Tapping into Mexican plants

A consortium of academic and industry researchers has established a biodiversity project in the Chiapas region of southern Mexico. Xenova (Slough, UK), a biotechnology company specializing in the discovery of small molecule drugs derived from naturally occurring organisms, together with the University of Georgia (UGA; Athens, GA) and El Colegio de la Frontera Sur (San Cristobal de Las Casas) will work with the local Mayan people to create biodiversity inventories of plants and fungi that the Maya people have used for years in ancient herbal medicine, according to project leader, Brent Berlin from UGA. The area is ideal for this as "the Chiapas flora is among the richest in the world," he says. The project will be funded by a five-year grant of $500,000 per year from the International Cooperative Biodiversity Groups Program of the US National Institutes of Health (Bethesda, MD), which announced its awards in December. Although any intellectual property gained from the research will be held within Mexico, "all of the data will be shared among the group, as required by our collecting permits and intellectual property agreements with Mexico and the US," says Berlin.

A knock for genomics

Progenitor (Menlo Park, CA) is the first genomics firm to cease trading, prompting a delisting from Nasdaq at the end of last year. Only a year and a half after it went public, the company shut down operations because it could not find financing to continue its work, says CEO Doug Givens. Progenitor began work on yolk sac cells, at first looking for hematopoeitic stem cells for transplant but then switching to research to identify growth factors that affect differentiation. "We had good success working with growth factors and their receptors, which seemed to have better near-term commercial potential over stem cells," says Givens. Although it had several collaborations and sold genomic information, libraries, databases and other tools for drug development, Progentitor's fatal flaw may have been a combination of changing tracks too frequently to the technology du jour and an increasingly crowded genomics playing field.

Human clone update

A human cloning experiment conducted by a team of researchers from Kyunghee University in Seoul (South Korea), has raised so much international controversy that the Korean government has decided to ban funding for all research involving the cloning of human embryos. The government's decision came shortly after the researchers' announcement last December that they were the first to successfully produce an embryo from a human somatic cell. Researchers from Kyunghee University claim they cultivated an early stage embryo using an unfertilized egg and a granulosa cell obtained from a female patient who had been receiving infertility treatment at the university hospital. Although researchers say they destroyed the embryo after it reached a four-cell stage, the ethical implications of the experiment caused widespread concern among the public. However, other scientists doubt the validity of the claims, particularly as no supporting evidence has been released by the researchers, who say they are "keen to avoid further controversy."

Research collaborations

Company 1	Company 2	$ Millions	Details
Cell Genesys (Foster City, CA)	Japan Tobacco (Osaka, Japan)	137.5	A pact to develop and globally commercialize two of Cell Genesys' cancer vaccines. Japan Tobacco will pay $27.5 million for R&D, up to $80 in milestones, and provide a $30 million loan to Cell Genesys in return for marketing rights outside North America.
Isis Pharmaceuticals (Carlsbad, CA)	Zeneca (London)	40	A three-year collaboration to develop and commercialize antisense cancer drugs. Isis will create and, with Zeneca, screen antisense candidates for undisclosed targets. Zeneca will develop resulting drugs and pay Isis $40 million in development costs plus royalties on sales.
Connetics (Palo Alto, CA)	Medeva (London)	40	A development, commercialization, and supply agreement for Connetics' ConXn, a recombinant human relaxin to treat scleroderma. In return for exclusive marketing rights in Europe and co-promotion rights in the US for five years, Medeva will pay Connetics $8 million on closing the deal, plus $32 million in milestones and development costs.
Dyax (Cambridge, MA)	Genzyme General (Cambridge, MA)	31	A research and marketing collaboration aimed at the development of EPI-KAL2, Dyax's protein to treat chronic inflammation. Dyax will develop the drug in exchange for a $3 million equity investment from Genzyme, a $3 million credit line, and up to $25 million in milestones. Genzyme will market the drug.
Idun Pharmaceuticals (La Jolla, CA)	Abbott Laboratories (Abbott Park, IL)	30	The firms will study cell pathways leading to apoptosis with the aim of developing drugs to treat cancer. Abbott will pay Idun $30 million to develop assays against targets, which Abbott will use for high throughput screening. Abbott will hold exclusive global rights to developed products.
Cambridge NeuroScience (Cambridge, MA)	Bayer (Leverkusen, Germany)	26	A deal to develop and market NeuroScience's recombinant glial growth factor 2 for the treatment of neurodegenerative diseases. NeuroScience will receive $26 million from Bayer for R&D costs plus royalties on sales; Bayer will have global exclusive marketing rights to the product.
OraVax (Cambridge, MA)	Pasteur Mérieux Connaught (Paris)	16.5	An agreement to develop a vaccine against dengue fever. OraVax, which will develop the vaccine, will receive R&D funding, and milestones from Pasteur, which will have rights to market the product globally.
Aquasearch (Kailua-Kona, HI)	EnzyMed (Iowa City, IA)	*	A drug discovery and commercialization agreement whereby EnzyMed will develop and screen libraries of compounds based on microalgae provided by Aquasearch. The companies will share any revenues generated from resulting products.

*Financial details not disclosed.