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This first edition of the Nature Index 2014 Global supplement provides a snapshot of results from the new Nature Index. In this supplement, we turn a spotlight on the countries and institutions around the world that contributed to some of the highest quality research over the previous calendar year.

The Nature Index provides a new way to look at the scientific literature — and to those research organizations that contribute to it. By looking at articles from only a small group of journals, most favoured by the scientific community as a place to publish their best research, we hope to provide 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. The story behind the Nature Index is outlined on page S52.

In this supplement, our analysis includes layers of information from other data sources, for example demographics, national spend on research and development, changes to science policy and funding, and even altmetrics (online and social media coverage), which help put the Nature Index data into perspective. The top level, global results can be seen on page S56.

Drilling down by region (starting with North America on page S60),

we highlight the most interesting patterns in research output in this snapshot of the Nature Index. Within each region, we try to identify national 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.

Focusing down further, we look at some of the notable institutions in each country, and use the Nature Index data to compare and contrast between them, aiming to tease out specific institutional strengths.

Above all, our hope is that this supplement, rather than providing some authoritative analysis, will act as a conversation starter and a nucleation point for ideas for further analysis. Every reader of this supplement and user of natureindex.com will have their own specific interests and questions they want to address. We encourage use of the freely-available data to do just that. And we hope the conversation we have started here will prove useful for researchers, institutions, analysts and policy-makers alike.

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