Scientists in International Context
Summary Report of Findings from the United Kingdom

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The Scientists in International Context (SIIC) research initiative is the first-ever cross-national study on the social context of science, examining issues of religion, ethics, gender, and family life. The study is led by Elaine Howard Ecklund, PI and Autrey Professor of Sociology at Rice University, along with co-PIs Kirstin R. W. Matthews, Fellow in Science and Technology Policy at Rice University’s Baker Institute for Public Policy, and Steven W. Lewis, C.V. Starr Transnational China Fellow at Rice University’s Baker Institute for Public Policy. It includes a survey of 20,000 biologists and physicists at different points in their careers at universities and research institutes in France, Hong Kong, India, Italy, Taiwan, Turkey, the United Kingdom, and the United States. The project also includes follow-up qualitative interviews with over 500 of these scientists.

The PI and co-PIs surveyed 3,476 scientists at 49 universities and research institutes across the United Kingdom from September-October 2013. The research team has also conducted a total of 137 in-depth interviews with scientists in the UK.

Below is a summary of preliminary findings from the UK portion of the project.

**DEMOGRAPHIC OVERVIEW**

![UK Survey](image)

- **50% Response Rate**
  - (little non-respondent bias)
- **N=1,581**
- **56% male**
- **44% female**
- **50% biologists**
- **50% physicists**
- **26% Graduate Students**
- **54% Mid-Career Scientists**
- **21% Senior Scientists**
**Survey Findings**

*Ethics and Commercialization*

Nearly one-third of UK scientists (30%) claimed to have experienced ethical difficulties in their work. Biologists (36%) were statistically significantly more likely to say so than physicists (17%). A sizeable proportion of scientists expressed concerns about commercialization.

- 32% of scientists believe that the engagement of academic scientists in commercial activities harms a university's commitment to knowledge-production.
- 42% of scientists believe that patenting activities by scientists have a negative impact on the freedom to choose research topics according to scientific criteria.
- 68% of scientists say that patenting activities by scientists have had a negative impact on their ability to adhere to the norms of open science (i.e., freely sharing research with other scientists).
- Biologists were significantly more likely than physicists to express the above criticisms of patenting.

*Work and Family*

- On average, UK scientists would prefer to work 8 fewer hours per week than they currently do. There are no statistically significant differences here by discipline or gender.
- 44% of scientists say they often feel they have no time for family commitments because of their work, while only 11% of scientists feel that family commitments often keep them from getting work done. There are no statistically significant differences between male and female scientists in their reports of work-family conflict.

*International Collaboration*

- 86% of scientists say that international collaboration is important to their work.
- 27% of scientists have experienced barriers to international collaboration. The most frequent barrier is funding. Other frequently mentioned obstacles include challenges associated with working across time zones and due to separation from family and friends.

*Women in Science*

- 36% of female scientists say they have felt discriminated against in their work lives because of their gender. Female physicists are statistically significantly more likely than female biologists to experience such discrimination.
- 22% of scientists say they have had fewer children than they would have liked because of their scientific careers. Women were statistically significantly more likely than men to say so.
**Religion**

UK scientists are significantly more likely than the general public to identify as not belonging to a religion. Sixty-five percent of UK scientists do not belong to a religion, compared with 50% of the general UK population. This is also reflected in their religious practices, with 68% never attending services compared to 47% of the general population.

Sixty-five percent of UK scientists reported that they do not believe in God, compared with 18% of the general UK population.

- **Religious Practices:**
  - 12% of scientists regularly attend religious services.
  - 69% of scientists never participate in religious services.

- **Religious Beliefs:**
  - 49% of scientists think there are basic truths in many religions.
  - 39% of scientists say there is very little truth in any religion.
  - 19% of scientists believe in a higher power or God.

- **Religion-Science Conflict:**
  - 45% of scientists do not perceive a conflict between religion and science.
  - 38% of scientists perceive a conflict and are on the side of science.
  - 10% of scientists think there can be collaboration between religion and science.
  - 8% of scientists say they have been discriminated against in the workplace because of their religion.