More impact with academic startups The entrepreneurial scientists' statements for a thriving ecosystem

Science is a magnificent source and accelerator of solutions to the world's challenges, and the academic environment must do the utmost to maximize the impact of research. Startups are a key pathway for this purpose because they can break paradigms and speed up change. We, entrepreneurial scientists in The Netherlands, are committed to making academic startups more impactful. We want to inspire fellow scientists, students and entrepreneurs to pursue the startup journey. And we call upon universities, knowledge transfer officers (KTOs), the entrepreneurial world, and government to act and work with us to create the right conditions for startups to flourish. As a contribution to a thriving ecosystem for academic startups, we put forward the following statements.

Maximizing impact means scaling

- 1. An academic startup is successful when it becomes a vehicle to maximize the social, environmental, and financial impact of a piece of knowledge generated at a research institute. To maximize impact, startups must be created and managed in a way that enables them to scale;
- 2. Scientific knowledge and scientific talent should flow to businesses with the highest expected impact. Research-based businesses that do not scale should be avoided if they 'lock up' scientific talent and knowledge that could otherwise scale.

Celebration and roles of entrepreneurial scientists

- The scientist is the carrier of the scientific 3 knowledge that drives the startup and is therefore often critical to the startup's success;
- 4. Within any institute, scientists and students considering to set up a startup are encouraged to connect to experienced entrepreneurial scientists for support and mentorship;
- Scientists who dare to take the entrepreneurial risk should be celebrated, because the startup process is a long, demanding and sometimes painful journey that fails in most cases, and the scientists' opportunity costs are enormous;
- 6. It is essential to **create the conditions** necessary for a scientist to embark on the startup opportunity. These conditions include facilities for scientists to combine their academic duties with the startup process:
- 7. The scientist's academic performance and integrity is supervised in the institute's academic hierarchy. Entrepreneurial scientists can spend their out-of-office time with the startup as long as their teaching and research performance remain consistent. If they move to a part-time contract with the institute, compensation for time invested in the startup is a matter between the scientists and the startup only.
- 8. Money is a means for creating impact. It is not the main goal, but if a startup succeeds and has a significant impact, it's fair for the scientists to receive financial compensation for their earlystage risks and efforts.

Entrepreneurs and support professionals driving the startup to impact

- It is strongly recommended to start a business with a mixed team of scientists and experienced entrepreneurs. Besides providing business know-how and access to capital and markets, experienced entrepreneurs are key when it comes to managing possible conflicts of interest of scientists;
- 10. Research ecosystems need many more **professional experienced entrepreneurs** to create more impact with academic startups. Cultivating entrepreneurship and attracting repeat entrepreneurs to research institutes is critical. A national program should support this effort;
- 11. The institute's Knowledge Transfer Office (KTO) and holding company support the entrepreneurial scientist and the entrepreneurial team in **setting up the startup for scaling and ensuring that it can attract partners** (e.g. investors). This includes achieving conducive deal terms in a swift process. In case of negotiations between startup and research institute, the startup should be supported by independent advisors.

Creating a fertile and learning academic support system

- 12. Each KTO should have an **advisory board** that includes experienced entrepreneurs and entrepreneurial scientists, with involvement, among others, in the hiring of new KTO employees;
- 13. Government and institutes must fund the cultivation of entrepreneurship and the general support of startups as structural **investments in our national society and economy**. If KTOs or startups are forced to bear the costs of these activities or become self-sustained via the ROI on their startups, they are not incentivized to maximize the impact of science.
- 14. The academic startup ecosystem needs continuous learning and improvement, drawing from the practical experience of entrepreneurial scientists. The initial set of national deal term principles is an example of a positive step forward, one that entrepreneurial scientists can help improve further.

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