



Broadening the Knowledge Economy through Independent Scholarship

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Summary

Scientists and scholars in the United States are faced with a relatively narrow set of traditional career pathways. Our lack of creativity in defining the scholarly landscape is limiting our nation's capacity for innovation by stifling exploration, out-of-the-box thinking, and new perspectives.

This does not have to be the case. The rise of the gig economy has positioned independent scholarship as an effective model for people who want to continue doing research outside of traditional academic structures, in ways that best fit their life priorities. New research institutes are emerging to support independent scholars and expand access to the knowledge economy.

The Biden-Harris Administration should further strengthen independent scholarship by (1) facilitating partnerships between independent scholarship institutions and conventional research entities; (2) creating professional-development opportunities for independent scholars; and (3) allocating more federal funding for independent scholarship.

Challenge and Opportunity

The academic sector is often seen as a rich source of new and groundbreaking ideas in the United States. But it has become increasingly evident that pinning all our nation's hopes for innovation and scientific advancement on the academic sector is a mistake. Existing models of academic scholarship are [limited](#), leaving little space for any exploration, out-of-the-box thinking, and new perspectives. Our nation's universities, which are [shedding full-time faculty positions](#) at an alarming rate, no longer offer as reliable and attractive career opportunities for young thinkers as they once did. Conventional scholarly career pathways, which were initially created with male breadwinners in mind, are strewn with barriers to broad participation. But outside of academia, there is a distinct lack of [market incentive structures](#) that support [geographically diverse](#) development and implementation of new ideas.

These problems are compounded by the fact that conventional scholarly training pathways are long, expensive, and unforgiving. A doctoral program takes an average of [5.8 years](#) and [\\$115,000](#) to complete. The federal government spends [\\$75 billion per year](#) on financial assistance for students in higher education. Yet inflexible academic structures prevent our society from maximizing returns on these investments in human capital. Individuals who pursue and complete advanced scholarly training but then opt to take a break from the traditional academic pipeline — whether to raise a family, explore another career path, or deal with a personal crisis — can find it nearly impossible to return. This problem is especially pronounced among [first-generation students](#), [women of color](#), and [low income groups](#). A [2020 study](#) found that out of the 67% of Ph.D. students who wanted to stay in academia after completing their degree,

only 30% of those people did. Outside of academia, though, there are few obvious ways for even highly trained individuals to contribute to the knowledge economy. The upshot is that every year, innumerable great ideas and scholarly contributions are lost because ideators and scholars lack suitable venues in which to share them.

Fortunately, an alternative model exists. The rise of the gig economy has positioned [independent scholarship](#) as a viable approach to [work](#) and research. Independent scholarship [recognizes](#) that research doesn't have to be a full-time occupation, be conducted via academic employment, or require attainment of a certain degree. By being relatively free of productivity incentives (e.g., [publish or perish](#)), independent scholarship provides a flexible work model and [career fluidity](#) that allows people to pursue research interests alongside other life and career goals.

Online independent-scholarship institutes (ISIs) like the [Ronin Institute](#), [IGDORE](#), and others have recently emerged to support independent scholars. By providing an affiliation, a community, and a boost of confidence, such institutes empower independent scholars to [do meaningful research](#). Indeed, the original perspectives and diverse life experiences that independent scholars bring to the table increase the likelihood that such scholars will engage in [high-risk](#) research that can deliver tremendous benefits to society.

But it is currently difficult for ISIs to help independent scholars reach their full potential. ISIs generally cannot provide affiliated individuals with access to resources like research ethics review boards, software licenses, laboratory space, scientific equipment, computing services, and libraries. There is also concern that without intentionally structuring ISIs around equity goals, ISIs will develop in ways that marginalize underrepresented groups. ISIs (and individuals affiliated with them) are often deemed ineligible for research grants, and/or are outcompeted for grants by well-recognized names and affiliations in academia. Finally, though [independent scholarship is growing](#), there is still relatively little concrete data on who is engaging in independent scholarship, and how and why they are doing so.

Strengthening support for ISIs and their affiliates is a promising way to fast-track our nation towards needed innovation and technological advancements. Augmenting the U.S. knowledge-economy infrastructure with agile ISIs will pave the way for new and more flexible scholarly work models; spur greater [diversity](#) in scholarship; lift up those who might otherwise be [lost Einsteins](#); and increase access to the [knowledge economy](#) as a whole.

