response if the same vector is used in both the prime and the boost, as was the case in the V520 trial.

Although the ALVAC-HIV-plus-AIDSVax trial seems to address these concerns by using a prime-boost approach intended to induce both B and T cell immunity, initiating a costly phase 3 trial of vaccines that failed in earlier testing is not an efficient use of resources.

Studies in humans are certainly necessary to answer fundamental questions in vaccine development. Establishing discrete go/no-go decision-making criteria might better help guide regulatory bodies and the NIAID in evaluating large trial proposals and might allow for faster incorporation of research findings to improve existing approaches. Favoring smaller phase 2b trials for 'proof of concept' over large phase 3 trials might also more rapidly determine the efficacy of any one approach. And increasing responsiveness of trial investigators to the recommendations of advisory panels to improve or revise planned clinical trials—even if underway—can only enhance the value of the information derived from a trial.

Clinical development of HIV vaccines has been underway for more than 20 years. Although the results of the Merck trial are disappointing, the outcome is not a reason to forgo vaccine efforts altogether. Development of the polio, measles and hepatitis B vaccines took 47, 42 and 16 years, respectively (*New Engl. J. Med.* **353**, 753–757, 2005). The problems facing HIV vaccine development aren't new, and the solutions are in no way obvious or straightforward. But the clinical trial machine could perhaps learn from HIV—and evolve a little faster.

Frontiers of Clinical Investigation 2007

High-quality translational research beckons a high-quality translational meeting.

Ever since the publication of the National Institutes of Health Roadmap, "an integrated vision to deepen our understanding of biology, stimulate interdisciplinary research teams, and reshape clinical research to accelerate medical discovery and improve people's health", the concept of translational research has galvanized the biomedical community, profoundly affecting the way many scientists think about their own research. There is a lot of interest in maximizing the number of basic discoveries that make it to the clinic, and this situation has necessarily colored the way people go about designing their research projects. Researchers who used to identify themselves as basic scientists are now spending more time trying to make sure that their findings are as relevant as possible to human disease and are doing the 'hard' *in vivo* experiments that are crucial for preclinical research.

Paradoxically, as we have reported in these pages (see, for example, *Nat. Med.* **13**, 658–659; 2007), few young physicians are choosing careers in biomedical research. So, the training of physician scientists has been identified by different organizations and governments as a priority, not only in the US, where MD-PhD programs have long existed, but also in Europe and in other regions that have historically been home to a low number of physician scientists.

With this in mind, the Clinical Investigation Institute of the University of California, San Diego and *Nature Medicine* decided in 2005 to launch a meeting series—Frontiers of Clinical Investigation—with several goals in mind. First, we wanted to create a translational meeting that would attract basic, translational and clinical researchers, hoping for some cross-pollination and for new ideas about how to move biomedical discoveries from the bench to the bedside. Second, we thought that a meeting with a translational slant had the potential to stimulate the imaginations of young trainees, encouraging them to pursue a career in translational research. Now, three years later, we are more convinced than ever that launching Frontiers of Clinical Investigation was the right decision.

This October's event—Aging 2007: From Bench to Bedside—was a very broad meeting on two counts. First, like our inaugural meeting on autoimmunity and our 2006 meeting on host defense, Aging 2007 was true to the spirit of the series, as it included basic, translational and clinical talks by top scientists. Second, as many systems deteriorate with aging, the meeting included sessions in as many diseases of old age as possible—cardiovascular, metabolic, immunological and neural. The result was a very stimulating gathering that brought together people who otherwise would not have had a chance to meet—another of the original goals of Frontiers of Clinical Investigation.

Our intention is to carry on organizing the meeting, and we would therefore like to invite all of you to become a part of it. We welcome your ideas on topics that are ripe for a translational meeting and your suggestions about issues that are germane to translational research but receive limited discussion. Our vision is that, with time, this meeting will become a touchstone for translational researchers, and we hope that you wish to join us in La Jolla and help us shape it.