

## AN AUDIENCE WITH...

## Ian Tomlinson

Pharmaceutical companies and universities have been experimenting in recent years with all kinds of new ways to work together to get more science projects off the bench and into the clinic. A latest attempt now sees AstraZeneca, GlaxoSmithKline and Johnson & Johnson partnering with three top UK universities to fund projects through the valley of death. Ian Tomlinson, former head of Biopharmaceuticals R&D and Worldwide Business Development at GlaxoSmithKline, will chair this Apollo Therapeutics Fund. He told **Asher Mullard** about the fund's plan to invest £40 million over the next 6 years.



Ian Tomlinson

**Q** *What is your goal with the Apollo fund?*

Three pharmaceutical partners are coming together with Imperial College London, University College London and the University of Cambridge, to identify science projects that are a few experiments away from being commercially viable. We are looking for research that is too early for companies to want to license directly, and will invest up to £3 million per project to get it ready. We will invest in around 30 projects over the next 6 years.

We can pretty much invest in any therapeutic area, and in any drug modality. My plan is to make the first 4 investments within the next 12 months.

There is a lot of great science in the United Kingdom, and we believe that more of that can be translated into medicines.

**Q** *You've called this setup "a truly innovative venture". What makes it different from all of the other pharmaceutical-academic collaborations out there?*

Several things make it innovative.

First, to have three top universities and three top pharmaceutical companies come together is unique. Although we haven't actually done anything yet, it shows the potential for real partnership between those groups.

Second, the way in which we have set this up means that the intellectual property will stay with the universities. We will fund the research that needs to be done — either directly in the university laboratories or through a contract research organization — up to a preset milestone. And if it meets the milestone, our partner companies will be able to option the project.

How many of the 30 projects are going to be successful? I'd say three to six, if we are really lucky. But because of how we have set this up, we do not need licensing agreements for all of the projects that are ultimately going to fail. We think that this is a very efficient model in terms of the amount of legal time required.

Third, for the projects that succeed, pharmaceutical partners will have a first right to license the projects on normal commercial terms. When that happens, 50% of the revenue goes back to the originating university, and 50% goes back to Apollo to be divvied up between our pharmaceutical and university partners. What's different about this is that a project can come from the University of Cambridge and be licensed to AstraZeneca, but the other universities and pharmaceutical companies will still stand to gain through their initial investment in Apollo. I think there could be a very good return on investment for our partners.

Fourth, academics at our partner universities will have the opportunity to receive input on their projects from Apollo's pharmaceutical scientists and from our pharmaceutical partners. We'll be able to help them to think about the biochemical properties of a good candidate, formulation, delivery, and more. By bringing this to bear at an early stage, we think that we can add value, help to deal with attrition, and maybe help projects to move faster than they would otherwise move.

**Q** *We've seen the number of partnerships between pharmaceutical companies — both with one another and with academics — surge in recent years. Are you concerned*

*about diminishing returns and consortium fatigue from all of these different collaborative models?*

My incoming position here is that partnerships are a good thing. If you can bring together two groups with complementary expertise and ideas, the output is greater than the sum of the parts. And I think that is now broadly accepted.

I also think that there is still not enough money going into this whole area of translational science. There are so many ideas in universities that are never seeing the light of day. Funding bodies find it hard to support this kind of work, because it is viewed as pseudocommercial. And it is not quite mature enough for pharmaceutical companies and venture capital firms to want to make direct investments. The more resources that are brought to bear on this space, the better.

We really need to work harder to extract more of those opportunities. So, by no means do I think that we've saturated the market with different models or funding. But certainly some models will work better than others.

I think we are still at a stage at which we need to try out lots of models. Our model is different, and we are excited that it will work. But come back in 3 or 4 years and we'll see how we've managed. I'm a firm believer that we need innovation in collaborative models as well as innovation in science itself.

I suspect that in general the success rate of the different partnership models is not being tracked particularly carefully. But I think it would be great to keep an eye on that. We are going to keep a very close eye on it at Apollo.