

UKRI Place and Citizen Science project summaries

Citizen Science - Environment themed projects

Institute of Occupational Medicine - Citizens' Data for Air Pollution (CitiDAir)

CitiDAir explores the feasibility of incorporating citizen-collected data into air pollution research. Citizens will participate in a study to compare a consumer air monitor with a research monitor. The project will explore people's experience with the data collection process and the benefits they receive from this activity, to better incorporate citizen science into air pollution research.

National Trust - Stream sleuths: using fish eDNA to determine shared catchment actions

In the National Trust's Stream Sleuths project, volunteers will design and test an environmental DNA approach to detect which species of fish live in streams and ponds in Norfolk. This will help local communities make decisions to help river catchments become healthy and full of wildlife.

Sir Alister Hardy Foundation for Ocean Science (SAHFOS) - Exploring new placed based technological opportunities for community science with the Marine Biological Association and Time and Tide Bell

The Marine Biological Association (MBA) has teamed up with the 'Time and Tide Bell' project to work with local people on techniques to monitor their changing seas. Community engagement events will take place around the bronze tide bells at Appledore, Morecambe Bay and Mablethorpe. The aim is to help understand how our coasts and seas are changing.

Swansea University - Citizen and Community Science with Oriel Science

Oriel Science will be taking three extraordinary research projects and placing them in a pioneering city centre science exhibition centre. Public participants will be collecting and analysing "star dust" from micrometeorites, helping understand biodiversity issues by categorising insect species, and connect with Swansea's scientific and industrial history using sections of a huge redwood illegally felled.

The Open University - EDUcating Citizens and organisations in Citizen Science methodologies (EduCS)

EduCS will empower citizens in determining their own research agendas and educate them in scientific thinking, through engagement with a dynamic technological solution and workshops with scientists, the BBC, and the Met office. The project will result in a nationwide investigation into the effects of weather on citizens and their communities.

University College London - Identifying synergies between citizen science and Long-Term Socio-Ecological Research (LTSER) in the Cairngorms National Park

Long-Term Socio-Ecological Research (LTSER) sites across the globe are centres of long-term research (some over 40 years) that examine environmental change over time and society/environment interactions. This project will evaluate the potential of using citizen science as a monitoring tool at LTSER sites.

University of Bristol - Using the UK Air quality archive in Primary Schools

The U.K. Air quality archive charts changes in key pollutants. This project will work with primary school teachers to develop datasets that schools can use to research and investigate the air quality local to them and beyond. Schools and their children will provide a conduit to this amazing resource and archive.

University of Exeter - Assessing the value and challenges of using citizen-science to understand plastic pollution in the marine environment

This project will work with the organisations engaged with beach cleans to identify key enablers, barriers and challenges and assess the potential role for citizen science within the future circular plastics economy. Litter survey programmes that enlist volunteers, or citizen scientists, to collect data can resolve many of the logistical or financial constraints that may otherwise be encountered.

University of Hull - Citizen Inquiry: Barriers, Challenges and Enablers for Public Engagement

Citizen Science is being used to focus on issues around plastics waste. A series of workshops with researchers and young people from youth organisations in the city of Hull will explore how the use of Citizen Inquiry might incentivise both groups to get more involved in this kind of activity.

University of Nottingham - Swat or Not? Identifying Insects in Virtual Reality

“Swat or Not” is a virtual reality game, where volunteers will try to distinguish between harmless and dangerous insects, such as flies and wasps. The results will show us how misidentification can drive the evolution of insect patterns, and hopefully inspire people to become amateur bug-hunters who can help us monitor biodiversity.

University of Plymouth - SoilSCAN: Soils, Science and Community Action

This project will encourage communities in East Africa to get involved in studies examining the impacts of soil erosion. Soil scanners will be used as a tool for mapping soil characteristics at a resolution beyond that achievable in conventional research, with the ultimate objective of empowering stakeholders to create a sustainable land-use plan for the community.

University of Surrey - Marine Litter Citizen Science Research Agenda - An Expert Perspective on Advancing the Citizen and the Science in Citizen Science

Citizen science is becoming a popular approach to help understand and tackle marine litter, with volunteers recording and removing rubbish found in different environments. By surveying and then bringing together world leaders in this area, this project will identify how this approach can further be advanced to benefit science and the citizen scientists.

