Charles University Innovations Prague and a biotechnology incubator i&i Prague together found a company to develop nanofabrics for medicinal purposes

Prague, 20 February 2020 – The Charles University and the Czech Academy of Sciences joined forces via their subsidiaries Charles University Innovations Prague s.r.o. and i&i Prague s.r.o. and today they are founding an academic, technology spin-off LAM-X a.s. The company is going to focus on development of nanomaterials that can be utilised for a fabrication of bandages of the future and its goal is to transfer research results into practice. Planned initial investment is 12 million CZK.

The name LAM-X (***L****ight* ***A****ctivated* ***M****aterials*) directly reveals purpose of the newly founded company, which is to develop light-activated, antimicrobial materials based on nanofibers and nanoparticles capable of active defence against a wide range of pathogens. "*By founding LAM-X, we want to support the group of Assoc. Prof. Mosinger and make it more dynamic. His team comes with a material that has a potential to revolutionise treatment and healing of wounds,*" says Otomar Sláma, director of *Charles University Innovations Prague* (CUIP), subsidiary of the Charles University.

CUIP and i&i Prague–a biotechnology incubator of the Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences—have been preparing the creation of LAM-X since 2018. The spin-off is going to enable a more efficient utilisation of its technologies and make them more available to industrial partners, manufacturers, and distributors. "*This project already piqued my attention several years ago when I had the opportunity to compare its quality with similar start-ups founded* e.g. *in California. It stood head and shoulders above its competitors thanks to both its ingenuity and obtained results. Apparently, I wasn't the only one, since we already have several potential customers among manufacturers of healthcare products,*" summarises Dr. Jaromír Zahrádka, CEO of i&i Prague.

The founding partners—CUIP and i&i Prague—share pilot funding of the project. Subsequently, additional resources are going to be provided via research grants and other finances from investors and strategic partners.

Technology Beyond Medicine

According to Assoc. Prof. Jiří Mosinger—leader of the LAM-X research team—the main advantages of their technology are "*specific properties of used photoactive materials that allow highly efficient elimination of a broad spectrum of pathogens, such as bacteria and viruses,*" and he sees its potential application in the field of human medicine and sterilisation techniques.

Efficiency of the LAM-X technology has been proven in a clinical study focused on a treatment of venous ulcers. Therefore, their priority product is a nanomembrane intended as a protection against secondary infections of open wounds. Due to a high antiseptic activity of singlet oxygen generated by the membrane after activation with visible light, there is no risk

of development of antimicrobial resistance. Thus, LAM-X addresses the emerging world-wide crisis of increasing resistance of microbes to antibiotics.

"*Our new technology can be used not only in the health sector, but also in the field of packaging materials and filtration systems,*" concludes Dr. Roman Chaloupka, chairman of the board of directors of the new company.

Supporting Commercialisation of Research

LAM-X is a second spin-off company founded by CUIP. In less than two years of its existence, CUIP managed to establish a cooperation with more than 20 domestic and foreign subjects, sell patents even to overseas companies, and close licensing contracts for almost 10 technologies.

"*It is another milestone in fulfilling the third role of university. I am very pleased that technology of a new university spin-off comes from our faculty,*" said Prof. Jiří Zima, dean of the Faculty of Science of the Charles University. The faculty is entitled to a part of company's generated profit and intends to invest it back into science and research.

Charles University Innovations Prague s.r.o.

CUIP is a wholly owned subsidiary of the Charles University founded in June 2018. It is a research and knowledge dissemination organisation, whose primary goal is to widely disseminate results created at the Charles University and to secure utilisation of intellectual property of the Charles University in the field of research and development and its use for business, industrial, and other similar purposes, i.e. their commercialisation. CUIP can establish or buy shares in spin-off companies in order to commercially utilise intellectual property of the Charles University. Within this field, CUIP closely cooperates with the Centre for Knowledge and Technology Transfer of the Charles University, which is a standalone part of the Charles University and provides services and information supporting the transfer of knowledge and technology.

i&i Prague s.r.o.

i&i Prague is a biotechnology incubator founded in 2017 by the Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences. It supports scientific projects focused on technology in the field of medicine, biotechnologies, diagnostics, or drug development. It helps with commercialisation of projects where it leads and plans their business growth, seeks partners, and provides marketing. In three years of its existence, i&i Prague managed to analyse over 70 projects originating mainly in Central Europe. Currently, it incubates over 30 projects, while 10 projects have been already successfully commercialised in form of a license agreement or a spin-off. i&i Prague became the major investor of the LAM-X company.

Contact for Media
Lucie Schovancová, SLASH Public Relations
Phone: +420 776 818 587
E-mail: lucie.schovancova@slashpr.cz