

UQ researcher on the hunt for viruses

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(PhysOrg.com) -- UQ scientist Ian Mackay is always on the lookout for that lucky find - well, if you consider unknown strains of the common cold virus lucky.

Dr Mackay's team has worked in this area for the past three years and recently identified an entirely novel species of Human Rhinovirus (HRV) - the [virus](#) responsible for the common cold and the majority of acute [asthma](#) attacks.

"The new species - to be called HRV C - consists of many discrete viral strains that had previously gone undescribed," Dr Mackay said.

"They hadn't been found earlier because they cannot, to this day, be cultured using the standard methods that work for the 100 HRV A and HRV B strains and culture was the standard diagnostic method until the early 1990s."

Dr Mackay said being able to identify all strains of the virus would make vaccines or antiviral interventions more likely to succeed.

"It is important to be able to examine strains individually to see whether their distinctive genetic features translate into discrete clinical outcomes," he said.

"For example, HRV C strains may be more common in asthma exacerbation than HRV B strains."

Dr Mackay's lab screens hundreds of patient specimens at a time - mostly from young children admitted to Brisbane's Royal Children's Hospital - in order to find newly identified or previously unknown virus strains.

"We also work with an expert clinical team who can perform medical chart reviews to identify what signs, symptoms and diagnoses were made on patients positive for the virus of interest," he said.

A viral theme is also identifiable in Dr Mackay's career - he has previously worked in the area of viral diagnostics and respiratory virus characterisation in children.

"The area of respiratory virus identification and characterisation - or 'virus hunting' as we call it - is the latest in a series of interests," he said.

"I'm an accidental virus hunter I suppose."

Dr Mackay is an Adjunct Senior Lecturer in UQ's Clinical Medical Virology Centre and leader of the Emerging Viruses Group at the Sir Albert Sakzewski Virus Research Centre (SASVRC).

He recently presented a summary of his team's achievements at a [conference](#) in San Francisco.

Provided by University of Queensland ([news](#) : [web](#))

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