### TOOLS AND TESTS Type by type

**Myers-Briggs Type Indicator** Widely used test. Classifies personalities into 16 categories on the basis of the traits of extrovert and introvert, sensing and intuition, thinking and feeling, and judging and perception.

#### NEO Personality Inventory Based

on the 'Big 5' model of traits neuroticism, extroversion, openness to experience, agreeableness and conscientiousness. Used mostly in psychology research.

**Hogan Personality Inventory** Also based on the Big 5 model. Used mainly for career development and hiring.

**Strong Interest Inventory** Assesses interests and working styles, and compares them to the interests of people in a range of vocations. Used mostly by undergraduate students seeking advice on career choices. C.L.

'boot camp' for new faculty members offered by the US Society for Developmental Biology in Bethesda. When she told her students about it, they became interested, took the test and asked students joining the lab to take it as well. The assessment has become part of the culture of the Cornelison lab. "It's like a getting-to-know-you game," says Cornelison: it breaks the ice and helps new students to integrate rapidly into the lab.

#### **PRESCRIPTION PRECAUTION**

People who administer personality assessments are quick to point out that they are not meant to be deterministic or prescriptive. The results should not be used to pigeonhole someone, or to tell them what kind of job they should have or whether they can succeed at it. The assessments do provide some insight into what kind of person the test-taker is, but only as one data point to be used in overall career guidance and development. "Myers-Briggs results provide just one window through which you can look at your overall capabilities," says Lindstaedt.

Milgram emphasizes that there is no 'right' or 'wrong' personality type in science. No one needs to change their personality to be an excellent scientist. "It's about how you manage your behaviour," she says.

**Corie Lok** *is the editor of* Nature's *Research Highlights.* 

# TURNING POINT Sohini Ramachandran

Sohini Ramachandran, a population geneticist at Brown University in Providence, Rhode Island, received two high-profile awards this year. In June, she was named a Pew Scholar in Biomedical Sciences by the Pew Charitable Trusts, based in Philadelphia, Pennsylvania; and in February, she received a fellowship from the Alfred P. Sloan Foundation in New York. She plans to use the grants to distinguish herself in a fast-moving field.

## How did you realize you wanted to combine maths and biology?

It began when I was in high school. Marcus Feldman, an evolutionary biologist at Stanford University in California, let me do a project in his lab so that I could enter what is now the Intel Science Talent Search, a pre-university research competition. I studied genetic variation in Arabidopsis thaliana, the plant equivalent of the lab rat, and found that the species moved into the Americas 30,000 years ago, at the same time as humans. I got fourth place. Later, as a computational-science undergraduate at Stanford, I attended a lecture by Feldman in which he estimated the number of females missing from China's population as a result of the onechild law. I realized how incredible it was that we could use maths to learn so much about human behaviour. I have since used genomics to study topics from historical patterns of human migration to whether genetic variation accounts for differences in cancer-treatment outcomes.

#### What was your first difficult career decision?

Whether to stay at Stanford for my graduate research. Everyone told me to go somewhere else to get broader experience, but I stayed and Feldman became my PhD adviser. I wanted to stay with him because he had a strong history of training students who go on to get tenuretrack jobs and make an impact on the field.

#### How did you come to work at Brown?

I was lucky enough to have multiple offers, but my husband needed an academic post nearby, which can take a lot of time to work out. I found that this two-body problem has become so common that administrators expect it. My husband is a historian, and Brown came up with the best offer — a multi-year, non-tenure-track position. We had been living in different states since we met, so being at the same institution for the first time was important to us.

What is your current biggest career challenge? Being a junior faculty member in human population genomics. The field is much more



competitive than it used to be. All the data are coming from large consortia, such as the 1000 Genomes Project Consortium. Junior people just starting to establish their research credentials can have difficulty joining such consortia. I have always worked on publicly available data, so the biggest change to my research programme is trying to differentiate my work by generating new whole-genome and exome data and analytical methods. My two latest funding sources are very helpful because this work is expensive. Building collaborations is a new frontier for me, but I am finding colleagues at Brown — from anthropologists to clinicians - who have unique data sets to which I can apply my methods.

#### Did you have female role models in academia?

Yes, my mother and sister. My parents are statisticians at California State University in Sacramento, and my older sister is a pathologist at the University of California, San Francisco. They had a huge influence on me while I was growing up and as I got into applied maths. As a result, I didn't think about gender or the fact that there were few women in my classes.

#### Do young women seek you out as a mentor?

I get a lot of interest from both female and international students, and I mentor a number of undergraduate women. I understand that it can be difficult to pursue a career path without role models, and I am glad if I can provide an example for someone. Mentoring is a huge part of why I want to be a professor, and of what I plan to do in future.

#### INTERVIEW BY VIRGINIA GEWIN