Science and technology networks in Scandinavia

The dominant science hubs in Scandinavia are akin to the open sandwiches favoured throughout the Nordic region — each country has its own name for, and unique approach to preparing, this delicacy. So, too, with science. Each hub has had different motivations and methods for building up local networks, as articles in this supplement reveal.

Finland invested in centres of excellence for research and development in response to an economic crisis. Stockholm and Uppsala relied on tradition for their base, and a new emphasis on mobility between academia and industry for growth. Medicon Valley was tied together after a bridge opened across the Øresund Sound in 2000, connecting Copenhagen and Malmö. And Norway is pumping oil revenues into research infrastructure, and must balance investment in traditional strengths, such as climate research and aquaculture, with attempts to improve its competitiveness in biomedicine.

But increasingly, scientific leaders in each of these areas are realizing that they cannot go it alone — even though each hub shows signs of expanding, both in terms of academic and industrial research. That realization is reflected across much of Europe. To compete with international juggernauts such as the United States, nations are realizing that they must pool their resources. The European Commission's Sixth Framework Programme for funding research, which came into effect last month, is designed to reward scientists who can build the most effective cross-border networks.

Doing so is especially important in Scandinavia, where the collective population — and research budget — is a fraction of those of Britain, France or Germany alone. Fortunately, the Nordic countries have already begun building what many refer to as 'a network of networks', which they hope will give them the competitive edge. The challenges they have faced and the lessons they have learned in beginning this process will undoubtedly inform scientists in other countries who are embarking on similar journeys.

Although Norway is the most recent Nordic country to start building networks, with the funding of a functional-genomics initiative and 13 centres of excellence this year, it is among the most active and innovative players, chairing the Nordic Council and planting the seed for one of the most sweeping pan-Scandinavian initiatives in the shape of MedCoast Scandinavia. *Nature* is pleased to acknowledge the financial support of Norway's Ministry of Education and Research in producing this supplement. As always, *Nature* carries sole responsibility for all of the editorial content.

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