

Research and Development

The future

The AquaRay range is designed with the future in mind.

Wherever possible, new products will always be retro-compatible with your existing set up. Although the LED industry moves extremely quickly, your lights and controllers will work together whether they are old or new.

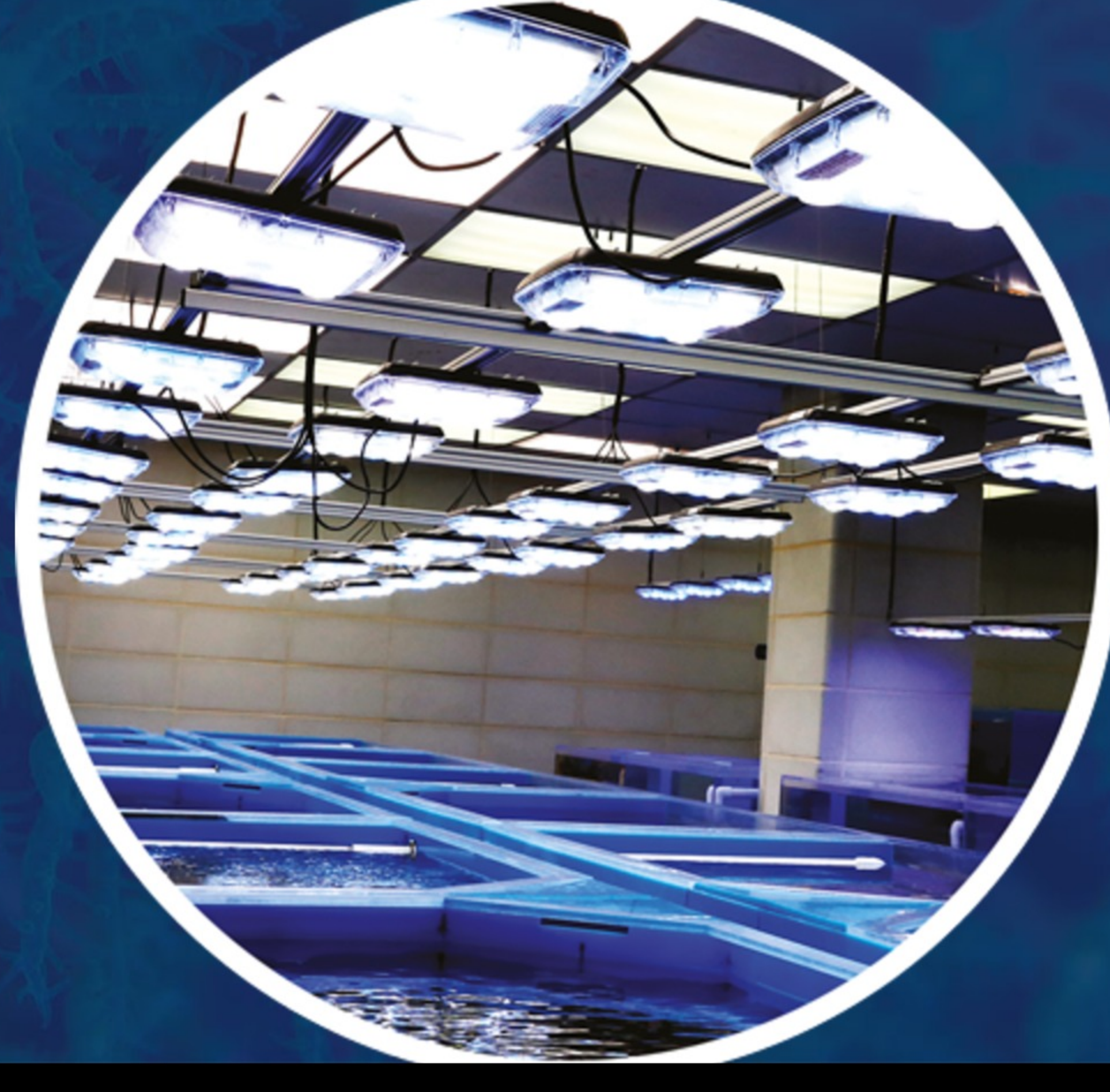
In this way you can easily upgrade your lighting gradually, or perhaps continue to use your old kit with a newer controller.

LED is a very fast-paced, exciting technology and Tropical Marine Centre thrives on research and development.

