

Project Title

The President's Scientists: Understanding the Evolving Role of White House Science Advisors

Project Mentor(s)

Kenneth Evans

Project Summary

This project seeks to understand the role and impact of scientists in shaping White House policy since the end of the Cold War in 1991. The goal is to expand and preserve knowledge about the history of presidential scientific advisors through archival research and analysis.

Project Description

This proposal would support the independent research projects of two Rice undergraduates interested in the history of science and science policy. The two complementary research questions examine the role of presidential science advisors across administrations in an effort to identify how and why scientists have been effective – or not – in influencing White House decision-making on a range of public policy challenges.

The position provides support to a research project that traces the development of a series of policy issues through an analysis of materials in the Neal Lane papers at Woodson Research Center. Neal Lane, former Rice University professor and provost, served as President Bill Clinton's chief scientific advisor from August 1998 to January 2001. Lane's papers contain weekly memoranda to President Clinton – a unique, unpublished source of information about science, technology, and innovation policy challenges during the end of the Clinton administration. The student will analyze the development and implementation of policy related to three scientific issues – climate change, the James Webb Telescope, and cloning – in the weekly memos from Lane to Clinton. The research findings will provide new insights on how these three policy challenges evolved with time and how they were presented to Clinton, through the lens of Lane's weekly presidential briefings.

The second research project explores the role of independent scientific advisors in informing federal policy related to health and biosciences across presidential administrations. The student will perform a thematic analysis of oral history interviews with former members of the President's Council of Advisors on Science and Technology Policy (PCAST), a science advisory committee created in 1990 by President George H.W. Bush consisting of 30 preeminent scientists, engineering, and industry leaders. The oral history interviews will be sourced from various collections, including the White House Scientist and Science Policy Dynamic Digital Archive housed on the Rice Digital Scholarship Archive (RDSA), and analyzed to understand how White House policy on biomedical science – including federal research funding, regulation of emerging biotechnologies, and pandemic preparedness – changed with time.

The two projects complement an ongoing research program at the Baker Institute Science and Technology Policy Program to collect and preserve materials related to the history of federal science policymaking in collaboration with the Woodson Research Center. This program works to both digitize archival records of PCAST and the Office of Science and Technology Policy (OSTP) and conduct oral history interviews with former PCAST members and senior OSTP staff.

Students will present their research findings at the annual meeting of the American Association for the Advancement of Science (AAAS) and the Rice Undergraduate Research Symposium, as well as publish their work in peer-reviewed journals, Baker Institute policy briefs, and/or blog posts. These materials will be widely disseminated through Baker Institute internet platforms, Rice's research networks, and collaborators at other scholarly institutions.

Two Fellows will be hired. One would concentrate on the first research program (analyzing Lane's weekly memoranda to President Clinton) and the other would focus on the second research question (biomedical policy in oral histories with White House scientists)

Key Tasks for Fellow(s)

The first Fellow would review and analyze archival materials in the Neal Lane papers at the Woodson Research Center. Key tasks include:

- Identify and digitize Lane's weekly memoranda to President Clinton;
- Conduct a textual analysis of the roughly 100 memoranda for three policy issues: climate change, the James Webb Telescope, and cloning;
- Build statistics of the frequency and priority of the topics included in each memo;
- Create a timeline of decisions and progress on the implementation on each policy issue;
- Develop a research poster and presentation;
- And outline, draft, and publish a research paper or policy brief.

The second Fellow will collect and examine oral history interviews with former PCAST members. Key tasks include:

- Collect published oral history interviews of former PCAST members;
- Review interviews and locate passages related to discussion on their White House service;
- Identify themes across interviews related to federal biomedical policy, including early policy development, challenges to implementation, strategies employed, public engagement, ethical perspectives, and lessons learned;
- Develop a research poster and presentation;
- And outline, draft, and publish a research paper or policy brief.

Qualifications

Students must be self-motivated, hardworking, and enthusiastic about learning and writing.

Learning Outcomes

Students would develop a deep understanding of federal science and technology policy and the interface between science, government, and the broader public. Students would also learn and utilize qualitative research methods for policy analysis, archival research practices, and scholarly writing and communication skills.