RAS 200: the first projects



Sue Bowler

reports on the winners of the first six RAS 200 grants for innovative outreach. he RAS will celebrate its 200th anniversary in 2020 – and the preparations have already begun with the selection of the first six projects in RAS 200: Sky & Earth. These innovative outreach projects include regional and national programmes, for disadvantaged young people and adults who see science as something other people do, through arts and humanities as well as tailored learning for people struggling with everyday life. All six awards address the fundamental goals of RAS 200: reaching out in innovative ways to new audiences of people in astronomy, space and planetary sciences and geophysics.

The first funding round in spring 2015 received a large response: 92 submissions. "More than anything else," said Prof. Steve Miller, chair of the RAS 200 Steering Group, "this shows how much of

an appetite there is for innovation in public engagement and the real willingness to expand our work into new areas and diverse groups of people – the central aim of this project."

What the winning projects have in common is new audiences and new ways to interest them – together with the means to reach them. The RAS is working with organizations that have experience of working with different sectors of the community. The collaborative way in which the RAS 200 projects are set up means that we use the extensive knowledge and established networks of specialist organizations to bring astronomy and geophysics to their audiences in ways that work for them. It's an effective way to work, but it also throws up innovative approaches to outreach. For example, embedding astronomy, space science and geophysics in the **Eisteddfodau** sets them at the heart of Welsh

culture. **The Planets360** will bring science to music-loving audiences in spectacular planetarium shows. Stargazing

works as a hook to develop an interest

The Prince's Trust will introduce stargazing to marginalized youngsters on their wilderness expeditions. disadvantaged young people it supports will gain confidence and skills from an appreciation of astronomy. Many adults have missed out on basic education, or perhaps are not fluent in English; the **Workers' Educational Association** will use an interest in the skies as a way to draw them into targeted education, so that they can help their children with schoolwork, for example. **Care4Carers** will be using astronomy in structured activities to give carers a change and a rest. At the heart of all these projects is sharing the enduring appeal of our sciences, satisfying our innate curiosity about the world around us. Science can be a lifelong interest and help to build bridges between people; **Space, Earth and Autism** aims to strengthen those links specifically to enable

in science, for pleasure or to boost people's oppor-

tunities in life. The Prince's Trust hopes that the

"The RAS is working with groups that have expertise in how to address their audiences"

more participation in RAS sciences from people with autism, by developing tailored training and resources.

By combining RAS expertise – in the form of Fellows active in the projects as well as partnerships with astron-

omy and geophysics organizations – with specialist knowledge and expertise about the people we want to reach, the RAS200 projects are set to bring astronomy and geophysics to new audiences.

The groups selected for funding bring new and exciting opportunities, spreading the influence of the Society across the country. The RAS is working with groups that have expertise in how to address their audiences together with established networks and contacts. And, above all, the RAS 200 projects

> will bring fresh new ideas to astronomy and geophysics outreach. There's a lot to look forward to for our bicentenary! See over for details of the winning projects

RAS 200: the winning projects

Astronomy and Geophysics through the Traditional Culture of Wales

led by Prof. Eleri Pryse, Aberystwyth University

This programme will bring astronomy and geophysics into the National Eisteddfod of Wales, and youth festival the Urdd National Eisteddfod. The Eisteddfodau are national arts festivals that encompass all elements of culture. This project will introduce



The festival atmosphere of the Eisteddfod will be the backdrop for poems, music, dance and writing inspired by the sky and the Earth. astronomy and geophysics as themes for competitions, compositions and performances, including a live – and lively – competition between teams of poets. Scientists involved in the project will develop activities such as a "dance of the solar system" inspired by the Rosetta comet mission. This project will produce a legacy of poems, musical compositions, dance and writing; the idea is also adaptable to other traditional cultural celebrations.

Open Your Eyes, Look up to the Sky led by Paul Amann, Workers' Educational Association

Open Your Eyes will use skills developed through astronomy to better the lives of people who are unemployed or disabled, with low levels of literacy or numeracy and mental health or learning difficulties, those living in disadvantaged communities and the digitally excluded. Open your Eyes will use and enhance the grass-roots learning networks of the WEA, training tutors and developing new materials as the project progresses. The WEA has a strong social purpose: this project contributes to their goals in employability, health, community engagement and culture. "Starting in the northwest and rolling out nationally, the project will engage thousands each year," says Amann. "Above all it will be fun, funky and fascinating."

AUTHOR

Sue Bowler is editor of A&G.

WEBSITES

http://www.ras.org.uk/200 http://www.eisteddfod.org.uk/english http://www.urdd.cymru/en/eisteddfod http://www.wea.org.uk http://www.princes-trust.org.uk http://www.NSCcreative.com http://www.autism.org.uk

Stars and Space

led by Kate Ferrie for the Prince's Trust

Stars and Space will add astronomy and space science to the activities that The Prince's Trust runs for marginalized and vulnerable young people – those experiencing homelessness, mental health issues, and/or disability, and young offenders and those struggling with long-term unemployment or the impact of leaving the care system. The Prince's Trust organizes wilderness residential expeditions; stargazing will become an integral part of this experience. Stars and Space will also develop a week-long Get Started course to boost the skills and confidence of young people who might return to education or employment. The Trust will also encourage young people to build on their interest by volunteering or seeking work experience at science centres.

The Planets360

led by Paul Mowbray of the National Space Centre

This project draws on music to engage audiences in science, through a spectacular planetarium show. The focus is Gustav Holst's orchestral suite *The Planets*, which will be reimagined as part of a full-dome immersive planetarium show, using a recording by the Philharmonia Orchestra and a commissioned contemporary interpretation produced by Sonic-Xplores. The show will be freely available and modular, so individual planetariums can tailor shows to different audiences. This innovative presentation, fusing science, arts and music, will introduce those interested in music to science that they might not otherwise discover. The music-led approach may also support different ways of learning for both adults and children.

Stepping out: Astronomy Short Breaks for Carers led by Ruth MacLennan of Care4Carers

"Unpaid family carers need breaks from caring in order to cope with their often complex and challenging caring situations," says MacLennan. "We want carers to have fun, a break, learn something new and have a shared experience in new settings that they may not have explored before." The project, based in Scotland, will involve day, evening and weekend activities and visits to organizations such as the Royal Observatory Edinburgh. Carers will also be able to make new friends and follow up their new interests, perhaps online, which in turn increases their confidence. Care4Carers also hopes that these activities will support specific groups of carers: young adult carers, men, those from ethnic minorities and carers in remote rural locations.

Space, Earth and Autism

led by Heather Wildsmith, National Autistic Society

This project focuses on access to the other RAS200 projects – and other UK science organizations – to people with autism. Space, Earth and Autism will develop training to ensure that outreach activity is accessible and enjoyable to people with autism, who can have a particular affinity for astronomy, geophysics, space and planetary sciences. People with autism often have the same passion for lifelong learning as anyone else, yet experience significant barriers to participation. The training developed through this project will be useful for many science organizations and offers the prospect of better employment opportunities that use the specific skills of people with autism to good effect.