climatological, social, economic and ecological circumstances and interactions. The purpose of this program is to increase understanding of the impacts of climate variability and change as conditioned by ongoing processes of decision-making and socio-economic transformation. The suite of efforts is intended to further research-based integration between studies of the whole of the climate system, including human components, such as health, and evolving informational and educational needs of decision-makers in climate sensitive sectors around the world. The goal is to provide the basis for more effective application of climate information, including climate forecasts, for purposes of adaptation. The intent of this program is to encourage overlapping research approaches to integrate knowledge for problem solving. The CSI is a chapeau for a suite of activities. CSI Web site information is available at: <http://www.ogp.noaa.gov/mpe/csi/index.htm>. Prospective applicants must apply to one of the following CSI program elements:

Human Dimensions of Global Change Research (HDGCR)—One of the main goals of the HDGCR program is understanding and analyzing the decision process as it relates to information about a dynamic climate system. The program is interested in building on analyses, modeling, and field work of societal adaptation to climate and the use of scientific information. For further information, investigators may contact one of the NOAA program managers, Nancy Beller-Simms ([Nancy.Beller-Simms@noaa.gov](mailto:Nancy.Beller-Simms@noaa.gov), 301–427–2089 ext. 180, fax: 301–427–2082) or Caitlin Simpson ([Caitlin.Simpson@noaa.gov](mailto:Caitlin.Simpson@noaa.gov), 301–427–2089 ext. 152, fax: 301–427–2082).