

The hosts of the podcast Why Aren't You A Doctor Yet? aim to reach a multicultural audience.

Lathbridge's team meets in person to record shows together. "We feed off each other's energy," he says. "It's like having a conversation with your mates, and so getting us all into one room, I think, is paramount."

To reach listeners, creators should promote their podcasts through social media and post show notes or transcripts on the podcast website to increase the chances of being found through Google. Scientists with their own podcasts can ask producers of similar podcasts to mention their show and offer to do the same in return. Osborn adds a slide about *Exocast* to the end of most of his conference presentations. And inviting guests with large social-media followings can boost exposure.

New podcast creators might get disheartened by low download numbers, but "it's important to remember why you're doing a podcast in the first place", Arney says. Some scientists want to improve communication skills, work with friends or just have fun. In those cases, Arney says, researchers can measure success on the basis of whether they feel proud of their episodes, have improved the podcast over time and are enjoying the process.

Encouraging audience feedback through social media or e-mail can motivate podcast producers to keep going, even if the number of listeners is relatively small, Mac-Kenzie notes. After *The Taproot* released an episode about mental-health issues among graduate students last May, some researchers expressed appreciation on Twitter that the show had addressed the topic. And criticism can spur improvement. One listener tweeted about the lack of ethnic diversity featured on *The Taproot*, which prompted Haswell and Baxter to increase the range of guests in the next season.

REVENUE

Some creators get funding or other support for podcasts. The ASPB pays expenses such as the Cast recording-service subscription, Haswell says. Lathbridge's team won a £1,000 (US\$1,300) outreach grant from the Biochemical Society in London. The team used some of the funds to produce five episodes with biology themes. In 2018, Arney started a podcast for The Genetics Society in London called *Genetics Unzipped* and decided to host it on Acast, a podcast platform that takes care of securing advertisers and gives creators a cut of the revenue. (*Working Scientist*, the *Nature Careers Podcast*, and the *Nature Podcast* are also on Acast.)

There are a few avenues open to researchers who want to pursue podcasting professionally. After her PhD programme in developmental genetics, Arney got a job in science communications at Cancer Research UK in London; her duties included making a podcast. She now works as a freelance writer, broadcaster and podcast producer. Ballance, who was trained in zoology, started as a researcher for wildlife documentaries, worked her way up to producing and directing and then switched to radio. As for pay, \$250-500 a day is typical for freelance audio production, Arney says. Ballance estimates that radio journalists in New Zealand make about \$35,000-40,000 per year.

Scientists might feel intimidated by the thought of entering the booming podcast market. But there is still space for more voices, Haswell says. "I don't feel like we've reached saturation," she says. "Nobody should feel like there isn't room for another point of view."

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GRADUATE STUDIES

Foreign enrolment falls

The number of international students enrolling in US graduate programmes is falling, according to reports from the US Council of Graduate Schools (CGS) in Washington DC and the Institute of International Education (IIE) in New York City. In a survey of 619 institutions, the CGS found that the number of international students enrolling in US graduate studies for the first time in autumn 2017 was 3.7% lower than the equivalent number in 2016. The IIE, which tracks data from the US National Center for Education Statistics, found that the total number of international students, both new and continuing, in US graduate programmes had fallen by 2.1% between the 2016-17 and 2017-18 academic years. CGS president Suzanne Ortega describes the decline as worrying and thinks that the current policy climate regarding US visas and immigration might have contributed to the falling numbers. The decline could impair the global research enterprise by hindering institutions' efforts to attract top talent and by limiting exposure to diverse ways of thinking, she adds. Continuing declines in international enrolment — which comprises about 20% of graduate intake nationwide - could take a toll on institutional budgets.

DIVERSITY

Barrier breaking

The Royal Society of Chemistry (RSC) in Cambridge, an association for chemical researchers in the United Kingdom, aims to plug the "leaky pipeline" of women in academia. The society's plan is to help more female chemists to remain in the enterprise and to progress to senior positions. In its Breaking the Barriers report, the RSC says that female chemical scientists tend to leave academia at early-career stages — and that those who remain do not ascend to senior grades in the same proportion as their male counterparts. Women comprise just 9% of UK chemistry professors. The RSC notes that female chemists receive mostly short-term funding and contracts; that the academic culture is opaque about recruitment and promotion practices, and allows bullying and harassment; and that there is a lack of part-time and flexible working options to accommodate carers' responsibilities. Among other strategies, the RSC aims to launch grants this year for those who are carers, establish a helpline for reporting bullying and harassment, and annually recognize chemistry departments that significantly improve their inclusion and diversity practices.