

NOAA'S RESPONSE TO THE CLIMATE WORKING GROUP'S REVIEW OF THE NOAA CLIMATE AND GLOBAL CHANGE POSTDOCTORAL PROGRAM

Program Overview

Established in 1991, the National Oceanic and Atmospheric Administration's (NOAA) Climate and Global Change (C&GC) Postdoctoral Program ("the Program") mentors and trains the next generation of leading researchers who are advancing climate and global change science. The Program focuses on research that advances understanding, modeling, and prediction of climate variability and change over seasonal to centennial time scales. Since its inception, the Program has hosted nearly 240 Fellows, many of whom are now leaders in climate and global change science fields.

The Review

In October 2018, at the request of NOAA's Climate Program Office, a panel of experts in climate and global change science met to examine and evaluate the Program's current model, the value of the Program, and mechanisms to support the Program under increasingly constrained budget scenarios. Convened under the auspices of the Climate Working Group (CWG) of NOAA's Science Advisory Board (SAB), the Review Panel produced a report, including recommendations, on the Program's effectiveness, impact, and performance to date and options for funding the long-term success of the Program. NOAA's response to that review follows.

Response to the Findings of Review Panel Members

An excellent program, serving the nation and society by fostering the next generation of leaders

NOAA is grateful for, and agrees with, the Review Panel's and CWG's perspectives that this is an excellent Program that promotes NOAA's mission and prestige both nationally and internationally, and is therefore worth maintaining and enhancing, even under constrained budgets. By producing talented and diversely trained researchers that become leaders in the climate research community, the Program promotes the Earth system and climate research needed to serve the nation and society in the face of a changing climate.

Response to the Recommendations of the Review Panel Members and the Climate Working Group

The Review Panel's recommendations informed several updates and improvements to the Program:

1. Increase the number of postdoctoral Fellows funded per cohort

NOAA agrees and has already done so. The Program was created to foster the development of Fellows that represent the broad range of disciplines required to address climate problems of national need. The Program is supporting eight Fellows—chosen from over 100 applicants—in FY2020 (up from a historic low of just four Fellows in the three previous years) and has set a target of eight to ten Fellows for future cohorts, contingent upon funding availability.

2. Increase interactions between NOAA and the Program

NOAA agrees and is taking actions to do so. Increasing Fellow interaction with NOAA, and with the host Climate Program Office in particular, advances research in line with NOAA's mission, facilitates knowledge exchange and effective use of resources, and builds valuable networks of contacts between NOAA and the broader research community now and in the future. The Program is improving in this area

by communicating NOAA priorities, gaps, and opportunities in the Program solicitation process and by including these topics in two specific venues that allow for NOAA and Fellow exchanges: the NOAA “Summer Institute” every other July and an annual Fellow alumni luncheon at the American Geophysical Union (AGU) Fall Meeting. Further, prospective Fellows are now *required* to describe specific NOAA interactions in research proposals. Supporting cross-cutting research that aligns with NOAA’s priorities, while also providing additional opportunities for Fellows to visit NOAA, is facilitating collaborative research and knowledge exchange between Fellows and NOAA scientists that includes the use of NOAA’s data and models. Furthermore, the Program is pursuing more opportunities for Fellows to communicate their research to NOAA leadership and the community through participation in OneNOAA science seminars, “hot item” updates about Fellow publications from NOAA’s Climate Program Office, Fellow alumni interviews featured on NOAA’s climate.gov, and the Summer Institute and Program alumni luncheon at the AGU Fall Meeting.

The biennial Summer Institute in Steamboat Springs, Colorado is one of the highlights of the Program. Consistent with the recommendation, the primary goal of the Institute is to strengthen the community of climate and global change current and alumni Fellows, who are hosted at research institutions throughout the United States, and senior researchers. The Institute consists of four days of scientific talks and luncheons for current and past Fellows, steering committee members, and NOAA sponsors, all of which create opportunities for Fellows and other researchers to explore the breadth of climate and global change research and to discuss future directions of climate science research. The Institute is both a benefit to the Fellows, who build connections and leverage NOAA resources and scientific expertise, and to NOAA employees, who learn from the research investments and updates and the Fellows.

3. Enhance diversity and inclusion

NOAA agrees and is taking actions to do so. Improving Diversity and Inclusion (D&I) relative to the Fellows themselves as well as the host institutions is critical. The Program has added D&I Training to the Climate and Global Change Steering Committee meetings and has implemented new criteria for considering D&I during Fellow selection, such as re-convening the Steering Committee to consider any alternate fellow selection (in case of declined offers) to maintain scientific and fellow diversity of the overall cohort selection.

4. Incorporate ongoing and well-maintained metrics

Accepted. Developing and maintaining metrics is critical for tracking, maintaining, and communicating the success of the Program. The University Corporation for Atmospheric Research’s Cooperative Programs for the Advancement of Earth System Science is collecting and maintaining metrics (e.g., number of fellows hosted, publications through the Program, number of host institutions, organizations that employ alumni) in a database of current Fellows and alumni.

5. Note about alternative funding models

NOAA is grateful to the review panel members for the note on alternative funding models. Moreover, NOAA was able to use funding increases (from the Climate Competitive Research budget) in recent appropriations to fund eight Fellows this year (FY2020) and, contingent upon future budgets, plans to maintain support for eight or more Fellows moving forward. NOAA also benefited from the review and subsequent recommendations with an increase in Program visibility and relevance within NOAA, which has resulted in significant support from the broader NOAA community.

Conclusion and Acknowledgements

The Climate and Global Change Postdoctoral Program is a critical component for mentoring and training the next generation of researchers who are advancing climate and global change science. NOAA

acknowledges the Climate Working Group and the Review Panel members for their dedication and contributions to NOAA.