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Vision and Mission

Vision: To be the world-leader in research in on-chip photonics, for all-optical signal processing.

Mission: At CUDOS, we aim to lead research which creates a world-best on-chip photonic platform for information transfer and processing technologies. We will translate the intellectual capital which we create to build a community of professionals which can drive wealth creation in Australia.

To achieve this vision and mission, CUDOS will be guided by an interlocking set of strategic goals across a number of areas of activity.

Research: CUDOS will perform world-leading research in integrated nanophotonics for all-optical information processing.

Education and Training: CUDOS will inspire, mentor and nurture the people needed to shape the future Australian photonics community.

Creating Wealth: CUDOS will create and exploit the intellectual capital essential for wealth creation through new jobs and new companies, and building industrial strength.

Community: CUDOS will create excellent linkages between academia, industry, government and community, be a flagship of Australian science and the national authority on photonics.
Initially funded from 2003 to 2010, CUDOS was awarded further funding for 2011 to 2017 with a $23.8 million Australian Research Council (ARC) grant, and secured funding from additional sources, providing a research budget exceeding $33 million for this seven year period.

In 2011, CUDOS had 15 Chief Investigators, 15 Partner Investigators and 13 Associate Investigators external to the Centre. Over 75 research staff (including 31 ECR’s) was involved in CUDOS projects and 66 students were enrolled in PhD, Masters and Honours programs across the Centre. Twenty three of these students completed in 2011 and gave gone onto employment in industry, research institutions or government.

In terms of research outputs, CUDOS published 73 papers in (A/A*) journals with 8 of these having an impact factor >6, and scored 6 post deadline presentations. CUDOS staff delivered over 45 international plenary, keynote and invited presentations and visited 65 overseas labs. CUDOS hosted 27 visitors and over 20 students from 15 countries.

CUDOS Outreach initiatives were delivered directly to over 1500 secondary school students to develop their interest in photonics and science in general. In line with its goal to create intellectual wealth, CUDOS introduced the Entrepreneurship Seminar Series as the initial step in creating awareness of commercialisation and entrepreneurship amongst staff and students. CUDOS was cited in the media on over 200 occasions and several members of CUDOS received highly coveted, prestigious awards.