The research determined that induced expression of TOB inhibited T cell proliferation and the transcription of cytokines. Suppression of TOB increased CD3-mediated responses and cancelled the requirement of costimulation for maximal proliferation and secretion of cytokines.

Currently, cancer vaccines induce an immune response in the immune system. By contrast, the success of organ transplantation relies on the desensitization of the immune system to foreign tissue. Therefore, the elucidation of the switching mechanism of *Tob* would be essential in enabling the switching of the cells to 'off' or 'high alert'. This research could lead to the development of more potent vaccines and transplantation techniques that require fewer anti-rejection drugs.

8 Tzachanis, D. et al. (2001) Tob is a negative regulator of activation that is expressed in anergic and quiescent T cells. Nat. Immunol. 2, 1174–1182

University of Pittsburgh consolidates its immunology programs

The University of Pittsburgh School of Medicine (Pittsburgh, PA, USA) is to create a dedicated immunology department in an attempt to streamline basic immunology research and strengthen training programs. The University will bring more than 30 faculty members currently working across various departments under one roof.

'We are extremely excited about the formation of the new department,' said Arthur S. Levine, Senior Vice-Chancellor for Health Sciences and Dean of the School of Medicine at the University of Pittsburgh. 'It will provide a needed academic home

for the innovative research in immunology we are currently conducting," he said.

Other targets and mechanisms

Nature's own gene therapy candidate for blindness



Two recent reports have shown that recombinant fragments of a human tyrosyl-

tRNA synthetase (TyrRS) are angiostatic in mammalian cells [9] and inhibit vascular endothelial growth factor (VEGF)-induced angiogenesis and naturally occurring retinal angiogenesis in the adult and neonatal mouse, respectively [10]. In addition to revealing a potential anticancer target, this finding could lead to new therapies for age-related macular degeneration (AMD) and diabetic retinopathy, which result from inappropriate neovascularization and affect 12–15 million people aged over 65 years in the USA.

TyrRS is an aminoacyl-tRNA synthetase (an enzyme that catalyzes the first step of protein synthesis) that has recently been shown to have a role in cytokine signalling [11]. Researchers at the Scripps Research Institute (SRI; La Jolla, CA, USA) demonstrated that TyrRS can be split into two fragments with distinct cytokine activities [11]. A close homologue of TyrRS, tryptophanyl-tRNA synthetase (TrpRS) is a naturally occurring alternative splice product, the expression of which is stimulated by the angiostatic cytokine, interferon γ (IFN γ). By contrast, the

full-length protein has no anti-angiogenic activity.

In preclinical studies using a recombinant carboxy-terminal fragment of TrpRS, the Scripps group has demonstrated 100% inhibition of vessel formation in 70% of neonatal mice. This is significantly better than the 20-40% inhibition seen with anti-angiogenic compounds currently in clinical trials, according to Martin Friedlander, Associate Professor in the Department of Cell Biology at SRI. This natural molecule has advantages over other potential compounds because it is unlikely to provoke an immune response or cause toxicity. Moreover, Friedlander hopes that this is one therapy that they can teach the cell to make: 'One clinical approach to treating angiogenic vision loss could be to deliver the TrpRS molecule directly into the eye through gene- and cell-based vectors.'

In addition to exploring ways to apply this therapy, the group is now concentrating on finding out what role this alternatively spliced fragment has in nature and, importantly, identifying its receptor.

- 9 Wakasugi, K. et al. (2002) A human aminoacyl-tRNA synthetase as a regulator of angiogenesis. Proc. Natl. Acad. Sci. U. S. A. 99, 173–177
- 10 Otani, A. et al. (2002) A fragment of human TrpRS as a potent antagonist of ocular angiogenesis. Proc. Natl. Acad. Sci. U. S. A. 99, 178–183
- 11 Wakasugi, K. and Schimmel, P. (1999) Two distinct cytokines released from a human aminoacyl-tRNA synthetase. *Science* 284, 147–151

News in Brief was written by Joanne Clough, Joanna Milburn, Joanna Owens and Ben Ramster

People

New leadership at Memorial Sloan-Kettering Cancer Center

Memorial Sloan-Kettering Cancer Center (New York, NY, USA) has announced the appointment of Robert E. Wittes as Physician-in-Chief of Memorial Hospital and Thomas J. Kelly as Chairman of the Sloan-Kettering Institute. Wittes is currently

Director of the Division of Cancer Treatment and Diagnosis and Deputy Director for Extramural Science at the National Cancer Institute. He has previously worked as Senior Vice-President of Cancer Research at Bristol-Myers Squibb and as Chief of the medicine branch at the National Cancer Institute.

Meanwhile, Kelly is Boury Professor and Chairman of the Department of Molecular Biology and Genetics at Johns Hopkins
University. He was also the founding
director of the university's Institute for
Basic Biomedical Sciences. He is a member
of the National Academy of Sciences and
the Institute of Medicine, and was
previously Assistant Professor of
Microbiology at Johns Hopkins. Harold
Varmus, President of Memorial SloanKettering Cancer Center said: 'Memorial
Sloan-Kettering is beginning a period of
extraordinary growth and development
across our full panoply of clinical and

research programs.' The centre is currently planning the construction of a new laboratory building and expansion of its basic research efforts into several key new areas.