University of Warwick - Identifying, developing and embedding citizen science techniques in action research to evaluate locally led solutions for water quality monitoring

This new citizen-science study will evaluate locally led solutions for water quality monitoring in a range of water environments (i.e. river, coastal, wetlands) and will include, outfall safaris using community groups to identify pollution outfalls; autonomous GPS boats; & visual science, by using fluorescent tracers to track pollution.

Citizen Science - Health themed projects

Aston University - Crowd Sourcing SuperYeast

Aston University researchers are crowd-sourcing yeast strains from the public to test for alcohol and sugar tolerance. By determining what makes a strain more resistant to these stresses they aim to develop microbes that can withstand the effects of climate change or produce sustainable alternatives to fossil fuel derived products.

King's College London - My house, my rules: Co-designing residential air pollution research

Our homes are personal spaces, where we set the rules. This makes it challenging to conduct research in residential and community buildings without artificial constructs. This scoping study will engage with members of an urban community to co-design social and technological methods for indoor air quality research, laying foundations for improved public health.

The Open University - Exploring Community Responses to Health-related Community Displays

Increasing physical activity is an important health challenge for older adults. This project explores whether fitness tracking technology is made more effective if used alongside community displays. The project will work with communities to understand their needs and desires, as well as collaboratively designing how a community approach to fitness tracking could work.

University of Edinburgh - Investigating the Antimicrobial Properties of Scottish Honey: A Citizen Science Approach

Honeybees are much-loved insect pollinators, vital to ecosystems and agriculture. This project will bring together beekeepers and secondary school teachers, creating a network of citizen scientists who will work with researchers and clinicians to investigate the antimicrobial properties of honey and develop an online toolkit for use in schools across the UK.

University of Plymouth - GlacierMap: mapping glacier change in the Peruvian Andes

GlacierMap will encourage communities in Peru to get involved in mapping glacier outlines from satellite imagery across multiple time periods using a free web-based mapping tool. It will help to increase public awareness of mountain glacier retreat, changes to meltwater production, and implications for water, food, and energy security, through experiential learning and interactive glacier mapping.

Citizen Science - Space themed projects

Liverpool John Moores University - Developing opportunities for in-depth citizen science using robotic telescopes

This in-depth Citizen Science activity analyses the changing brightness of supernovae in distant galaxies. Understanding how exploding stars behave can ultimately equip people to measure the Universe's age and expansion. Additionally, the activity imparts some data analysis skills involving the citizen scientist in the scientific process itself.

Queen's University Belfast - Exploring Citizen Science Use Cases with the Lasair transient alert broker

The Legacy Survey of Space and Time (LSST) will effectively generate the largest movie of the changing night sky. Partnered with the Zooniverse team in Oxford, Queen's University Belfast researchers are exploring how to combine citizen science and automated routines to efficiently sift through the survey's data stream to identify transient sources worthy of rapid follow-up.

University of Nottingham - Citizens4EO

Satellite imagery is crucial in identifying and then tackling world problems such as loss of species and modern slavery. This project will start to realise the full potential of Earth Observation projects in using data from citizen scientists, producing a compelling report and showcasing case studies to inform future developments in using citizen science data.

Citizen Science - Other themes

University College London - A Citizen Assembly Pilot on Energy Transition in Lebanon

In this project a Citizen Assembly on energy transitions in Lebanon will explore the priorities, needs, and recommendations made by communities suffering energy deficits, leading to policy and engineering solutions that address their needs. Moving away from carbon energy production is not just a technical challenge but also a political, cultural and social challenge.

University of Nottingham - Using Citizen Science to Promote Transparency in British Election

This project delivers a new website that allows people to analyse election communication. Users can code election leaflets and find out where parties are discussing important issues like the economy or Brexit, the extent to which leaflets attack another party, and how much candidates emphasise their personal story to voters.

University of Oxford - Reconfiguring Citizen Participation in Cybersecurity

Cybersecurity can seem obscure and daunting. Yet, everyone can be made vulnerable by technology. Drawing on feminist participatory action research, we provide cybersecurity support combined with open discussion spaces which invite citizens—especially those excluded from technology discussions—to participate in defining what makes them feel threatened or empowered online.

University of Oxford - Co-creation of CERN OpenData projects with UK school students - pilot study

This pilot project brings cutting-edge CERN OpenData science into UK classrooms. The citizens performing the science will be UK school students and their teachers, assisted by researchers in UK universities and the Institute for Research in Schools. The students will be undertaking a full spectrum of scientific activities, and leading their own research using data from the world's highest-energy particle collider.

