

industry or professional-development experience to provide the sort of training that MBA students receive as a customary part of their degree.

If a greater proportion of PhD graduates were to transition into the business sector, however, it could create pressure on universities to provide such training and on funding agencies to require it.

In the meantime, this training gap can easily be filled by taking short courses or programmes in business skills. Many are available online as massive open online courses, and some offer certifications.

Still, even more so than the paucity of professional-development programmes for PhD students, the greatest barrier to a high-paying position in the business sector is your personal beliefs about what you are qualified to pursue.

As someone with a PhD background, you probably view yourself foremost — even solely — as

a research scientist. **“The business world is full of delicious, complex, intellectually exciting problems.”**

rather than exploring what they are capable of doing.

And as a PhD graduate, you may believe that academia is the only sector in which you can enjoy intellectual freedom and work on challenging problems. This is incorrect. The business world is full of delicious, complex, intellectually exciting problems. Their resolution can yield enormous value, both to those who solve the problems and to society.

Some people are beginning to recognize this reality. Graduate students and postdocs are organizing their own professional-development programmes, sometimes recruiting business-school professors to help them (see *Nature* **485**, 269–270; 2012).

And more businesses, especially technology-related companies, are either being launched by graduates of doctoral programmes or have a PhD holder on the founding team.

As more PhD students and graduates learn about these opportunities from their brethren, we can expect further interest in, and greater pursuit of, business careers by doctorate holders. MBAs, beware. ■

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## TURNING POINT

# Diversity ruling

*Lia Corrales, a postdoctoral researcher at the Massachusetts Institute of Technology (MIT) in Cambridge, is fighting for equality in astronomy — a field that has been plagued by allegations of harassment and low diversity. Last December, Corrales and her colleagues wrote an open letter to the US Supreme Court after some judges questioned whether a federal policy known as ‘affirmative action’ has helped people from minority groups to become scientists.*

### What happened at the Supreme Court?

The justices were debating the merits of affirmative action, which aims to protect against discrimination on the basis of race or gender, in higher education. Justice Antonin Scalia noted that some people contend that the policy does not benefit African Americans because they do better at a less-advanced, slower-track school. And the chief justice, John G. Roberts Jr, asked what “unique perspective” a minority student could bring to a physics class.

### Why did you write an open response?

I was angry that the justices’ comments implied that affirmative action has no value, and knew that friends were upset, too. Astrophysicist Josh Tan, a colleague of mine, and I discussed writing a letter because, as physicists and astronomers who care about diversity, we’re not doing our job if we don’t stand up for affirmative action. In the end, five of us wrote it. I put the letter online at [eblur.github.io/scotus](http://eblur.github.io/scotus) and mailed printed copies to the justices on the case. We gathered more than 2,400 signatures.

### Describe your pursuit of astronomy.

As a kid, I loved black holes and thought Stephen Hawking was the coolest, so it seemed natural to study physics and astronomy. While I was an undergraduate at Harvey Mudd College in Claremont, California, roughly one-third of the students there — but probably half of my physics class — were women. And there were plenty of women at Columbia University in New York, where I earned my PhD studying interstellar dust. But when I came to MIT, where only 3 or 4 of about 30 postdocs at my institute were women, it became apparent how few of ‘me’ there were.

### When did you first work on diversity issues?

As an undergraduate. The diversity office at Harvey Mudd College asked me to help start a branch of the US Society of Hispanic Professional Engineers. But I also wanted to make a difference to aspiring university students, so we connected with a preparatory programme



for students who would be the first in their family to attend university. I now realize that I’m passionate about this issue because of my own Latin-American background and my angst about affirmative action.

### You are part of a Facebook group called Equity and Inclusion in Physics and Astronomy. Can you tell us more about it?

I’m not a founder, but it started out as a ‘Women in Astronomy’ group on Facebook, and evolved into something that was about more than just gender. There are many ways in which people experience discrimination, so now it’s more of an umbrella group to increase diversity.

### What else have you been involved with?

Last summer, an Inclusive Astronomy conference was held at Vanderbilt University in Nashville, Tennessee — an institution where several faculty members have tackled diversity issues. It was an amazing event. There was so much acceptance that we must confront stereotypes and move beyond the ways in which we allow or contribute to discrimination.

### Are things beginning to change in astronomy?

There is a critical mass of people who are talking about diversity and inclusivity. One recommendation from the conference was to stop the requirement for minimum test scores for admission to US graduate schools. This stance has already been adopted by the American Astronomical Society — a step forward. There’s still a long way to go, but I feel more inspired and empowered than I have in a really long time. ■

INTERVIEW BY VIRGINIA GEWIN

This interview has been edited for length and clarity.