William Cowan joins the UT Southwestern Medical Center

William Maxwell Cowan has joined the UT Southwestern Medical Center (Dallas, TX, USA) as a Distinguished Adjunct Professor in the Center for Basic Neuroscience and Department of Neurology. He was previously Chief Scientific Officer of the Howard Hughes Medical Institute (HHMI). During his 12-year tenure at HHMI, the number of investigators tripled and the number of these investigators honoured by being inducted into the National Academy of Sciences grew from five to 70. He has also held the positions of Provost and Executive Vice-Chancellor at Washington University, Vice-President of The Salk Institute for Biological Sciences and Adjunct Professor of Neuroscience at Johns Hopkins University School of Medicine.

Kern Wildenthal, President of UT Southwestern said: 'Dr Cowan is one of the most distinguished and highly regarded neuroscientists in the world.' Cowan commented that 'Neuroscience has the potential for becoming one of the strongest and most influential areas in science.' Being born in South Africa, Cowan is a Foreign Associate of the National Academy of Sciences, a member of the Institute of Medicine and a Fellow of the Royal Society of Great Britain.

All change at Aventis Pasteur

David J. Williams has been named the President and CEO of Aventis Pasteur (Lyon, France), the vaccines business of Aventis Pharma. He was previously co-President and Chief Operating Officer of the company. Meanwhile, the past CEO, Jean-Jacques Bertrand will remain Chairman, while Michel Greco, who was co-President of Chief Operating Officer with Williams, will become deputy-CEO. Other promotions in the company include Damian Braga, who will become President of Aventis Pasteur US from being Senior Vice-President and General manager of the US business unit. Wayne Pisano has also been promoted to Executive Vice-President, Aventis Pasteur North America from the position of Senior Vice-President, Marketing and Sales for the US company.

Key management changes at Kos

Kos Pharmaceuticals (Miami, FL, USA) has made several key management changes recently. Adrian Adams has taken on the role of CEO in addition to his current title of President of the company, and has joined the Board of Directors. Meanwhile, Daniel Bell, a co-founder of Kos and the past CEO, will remain Chairman of the Board of Directors. Adams joined the company as President and Chief Operating Officer in mid-2001 from Novartis Pharmaceuticals UK, where he was CEO. He has previously been President of the Canadian subsidiary of SmithKline Beecham Pharmaceuticals, as well as their Vice-President and Director of Worldwide Marketing, and Director and Vice-President of Sales and Marketing in the UK.

There have also been four senior management and officer appointments at the company. Mark McGovern has been appointed as Senior Vice-President and Chief Medical Officer from the position of Vice-President of Medical Affairs. He was previously Executive Director, Heart Failure/Atherosclerosis Clinical Research at Bristol-Myers Squibb. Fred Sexton has been appointed as Senior Vice-President of **Technical Operations and Product** Development from the position of Vice-President of Technical Operations. He previously worked at Boehringer Ingleheim Pharmaceuticals. Christopher Kiritsy has been promoted to Senior Vice-President and Chief Financial Officer from Vice-President of Financial Planning and Business Development. He was previously Associate Director of Product Development at the Institute of Molecular Biology. Finally, Christopher Reider has taken up the position of Vice-President, Information Technology. Before joining Kos in 1996, he was Manager and Associate Director of Information Technology at North American Vaccine and BRI International.

New CEO for Allos Therapeutics

Allos Therapeutics (Westminster, CO, USA) has promoted Michael E. Hart to the position of President and CEO from being Senior Vice-President, Operations and Chief Financial Officer. Hart replaces Stephen J. Hoffman, who is going to remain with the company as Chairman of the Board of Directors. Prior to joining Allos, Hart was Vice-President and Chief Financial Officer of NeXstar

Pharmaceuticals. He facilitated the merger between NeXagen and Vestar to form NeXstar and then led the acquisition of NeXstar by Gilead Sciences in 1999. Hoffman commented that: 'Mike's in-depth knowledge of the company and broad product commercialization and operations experience in oncology led the Board to select him over other candidates.'

Ronald Griffith leaves Isis for Genelabs Technologies

Genelabs Technologies (Redwood City, CA, USA) has appointed Ronald C. Griffith as Vice-President of Research. Griffith leaves Isis Pharmaceuticals, where he was Vice-President of Medicinal Chemistry. He has previously held several other senior positions including Vice-President of Chemistry at X-Ceptor Therapeutics. Director of Chemical Sciences at Tanabe Research Laboratories, and Director of Chemistry at Fisons Pharmaceuticals, and then at AstraZeneca after its acquisition of Fisons, Irene A. Chow, Chairman and CEO of Genelabs said: 'His record of accomplishments in directing the discovery of pharmaceutical compounds that have successfully advanced into clinical development is outstanding. I anticipate Ron's experience will be of immediate benefit...[in] achieving our near-term objective of selecting preclinical candidates from our DNA-targeted lead compounds.'

New CEO for Arakis

Arakis (Saffron Walden, UK) has appointed Ken Cunningham as CEO. He joins the company from Alza where he was Vice-President of European Affairs. He was also previously Vice-President, Clinical Development and Medical Director at Sequus and has held several senior clinical and commercial strategy roles at GlaxoWellcome. Cunningham takes over the position from Andy Richards, who will become a Non-Executive Director and special advisor on strategic development to the company.

People was written by Rebecca N. Lawrence