

## From Research to Reality: The Personal Cost of Academia

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For years, I equated success with academic milestones - publishing papers, securing grants, and achieving career goals. However, during a recent career workshop, I used a mind map to visualize and connect our ideas, confronting an uncomfortable truth: while the professional goals were well-defined, my personal lives were notably absent. Relationships, family, and hobbies had all been sidelined in the relentless pursuit of academic success.

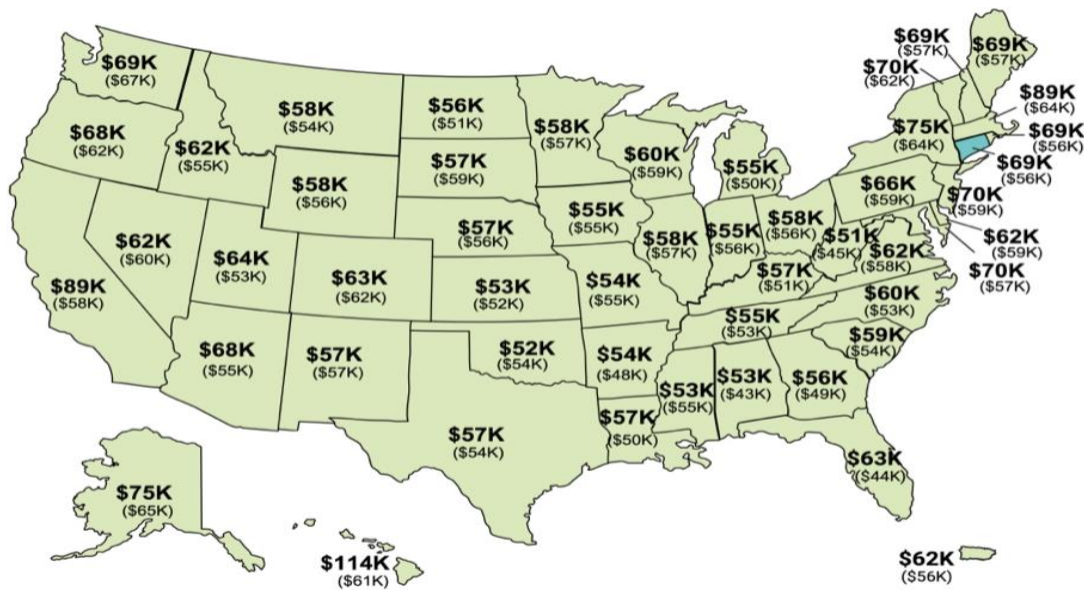
Academia feels like a relentless treadmill, where "publish or perish" often dictates career longevity. Since graduate school, the pressure has only intensified. The demands of lab work leave little room for meaningful personal interactions, and by evening, many of us are emotionally drained, making it difficult to engage outside research.

### The Hidden Costs of Passion

Research and mentoring bring immense joy, but the demands of the postdoctoral role, coupled with visa restrictions, come at a personal cost. In college towns like New Haven, postdoc stipends barely cover basic expenses- a reality many face. According to the [2024 National Postdoctoral Association survey](#), more than 70% of postdocs report financial hardship, with international scholars disproportionately affected. International postdocs, who constitute over 50% of U.S. postdocs ([NSF, 2023](#)), often face salary disparities despite high research productivity

([Research Policy, 2023](#)). The cost-of-living-adjusted salary gap between postdocs in the least and most expensive U.S. cities is 29%, exacerbating financial strain.

Visa restrictions further compound these challenges. Most institutions favor J-1 visas, effectively trapping researchers in academia and rendering industry transitions nearly impossible. Although the O-1 visa exists, its stringent criteria place it out of reach for most, offering little hope for an alternative. Moreover, many institutions require postdocs to spend nearly a decade on J-1 and H-1B visas before considering green card sponsorship- apparently as a safety net given the lengthy processing times for scholars from countries such as [India](#) and China, who comprise most international postdocs in the U.S. But this prolonged limbo stifles career growth and undermines long-term stability, forcing talented scientists to put their futures on hold. Institutions should step up by offering better visa options or directly sponsoring green cards. Obtaining an H1-B as a postdoc initially is difficult or [transitioning to H-1B](#) as a postdoc is often challenging due to inconsistent institutional policies and lengthy processing times. For example, the [University of Pennsylvania](#) typically sponsors H-1B visas only in exceptional cases, while institutions like [Stanford](#) and [Yale](#) primarily reserve them for faculty-level positions, imposing strict limits that increase stress among postdocs.