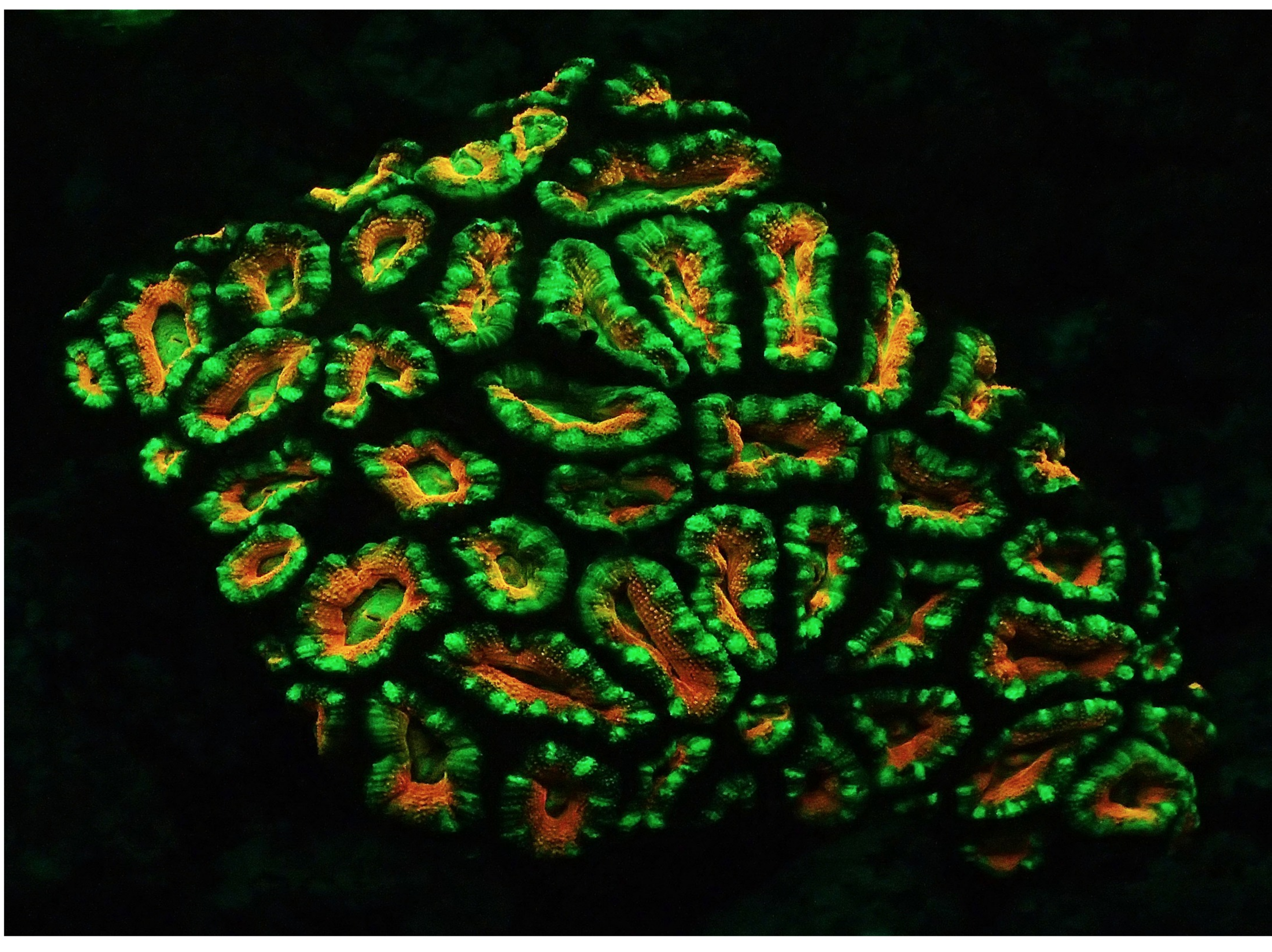
We have been involved with LED lighting since its introduction to the hobby in 2007 and we constantly look for new lighting technologies that could perhaps be adapted for aquarium use.

When they appear, our aim is to make them accessible to the hobby with high quality products at affordable prices.