Plan of Action

The Biden-Harris Administration should consider taking the following steps to strengthen independent scholarship in the United States:

1. Facilitate partnerships between independent scholarship institutions and conventional research entities.
2. Create professional-development opportunities for independent scholars.
3. Allocate more federal funding for independent scholarship.

More detail on each of these recommendations is provided below.

1. Facilitate partnerships between ISIs and conventional research entities.

The National Science Foundation (NSF) could provide \$200,000 to fund a [Research Coordination Network](#) or [INCLUDES alliance](#) of ISIs. This body would provide a forum for ISIs to articulate their main challenges and identify solutions specific to the conduct of independent research (see FAQ for a list) — solutions may include exploring [Cooperative Research & Development Agreements \(CRADAs\)](#) as mechanisms for accessing physical infrastructure needed for research. The body would help establish ISIs as recognized complements to traditional research facilities such as universities, national laboratories, and private-sector labs.

NSF could also include including ISIs in its proposed [National Networks of Research Institutes \(NNRIs\)](#). ISIs meet many of the criteria laid out for NNRI affiliates, including access to cross-sectoral partnerships (many independent scholars work in non-academic domains), untapped potential among diverse scholars who have been marginalized by — or who have made a choice to work outside of — conventional research environments, novel approaches to institutional management (such as community-based approaches), and a model that truly supports the “braided river” or [“ecosystem” career pathway model](#).

The overall goal of this recommendation is to build ISI capacity to be effective players in the broader knowledge-economy landscape.

2. Create professional-development opportunities for independent scholars.

To support professional development among ISIs, The [U.S. Small Business Administration](#) and/or the [NSF America’s Seed Fund](#) program could provide funding to help ISI staff develop their business models, including funding for training and coaching on leadership, institutional administration, financial management, communications, marketing, and institutional policymaking. To support professional development among independent scholars directly, the [Office of Postsecondary](#)

[Education](#) at the Department of Education — in partnership with professional-development programs like [Activate](#), the Department of Labor’s [Wanto](#), and the [Minority Business Development Agency](#) — can help ISIs create professional-development programs customized towards the unique needs of independent scholars. Such programs would provide [mentorship](#) and [apprenticeship](#) opportunities for independent scholars (particularly for those underrepresented in the knowledge economy), led by scholars experienced with [working](#) outside of conventional academia.

The overall goal of this recommendation is to help ISIs and individuals create and pursue viable work models for independent scholarship.

3. Allocate more federal funding for independent scholarship.

Federal funding agencies like NSF struggle to diversify the types of projects they support, despite offering funding for [exploratory high-risk work](#) and for [early-career faculty](#). A mere [4%](#) of NSF funding is provided to “other” entities outside of private industry, federally supported research centers, and universities. But [outside of the United States](#), independent scholarship is recognized and funded. NSF and other federal funding agencies should consider allocating more funding for independent scholarship. Funding opportunities should support individuals over institutions, have low barriers to entry, and prioritize provision of part-time funding over longer periods of time (rather than full funding for shorter periods of time).

Funding opportunities could include:

- Funding for seed-grant programs administered by ISIs. Federal agencies already have authority to support seed-grant programs — like the National Aeronautics and Space Agency (NASA)’s impactful program at [Earth Science Information Partners](#) — as prizes competitions.
- Funding research awards for individual independent scholars. For instance, Congress could consider amending the 2021 [Supporting Early-Career Researchers Act](#) to allow NSF to award funding to researchers who are not affiliated with an “institution of higher education”, as well as to award part-time funding.
- An NSF program that exclusively funds innovative, high-risk research led by scholars outside of universities, federally supported research centers, and private-sector labs.
- An NSF-funded research effort to capture basic information about independent scholars in order to provide them with better support. The effort would strive to understand why independent scholars choose not to work with a conventional research institution, what their work models look like, and their greatest challenges and needs.

Conclusion

Our nation urgently needs more innovative, broadly sourced ideas. But limited traditional career options are discouraging participation in the knowledge economy. By strengthening independent scholarship institutes and independent scholarship generally, the Biden-Harris Administration can help quickly diversify and grow the pool of people participating in scholarship. This will in turn fast-track our nation towards much-needed scientific and technological advancements.

Frequently Asked Questions

1. What comprises the traditional academic pathway?

The traditional academic pathway consists of 4–5 years of undergraduate training (usually unfunded), 1–3 years for a master’s degree (sometimes funded; not always a precondition for enrollment in a doctoral program), 3–6+ years for a doctoral degree (often at least partly funded through paid assistantships), 2+ years of a postdoctoral position (fully funded at internship salary levels), and 5–7 years to complete the tenure-track process culminating in appointment to an Associate Professor position (fully funded at professional salary levels).

