

CANADIAN MEDTECH SETS UP FIRST INTERNATIONAL OFFICE IN SYDNEY

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Fast-growing intelligent dermatology startup company MetaOptima chose Australia as its first international market due to its world-class melanoma research and passion for medical innovation.

'The primary care and dermatology network in Australia is much more advanced in skin cancer diagnostics and management compared to other countries because they are dealing with it every day,' says MetaOptima Co-founder and CEO Maryam Sadeghi.

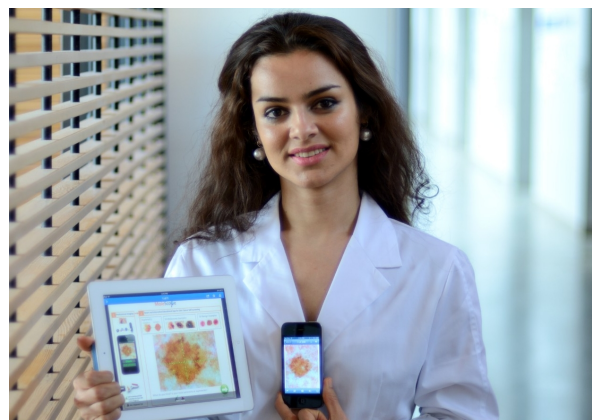
Australia, she explains, has one of the highest rates of melanoma in the world, with skin cancer accounting for around 80 per cent of all newly diagnosed cancers.

MetaOptima has developed a highly advanced skin dermatology platform, DermEngine, which uses artificial intelligence (AI) to support the early detection of skin cancer by helping medical professionals make evidence-based decisions.

The platform is equipped with advanced deep-learning algorithms that retrieve visually similar images from previously identified skin cancers to assist doctors, dermatologists, pathologists and cancer specialists in detecting suspicious skin spots – within a matter of minutes.

DermEngine, which contains the world's largest library of annotated images of skin lesions, is designed to improve diagnosis accuracy and quality of care as well as cut down on unnecessary referrals and costs to healthcare systems and providers.

Sadeghi was motivated to start the company after observing how archaic and under-digitalised the systems used by dermatologists were in top medical centres. She describes an inefficient, very subjective process which, depending on the doctor's experience, could see a patient end up with a late or a missed diagnosis.



Maryam Sadeghi showcasing MoleScope on an iPad and iPhone.

'Our scientists in Australia are pioneers; they are changing the whole ecosystem and leading the wave of skin cancer innovation. Being part of that innovative family, having those leaders on board is awesome.'

Maryam Sadeghi, Co-founder and CEO, MetaOptima

Improving patient outcomes

'Melanoma is not static, it's growing every day and patients need to be seen quickly by specialists,' says Sadeghi. 'The earlier a skin cancer is identified and treated, the better a patient's chance of survival.'

'We wanted to modernise the way tracking and diagnosing skin cancer is conducted and at the same time connect everyone who's involved at each step of the patient journey, from GPs to dermatologists, from oncologists to surgeons.'

She equates the role of AI in skin cancer detection as having an expert colleague sitting beside you.

'It's a machine that can deliver a second opinion obtained from the collective knowledge of thousands of doctors.'



Australian Government

Australian Trade and Investment Commission



'I think of it as explainable AI that you can debate with. The doctor makes the final diagnosis, but AI facilitates the decision making.'

Australian investors get on board

Sadeghi's mission to make dermatology intelligent and build evidence-based decision support tools in skin cancer diagnostics for better care outcomes, resonated with Australian venture capitalists Skip Capital and AirTree Ventures.

AirTree founder Daniel Petre had been searching for the best startups working on AI, image recognition and melanoma detection, hiring a PhD student to conduct a worldwide review. MetaOptima stood out as an industry leader.

Petre and Scott Farquhar, co-founder of Skip Capital and software company Atlassian, travelled to Vancouver to meet with Sadeghi and MetaOptima's Chief Technical Officer and co-founder Majid Razmara.

'We shared a vision that no-one should die from melanoma,' says Sadeghi.

'Daniel pointed out that MetaOptima's key performance indicators were a little different to other business ventures – it's about how many lives we save, not how much money we make.

'That meeting was one of the best experiences of my life,' she says.

Skip Capital and AirTree went on to make an A\$8.6 million investment in the company, convinced of DermEngine's potential to deliver better patient care.

In 2017, MetaOptima approached Austrade for assistance in setting up in Australia.

'We had really good support from the Austrade network in terms of advice, partner referrals and access to industry representatives and policy makers,' she says.

In 2018, the company opened its first international office in Sydney. Of the 49 employees worldwide, six are based in Australia and Sadeghi anticipates further growth.

As part of the recently ratified Comprehensive and Progressive Trans-Pacific Partnership (CTPP), MetaOptima qualifies for tax-free operation for its Australia-based entity.

Local heroes

Sadeghi believes local expertise and support is critical to success, explaining how MetaOptima works with Australian hospitals, pathology labs, doctors and clinics to incorporate their insights and learnings and customise the product to serve Australian patients and physicians.

'The knowhow we have found in Australia is very unique,' she says.

'Our scientists in Australia are pioneers; they are changing the whole ecosystem and leading the wave of skin cancer innovation. Being part of that innovative family, having those leaders on board is awesome.'

MetaOptima is planning clinical trials with major centres of excellence in Europe, Australia and the US to investigate the use of AI in retrospective and prospective analysis, as well as demographics and population.

'Our vision is to have DermEngine as a worldwide platform for dermatology and skin cancer,' she says.

Locally, that means making sure MetaOptima's technology is available in every major Australian dermatology and cancer clinic.

'We are looking at opening offices in different Australian states, in different regions,' says Sadeghi.

'I'm a big fan of serving remote areas and providing access to quality care for in-need patients.

'For us, true success will be our contribution to reducing mortality rates from melanoma in Australia, improving the system and patient outcomes.'

About Austrade

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