



Ph.D. student Omar Florez (right) explains a project to David Garcia, Marianna Sledzinska, and fellow Ph.D. student Francisco Cespedes.

Catalan Institute of Nanoscience and Nanotechnology

## REFLECTIONS IN DIVERSITY

# Navigating a Career in Research

What does it mean to “make it” as a woman in research?

**Clivia M. Sotomayor Torres** shares her thoughts.

**D**iversity questions surrounding “making it as a researcher” as a non-European woman of color have been unavoidable in the retention and progression steps in my career path. Over the course of my career, I moved several times within the U.K. and Europe searching for the right academic home—a place where I would feel happier in the pursuit of knowledge and mentoring my group.

Reflecting on this path, I have come to the conclusion that a career in research is like a project. It’s long term, requiring planning and prioritization. It has a trajectory—one that will probably include setbacks. And it is subject to unwritten, external factors, such as inequity and comparative advantage, that can affect its progression.

## All part of the plan

Why the “project” concept? Because a career path needs to be outlined and prioritized within a person’s “project ecosystem.” Just think of all the steps we take when planning a research or academic project, and apply that more broadly to your career as a whole. Not all steps are successful—the project can bite the dust at the proposal stage. But we get up, rethink, and write another, better one.

In any case, it is crucial to be aware of the external factors, like competition, comparative advantage and timeliness, as well as the internal ones, such as our own degree of ambition and curiosity. Will I be happy with a reasonable academic endeavor, or only if I become a high-flyer?





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Is the proposal for my new project so exciting that it will be my top, or almost top, priority for some years?

And what about the “other” factors—the less obvious but significant sociocultural realities? I would argue that they are part of the project planning. Be aware not only of the facts, statistics and trends at your university or institution, but also draw from the experience of senior women in the department or research center about the unwritten factors and their dynamics.

### Academia's dynamics

As a child with academic parents, I was a great believer in education as a means of social mobility to better society. Now, I am not so sure. Social class, gender and the importance of social contacts are factors that play roles of varying importance in someone's career journey. Their importance may depend on the particular society or region—but they play a determinant role nevertheless, especially in countries with fewer resources for the academic career.

The change from the Humboldtian University model, emphasizing comprehensive, well-rounded learning for its own sake, to the Market University model that prevails today, which focuses on education as a business, has had a huge impact on academia—and, I suspect, a negative impact on women working in the academic sphere. This change turned the academic ethos upside down in terms of values and practices, with concepts like “students as customers,” managers instead of self-administration, key performance indicators and metrics. In essence, the transition puts money above the values of knowledge, education and society.

Within the Market University concept, women—who often bring in less money, for a number of reasons—are likely to be disadvantaged

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at the retention or progression stage of their careers. I wish that I was wrong, but these are facts that should be acknowledged, and their dynamics must be understood at a national, regional, local and institutional level or diversity will suffer. That is why we have professional organizations, trade unions and networks.

I argue that a career in research needs to be seen as the sum of what the person has achieved and has the potential to achieve in the future—a complete picture. However, this requires that institutions value and support different career patterns, based on personal choices prioritizing the various “projects” along the way. To accomplish this, we need to continuously create new tools for recruitment and promotion practices.

Without a coordinated change to the system, I fear that this culture of insufficient consideration to different career paths will continue to work strongly against women in research.

### Your own project priorities

Nevertheless, taking all of these factors and hurdles to a research career into account, if one thinks in terms of projects, then success may just be a matter of managing your priorities. “There is a time for everything,” we have all heard the saying. Yet there is no avoiding making hard choices at the turning points in our lives.

There is little room for complacency, and little room for serious doubts about the top-priority project while it is running. It needs one's complete attention, as some of the projects are “make or break” at that time and place in one's life. Therefore, I believe that it is advisable to have sorted out your analysis, personal considerations, doubts and reflections in advance.

Yet there is also a place for longer-term reflection. Sometimes, when I think about diversity issues, I become afraid that—having been in a predominantly male environment for more than 40 years—I have subconsciously internalized some of the very same values that hinder diversity. That's a danger for which we all should be vigilant, and on which we should reflect often. **OPN**

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