

## Pharmaceutical company launches product to produce rare disease-fighting compounds

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A pharmaceutical company based on Purdue University intellectual property has launched a product line that will allow researchers and medical professionals the ability to produce larger amounts of compounds that could lead to new disease-fighting drugs.

Akanocure Pharmaceuticals Inc., headquartered in the Purdue Research Park of West Lafayette, has begun offering packets of <u>chemical building</u> <u>blocks</u> that will enable the creation of a rare class of <u>compounds</u> produced by plants, marine life and other small life forms. These compounds show promise in stopping the growth of bacteria, viruses, fungi, parasites and <u>cancer</u> tumor cells.

The ability to produce the compounds on a large scale could lead to new drugs to fight cancer and other diseases.

According to Sherine Abdelmawla, Akanocure's co-founder and CEO, these compounds, called polyproprionate polyketides, can't be harvested from their natural sources since they are produced in such small quantities. They also can't be made from scratch synthetically due to their complex structure and the absence of an efficient way to do so on a large scale.

"Akanocure's chemical stereotetrad building blocks will ease the synthesis of such compounds and may increase their number in the drug development pipelines," Abdelmawla said. "These compounds would represent a treasure trove of potential drugs if they can be made on a



large scale. That translates to more options for patients."

Purdue University researchers led by Philip Fuchs, the emeritus R. B. Wetherill Professor of Organic Chemistry, helped develop the technology that allows large-scale synthesis of complex natural products. Fuchs is a co-founder of Akanocure along with Abdelmawla and Mohammad Noshi.

Abdelmawla has more than 10 years of experience working in academia and in biotechnology and pharmaceutical industries to develop HCV inhibitors, nucleic acid-based cancer therapeutics and cancer diagnostics.

Noshi has more than 10 years of experience within academic and industrial settings developing chemistry methodologies, synthesis of anticancer natural products, complex alkaloids synthesis, diagnostic agents for image-guided surgery in cancer and potential drug candidates for Alzheimer's disease and prostate cancer.

"We want to use our line of building blocks to produce a number of pipeline candidates in the future to treat unmet needs in the fight against cancer," Noshi said. "Akanocure also strives to add more <u>building blocks</u> to its library in the future to enable the synthesis of more biologically relevant compounds for the scientific community."

Provided by Purdue University

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