

# RCPS MEDAL AWARDS 2023

## THE SHORTLIST



### ARTS

#### Nicola Bealing



**Nicola Bealing** is a narrative painter of exceptional skill. Admired for her overactive imagination and curious intellect she produces intriguing, unsettling images. Painted with seductive fluency and lively brushwork, her work often explores the tradition of the Carnavalesque, particularly its darker undercurrents, using humour to push the boundaries of taste.

Just before the pandemic closed borders, she spent time in Mexico as the inaugural artist for a new residency exchange programme developed by CAST in Helston with the Centro de las Artes de San Agustín Etla (CaSa) in Oaxaca. She is an award-winning artist, notably receiving the prestigious Bryan Robertson Trust Award (2021). Her work is held in numerous private and public collections, including the British Museum. Bealing is represented by Matt's Gallery in London, where her two-part exhibition of recent, extraordinary paintings, 'The Borough' and 'Dead-man's Fingers', will be showcased from January to April this year.

#### Lisa Wright



**Lisa Wright** is a figurative painter whose subjects quietly convey the aura of art history while existing firmly in the contemporary world. Trained in the discipline of drawing at the Royal Academy Schools, and informed by art history, her paintings connect the viewer to the past, while her exploration of shifting identities alludes to present day concerns.

In 2019 she created 'Future Forest', an ambitious sculptural installation commemorating Forestry England's centenary, speculating on the beauty and fragility of the natural world, and our position within it. Extending her painting practice, she produced ten life-size, classically-inspired adolescent figures, working closely with Tom Piper (MBE) to realise their presentation in a forest setting in Suffolk. Wright has received many awards, and was the first artist in residence at the Royal Shakespeare Company. She has exhibited widely, in London, New York and Hong Kong, and her work is represented in numerous collections.

## ARTS (continued)

### Abigail Reynolds



**Abigail Reynolds** works across different media including sculpture, print, event and film to consider communal experiences of time. Reworking historic images or events using techniques such as montage and assemblage, she gently draws attention to things almost forgotten, opening them up for reinterpretation. Initially studying English

Literature at Oxford University, her enduring love of books underpins a recent body of work that celebrates the lost and living worlds of libraries.

She exhibits nationally and internationally, and her work is represented in public collections such as the Arts Council Collection and New York Public Library. In 2016 she was awarded the BMW Art Journey prize at Art Basel to travel to lost libraries along the Silk Road, resulting in a publication. In 2022 she completed a major permanent commission for Kresen Kernow, 'Tre', an original stained glass window. Her accompanying book 'Tre, a window for Cornwall' was published last year along with a companion book 'Flux, glass from sand and seaweed' with her solo exhibition at Kestle Barton gallery. Her work is currently featured in the Hayward Gallery's British Art Show 9, the landmark touring exhibition that defines new directions in contemporary art.

## SCIENCE

### Prof Chris Bass



**Prof Chris Bass** is an applied entomologist. His research focuses on understanding how insects (beneficial species such as bee pollinators and pests such as aphids) interact with the natural and synthetic toxins they encounter in the environment. These toxins include the chemicals produced by plants as a defence against herbivores and human-made insecticides. In the case of bee pollinators, the work of the Bass lab and his collaborators has discovered why bees are

highly sensitive to some insecticides but not others. This knowledge has been used to predict and avoid negative bee-pesticide interactions, inform the development of robust pesticide risk assessment frameworks and in the development of bee-safe insecticides. In the case of pest insects, the Bass lab's recent work on aphids has uncovered the mutational events that lead to insecticide resistance. The research results have provided fundamental insights into rapid adaptive evolution and applied impact in relation to controlling global crop pests.

## SCIENCE (continued)

### Dr Kate Moore



**Dr Kate Moore** is an expert in green technology metals. Her research focuses on the security of resource supply, particularly for the raw materials used in the low-carbon energy technologies and the ethics of mining for an extended and diversified set of technology metals.

She was shortlisted for her recent research on switch-on switch-off mining that tested mining and processing technologies for responsible resource extraction. Her work crucially considers whether current mining paradigms are well-suited to the geological nature of raw materials, the scale of primary and secondary ore deposits, the footprint of supply chains, and environmental and social sustainability imperatives.

