

MEDIA RELEASE

19 September 2017

Is this the future of prosthetics?

When Len Snowden lost his arm and leg in a tragic accident in 1992, he never could have imagined that 25 years later he would be an expert on a panel discussing the future of innovative prosthetics, giving a voice to others who have lost their limbs.

The public ethics panel, presented by the [ARC Centre of Excellence for Electromaterials Science](#) (ACES), aims to ask the important ethical questions surrounding the next generation of prosthetic devices.

The panel will be hosted by Illawarra media personality, Nick Rheinberger, who will foster essential conversation between soft robotics expert Professor Gursel Alici, materials scientist Professor Gordon Wallace, amputee Len Snowden and ethicist Professor Sue Dodds.

ACES is currently developing a soft robotic prosthetic hand which has the potential to become a low cost, easy-to-use and customised alternative to current prosthetic devices.

The hand is made of soft, innovative smart materials and uses 3D printed microchip technology to communicate with the brain to guide the movements of the hand. Through collaboration with researchers in Melbourne, ACES aims to have a device that can not only move like a human hand but also feel sensations by sending signals from the hand back to the brain.

Len has been using a variety of prosthetic devices since his accident, prosthetics that function well below the capabilities that are expected from the ACES soft robotic hand.

“The ultimate goal in our research program is to translate the progress in soft smart materials and 3D printing into an affordable, comfortable and aesthetic prosthetic hand with life-like movement, sense of touch and intuitive control,” Prof Alici said.

“It is a sensible hand that will touch people and their lives”.

This panel will also be an opportunity for these researchers to release some of the questions being asked in a recent survey of amputees. This survey aimed to find out what people are looking for in their prosthetic devices and what they wish to see in the future.

“We have also devised a new survey currently being conducted in Australia to compile up-to-date information about the needs and desires of people needing an upper limb prosthetic device. We will use these findings to make our research more relevant to the needs of society”, Prof Alici said.

ARC Centre of Excellence for Electromaterials Science
electromaterials.edu.au

The public ethics panel will be held at the University of Wollongong's Innovation Campus from 4.20PM on Tuesday 26th September 2017. For more information and to register please click [here](#).

Media opportunity:

Please contact ACES Communication and Media Officer Sian Wright on 02 4221 5960 or sianw@uow.edu.au to attend the event or arrange an interview with any of the panel members.

The ARC Centre of Excellence for Electromaterials Science (ACES)

Headquartered at the University of Wollongong's Innovation Campus, ACES is a multidisciplinary research group with a focus on developing functional devices for applications including batteries, solar cells and systems that interact with living tissue.