nature INDEX 2014

CHINA

NATURE, VOL. 516, NO. 7531 (18 DECEMBER 2014)

Index, we are pleased to present a supplement dedicated to results from China, currently the country with the second largest output in the index. Here we analyse a snapshot of results for papers published between 1 January and 31 December 2013, shining a spotlight on the cities, institutions and individual researchers who have contributed to some of the highest quality research during that time.

The Nature Index is already attracting comments about the window it provides into the scientific literature, and we hope to further the conversation here. The concept is that, by looking at articles from only a small group of journals — those most favoured by researchers — we can offer a new level of analysis that is more targeted and hence more malleable.

We want users to be able to tease out patterns of research, look at trends, analyse individual strengths, and investigate how institutions and countries collaborate.

In this supplement, we start by looking at China as a whole — at its scientific collaborations with other countries, at the spread of its output across four main subject areas, and at its top ten contributing cities.

China is dominated by the Chinese Academy of Sciences (CAS), a 60,000-strong research conglomerate,

with headquarters in Beijing. In this supplement, we identify the contributions of the 100-or-so specialized institutes that comprise this research behemoth, looking at the outstanding institutes and researchers within the different disciplines (S56).

We are also able to examine the index data at the city level. Within each city we try to identify hotspots for high-quality research, based not just on output quantity but also on a range of indicators — for example, the number of researchers and the ratio of collaborators — that help put the data in context and allow a more nuanced view of these patterns. However, it is the insights into research at the institutional level that are most revealing. Using the data we are able to drill down to the level of the individual researcher to see who has been most prolific and in what areas (S60).

Our aim with this China-specific supplement is to show the Nature Index's capacity to generate discussion. Every reader of this supplement and user of nature index.com will have their own specific interests and questions to address. We encourage use of the freely-available data to do just that, and welcome any feedback that arises.

Nick Campbell

Executive Editor, Nature

Michelle Grayson

Senior Editor, Nature Supplements

CUSTOMER SERVICES
To advertise with the Nature Index, please visit natureindex.com/support feedback@nature.com
Copyright © 2014 Nature Publishing Group.
All rights reserved.

CONTENTS

S52 CHINA IN NUMBERS

A nation's achievements in graphics

S56 CHINESE ACADEMY OF SCIENCES

An in-depth look at China's scientific leader

S60 BEIJING

Capital cracks down on use of research funds

S62 SHANGHAI

Pharma hub makes strides in life sciences

S64 HONG KONG

Supporting start-ups to keep pace with rivals

GE NAN IING

Ancient tourist hot-spot boosts high-tech sector

67 WIIHAN

Creating a niche in fibre optic technology

S68 HEFEI

Moving into the spotlight with strong basic science

S69 HANGZHOU

E-commerce giant shapes research landscape

S72 CHANGCHUN

Manufacturing base aims for innovation economy

S73 GUANGZHOU

Vested interest in finding disease solutions

5/4 HANJIN

Leveraging discoveries in materials and energy

S75 SHENZHEN

Global genomics powerhouse steps up a gear

S76 A GUIDE TO THE NATURE INDEX

How to get the most out of the Nature Index

S77 NATURE INDEX CHINA TABLES

EDITORIAL: Herb Brody, Michelle Grayson, Rebecca Dargie, Victoria Kitchener, Felix Cheung, Jiajun He. Stephen Pincock. EDITORIAL SUPPORT: Nobuko Miyairi, Larissa Kogleck. ART & DESIGN: Wesley Fernandes, Alisdair Macdonald, Andrea Duffy, Denis Mallet, Chris Gilloch. WEB & DATA: Bob Edenbach, Olivier Lechevalier, Yuxin Wang, Naomi Nakahara, Masamichi Wada, Jyoti Miglani, Akiko Murakami, Takeshi Ouchi, Maxime Fontaine, Jennie Pao. PROPUCTION: Sue Gray, Karl Smart, Ian Pope, Robert Sullivan. MARKETING: Hannah Phipps, Rice Song. SALES: Janet Cen, Stella Yan, George Sun. PROJECT MANAGER: Anastasia Panoutsou. ART DIRECTOR: Kelly Buckheit Krause. PUBLISHING: Nick Camobell. Richard Hughes. David Swinbanks.

NATURE INDEX 2014 CHINA

The Nature Index 2014 China, a supplement to Nature, is produced by Nature Publishing Group, a division of Macmillan Publishers Ltd. This publication is based on data from the Nature Index, a website maintained by Nature Publishing Group and made freely available at nature index.com.

Nature Editorial Offices The Macmillan Building 4 Crinan Street, London N1 9XW, UK Tel: +44 (0)20 7843 4000 Fax: +44 (0)20 7843 4596/7