



ESRIC

EDINBURGH SUPER-RESOLUTION
IMAGING CONSORTIUM

The award for Research Project of the Year in STEM goes to a mission that has brought together scientists from several countries and different academic disciplines to better understand the mechanisms of disease in areas such as cancer, dementia and diabetes.

The Edinburgh Super-Resolution Imaging Consortium (ESRIC) is a project designed to bring super-resolution microscopy techniques to the widest community of biomedical researchers, helping to accelerate scientific discovery, train the next generation to the highest level and encourage international collaboration within biomedical research.

In 2015-16, the group's work included using silicon to develop novel camera adaptors for microscopes as well as new techniques to increase microscope resolution sixfold. Scientists are now able to visualise the movements of hundreds of thousands of single molecules inside living nerve cells.

ESRIC has also developed a PhD programme that teaches communication across scientific barriers, and launched an acclaimed summer school with substantial industry investment, hosting delegates from New Zealand, Australia, Brazil, the US, Canada, China and across Europe.

There are now 140 different groups working with ESRIC, while its outreach work spans more than 9,000 teachers, pupils and members of the public via talks and exhibitions.

Judges of the award said that the winning project "has already delivered prolific results, including a new diagnostic for cataracts – a major cause of blindness".