Feijoas promise new anti-fungal treatments says researcher

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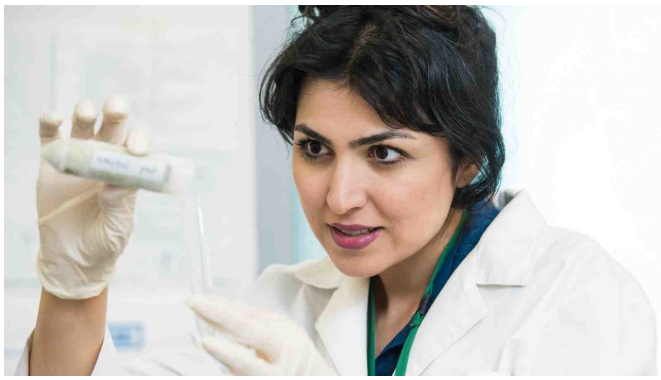

Credit: Victoria University

Mona Mokhtari will graduate with a PhD in Biomedical Science at a Victoria graduation ceremony, after conducting research into the antifungal properties of one of New Zealand's favourite fruits.

Researchers have been interested in the feijoa's antibacterial and anti-cancer potential for some time but Mona's research is one of only a handful of studies into its antifungal properties.

"Fungal infections cause one million deaths per year worldwide—more than breast cancer or tuberculosis—and that's even with the availability of antifungal drugs," Mona says.

"The problem is many of the antifungal drugs doctors have relied on for years are becoming less and less effective as these infections build up antifungal resistance. That's why we need to expand the range of antifungal drugs doctors have at their disposal.

"I became interested in feijoas, partly because New Zealand is so passionate about them, but also because they're a source of natural products. Research has shown that drugs based on naturally occurring compounds often produce fewer side effects in patients and can be taken in lower doses than synthetic drugs.

"I worked with Foretaste Feijoa Fruit in the South Island to identify and test a particular compound in feijoas. I found that it is about 50 times more effective as an antifungal than as an antibacterial. That makes the compound very promising as the basis for a drug that kills fungal cells without hurting human cells or the beneficial bacteria in the guts of humans."

Mona says a lot more work needs to be done before a drug can be developed and made available to doctors. For the time being, she is starting a new project looking at the anti-cancer and anti-diabetic properties of feijoas.

"Now that the compound has been identified and once the research has been published, other researchers have a head start on turning this compound into something you might see in pharmacies in years ahead," Mona says.

Provided by Victoria University