

New gene boosts immunogenicity of flu vaccine

Alexander Bukreyev, of the National Institute of Allergy and Infectious Diseases (<http://www.niaid.nih.gov/default.htm/>), and his research team have made a discovery that promises to boost the effectiveness of vaccines without bringing on unwanted side-effects [6].

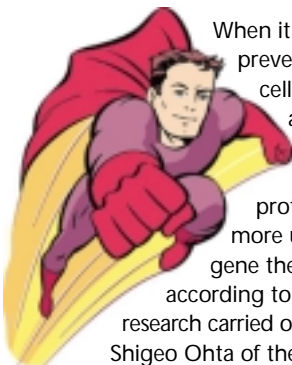
By inserting an extra gene, coding for granulocyte-macrophage colony-stimulating factor (GM-CSF), into live, attenuated parainfluenza virus type 3 (HPIV3) vaccine, and administering it to a group of rhesus monkeys, the researchers found a virus-specific serum antibody response 3–6 times stronger than that seen with a control. What excited Bukreyev and collaborators more was an immune response matching that observed with an equivalent dose of full-strength wild virus, except that their candidate did not lead to more replication of the virus. In response to the vaccine, the monkeys also released more protective T lymphocytes, specific to the virus, into their peripheral blood.

'These findings show that the immunogenicity of a live-attenuated vaccine virus in primates can be enhanced without increasing the level of virus replication,' they concluded. 'It might be possible to develop live-attenuated vaccines that are as immunogenic as parental wild type virus or, possibly, even

more so.' They hope their findings will help in the fight against other viruses, including influenza, measles, dengue and respiratory syncytial virus.

- 6 Bukreyev, A. *et al.* (2002) More antibody with less antigen: Can immunogenicity of attenuated live virus vaccines be improved? *Proc. Natl. Acad. Sci. U. S. A.* 99, 16987–16991

'Super' protein prevents massive cell death



When it comes to preventing massive cell death associated with strokes and other injuries, proteins might be more useful than gene therapy, according to recent research carried out in Japan [7]. Shigeo Ohta of the Nippon Medical School (<http://www.nms.ac.jp/>) and collaborators engineered super anti-apoptotic factor FNK, a protein known to have strong cytoprotective properties, and fused it to the protein transduction domain (PTD) of the HIV/Tat protein, which helps the HIV virus to enter cells. When introduced into a model of ischemic brain injury, they found that the protein

(PTD-FNK) took as little as an hour to localize to mitochondria and protect neurons against toxin-induced cell death. It was so effective that it even prevented cell death at concentrations as low as 0.3 pM.

The most promising results come from what they observed when they used the preparation on live gerbils. When they injected it into the animals' abdominal cavities and induced a stroke, they found that the protein prevented delayed neuronal death in the hippocampus region of the brain.

Unlike gene therapy, which relies on transport via inactivated viruses, proteins have the advantage that they can be delivered directly and in a relatively short period, explained the team. They think their protein works by affecting the movement of calcium ions in the cytosol. They suggested that 'PTD-FNK has potential for clinical [use] as a protein therapeutic strategy to prevent cell death in the brain'.

- 7 Asoh, S. *et al.* (2002) Protection against ischemic brain injury by protein therapeutics. *Proc. Natl. Acad. Sci. U. S. A.* 99, 17107–17112

News in brief was written by
Peter Chan

People

Appointments

Hunneyball to oversee Evotec's British and German operations

With more than 24 years' experience in the pharmaceutical and biotechnology industries, Ian M. Hunneyball is to lead the German company Evotec OAI (<http://www.evotecoi.com/>), in the newly created position of President of Discovery Services. Hunneyball, also a member of the management board, is expected to oversee Evotec's chemistry operations in the UK

and its biology services in Germany. 'His excellent team leadership skills and strong commercial awareness will strengthen our management team and make a significant contribution to the continued growth of our business as a partner for pharma and biotech customers,' said President and CEO Joern Aldag. Hunneyball joins Evotec OAI from French company Entomed, where he was Director of R&D. Before that he worked for Knoll Pharmaceuticals, where he managed the development of flosequin and sibutramine from discovery to registration.

