From concept to product in cardiology

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As academic physicians and researchers, we are expected to try to valorise basic concepts and turn them into useful products. Despite the general call from the public for these initiatives and an encouraging stimulation package from the Ministry of Economic Affairs there are counterbalancing forces that are keeping researchers from going along the arduous path of claiming intellectual property (IP), filing for a patent, and seeking funding for the initial translation steps from idea to product. Although the ministry of economic affairs has stimulated the further development of the 'knowledge economy' with impressive funding, the academic centres have difficulties in implanting the new way of thinking into daily practice.

In the new programmes that have been launched recently (TI Pharma, Smart Mix, CTMM and BMM) the valorisation of new findings is a key issue and actually part of the evaluation process by external reviewers. Yet, many institutions have no staff to help identifying breakthroughs or potential IP issues. In addition, the step going from IP to patent is not optimally supported. There is limited funding available and a lot of the writing is left to inexperienced researchers. This will for sure result in loss of efficiency, but also missing potential useful patents.

Applying for a patent is one issue, getting it is a whole different ball game. Most institutes have a limited system or office to guide and coach researchers. Once a patent has been obtained it is important to realise that by law it is owned by the hospital and university and not by the researcher in Europe. This is a very different situation compared with the US. In the US a patent is and always will be owned by the inventor. Of course a patent is only useful if it will be applied in a product by a company.

Here is the next hurdle to take, as most institutes have limited connections with various companies and no seeding funds available to start a new company. The final issue to be resolved is a practical and an ethical one with respect to the benefits of the researcher(s). This has varied very widely between different institutes in the Netherlands. The NFU has finalised a document that gives some guidance with respect to all these issues, but no strict advice. That is an important development for the years to come. It is important to have some basic rules, but even more important to be creative. A key element in enterprise is creativity. When creativity is blocked there are only losers, with the most important victim being our economy. Therefore we in the UMCU are looking forward to the further development of the big programmes where industry and academy are linked by definition. We anticipate a gradual change to not just allow, but stimulate IP, patent and enterprise seeking in the academic setting. This could lead to additional benefits for academic specialists. But will also result in great benefit for the institutes (Octopus off-pump cardiac surgery).

The question is whether our society and the public can cope with these developments. ■

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