### Dr Nick Tregenza



**Dr Nick Tregenza** has revolutionised the way cetaceans are studied in the wild by developing fully automated acoustic monitoring devices, called PODs, that identify the ultra-sonic echo-location clicks made by dolphins, porpoises, and some whales. This novel technology has made it possible, for the first time, to discover the locations and trends of some the most endangered species in the world and to find out how to keep them out of fishing gear. PODs spread across the whole sea, showed that the Baltic Sea Harbour

Porpoise was not extinct and had key sites that are now protected.

PODs have also tracked the sadly downward trend in number of the Vaquita, a porpoise unique to Mexico. A single instrument recently revealed that the pink river dolphins of the River Amazon have an extraordinary and highly developed means of communicating with one another through a kind of private channel by using highly directional ultrasonic clicks.

This year PODs have gone into use in Nepal, and meanwhile a combined citizen-science and academic project is building a network of PODs around the south and south-west coasts of Britain to help understand what is happening to our own dolphins and porpoises.

# INDUSTRY

## Bennamann Ltd (Chris Mann)



**Bennamann** was a 2011 start-up and remains a privately-owned company based in St Allen and at the Aerohub.

It is a world leader in delivering Clean Energy for the agriculture industry and often derived from space sector technology. Using its innovative approach and products, livestock farms of any size can capture all of the emissions from slurry lagoons, create their own energy source, reduce fertiliser

bills and sell the high value biomethane fuel which is produced by the process. Cornwall Council now uses Bennamann biomethane in some of its Cormac vehicles, last year the first liquid methane tractor was being produced by New Holland in collaboration with Bennamann, and a multi-farm project is being rolled out across Cornwall Council estate farms and beyond.

The circular economy that Bennamann technologies create is a model of local success and mutual support, in addition to the untold environmental benefit of vastly reducing global-warming gases from livestock farms, currently one of the greatest challenges to the sector. And it is creating tech, environmental science and engineering careers in The Duchy.

## Eliquo Hydrok Ltd (Peter Wroe and Lewis O'Brien).



**Eliquo Hydrok**, a Cornish start-up in early Noughties, was sold to Eliquo Water Group GmbH in 2016. It has continued to grow, from its HQ in Indian Queens, as a major player in sludge and wastewater treatment. The company was formed around a core of skilled engineers based here in

Cornwall with a passion for environmentally progressive and engineering-based products and services to the water industry. It is the largest manufacturer in Europe of static and mechanical CSO (combined sewage operations) screens alongside a range of flow controls, filtration and aeration technology and delivers bespoke solutions from design, through manufacture to installation, commissioning and servicing.

The company has a long term role to play in central Cornwall in creating high end, well-paid tech careers, cutting edge R&D and environmental leadership in an increasingly sensitive area - and one in which Cornwall has a special interest with our water-based tourism, surfing, fishing and farming sectors, forming such a huge part of our economy and wellbeing. During the past 12 months Eliquo Hydrok has led research and collaboration into world-leading sludge treatment which could turn waste into energy.

## INDUSTRY (CONTINUED)

### Goonhilly Earth Station Ltd (Ian Jones and Piran Trezise)



**Goonhilly** has made international headlines in recent months, providing communications support for NASA's Artemis programme, and as a key partner in the Spaceport Cornwall project.

Formed in 2010, the company's first mission, however, was to save the iconic BT satellite Earth station from demolition,

successfully acquiring a 999-year lease for the site in 2014. Goonhilly is now revitalised as a trusted communications provider for the world's major space companies, supporting vital services including satellite internet, broadcasting, Earth observation, and launch tracking. Not content with providing services in near space alone, in 2021, Goonhilly completed state-of-the-art upgrades to its 32m and 30m antennas, establishing the world's first commercial deep-space communications network.

The company now supports scientific missions around the Earth, Moon, and Mars, for international space agencies including ESA and NASA, as well as commercial organisations. Goonhilly also offers unique space solutions here on Earth, including consultancy, specialist manufacturing, and training. While expanding overseas, the company's heart is firmly in Cornwall. It has attracted inward private and government investment to the area, offers opportunities for skilled employment and STEM outreach, and passionately promotes the region's impressive space and tech capabilities on a global stage.

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The Royal Cornwall Polytechnic Society (RCPS) would like to thank the group of generous individual sponsors who have made the 2023 RCPS Medal Awards possible, as well as the Tanner Phoenix Trust and the Cornwall Community Foundation.

