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A visit to KAUST convinced Mark Tester, pictured with PhD students, that it was the right place for his work on plants in saline environments.

Looking past the Harvard headlights

Young universities need to identify their unique attributes and communicate their value to ambitious researchers. By Benjamin Plackett

lanked by the Red Sea and the Arabian desert, the campus of the King Abdullah University of Science and Technology (KAUST), dotted with palm trees, sits about 100 kilometres north of Jeddah in Saudi Arabia. It's hard to imagine a more picturesque spot for scientists to conduct their research.

A US\$10-billion starting endowment was another lure for potential staff when the university opened its doors in 2009. Yet,

international observers were sceptical. *The New York Times* called KAUST a "gamble" and questioned whether an institution in which, contrary to the country's custom, men and unveiled women mingle, could survive. Would researchers abandon posts at established universities in countries with a higher-education tradition, to work at an unknown start-up in an ultra-conservative kingdom?

Around the world, young universities – 50 years or under, in Nature Index's terms

– grapple with their own version of the same question: how to attract researchers? They share a need to be proactive, says Paul McCarthy, co-founder of the League of Scholars, a consultancy firm in Sydney, Australia that uses data analytics to help universities with research strategy and recruitment. "Our clients come to us and say they want to recruit a star," he says. "The elite institutions don't have to try because people will always apply to them."

John Muckle, as a partner at the recruitment consultancy firm Isaacson, Miller based in Boston, Massachusetts, specializes in finding scientists and high-level administrators for clients such as KAUST. He says it's a lot easier when there's something unique about a university, "You have to sell the idea of a research environment that isn't possible anywhere else," he says. One way to do this is to give up on trying to be everything to everybody. Universities such as Cambridge and Princeton, that offer programmes in almost every discipline, already have a centuries-long head start in the market, says Muckle. "Instead, young universities should think about the cutting-edge areas that they might pursue," he says. "Institutions with the ability to make these strategic choices have a nice sales pitch in terms of articulating their values and showing that they're not trying to duplicate something that's already great somewhere else."

This approach is exactly what enticed one of KAUST's most cited researchers, the biologist Mark Tester, to join the university. He's looking into the genetic underpinnings of why some plants thrive in saline environments whereas others don't. The answers could inform efforts to improve crop saline tolerance and allow farmers to irrigate with salty water. He says it was a site visit that convinced him to work at KAUST. "KAUST is well resourced to begin with, but they chose to focus those resources into research on food, water, energy and the environment," says Tester. "Ithought that was fantastic and it attracted me to come."

The personal touch

"You don't advertise job vacancies blindly." says Christopher Barner-Kowollik, deputy vice-chancellor of research at the Oueensland University of Technology (QUT) in Brisbane, Australia. "You work your contacts in the field beforehand. The personal touch is very important to make sure you get good-quality applicants."

It takes perseverance too, says Way Kuo, president of City University of Hong Kong (CUHK), which started in 1994. "We're different to more established places. We must be proactive and persistent. I call people personally and keep in touch; it can take four years for me to get people out here from Europe and the United States."

Nikolaus Osterrieder, a virologist and public health researcher, is proof that Kuo's patient approach pays dividends. Kuo first met Osterrieder in 2013 when he was on sabbatical from the Freie Universität of Berlin at Cornell University in Ithaca, New York, one of CHUK's strategic partners. "After numerous conversations, he was finally offered a position in 2014. However, he had suffered a head trauma after a bike accident and had to decline our original offer for health reasons," says Kuo.

But, the pair kept in touch, and Kuo rekindled the recruitment conversation in 2019. which eventually led to Osterrieder accepting the offer. Faculty recruitment is not easy, but can be particularly challenging when it comes to luring accomplished scientists, often from world-leading universities, says Kuo. "Patience and persistence are key."

This customized approach shows that young universities understand one of their main selling points, says McCarthy: that they prize their researchers. "It's often better to be a big fish in a small pond than go to Harvard, Oxford, or any other older big-name university, especially early in your career."

"Academics, by and large, aren't in it solely for the salary, so you have to look at what else you can offer," says Nic Smith, provost of QUT. "You have to be prepared to listen and respond to their needs so they can do their best work." That kind of support could include factors such as reduced bureaucracy for in-house funding applications: help finding industry collaborators; or just a stated understanding that success in research takes time and isn't limited to publishing in high-impact journals. A job at a more established institution, meanwhile, can come with a lot of pressure to prove oneself in a publish-or-perish atmosphere.

It was a medical diagnosis that pushed Zuankai Wang, a mechanical engineer, to move from the United States to Hong Kong, seeking a more productive and less stressful work environment in which to pursue his career. He had previously held research positions at Columbia University, New York and Boston University. Massachusetts. But when he received a cancer diagnosis in 2009, he re-evaluated his career path. "I really wanted to become a professor before my life ended," he says. The offer of a tenure-track assistant professorship came at the right time.

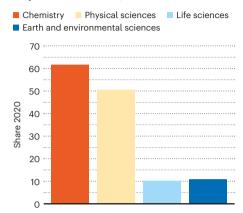
"In the US, they told me what they wanted me to work on, but to be a good researcher I think you have to research what you want to," he says. After speaking with the acting head of the mechanical engineering department, Wang believed that CUHK was as keen as he was to advance his research, and happy to let him dictate which projects he wanted to go after. "At City there was more of an attitude to help young people make their career." Wang subsequently made a full recovery, but has no regrets about the move. "I have ownership over my research here and my achievement belongs to City University, too. I want to stay and contribute more."

Benjamin Plackett is a freelance writer based in Dubbo, Australia.

King Abdullah University of Science and Technology, Saudi Arabia

NI young university rank: 6 NI academic rank: 113

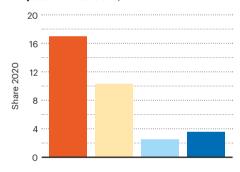
Subject Share breakdown, 2020



Queensland University of Technology, Australia

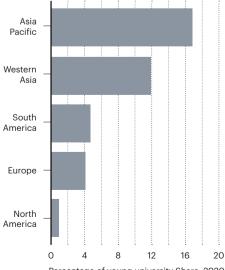
NI young university rank: 50 NI academic rank: 408

Subject Share breakdown, 2020



YOUTHFUL OFFERING

Young universities contribute far more to their regions' total Share in the Asia-Pacific region and western Asia, reflecting higher levels of new investment in higher education than in the more established research systems of Europe and North America. China has the greatest number of young universities in the Nature Index, at 68.



Percentage of young university Share, 2020