**Figure 1:** Shows the disparity in postdoctoral salary across the US. The 2024 Annual Average Cost of Living post-tax calculated by the Council for Community & Economic Research (C2ER). Data adapted from the Missouri Economic Research and Informational Center (MERIC) with the current average salary pre-tax in the parentheses as reported by on a volunteer basis and from various online recruiter platforms.

**Note:** the data is based on voluntary reporting, *may have inherent biases, inconsistencies, or gaps.*

[A survey by Nature](#) found that 45% of postdocs experience high stress, while 33% struggle with work-life balance, contributing to burnout and reduced research productivity. Financial pressures exacerbate these challenges, not only affecting individual well-being but also diminishing research quality and long-term academic retention. These issues have worsened in recent years, as the rising cost of living outpaces stagnant postdoctoral salaries. According to the Cost-of-Living Index (COLI) from C2ER, published by the [Missouri Economic Research and Information Center \(MERIC\)](#) living expenses in many regions exceed the average postdoc salary, leaving researchers in high-cost cities struggling to meet basic financial needs. Furthermore, most postdocs lack retirement benefits, leaving them financially vulnerable despite years of specialized training. These structural deficiencies reinforce systemic inequities, disproportionately impacting postdocs from lower-income backgrounds and limiting diversity in academia. While institutions

may achieve short-term savings by underfunding postdoctoral positions, these costs are ultimately offset by increased turnover, recruitment expenses, and the loss of highly trained researchers.

The long-term consequences of financial instability are evident in career trajectories. A recent study in [Proceedings of the National Academy of Sciences](#), analyzing 25 years of data from approximately 45,500 researchers across 19 disciplines, found that over 40% of postdocs leave academia. Key predictors of faculty success include securing a heavily cited "high-impact manuscript" during the postdoc, shifting research topics between the PhD and postdoctoral period, and international mobility after the PhD. However, for many the financial constraints can severely limit these opportunities- restricting conference travel, research independence, and relocation options- thus reinforcing barriers to academic career advancement. Without structural reforms to

improve postdoctoral compensation and support, financial precarity will continue to erode the future faculty pipeline, weakening scientific progress and innovation.

### **A Call to Action for Institutions**

To address these challenges, institutions must reevaluate policies that undermine postdocs' financial and career stability. [National Postdoctoral Association \(NPA\) recommends](#) offering longer-term contracts, improving supervisor-postdoc matching, and creating platforms for postdocs to influence institutional decision-making. Additionally, streamlining visa processes, particularly for international scholars, and expanding career development programs will help postdocs transition more smoothly into permanent roles.

Institutions must prioritize postdoc well-being to foster a more sustainable and productive research environment. Given the stress and burnout associated with job insecurity, mental health support and work-life balance initiatives should be emphasized ([Nature, 2025](#)). Comprehensive career development programs, including mentorship opportunities, industry collaborations, and skill-building workshops, will better prepare postdocs for diverse career paths

I've started exploring careers outside academia- roles in biotech, pharma, or consulting- that allow me to leverage my skills in intellectually stimulating and financially stable environments. Yet, I still feel a strong pull toward academia. I dream of becoming an assistant professor, a role that would allow me to continue mentoring and

beyond academia. Promoting inclusivity and equity in recruitment and advancement will reduce disparities and contribute to a more supportive research community.

Offering competitive salaries and benefits, along with transparent communication between postdocs and administrators, is essential to addressing postdoctoral concerns. Institutions must align policies with postdocs' needs through three key strategies: (1) [revising compensation packages to ensure financial stability](#), (2) [realigning policies on career development, mentorship, and advancement to recognize postdocs' contributions](#). These changes will create a more sustainable and equitable academic environment, retaining top research talent.

### **Redefining Success and Exploring Alternatives**

Lately, I've been rethinking what success means. While I've always loved the thrill of scientific discovery, I've come to realize that there's more to life than chasing the next paper or grant. To me, success now means integrating a fulfilling career with a balanced personal life. The pandemic reminded me of the value of time with loved ones, personal health, and simple joys like traveling or reconnecting with friends.

