

## Nexsen and Universiti Malaya to launch Joint Research Facility

Nexsen Limited (ASX:NXN) (**Nexsen** or the **Company**) is pleased to announce the execution of a Memorandum of Agreement for a Collaborative Research Program with Universiti Malaya (**UM**), which will see Nexsen and UM establish the UM-Nexsen Joint Research Facility at the Universiti Malaya Innovative Medical Devices Centre of Excellence.

The first project for the UM-Nexsen Joint Research Facility is intended to be a rapid biosensor targeting foodborne pathogens, which present a critical food safety issue – particularly in the extensive food trade between Singapore and Malaysia.

### Investor Highlights:

- **Launch of UM-Nexsen Joint Research Facility** will see Nexsen establish a dedicated R&D and commercialisation hub with a leading Asian research institution (ranked 58<sup>th</sup> in QS World Rankings)
- **First project addresses a critical food safety and security issue** with an already defined and underserved market as there is no commercially available rapid dual-sensor for E. Coli and Salmonella
  - UM brings existing research and development of prototype devices for independent detection of foodborne pathogens with Nexsen to contribute its expertise in ultrasensitive sensor technology and research-to-commercialisation translational expertise
- **Co-funded establishment of facility with UM contributing 50% of costs** provides an attractive additional entry into Asia alongside Hong Kong, where the Company has won a grant to establish a manufacturing and research hub
- **Further expansion of the applicability of Nexsen's innovations** addressing critical unmet needs in human health, agriculture, biosecurity, and now food safety

### Managing Director, Mark Muzzin, commented:

"The UM-Nexsen Joint Research Facility gives us another physical R&D and commercialisation base in Asia with a research partner of world-leading standing, and through UM's financial and research contributions, significant leverage on our spend.

"The first project targets a critical gap in food safety diagnostics. The Malaysian Ministry of Health has identified the need for a rapid dual-sensor capable of detecting both E. coli and Salmonella on a single device. No such product is commercially available today. That is the problem we intend to solve, and we intend to do so within 24 months.

"This further demonstrates the breadth of our underlying technology platform and capabilities. The same lateral flow and bioreceptor technology that underpins StrepSure® and our kidney diagnostic suite is now being applied to food safety, joining our existing programs across human health, agricultural diagnostics and biosecurity."

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### **The UM–Nexsen Joint Research Facility**

Universiti Malaya is Malaysia's oldest university, ranked 58th globally in the QS World University Rankings, and is home to established biosensor research infrastructure and clinical networks.

The UM–Nexsen Joint Research Facility will be established at the Universiti Malaya Innovative Medical Devices Centre of Excellence, serving as a dedicated hub for joint research and development, technology co-creation and commercialisation. Under the terms of the agreement, both parties will contribute RM 1.0 million (~A\$0.33 million each) to fund the establishment of the facility and initial development activities.

The collaboration will also support talent development through an Industry PhD Program and student internships, building a sustainable pipeline of skilled professionals in biomedical innovation.

### **Addressing a critical unmet need in food safety and trade**

The UM team has previously developed prototype devices for the independent detection of foodborne pathogens, including E. coli and Salmonella, which are currently undergoing extensive laboratory testing and field trials in collaboration with the Malaysian Ministry of Health.

During those discussions with MoH officials, it became evident that a biosensor capable of simultaneously detecting E. coli and Salmonella spp. would be highly beneficial, and that no such rapid dual-sensor is commercially available today. The commercial need is defined, the market is underserved, and the end users have been identified.

UM and Nexsen bring together complementary capabilities to address this gap. UM has established biosensor research infrastructure, laboratory facilities and clinical networks. Nexsen brings its expertise in ultrasensitive sensor technology and its track record of translating university-developed research into commercial products.

Foodborne diseases caused by bacterial pathogens such as Salmonella and E. coli remain a major global public health and economic issue, with the World Health Organisation estimating that nearly one in ten people worldwide fall ill from contaminated food each year, leading to approximately 420,000 deaths annually. In Southeast Asia, the challenge is growing as agri-food industries expand and supply chains become more complex.

Current detection methods remain reliant on culture-based microbiological testing that takes 24 to 72 hours, requires specialised laboratory infrastructure and depends on trained personnel, limiting rapid decision-making at the point where early intervention matters most.

### **A defined delivery pathway targeting results within 24 months**

The project is intended to deliver a commercially viable, field-deployable rapid biosensor for the simultaneous detection of E. coli O157:H7 and Salmonella spp. This is a product for which there is a clear and critical unmet need. Nexsen and UM are targeting establishment of the UM–Nexsen Joint Research Facility within two months and aim to produce a first commercially viable product within 24 months.

The development pathway includes:

- refinement and standardisation of the dual-mode biosensor system for manufacturing scale-up
- conversion of UM's current laptop-dependent reader technology into a standalone, field-deployable device suitable for real-world operational settings
- field validation benchmarked against gold standard bacterial plating and PCR methods, conducted in collaboration with food producers, regulators and ISO-accredited laboratories in Australia and Malaysia

On completion of co-development, Nexsen will have the rights to commercialise the resulting product. Intellectual property arrangements under the agreement protect each party's background IP and provide a framework for the ownership and commercialisation of IP developed through the collaboration.

### **Expanding Nexsen's Asia Pacific footprint and the applications of our technology**

The UM-Nexsen Joint Research Facility is Nexsen's second operational entry into Asia-Pacific. In March, the Company was awarded a HK\$6 million IGNITE Grant supporting clinical validation, access to the Asian healthcare system and establishment of manufacturing capability in Hong Kong.

The Malaysia facility complements this, enabling the Company to establish physical R&D and commercialisation presence in two key regional markets – both of which have a significant non-dilutive grant or partnership funding element, providing further leverage on Nexsen's research and development spend.

The collaboration directly supports key Malaysian Government national priorities under Malaysia's 13th Malaysia Plan (RMK-13) and its National Biotechnology Policy 2.0, and provides a base from which to engage regulators, food producers and distribution networks across Southeast Asia.

This project extends the application of Nexsen's underlying rapid diagnostics platform – the same technology base that underpins StrepSure® and the Company's kidney diagnostic suite – into food safety, joining existing programs across human health, agricultural diagnostics and biosecurity.

The Company continues to advance other partnership and collaboration opportunities across Asia including for its StrepSure® Group B Streptococcus rapid point of care diagnostic.

**-ENDS-**

ASX release authorised by the Board of Directors.

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## About Nexsen Limited (ASX: NXN)

Nexsen is developing a suite of rapid point-of-care diagnostics designed to deliver lab-grade results for conditions that have traditionally depended on delayed laboratory testing. The Company is focused on areas of significant unmet clinical need, where faster diagnosis can improve patient outcomes and reduce pressure on healthcare systems.

Nexsen's lead diagnostic is the GBS Rapid Sensor, a rapid point-of-care diagnostic for detecting Group B Streptococcus, addressing a critical unmet need in maternal health. The Company is also developing rapid kidney function diagnostics for Acute Kidney Injury and Chronic Kidney Disease, two conditions that affect more than 850 million people globally and remain underserved by slow, lab-based diagnostics.

With further diagnostics in development across human health, ag-tech and biosecurity, Nexsen aims to become a global leader in rapid point-of-care diagnostics, delivering on its mission to ensure every person benefits from a Nexsen test at some point in their life.

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