Because of this philosophy, AquaRay lighting is now one of the world's most established and popular aquarium LED lighting brands and we look

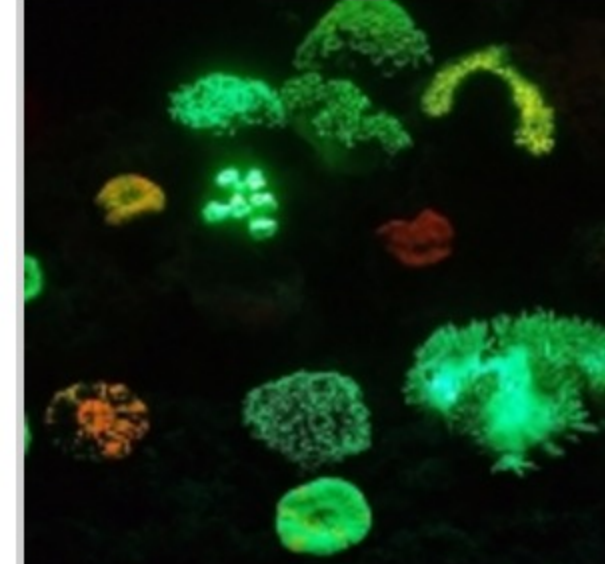


Research and Development Blog

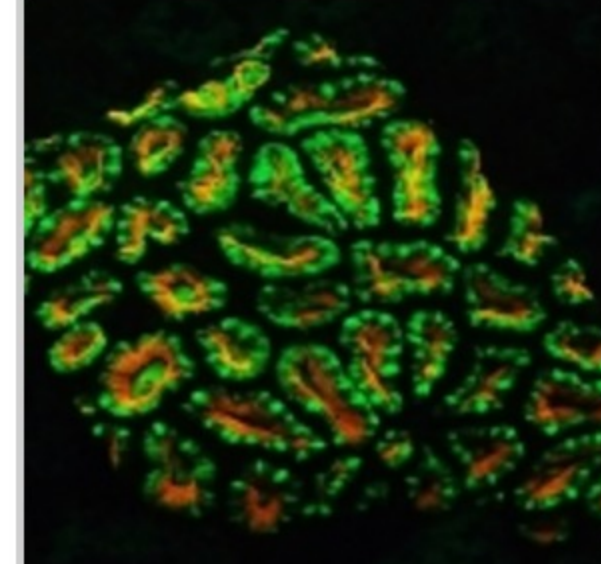


AquaRay Used to Show Coral Fluorescence at the Southampton Boat Show

AquaRay lighting was chosen as the best form of lighting available to display coral fluorescence at the Southampton Boat Show back in September. The people from the National Oceanography Centre at the University of Southampton created a great display and even used bacteria spliced with fluorescent protein genes to create fluorescent art!!



