

MEDIA RELEASE

**IMCRC collaboration is developing laser for cutting edge robotic dentistry**

**Melbourne, 13 January 2022:** A collaborative research project between the Innovative Manufacturing Cooperative Research Centre (IMCRC), dental technology company Dentroid Technologies and Griffith University is bringing Australians one step closer to accessing comfortable, pain free dentistry.

The project \$650,000 worth in research effort (cash and on-kind) will develop a high-power laser micro-electro-mechanical systems (MEMS) mirror (or “micromirror”) for the world’s first in-mouth laser-enabled robotic assistive device.

By replacing the traditional drill mechanism with gentle lasers, the innovative device will help dentists to provide patients ultra-precise and needle-free dental treatment with unprecedented convenience and speed.

Dr Jason Coonan, IMCRC’s Deputy CEO, said that automation and robotic assistance in dentistry is still in its early stages. IMCRC co-funding the development of the Australian manufactured MEMS mirror, a key component of Dentroid’s revolutionary robotic dentistry device, will catalyse the further development in the manufacturing of this tremendously exciting technology.

“This research collaboration has wide ranging impacts, from improving oral health for many populations across the world to leveraging Australia’s position as a global leader in dental excellence,” he said.

“As this project demonstrates, effective collaboration between industry and research partners is the key to delivering mutually beneficial transnational research outcomes that grow Australia’s medical technology manufacturing industry and create global export opportunities.”

Dr Omar Zuaiter, CEO of Dentroid Technologies said that the IMCRC research collaboration would enable Dentroid to deliver a device that would meet the growing demand for quality dental care and improve access for remote and disadvantaged communities.

“We’re excited to join forces with IMCRC and Griffith University to develop this world first micromirror. IMCRC’s activate funding will enable us to ultimately manufacture the in-mouth robotic assistive device that will herald a new era of accessible dentistry,” he said.

“Because our in-mouth device is compact, portable, and easy to use, it can facilitate early screening and diagnosis of dental issues, and then help administer the right treatment at the right time. The device will also enable remote and mobile dentistry, a game changer when it comes to improving access and quality of oral healthcare across Australia.”

Commenting on the project, Griffith University Professor Dzung Dao said he was delighted to be collaborating with IMCRC and Dentroid to assist with the development of such a cutting edge and impactful product.

“This collaborative research and development model means Griffith University can leverage our resources and technology to help Dentroid overcome barriers and develop, scale-up and deploy a locally made product of global significance,” Dao said.

“It also provides our researchers and students the opportunity to learn from industry SMEs and hone their understanding of Australia’s manufacturing landscape, allowing them to up-skill and add value when working on future projects.”

### **About IMCRC**

IMCRC is an independent and for-impact cooperative research centre with a successful, proven and scalable model for catalysing research and business partnerships that drives transformative commercial outcomes for participating Australian manufacturers. To date, IMCRC has successfully co-invested in more than 60 R&D projects, catalysing more than \$200 million in transformative manufacturing research.

The IMCRC activate program was introduced in 2020 to support shorter-term, industry-led research projects that help Australian manufacturers take action and gain a competitive edge in the post-COVID-19 world.

### **About Dentroid Technologies**

Dentroid Technologies (Emudent) is an award-winning Canberra-based dental technology company with the bold mission to develop the first in-mouth laser and A.I enabled robotic assistive device for dentistry. The company's vision is to overcome the enduring issues preventing access to quality dental care such as cost, accessibility and phobias.

### **About the Griffith University**

Griffith is one of Australia's leading research universities and its researchers are at the forefront of discovery. Operating out of world-class research centres, institutes and schools, Griffith's researchers are driven to better understand the world and improve people's lives. The university's research strengths span a broad spectrum of areas, from chronic diseases to criminology and Asian politics to the arts.

### **For more information, please contact:**

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