“When everyone shares the same politics and prejudices, the disconfirmation process breaks down.” Jonathan Haidt (2017)

“Difference of opinion leads to inquiry, and inquiry to the truth.” Thomas Jefferson (1816)

Extended Abstract

The identification and development of talent in science is shaped not only by skill but also by the social and political filters that determine who enters academia. The composition of the academy powerfully shapes the menu of questions researchers think to pursue, the methods they employ, and the solutions they propose. A growing body of evidence shows that researchers often channel their lived experience into their research agendas: female inventors disproportionately patent solutions to women’s health problems (Koning et al., 2021). Black scientists more frequently study challenges facing Black communities (Dossi, 2024). Scholars from lower-income backgrounds pursue ideas that their higher-SES peers overlook (Einiö et al., 2019). Yet systemic barriers continue to impede the very individuals who could broaden academia's intellectual vantage point. For example, Milkman et al., (2012) conduct a large audit study and reveal that under some circumstances, prospective graduate students who signal minority or female identities receive fewer and slower replies from faculty. Increasing representation across various identities, such as gender, race, class, and political orientation, may enlarge and broaden the talent in academia, pipeline of ideas, enriching the research questions posed, increasing methodological diversity, and the knowledge created that academia ultimately delivers.

Calls to widen demographic representation in academia increasingly share the stage with concerns about political and ideological diversity. For example, Federal Election Commission data, which tracks American academics’ political donations, traces the shift: between 1984 and 2000, roughly 40 percent of university employee donations went to Republican candidates; after 2000 the share fell below 10 percent, and since 2016 it has hovered near 5 percent among professors and about 2 percent at Ivy-League institutions (Kaurov et al., 2022). In the past three election cycles, academic scientists have contributed almost exclusively to Democratic candidates (Kaurov et al., 2022). Although the skew is most pronounced in the humanities and social sciences, the imbalance is present in every academic field (Langbert, 2018; Langbert et al., 2016; Langbert & Stevens, 2022). Quantitative comparisons reveal that conservatives are more underrepresented in academia relative to the general population than nearly every other major demographic group, including race, gender, ethnicity, religion, or socio-economic status (Al-Gharbi, 2018). This stark ideological composition has made academia's political balance a topic of increasingly vigorous public and scholarly debate.

These ideological disparities have become a focal point of contemporary political discourse and recent policy developments under the second term of the Trump administration have brought renewed attention to concerns about ideological influence in academic research. A May 2025 White House fact sheet issued by the Trump administration emphasised the need to ensure that "science is no longer manipulated or misused to justify political ends." Similarly, an April 2025

letter to Harvard stated that public investment in the institution "only makes sense if Harvard fosters the kind of environment that produces intellectual creativity and scholarly rigour, both of which are antithetical to *ideological capture*" (emphasis added). Despite a large body of work showing that ideology influences *what* scientists study, we know far less about *why* the ideological imbalance in the academy has emerged in the first place. Understanding whether this imbalance stems from systematic discrimination has become particularly urgent given recent shifts in science funding and policy under the second term of the Trump administration. The current policy environment suggests that answers to these questions may have significant implications for how academic institutions are evaluated and funded. This context motivates our central research question: is there a systematic bias against conservatives or individuals with conservative views when they attempt to enter academia?

Prior research demonstrates that political homophily impacts science, innovation, and knowledge work across four key dimensions. First, like the literature on gender, race, and socio-economic status, political orientation influences the problems researchers choose to investigate, with patent data revealing that Republican- and Democratic-leaning inventors concentrate in distinct technological domains, and political orientation explaining more variance in research direction than gender or race (Dossi & Morando, 2024). This ideological clustering may constrain the breadth of research questions posed within academic communities (Duarte et al., 2015). Second, even when examining identical research questions, scholars' political beliefs systematically colours their analytical approaches and conclusions, as demonstrated in economics where researchers' partisan affiliations predict divergent estimates of the same theoretical parameters (Naidu et al., 2025), and multi-team replication studies show that political predispositions influence both the direction and quality of empirical estimates even when teams analyze identical datasets (Borjas and Breznau, 2024). Third, Shi et al., (2019) find that politically heterogeneous teams can produce higher quality outcomes. Finally, political bias may also bias academic reviewers' evaluations of whether an empirical work is publishable, funding of grants, or approved by the IRB (Abromwitz et al., 1975; Ceci et al., 2017).

Beyond its effects on scientific collaboration and innovation, political homophily may also have broader downstream consequences for the role of science in society. Recent research highlights tangible implications for policymaking. For example, Wang et al. (2025) document systematic partisan disparities in how scientific evidence is incorporated into U.S. policy. They find that Democratic and Republican policymakers differ not only in the amount of science they cite, but also in the content and framing of that science, underscoring the growing politicisation of scientific knowledge in the policy process.

If political affinity affects who becomes a scientist, what they study, and how their findings diffuse, then ideological exclusion carries profound consequences for the direction, credibility, and societal reception of knowledge. Evidence on "missing" inventors suggests that such exclusion lowers aggregate innovation and, by extension, economic growth (Hsieh et al., 2019; Bell et al., 2019a,b; Bloom, Van Reenen, & Williams, 2019; Dossi & Morando, 2024).

However, studying the research question on whether there is a bias against conservatives leading to missed talent in academia is methodologically challenging. A rigorous empirical

approach must place actual decision-makers in real, incentivised choice situations while holding every applicant attribute constant except a clearly signalled political stance. Yet political identity is seldom declared in application materials, and overt cues can invite suspicion or strategic masking. Observational studies that tally who is in academia sample on the dependent variable, leaving invisible the conservatives who never applied, opted out, or were filtered out at earlier stages. Relying on this type of study ignores the underlying data-generating process and would misattribute the underlying mechanism. Resorting to survey experiments to solicit hypothetical judgments is prone to social-desirability bias. Finally, any credible design must be sufficiently powered to detect what may be modest effect sizes.

