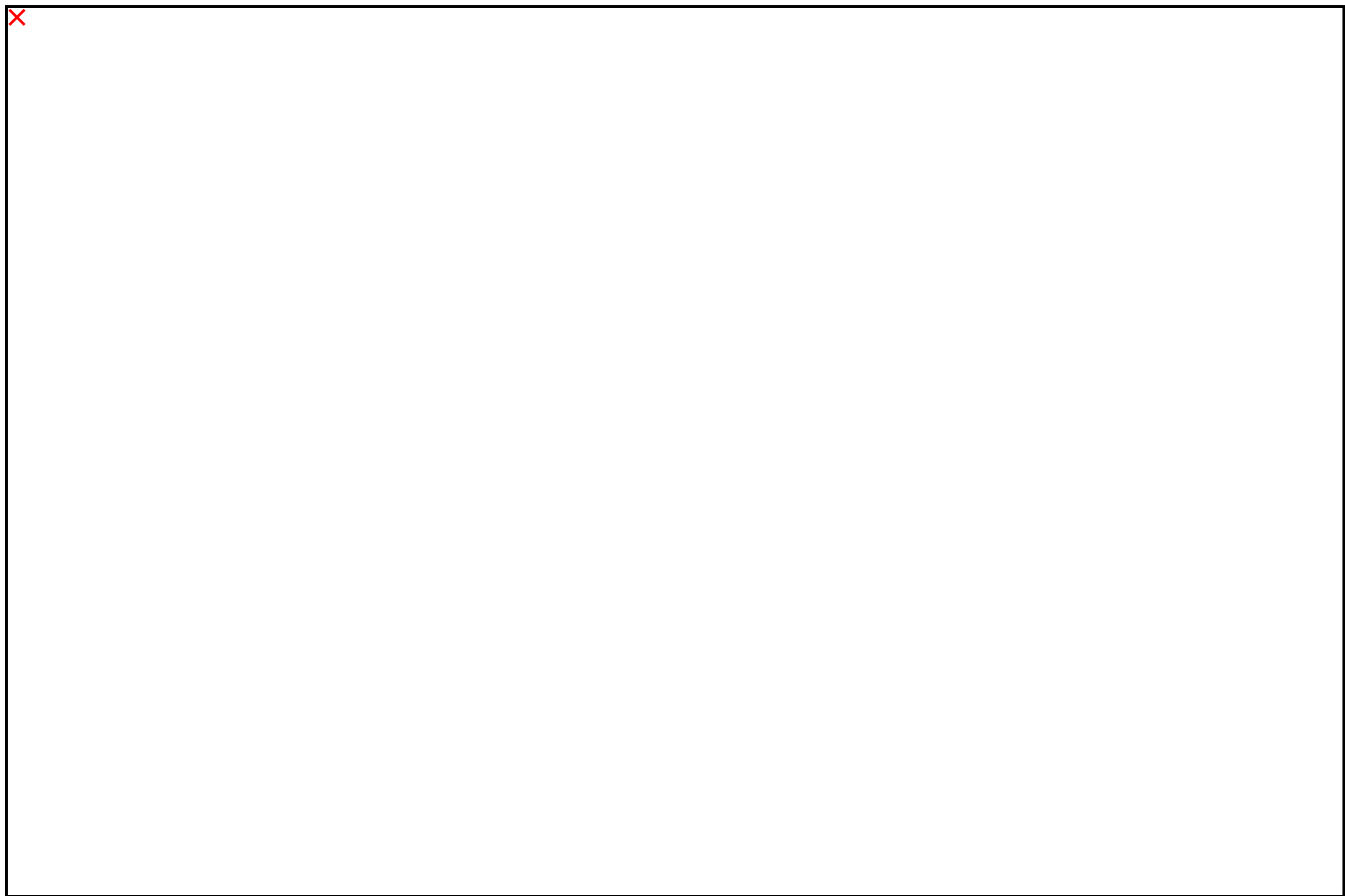




Minister Bruton announces new transatlantic partnership to make childbirth safer for mother and baby

Minister for Communications, Climate Action and Environment, Richard Bruton T.D., has today announced a strategic R&D partnership between Raydiant Oximetry, Inc., a medical device start-up based in Mountain View, California, and the Irish Photonic Integration Centre (IPIC), an SFI Research Centre based at Tyndall National Institute, who are working together to develop the world's first non-invasive foetal pulse oximeter.

The technology will provide obstetricians, who struggle to interpret the results of current foetal monitoring, with a key vital sign – foetal oxygen saturation – to enable more accurate identification of babies that are in distress and need of assistance, as well as help enable a safe reduction in Caesarean deliveries. It will be the first to measure oxygenation through the maternal abdomen, with no direct foetal contact.



Prof.

Paul Townsend, Head of Tyndall Photonics and Director of IPIC; Dr Nevan Clancy Hanumara, Chief Science Officer, Raydiant; Minister for Communications, Climate Action and Environment, Richard Bruton T.D.; Director General of Science Foundation Ireland and Chief Scientific Adviser to the Government, Prof. Mark Ferguson and Dr Patrick Morrissey, Head of Photonics Operations & IPIC Centre Manager at the announcement of the strategic R&D partnership in Boston.

Speaking at an event hosted by Science Foundation Ireland to promote transatlantic collaboration, Minister Bruton said *“The joining of people, ideas and expertise from Ireland and the United States, has created an opportunity to develop a technology that will protect both mothers and babies at a critical juncture in life, while also creating an opportunity for economic growth and job creation in both countries. I very look forward to following the progression of this innovative technology and its impactful benefits.”*

Quoting Raydiant's Chief Science Officer, Nevan Clancy Hanumara, PhD *"At Tyndall we found a world-class team of bio-photonics experts, with hands-on, device-level technical skills, who are crucial to the development of our prototype system."* According to CEO Neil Ray, MD, *"Science Foundation Ireland's initial investment of research funds jump-started our development process and Tyndall's capabilities have impressed our investors. I am proud to lead a team that spans the East and West coasts of the United States and the Atlantic. We look forward to increasing our presence in Ireland and are also planning a collaboration with the INFANT Centre at Cork University Hospital."*

This powerful and sensitive technology will detect the small foetal signal from inside the mother and correctly report when foetal oxygenation drops below safe levels. According to Prof. Stefan Andersson-Engels, Deputy Director of IPIC, *"Light is a powerful media for medical applications; at low intensities it is safe and the wavelengths can be tuned for specific molecular sensitivities. Current LED and photodetector technology makes the development of small, portable and low cost devices possible. My team and I see the potential for this and other light-based sensing technologies to improve clinical care across all regions of the world."*

Director General of Science Foundation Ireland and Chief Scientific Adviser to the Government, Prof Mark Ferguson concluded, *"World-leading SFI Research Centres such as IPIC attract some of the world's most exciting emerging companies to Ireland, with vision and ambition to develop breakthrough technologies. This international partnership demonstrates the excellence of the SFI Research Centres and their ability to turn science into life-changing technologies."*