Pharmacopeia subsidiary welcomes new boss

Pharmacopeia (<http://www.pharmacopeia.com/>), a US developer of science and technology for drug discovery, has welcomed a new president to its subsidiary company Accelrys (<http://www.accelrys.com/>). He was named as Mark J. Emkjer, an experienced manager, most recently president and CEO of IT firm Sunquest Information Systems, and formerly an executive of Pace Health Management Systems. He is now expected to lend his expertise, developed over 20 years in the business, to Accelrys, a software company with offices in San Diego, USA and Cambridge, UK. According to Pharmacopeia Chairman, President and

CEO Joseph A. Mollica, '[Emkjer's] extensive leadership experience in software management and the success he has demonstrated in generating growth will be of tremendous benefit to our company.'

Intradigm delight at appointment of Spears

As Martin Woodle, founder and former CEO of Intradigm (<http://www.intradigm.com/>) took on his new role as Chief Scientific Officer at the end of last year, the company announced that his replacement would be former Novavax President and CEO John A. Spears. He said he was excited about joining Intradigm and that he looked forward to helping lead the company towards future growth and development. 'In a short period of time, [Intradigm] has developed a strong base of technology in the exciting and emerging field of RNAi from which we will pursue our goal of becoming a leading drug discovery company,' he added. Spears' impressive career has included executive roles at Vion Pharmaceuticals and Immunex, and research positions with Bristol Myers and Ayerst Laboratories. Woodle, who holds onto his place on the executive team and board of directors, said his team was delighted to have attracted Spears to the company.

Warner appointed as Alpharma looks for new international markets

Alpharma (<http://www.alpharma.com/>), a producer of antibiotics and vaccines for humans, farmed animals and fish, is set to

broaden its research and development horizons with the addition of pharmaceuticals veteran Ronald Warner to its management team. Alpharma already operates in over 60 countries and has recently found new markets in south-east Asia. Warner's main role as Vice President of Global Research and Development of the newly created Global Human Pharmaceutical Organization will be to identify synergistic opportunities around the world, said the organization's President and Chief Operating Officer Michael Valentino. Warner, formerly Vice President and General Manager of the ESI Lederle division of Wyeth Pharmaceuticals, studied at the Albany College of Pharmacy and earned his PhD at Purdue University. He is also a member of several boards, including the Generic Pharmaceutical Association (<http://www.gphaonline.org/>).

Wikler to bring invaluable knowledge to Californian antibiotic company

As its new Chief Medical Officer, Matthew A. Wikler is expected to bring his wealth of knowledge of drug development, pharmaceutical research and regulatory affairs to Peninsula Pharmaceuticals (<http://www.peninsulapharm.com/>), a Californian company specializing in antibiotic and antiviral therapies for infectious diseases. Company President Paul F. Truex welcomed Wikler into his new role at the end of 2002. 'His deep expertise in the pharmaceutical industry, particularly his first-hand experience with the late stages of the drug development process,' explained Truex, 'will provide us with an

invaluable knowledge base as we continue to develop our lead product and license additional products.' His appointment at Peninsula Pharmaceuticals follows a string of senior level roles at companies including SmithKline Beecham, Burroughs Wellcome and Bristol-Myers Squibb. Wikler continues to serve as Chairman of the Antimicrobial Susceptibility Testing Subcommittee of the National Committee for Clinical Laboratory Standards (<http://www.nccls.org/>).

Altana Pharma appoints respiratory disease specialist Shah

Supervising the development of in-house drug expertise will be just one of the responsibilities faced by Tushar P. Shah as he steps into his new role at Altana Pharma US (<http://www.altanapharma-us.com/>), the pharmaceutical branch of Altana AG. Named as Senior Vice President of scientific and clinical affairs in December 2002, Shah will manage the company's clinical research programmes, its regulatory submissions and communications with Food and Drug Administration representatives. He is a well-respected expert in the field of respiratory and inflammation clinical research and development, and left GlaxoSmithKline to join Altana after nine years of service. During his time at Glaxo, Shah played a key role in the development of drugs for asthma, rhinitis and chronic obstructive pulmonary disease.

People was written by
Peter Chan

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