

Australia develops intelligent hi-res retinal camera

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Singapore: The Australian Government's Cooperative Research Center (CRC) Program is providing substantial amounts of funds to researchers in order to develop the Intelligent Retinal Camera (IRC) system, which is going to be the most advanced technology for use in real-time detection and assessment of common blinding eye diseases. The imaging technology of the breakthrough retinal camera is being developed by the Vision Cooperative Research Center (Vision CRC) based in Sydney with international partners in Australia, US, China, India and Africa.

The world's first intelligent retinal camera will accurately and rapidly detect and eventually diagnose sight-threatening conditions such as diabetic retinopathy and glaucoma. The camera is being designed for ease of use in the most extreme environments so that it can be used by technical support staff and in the most remote and under-harsh conditions, especially to close the gap in eye health in Australian Aboriginal communities.

Professor Brien Holden, CEO, Vision CRC and founder of Brien Holden Vision Institute, said that, "Medical devices of this nature are typically researched for use in affluent populations and aimed at high-end commercial returns. The IRC system will apply high resolution, multispectral imaging in an economic but high technology instrument that will be affordable and therefore accessible both in remote communities and in community health locations and professional offices throughout the world.

Prof Holden said, "Living in remote communities seriously disadvantages patients through lack of access to optometrists and ophthalmologists. The IRC will detect, measure and assess the potential for blinding disease thus preventing lengthy delay in getting treatment to those in need in marginalised communities."

He added, "Aboriginal communities will be among the first to experience and benefit from this technology thanks to the funding from the Australian Government recently announced and the partnership with Aboriginal researchers and community health experts. This is especially exciting as it is intended that post-CRC the infrastructure and systems will be in place to develop further diagnostics for many of the most difficult and intractable general health and eye conditions."