

Science cities

Editorial Simon Baker, Benjamin Plackett, David Payne, Bec Crew, Rebecca Dargie **Analysis** Bo Wu, Catherine Cheung **Art & design** Tanner Maxwell, Madeline Hutchinson, Sou Nakamura, Wojtek Urbanek **Production** Jason Rayment, Ian Pope, Nick Bruni, Bob Edenbach, Paul Glaeser **Marketing & PR** Kimberly Petit, Rice Song, Pinky Zhang, Sam Sule, Zhang Li **Sponsorship and translation** Stella Yan, Sharon Wang, Scarlett Ding, Rebecca Pan, Jolie Wu, Isabelle Yu, Darla Dai, Jiaqi Shi **Publishing** Rebecca Jones, Richard Hughes, David Swinbanks.

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Nature editorial offices
The Campus, 4 Crinan Street,
London N1 9XW, UK
Tel: +44 (0)20 7833 4000
Fax: +44 (0)20 7843 4596/7

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The ability of researchers to move between institutions, especially across borders, is a key driver of success for many nations. This is especially salient with regard to early-career researchers, who often cut their teeth as PhD students abroad before pursuing work elsewhere. Sometimes these scientists return home after establishing careers elsewhere and China in particular is seeing increasing numbers returning (see page 3). Its cities, with their clusters of research and industrial expertise, are reaping the benefits.

An analysis of output in 2021 by leading cities and metropolitan areas in the 82 selected natural-sciences journals tracked by the Nature Index shows Beijing maintaining its position as the world's leading science city (see page 2). Beijing's strong performance in areas such as physical sciences and chemistry could now be helping other Chinese hubs to increase their output of high-quality science through intra-city research collaboration.

Cities in the United States, meanwhile, still lead in life sciences. The data suggest the race for COVID-19 vaccines (see page 9) could have boosted their performance in this area, helping research centres such as New York and Boston to stay in the leading five despite China's surge, whereas the San Francisco Bay Area continues to benefit from its links to Silicon Valley. With travel restrictions, the disruption of the pandemic has, however, proved a challenge for other cities. Australia, and its leading science city of Melbourne, is a key example of resilience being tested (see page 8). Geopolitical tensions are also threatening to undermine the ability to attract researchers. And, as our data analysis of the leading five cities globally shows, the rising cost of living could be the next test for some cities in holding on to scientific talent.

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Simon Baker
Chief editor, Nature Index

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Credit: James Gilleard

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