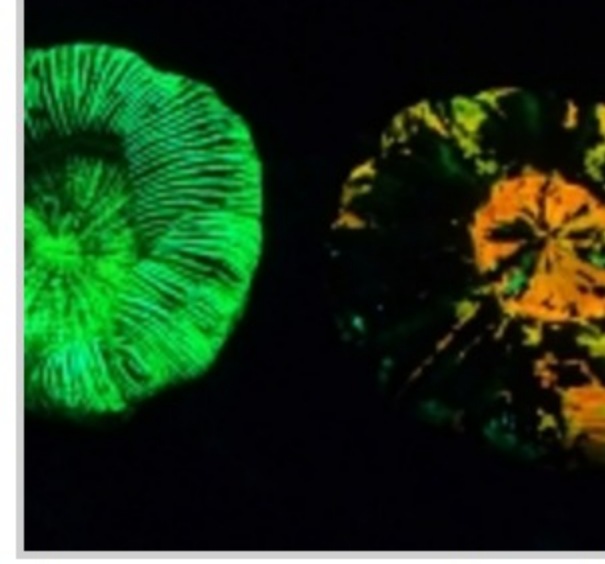
Fluorescent coral display



Fluorescent acanthastrea

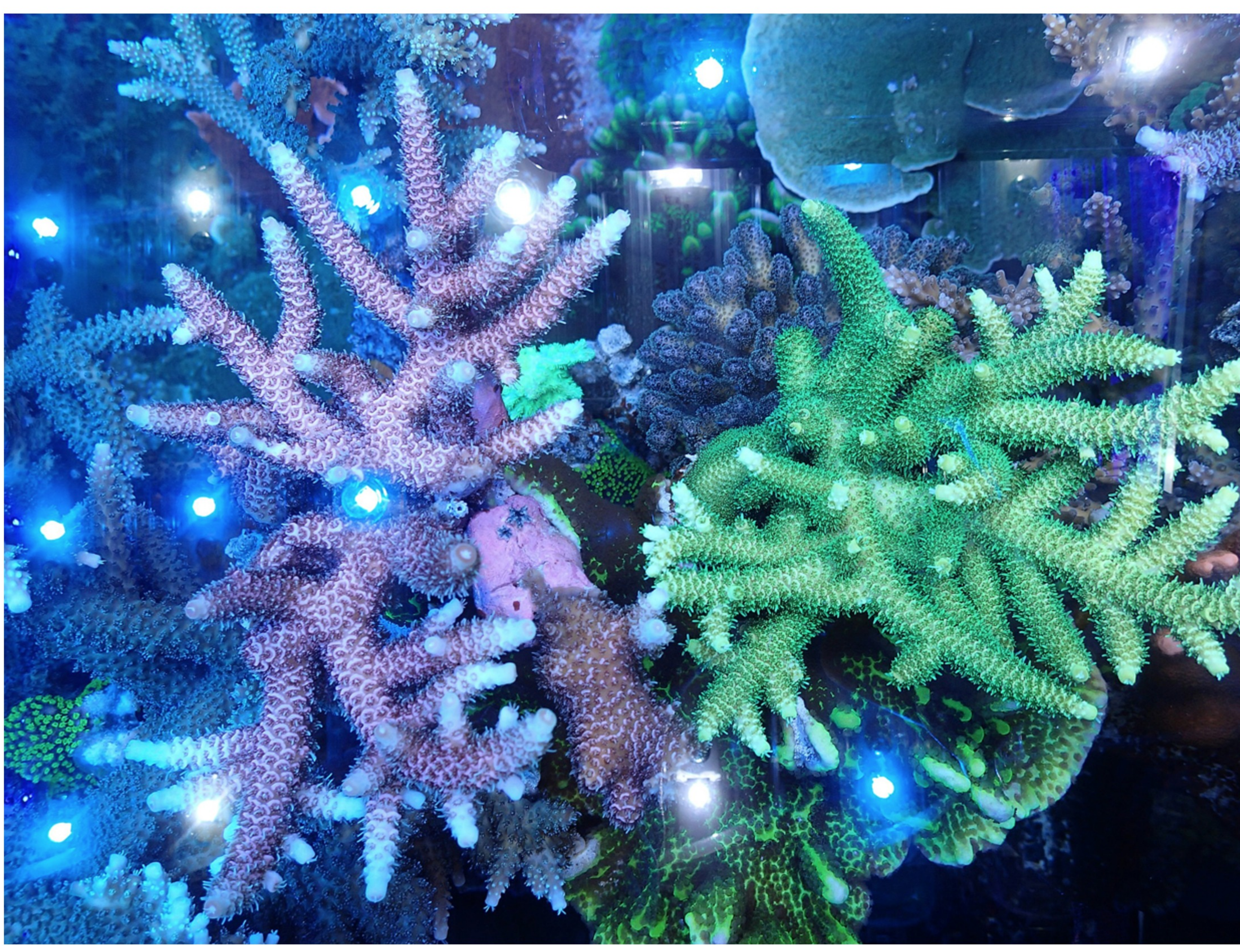


Bacteria spliced with fluorescent protein gene produced by NOCS



Fluorescent scolyimia

October 27th, 2015



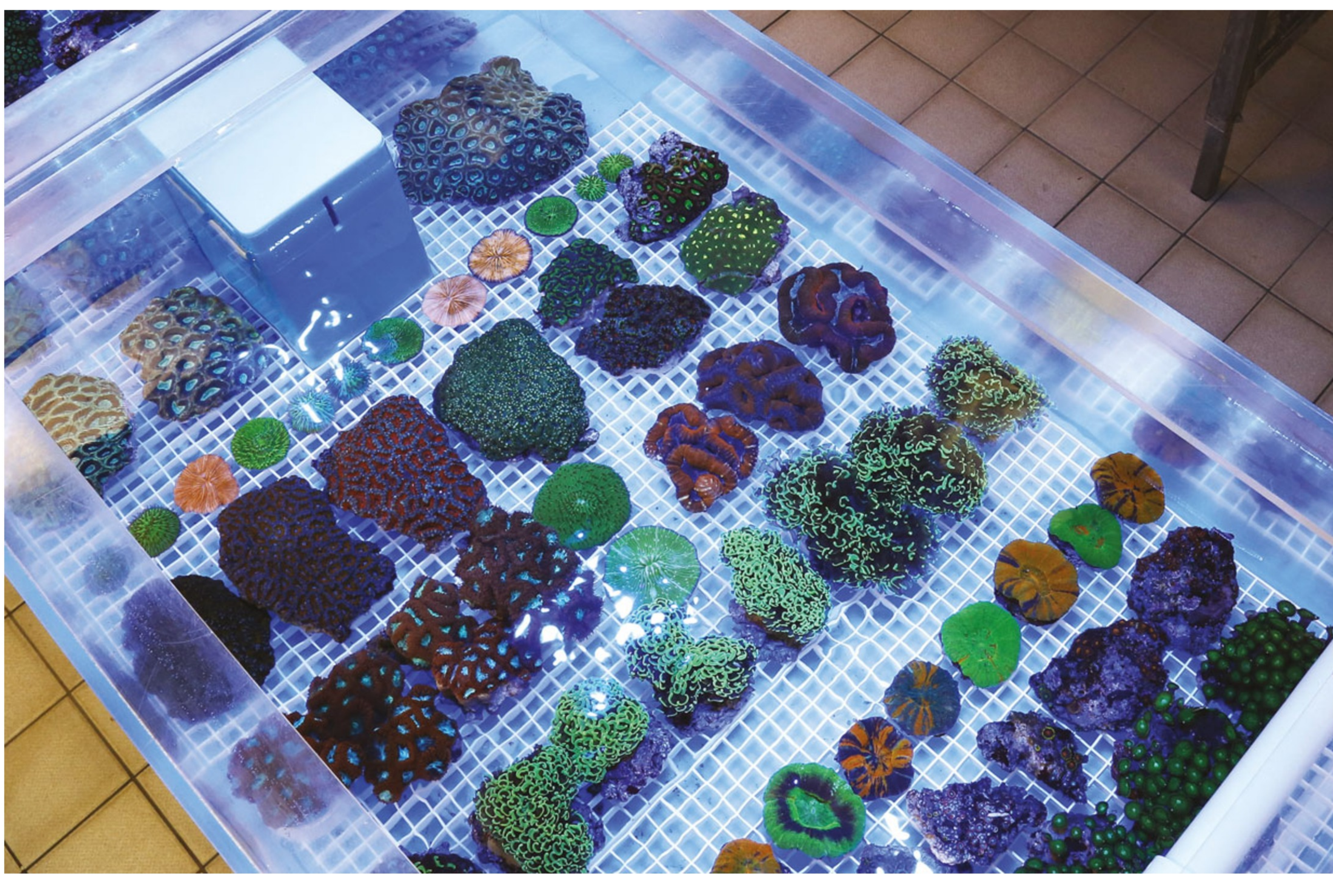
Cutting Edge Coral Research with the Help of TMC and AquaRay Lighting

Research at the University of Southampton has found an explanation for the puzzling observation that corals show such a stunning range of colours even when they are sat side-by-side on the reef. The related paper on the genetic basis of coral colour polymorphism in reef corals and its ecological implications came out in Molecular Ecology. The paper is open access so please feel free to download, tweet, blog and share with interested parties.

[How corals get colourful.](#)

Gittins, John R., Cecilia D'Angelo, Franz Oswald, Richard J. Edwards and Jörg Wiedenmann. "Fluorescent Protein-Mediated Colour Polymorphism in Reef Corals: Multicopy Genes Extend the Adaptation/Acclimatization Potential to Variable Light Environments." Molecular Ecology 24, no. 2 (2015): 453-465.

February 24th, 2015



AquaRay lighting used in coral pigment research

The research programme that we are involved in with the Coral Reef Laboratory at National Oceanography Centre, University of Southampton, is producing some excellent results, with new findings that potentially make big changes in the fields of reef keeping, propagation and conservation. You can find out more [here](#).

February 9th, 2015