Australian states compete for biotech primacy

The battle between Australia's second and third largest states for dominance in the biotechnology sector has become acrimonious following the award on May 30 of a new national Biotechnology Centre of Excellence to the Victorian state capital Melbourne. Victoria and its northern competitor Queensland have gone head to head in a microcosm of the battle that is taking place between American states, and between nations, as regional governments attempt to stimulate their economies with "knowledge based" industries.

The Australian federal government's decision to award the center, which attracts federal funding of A$46.5 million over five years, to the Melbourne-led bid from the Centre for Stem Cells and Tissue Repair, drew talk of a backroom deal from one of the country's strongest biotech supporters, Queensland Premier Peter Beattie. He cites speculation that the federal government made a deal to award the biotech center to Melbourne, and the national information technology center of excellence to the New South Wales capital Sydney, to ensure that the country's two largest cities are "looked after," accusing the federal government of ignoring the innovative R&D taking place in Queensland. Australian Minister for Industry Ian Macfarlane dismisses that, saying the assessment of each of the 11 bids was conducted independently of central government, and had been "beyond the personal one-upmanship of the states."

The battle of the states, although brought into focus by the center of excellence tender process, runs deeper than the grab for a one-off federal government grant. Whereas many of Australia's states have developed biotechnology strategies in a bid to attract knowledge-based industries—including New South Wales, Australia's most populous state—Victoria and Queensland are competing most aggressively in a bid to become the "premier" biotechnology center. Victoria is spending A$320 million over four years to implement its biotechnology strategic development plan, which aims to have the state recognized as one of the world's top five biotechnology locations by 2010. The state has also decided to go it alone in establishing a synchrotron, after opting out of a national synchrotron project, and is to build a A$157 million facility on the grounds of Melbourne's Monash University. This aggressive move has been controversial, with the state's auditor-general casting doubt on whether the Victorian government will be able to attract sufficient external funding to bolster its own contribution of A$100 million.

Despite Melbourne's obvious advantages in the biomedical sciences—it is home to 22 medical research institutes, and has particular strengths in stem cell work (thanks in part to the highly regarded work at the city's Monash Institute of Reproduction and Development led by Professor Alan Trounson, who will now run the Centre for Stem Cells and Tissue Repair)—industry observers say Queensland can not be ruled out of the race. Queensland is home to the Institute for Molecular Bioscience, which is regarded as a powerhouse in molecular biology and genomics. US biotechnology company Sequenom's (San Diego, CA) decision in February to locate its Asia-Pacific headquarters in the Comprehensive Cancer Research Centre at the Queensland Institute of Medical Research has been hailed by Beattie as confirmation of the state's growing reputation. Queensland launched its BioIndustry strategy in 1999, and in May this year added to its already substantial investment in the sector by pledging A$100 million to a Queensland venture capital biotechnology investment fund, a substantial sum for a state with a population of three million.

Victorian State Government Minister for Innovation John Brumby takes the message to BIO.

Val Giddings, a vice president at the Biotechnology Industry Organization (BIO; Washington, DC), and a keen observer of events in Australia, credits the current highly competitive situation to Beattie's "visionary and courageous" early decision to focus on attracting biotechnology industries to Queensland. Giddings believes that whereas similar regional rivalries have been apparent in the United States—between the major loci of biotech R&D in Boston, Maryland, California, and North Carolina, for example—the competition has neither been as robust nor as overt as in Australia. "Peter Beattie's visionary leadership really galvanized Victoria and New South Wales into realizing that all their natural advantages of infrastructure notwithstanding, if they didn't get on the stick, Queensland was going to leave them in the dust."

The two states took their battle to this year's BIO conference in Toronto, where Beattie, and his government's innovation and information economy minister Paul Lucas, led that state's push for investment. In a public snub to Queensland's ambitions, Victorian state premier Steve Bracks and innovation minister John Brumby launched a report at the conference proclaiming Melbourne to be the "biotech capital of Australia." Brumby is unapologetic about Victoria's aggressive stance. "We think it's important to send a message to the world that Victoria is the place to be in terms of biotechnology ... We've got a good story to tell, and we're getting out and around the world, and we're selling it."

Giddings does not feel that the arch rivalry between the Australian states is harmful to the development of the biotechnology sector, commenting: "The major risk would be the risk of falling behind and not exploiting the opportunities that are available." However, immunologist and Nobel laureate Peter Doherty, who has recently been attracted back to Australia from the United States, sounds a note of caution, saying he fears that the long-term nature of biotechnology may not in the end make a good bedfellow for the short-term nature of politics. "It's been interesting to see the way that politicians have bought into it—even a little bit scary ... Australian politics tends to operate on a rather short-term scenario because of the three year electoral cycle, and so I just hope there won't be some disillusion. Because with any biotech, and we've seen this in the [United States], it's essentially a pretty high-risk activity and a lot of things will fail. And that's normal. I just hope the political arena realizes that, and is not going to be expecting too much too quickly."

Cheryl Norrie, Wellington, New Zealand

Biotech spies arrested in Harvard case

A pair of medical researchers were arrested in June in San Diego for allegedly stealing genetic material and laboratory equipment from Harvard Medical School (Cambridge, MA). The case has many trade secret experts calling for greater security, while academic officials dismiss it as isolated.

On June 18, agents from the Federal Bureau of Investigation (Washington, DC) arrested Jiangyu Zhu and his wife Kayoko Kimbara in La Jolla, California, and charged them with conspiracy, theft of trade secrets, and interstate transportation of stolen property. The charges stem from alleged