Furthermore, understanding the mechanism behind why we observe the left-of-centre political skew observed in the data is important. On the one hand, self-selection could mean that this group of scholars may voluntarily opt for careers other than academia. On the other hand, faculty could also harbour explicit or implicit preferences that disadvantage individuals with opposing ideological views. *Ex ante*, it is unclear whether self-selection or gatekeeping drives the ideological skew.

To overcome these methodological and practical constraints, and in order to understand the empirical make-up of academia, we deploy three correspondence field experiments, a commonly used tool in social science studies, which offers a uniquely powerful approach to detect real-world discrimination. We randomly email 9,000 faculty members across STEM, the humanities, and the social sciences with nearly identical messages from a fictitious PhD applicant. The messages are identical across conditions except for a subtly embedded cue that signals the student's political leanings. In addition to this, in two of the three experiments (on social science and humanities), we cross-randomise the ability of the fictitious PhD applicant by revealing their 'low' (24) or 'high' (28) ACT score. This design allows us to causally estimate whether perceived political orientation influences faculty behaviour, holding all other characteristics constant. We track three key outcomes: whether the professor replies, how quickly they respond, and the tone of the response.

Our results are as follows:

Experiment One: In the first experiment on approximately five thousand STEM faculty, applicants who signalled Republican leanings experienced no statistically detectable penalty across reply rates, latencies, and tone.

Experiment Two: In the second experiment on approximately two thousand Humanities faculty, applicants who signalled conservative leanings and who were low ability (24 ACT score) received 12 percentage points (or 22% less likely) fewer responses than applicants who signalled a liberal leaning. They also received fewer warm responses, and it took longer for them to receive responses.

Experiment Three: In the third experiment on approximately two thousand Social Science faculty, applicants who signalled conservative leanings and who were high ability (28 ACT score) received 7 percentage points (or 13% less likely) fewer responses than applicants who

signalled a liberal leaning. They also received fewer warm responses, and it took longer for them to receive responses.

This paper makes several contributions. Our primary contribution is, to the best of our knowledge, the first study to rigorously test for political bias in academic gatekeeping in early academic access across the full disciplinary spectrum. We find that while STEM faculty exhibit no detectable discrimination, both humanities and social science faculty display statistically significant evidence of bias against conservative applicants, with penalties varying by the perceived ability of the student. If conservatives are filtered out before they enter academia, there are downstream repercussions for research produced, collaboration networks, and intellectual and methodological diversity. Moreover, evidence of gatekeeping in entering academia could raise the possibility that similar ideological filters operate in later stages of the scientific process: grant reviews, peer evaluation, promotion, mentorship, and access to funding, for instance. This could have profound consequences for the production and direction of new scientific knowledge. If conservative scholars are disproportionately filtered out, academia risks forgoing a share of potential contributors, reducing both intellectual diversity and innovation through missed talent. By identifying this mechanism at the earliest point of academic entry, our findings highlight the need for greater attention to ideological diversity as a component of academic inclusion, broadening the scope of debates about who gets to participate in—and shape—the future of science.

Our second contribution shows that political engagement per se does not pose a barrier to entering academia. Across all three experiments, applicants in the control condition—who signalled non-partisan political involvement—were treated no differently than their peers who signalled partisan leanings. We find no statistically meaningful differences in reply rates, response times, or tone. This finding is important in light of growing debates about activism and politics in science: it suggests that merely being politically active, absent a partisan signal, does not disadvantage applicants at the point of initial academic entry.

Third, in our humanities and social science experiments, we cross-randomize applicant ability, proxied by ACT performance. We find that political bias interacts with perceived ability, suggesting that ideological discrimination is not uniform but conditional on educational background. This highlights a novel intersection between politics and academic merit, opening a new avenue for future research on how multiple identity signals jointly shape access to science.

Taken together our findings speak directly to a policy landscape that is increasingly hostile toward higher education. Congressional Republicans have advanced budget blueprints that would slash the Department of Education's support for colleges and universities (Knott 2024). During his first term, President Trump castigated campuses for "radical left indoctrination" and instructed the Treasury Department to examine whether their tax-exempt status should be revoked (Perez 2020). In Florida, Governor Ron DeSantis championed a suite of laws aimed at curbing perceived liberal bias in public universities, and "Florida-style" bills have since surfaced in other states (Hodgson & Kumar 2023; Ellis 2021). Now, in his second term, President Trump has gone further, pushing steep, across-the-board cuts to federal research and higher-education

budgets. Amid this unprecedented political climate, our study delivers timely evidence on the ideological forces shaping today's academic landscape.

Beyond campus walls, ideological polarisation now shapes whether the public trusts science at all. Confidence in higher education has eroded alongside academia's perceived leftward drift (Duarte et al. 2015). When *Nature* broke precedent to endorse Joe Biden during the COVID-19 election cycle, trust in the journal fell sharply among Trump supporters (Zhang 2023). A 2024 Pew survey lays bare the partisan split: only 33 percent of Republicans and Republican-leaning independents viewed colleges favorably, versus 74 percent of Democrats and their leaners (Pew Research Center 2024). Among those skeptical of higher education, the most common complaint is that public universities push political agendas (Gallup, 2024). The gulf extends to policy priorities as well—Republicans remain far less likely to rank climate change as urgent, a stance linked to distrust of academic experts perceived as advancing a liberal agenda (Kennedy & Tyson 2024). Given this erosion of public trust along partisan lines, our paper's findings have important implications for understanding how political homophily within academia may inadvertently undermine the broader legitimacy of scientific institutions.