

and aims to draw in foreign talent. The organization is processing its first 30 grants from biomedical startups, of which 11 have been approved so far; a total of \$76 million has been committed, each grant for between \$2 and \$5 million over 3–5 years. Like the Rusnano deals, some of the Skolkovo awards will be equity investments into non-Russian companies that establish branches at the site, says Chris Janssen, Skolkovo's director of science and education.

Companies under Skolkovo's umbrella operate by special laws that provide tax breaks as well as administrative perks, such as an on-site customs department, and assistance greasing wheels with government offices like the Ministry of Health and expediting work permits to overcome bureaucratic delays. So far, the center has approved 74 companies that won't receive financial support but are still interested in being part of the system. Major pharma firms are expressing interest, "first, [for] the incentives we can offer, and second, to be part of the ecosystem," says Janssen. "For us, the attraction is really in getting the innovators to come here—and by their very presence, stimulate activity."

There are other issues, too, that must be overcome for the fledgling biotech market to thrive. One example is the absence of high-tech, modern research service providers that can conduct standardized assays or produce small batches of antibodies for early stage startups, says Egor Beketov, CEO of RVC's BioFund, launched in February 2011. "Right now, these services either don't exist or they work on Soviet standards," he says, adding that the BioFund has a special mandate to invest in firms that will build that capability. Also, says Maxwell Biotech's Eliseev, the cadre of people with both the knowledge about drug development and the entrepreneurial skills to run the new crop of companies is still thin on the ground. Such problems, though, are solvable with time and initiative; Skolkovo, for example, is collaborating with the Massachusetts Institute of Technology to establish a graduate school for innovation. Another issue, he notes, is that Western investors have yet to see enough potential in the Russian market to invest in companies there. That will take at least a first success story, in the form of a significant licensing deal or a commercial sale, he says. "Once we have that, I think investors will come to Russia and even Russian investors will get more comfortable putting money in this industry."

Alla Katsnelson *New York*

Monsanto to face biopiracy charges in India

An Indian government agency has agreed to sue the developers of genetically modified (GM) eggplant for violating India's Biological Diversity Act of 2002. India's National Biodiversity Authority (NBA) is alleging that the developers of India's first GM food crop—Jalna-based Maharashtra Hybrid Seeds Company (Mahyco) partnered with St. Louis-based seed giant Monsanto and several local universities—used local varieties to develop the transgenic crop, but failed to gain the appropriate licenses for field trials. At the same time, activists in Europe are claiming that patents on conventionally bred plants, including a melon found in India, filed by biotech companies violate farmers' rights to use naturally occurring breeds. Both these pending legal cases could set important precedents for biopiracy in India and Europe. In another development in early November, the Munich-based European Patent Office referred to its Enlarged Board of Appeals a case involving conventionally bred tomatoes, which will likely shape any future enforcement of the Monsanto-owned melon patent, says Christoph Then, spokesman for advocacy group No Patents on Seeds. "It is a signal that the European Patent Office has severe doubts about this kind of patent," he says.

The continuing wrangle over the insect-resistant *Bacillus thuringiensis* (*Bt*) variety of brinjal, as eggplant is known in India, was unexpected as in 2009 the vegetable's commercial release was imminent. The Genetic Engineering Approval Committee (GEAC), India's official regulatory agency for GM organisms, gave the go-ahead, but vociferous public opposition prompted then-minister of environment and forests Jairam Ramesh to introduce an indefinite moratorium in February 2010 (*Nat. Biotechnol.* **28**, 296, 2010).

Now the *Bt* brinjal's release will likely be further delayed as the NBA contends that, under India's 2002 Biological Diversity Act, the developers should have sought their approval, too. This is the first time the NBA has prosecuted firms for violating the 2002 Biological Diversity Act. Past biopiracy cases in India involving turmeric, rice and neem preceded the 2002 act so were treated in international courts.

The NBA's decision to initiate legal proceedings was prompted by a complaint filed in 2010 by the Bangalore-based Environment Support group (ESG). Bhargavi Rao, of ESG, says the GEAC considers only the biochemistry of a proposed biotech crop and not input from farmers. The biological diversity act, she says, obligates commercial developers of GM crops to negotiate with farmers for the intellectual rights to breeds and traits developed by indigenous farmers and their ancestors. In the *Bt* brinjal case, the biodiversity appraisal process "has been completely sidestepped," Rao says. The Karnataka Biodiversity Board agrees. In May, it recommended that the NBA investigate ESG's allegations that the University of Agricultural Sciences at Dharwad in Karnataka failed to obtain the necessary biodiversity approvals before conducting *Bt* brinjal trials. In June, the NBA agreed to press charges but as of early November it had not made any public charges. "We are hoping that even if they take time, they will do something that is legally right," ESG's Rao says. "This will set a precedent for the country and it has to be a good decision."

Mahyco has denied charges that it incorporated the *Bt* gene into local brinjal varieties provided by the university in developing *Bt* brinjal without prior approval from NBA. In a statement to *Nature Biotechnology*, Mahyco head of public relations Suryakant Mishra wrote that, "We have neither received any research results from any public partners nor are a beneficiary of their materials in any way." Mishra says the partners "have developed their materials with gene access provided by Mahyco in accordance with the regulations." Mahyco did not reply to *Nature Biotechnology's* request for comment on the case's impact on its planned investment or research in India.

Lucas Laursen



Mehrab/stockphoto

Eggplants stir debate