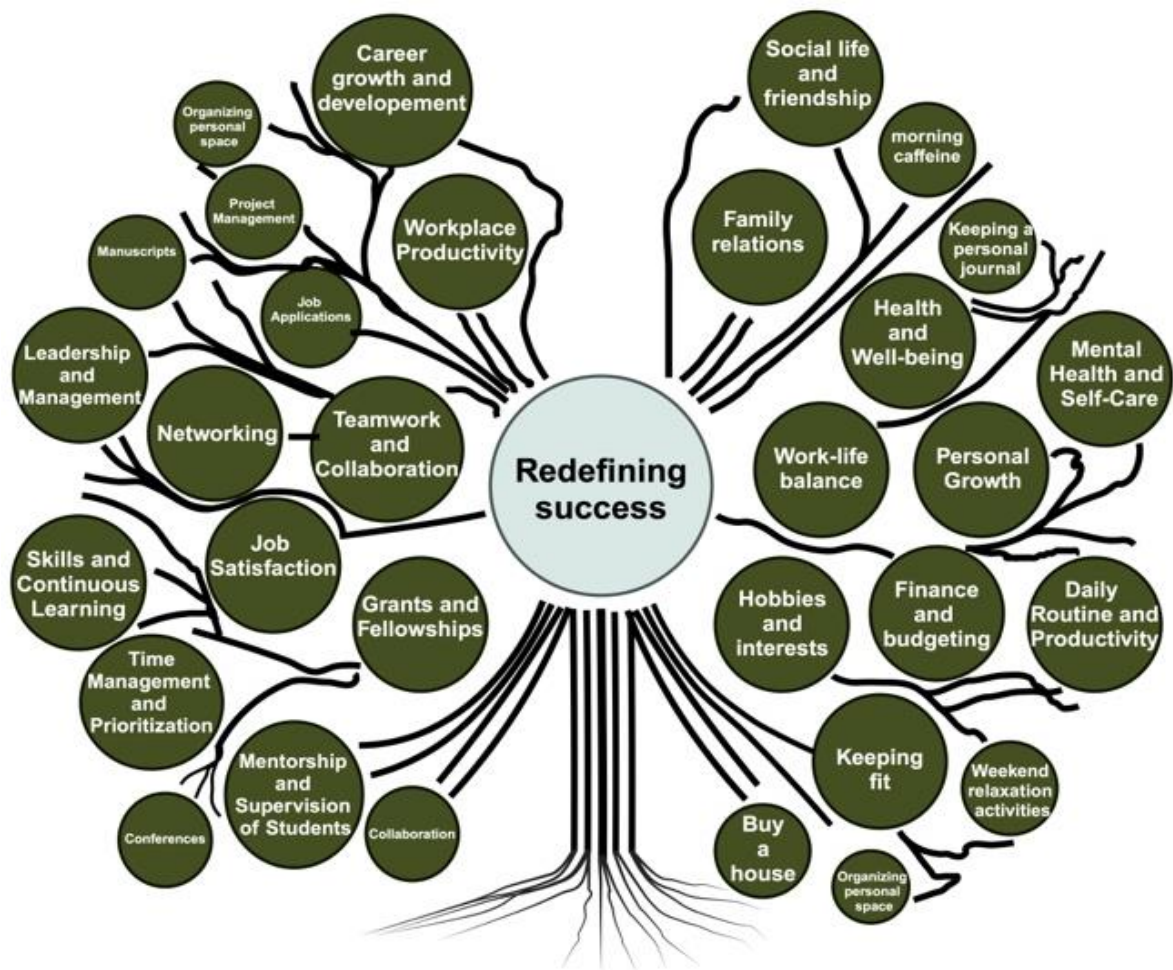
researching while building my own lab. However, I am acutely aware of the challenges- securing funding, managing time effectively, and maintaining a healthy work-life balance. If I pursue this path, establishing clear boundaries early on will be essential to prevent my personal life from falling by the wayside again.

## Creating a Balanced Career

Making this transition hasn't been easy. I've actively sought out resources, career workshops, mentorship, and networking events to better understand opportunities beyond academia. I've joined organizations like ASBMB and the RNA Society, participated in resume-building workshops, and reached out to those who have made similar transitions. Slowly but surely, I'm

and leadership experience - an inspiring example of how we can shape our careers while contributing meaningfully to the scientific community.

For now, I'm focusing on institutions and companies that support immigration sponsorship, aligning my career goals with



**Figure 2:** Diagram showing a re-defined mind map for both professional and personal goals

building a roadmap that aligns my professional goals with my personal values (see Figure 2). Postdoc-led initiatives like *JoLS* and *JoLS-Pub* have also caught my attention. These platforms empower postdocs to publish article summaries and serve as editors, offering valuable publishing

practical realities. The mind map workshop was a turning point, reminding me that a fulfilling career isn't just about professional success- it's about achieving balance. Redefining success to include personal well-being is essential- not just for professional fulfillment, but for crafting a

future where both my career and personal life thrive.

**Authors**

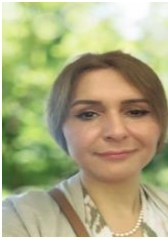


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