

Project yields new directions for allergy research

October 16 2014

A new practical tool developed by a Simon Fraser University scientist could provide clues to the mysterious causes of allergic responses, and how to prevent or treat them.

The Allergy and Asthma (AAP) is a database that permits scientists to study, for the first time, how genes, proteins and other molecules change and interact in creating allergic and asthmatic reactions.

Fiona Brinkman, an SFU bioinformatics professor, came up with the idea after working on a similar network-based project to identify immune-boosting therapies against <u>infectious diseases</u>.

She's hopeful that the AAP database and its visualization tools will encourage scientists to make new connections that weren't apparent when studying allergy-causing proteins, genes and other molecules in isolation.

Brinkman has spent the past several years leading the AAP project in collaboration with professor David Lynn of Flinders University in Australia, and a network of AllerGen researchers across Canada.

"Allergies have become essentially epidemic in Canada," says Brinkman, a former recipient of Canada's Top 40 Under 40, Canada's Top 100 and the World's Top 100 Young Innovators awards.

"We need to come up with better approaches for improving treatment,



and reducing development of allergies in the first place.

"This database provides practical help for researchers dealing with very complex diseases. It's not the final answer—there's a lot more integration to be done, but it's certainly a notable step in the right direction."

Provided by Simon Fraser University

Citation: Project yields new directions for allergy research (2014, October 16) retrieved 5 May 2024 from https://medicalxpress.com/news/2014-10-yields-allergy.html

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