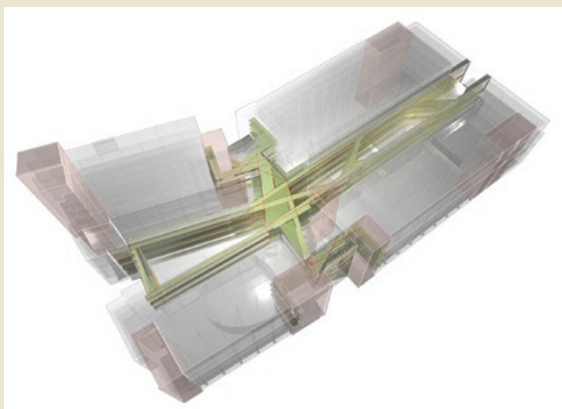


Purpose-built chromosome

"It's functional, and also a very good metaphor for what the center is trying to achieve." Larry Malcic, one of the architects of London's UK Centre for Medical Research and Innovation (UKCMRI), says scientists exclaimed, "that's a chromosome," when he presented the building designs without knowing its symbolic significance. The new \$978 million UKCMRI is



being built in central London as a partnership between University College London, Cancer Research UK, the Medical Research Council and the Wellcome Trust. It will house four leading science organizations to conduct biomedical research on genetics, stem cells and common diseases, and is expected to open in 2015. (*Times*, December 8, 2009)

IN brief

FDA balks on MedImmune's cell-grown flu vaccine

The shift towards new cell culture-based flu vaccine production has been dealt a blow as MedImmune of Gaithersburg, Maryland, puts its manufacturing efforts on hold. The AstraZeneca subsidiary took this step after the US Food and Drug Administration (FDA) requested follow-on studies that would substantially increase the cost and time to market beyond what the company expected. In its contract with the Department of Health and Human Services (HHS), MedImmune proposed an efficacy study comparing immune responses in volunteers receiving cell-produced with those receiving egg-produced vaccines, considering them genetically identical, followed by a large safety trial. But the FDA termed cell-grown vaccine a new product, requesting MedImmune conduct a clinical trial during an influenza season, as well as demonstrate efficacy in adults before vaccinating children. The plan "became cumbersome and complicated and did not address significant scientific and medical issues we thought we needed to address to advance this vaccine," says George Kemble, vice president of vaccine R&D at MedImmune. "I don't think there is any deliberate delay," says Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, noting the move is due to safety and efficacy data gathering. Jose Romero, member of the FDA vaccine advisory committee, comments in an unofficial capacity, "General FDA concerns include exposing humans to adventitious agents that might be lurking in cell lines or the remote possibility of transmitting an oncogene that could create cancer in a human host." Elsewhere, last November, Novartis of Basel inaugurated a \$1 billion cell culture flu vaccine manufacturing facility in partnership with the HHS. The plant in Holly Springs, North Carolina, is the first large-scale cell culture flu vaccine and adjuvant production facility in the US.

Wendy Wolfson

IN their words



"They just wait until WHO [World Health Organization] says 'pandemic' and activate the contracts." Wolfgang Wodarg, a member of the German Social Democratic Party and chair of PACE health committee, conveniently shifts blame for Germany's

surplus H1N1 vaccine stocks on to the companies that redirected resources and expertise to make a product available in just a few months. (*Pharma Times*, January 4, 2010)

"These sweetheart deals are being done on the backs of consumers. From the perspective of the Federal Trade Commission, [they] are one of the worst abuses across the board in healthcare and

should be stopped." Federal Trade Commission (New York) chairman Jon Leibowitz will press for a provision in the healthcare reform bill to end deals in which brand-name drugmakers pay generic producers to delay copycat versions of best-selling meds. (*New York Times*, January 12, 2010)

"The pharmaceutical industry has destroyed so much institutional knowledge over the last decade that it makes the Taliban, blowing up temples, look like high school pranksters."

Anonymous blogger. (*In the Pipeline*, January 12, 2010)

"Cannibalism is rife within the biotech industry!"

Barry Canton, a cofounder of Ginkgo Bioworks (Boston), on how his and other companies are acquiring equipment castoffs from universities and other companies from online auctioneers. (*The Boston Globe*, January 4, 2010)

SELECTED research collaborations

Partner 1	Partner 2	\$ (millions)	Details
Alopecx Pharmaceuticals (Cambridge, Massachusetts)	Sanofi-Aventis (Paris)	375	Sanofi-Aventis will pay Alopecx for rights to codevelop a monoclonal antibody (mAb) for treating <i>Escherichia coli</i> , <i>Staphylococcus aureus</i> and other infections. Alopecx receives an upfront payment, research funding and is eligible for milestone payments that could reach \$375 million in total, plus royalties. Sanofi will have the option to license the product, which will be in phase 1 trials in 2010.
Seattle Genetics (Bothell, Washington)	Millennium/Takeda (Osaka, Japan)	290	Millennium will pay \$60 million upfront, plus milestones that could exceed \$230 million, to codevelop Seattle Genetics' brentuximab vedotin (SGN-35). The antibody drug conjugate composed of an anti-CD30 mAb and monomethyl auristatin E is currently in a pivotal phase 2 trial to treat relapsed and refractory Hodgkin's lymphoma. Under the agreement, the Takeda Group keeps commercial rights to the drug outside the US and Canada where Seattle Genetics retains full rights.
Athersys (Cleveland)	Pfizer (New York)	111	Pfizer will pay Athersys \$6 million initially and up to \$105 million in the future for rights to develop Athersys's stem cells to treat ulcerative colitis and Crohn's disease. The product, MultiStem, consists of multipotent adult progenitor cell, and is in early clinical trials for heart attacks and in cancer patients receiving bone marrow transplants.
Syngenta (Basel)	CSR Sugar (Melbourne, Australia)	*	Syngenta has acquired exclusive global rights, excluding Australia, to CSR Sugar's SugarBooster, a transgenic technology to develop cane plants with high sugar content. The license agreement includes milestone payments and royalties on product sales to CSR Sugar. The terms of the deal were not disclosed.

*Financial details not disclosed.