2. What is independent scholarship?

Independent scholarship in any academic field is, as [defined](#) by the Effective Altruism Forum, scholarship “conducted by an individual who is not employed by any organization or institution, or who is employed but is conducting this research separately from that”.

3. What benefits can independent scholars offer academia and the knowledge economy?

Independent scholars can draw on their varied backgrounds and professional experience to bring fresh and diverse worldviews and networks to research projects. Independent scholars often bring a community-oriented and collaborative approach to their work, which is helpful for tackling pressing transdisciplinary social issues. For students and mentees, independent scholars can provide connections to valuable field experiences, practicums, research apprenticeships, and career-development opportunities. In comparison to their academic colleagues, many independent scholars have more time flexibility, and are less prone to being influenced by typical academic incentives (e.g., [publish or perish](#)). As such, independent scholars often demonstrate long-term thinking in their research, and may be more motivated to work on research that they feel personally inspired by.

4. What is an independent scholarship institute (ISI)?

An ISI is a legal entity or organization (e.g, a nonprofit) that offers an affiliation for people conducting independent scholarship. ISIs can take the form of research institutes, scholarly communities, cooperatives, and others. Different ISIs can have different goals, such as emphasizing work within a specific domain or developing different ways of doing scholarship. Many ISIs exist solely online, which allows them to function in very low-cost ways while retaining a broad diversity of members. Independent scholarship institutes differ from professional societies, which do not provide an affiliation for individual researchers.

5. Why does a purportedly independent scholar need to be affiliated with an institute?

As the Ronin Institute [explains](#), federal grant agencies and many foundations in the United States restrict their support to individuals affiliated with legally recognized classes of institutions, such as nonprofits. For individual donors, donations made to independent scholars via nonprofits are tax-deductible. Being affiliated with a nonprofit dedicated to supporting independent scholars enables those scholars to access the funding needed for research. In addition, many independent scholars find [value](#) in being part of a community of like-minded individuals with whom they can collaborate and share experiences and expertise.

6. What are some examples of existing independent scholarship institutes?

- [Canadian Academy of Independent Scholars](#) (Canada)
- [Independent Scholars Association of Australia](#) (Canada)
- [Slowopen Science Laboratory](#) (France)
- [Campus Orléon](#) (Netherlands)
- [Institute for Globally Distributed Open Research and Education](#) (Sweden)
- [Complex Biological Systems Alliance](#) (United States)
- [Institute for Historical Study](#) (United States)
- [Integrated Behavioral Health Research Institute](#) (United States)
- [Minnesota Independent Scholars' Forum](#) (United States)
- [Ronin Institute for Independent Scholarship](#) (United States)
- [San Diego Independent Scholars](#) (United States)
- [Postdoctoral Institute for Computational Studies](#) (United States)
- [Princeton Research Forum](#) (United States)

7. How do ISIs differ from universities?

Universities are designed to support large complex grants requiring considerable infrastructure and full-time support staff; their incentive structures for faculty and students mirror these needs. In contrast, research conducted through an independent-scholarship model is often part-time, inexpensive, and conducted by

already trained researchers with little more than a personal computer. With their mostly online structures, ISIs can be very cost effective. They have agile and flexible frameworks, with limited bureaucracy and fewer competing priorities. ISIs are best positioned to manage grants that stand alone, can be administered with lower indirect rates, require little physical research infrastructure, and fund individuals partnering with collaborators at universities. While [toxic academic environments](#) often push [women](#) and minority groups out of universities and academia, agile ISIs can take swift and decisive action to construct healthier work environments that are more welcoming of non-traditional career trajectories. These qualities make ISIs great places for testing high-risk, novel ideas.

8. What types of collaboration agreements could traditional knowledge-economy institutions enter into with ISIs?

Options include:

- Agreements to share [library resources](#).
- Multi-institution [consortia](#), including consortia established to serve specific regional missions. Here are [examples of US consortia](#).
- [Memoranda of understanding](#) that formalize a variety of institutional-level collaborations, such as collaborations in which university-run Institutional Review Boards (IRB) for research ethics review serve as external IRBs for other types of entities.
- [Cooperative Research & Development Agreements \(CRADAs\)](#) providing avenues for non-federal parties to access the physical research infrastructure that exist at federal laboratories.

About the Author



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