



**Australia Institute of Physics  
New South Wales Branch**

**NSW COMMUNITY OUTREACH  
TO PHYSICS AWARD**

**Presented to**

**Dr Renee Goreham**

**Senior Lecturer at the University of Newcastle**

*In recognition of outstanding achievements in  
Community Outreach to Physics*

*2023*

A handwritten signature in black ink, appearing to read 'F. Oomen', is positioned above the typed name and title.

AIP NSW Branch Secretary  
14 November 2023



# DR RENEE GOREHAM



Dr. Renee Goreham is a Physics Senior Lecturer at the University of Newcastle, and is proudly nominated for her exceptional contributions to community outreach that has impacted thousands of people. With expertise in nanotechnology for biomedical applications, Dr. Goreham has a demonstrated passion and skill for communicating the wonders of physics to people of all ages and has built new programs to do so.

Dr. Goreham has made significant contributions in three areas of physics outreach:

- increasing the media representation of women in Physics,
- building grassroots programs to excite rural school students about Physics, and
- coordinating a myriad of programs to engage school students with the university.

**Media:** In the past three years, Dr. Goreham has appeared on 4 local community ABC radio interviews (~70,000 listeners), 1 podcast (Avid Research), 2 university press releases, 2 community newspaper articles (Port Stephens Examiner), and 1 magazine article (2023 Cosmo magazine with ~70,000 subscribers). These media engagements are aimed at increasing the number of girls in science in our local community, as well as exciting the public about nanotechnology research.

**Grassroots Programs:** In 2021 during COVID-19 lockdowns in rural NSW, Dr Goreham ran a Zoom Science Show that was watched by over 200 students and their families in the Port Stephens regional council. Experiments made from household items included an air cannon and can-crusher. Tomaree High School, Wirreanda Public School and Medowie Public School took part. Students and their families were motivated to try Physics experiments after the show and sent pictures! The Zoom Science Show built on the success of a 2020 webpage and set of outreach videos called “Fantastic Physics” that Dr. Goreham made to engage students in regional areas with science. The Port Stephens Council awarded her a 2022 International Womens Day Scholarship to continue her grassroots physics initiatives. In addition, Dr. Goreham has mentored 3 female high school students in the Curious Minds program.

**School-University Partnerships:** Dr. Goreham is a leader in outreach to local schools at our university. Since arriving in Newcastle, she has led all Physics outreach. For example, since 2019, she has coordinated the ExperimentFest program, which sees over 1000 Year 11 and 12 students in the Hunter and Central Coast regions of NSW visit a university campus to do experiments, which they do not have access to in their high schools. Such experiential learning is valuable and would otherwise be missing from their schooling. Students and their families rave about this visit, with one saying it was “*the best thing ever.*” Students particularly like the Physics lab tour that Dr. Goreham added to the program in 2022, and which other science disciplines have now adopted. Beyond ExperimentFest, Dr. Goreham runs Physics Outreach at University of Newcastle Open Day (2021-on), National Youth Science Forum visits (2022-23), and Children’s University (510 Year 3 students impacted, 2021-on). Her phenomenal efforts have resulted in membership to both the School-level and the College-level Outreach Committees at the University of Newcastle, plus she was awarded the 2021 College Outreach and Engagement Award.

Dr Renee Goreham contributions and passion for physics makes her a very worthy recipient of the **2023 NSW Community Outreach to Physics Award** from the New South Wales Branch of the Australian Institute of Physics.