University of Oxford - Geospatial Design of Energy Systems for Africa: Citizen Science

GeoDESA Citizen Science aims to integrate local perspectives in rural electrical grid design. Using an online citizen science platform alongside outreach workshops, they are engaging citizen scientists in mapping rural areas of sub-Saharan Africa. By integrating local perspectives into large-scale data, they are developing smart, sustainable grid designs to connect around one billion who do not have electrical access.

Durham University - First encounters with quantum computing: can games teach quantum reasoning?

This is an interdisciplinary project between Quantum Computing and Education exploring how a puzzle visualization game (produced by partner Quarks Interactive) can promote a quantum literate society through enabling participants to learn the principles behind quantum computation without needing maths. This can make the field more inclusive and foster informed decision making.

University of Lancaster - Innovative Digital Citizen Science: Active Learning for Disaster Relief

A team of researchers from Lancaster University and the University of Oxford are partnering with citizen scientists to explore how people and AI can work together in crisis situations to provide responders with the most accurate information on where help is needed during and after a natural disaster.

Place based projects – health

Aston University - Engaging local citizens in Aston's Research

Aston University brings together an interdisciplinary academic team, Citizens UK, their anchor partners, and Aston Villa Foundation to work in some of the most deprived wards of central Birmingham. The team will use citizen listening events to understand barriers to accessing eye care, and co-create solutions including guidance and toolkits.

Liverpool School of Tropical Medicine - Formative study to evaluate period poverty among homeless and impoverished women in North-west England

Period poverty is a neglected public health issue. LSTM is partnering with organisations in Northwest England to engage with communities and stakeholders to explore women's experiences of managing menstruation under circumstances of deprivation, and what the most sought-after solutions might be. Findings will inform policy and a best practice guide.

University of Bradford - Bradford community connectors: shaping research into healthcare improvement

A collaboration with Millside Community Centre and an arts company - 'Ministry of Others', using creative processes to understand what matters most to communities about health. Putting local community experiences, needs, interests and challenges to set priorities in applied health research and co-create health research for better and safer care.

University of Cambridge - Using data to improve health: are the publics engaged?

Working with deprived communities across the East of England, this project will explore how the public is involved in the drive to establish linked health and care records. The goal is to develop shared meaning and guide engagement with the use of linked data for research and population health management.

University of Essex - Community Research and Engagement Programme (COURAGE)

The Community Research and Engagement Project (COURAGE) is a new partnership between Healthwatch Essex and the University of Essex. The project will support those affected by people living with neurological conditions, such as Multiple Sclerosis and brain injury. The co-designed research strategy will directly address these people's needs, through actively engaging them in research design and delivery.

University of Hertfordshire - Building a health and wellbeing research partnership with children and their families living in deprived neighbourhoods in Stevenage

This project will focus on ways to facilitate sensitive conversations with children and their families about their health and wellbeing. The research team will hold several engagement events in play centres in Stevenage to open conversations with children and their families about health and wellbeing issues that matter most to them.

University of Leicester - Raising community voice for future health research

Using a range of innovative engagement techniques facilitated by Leicester Citizens and the Akash Odedra Dance Company, this project will build a long-term partnership with diverse local communities to co-develop health research priorities for University Hospitals of Leicester NHS Trust and the University of Leicester.

University of Manchester - Developing community co-researchers to investigate air quality, health and well-being in Brunswick

A cross disciplinary team of researchers from The University of Manchester are working with residents in the Brunswick neighbourhood of Ardwick in Manchester and S4B, who manage the redevelopment of the area, to investigate resident's concerns about air quality and health. This project will acknowledge residents' concerns and involve them in this process.

University of Plymouth - The Pop-up Centre for Health Technology in Stonehouse

The pop-up Centre for Health Technology in Stonehouse, Plymouth will address health inequalities and social deprivation using digital technology and eHealth solutions. Working in one of the most deprived neighbourhoods in the UK, the pop-up Centre is a partnership between the University of Plymouth, Nudge Community Builders, Plymouth City Council, Adelaide Street GP Surgery, Plymouth Community Homes and Crowdfundready.

Place based projects – place

City, University of London - Prolific Offenders on the Andover Estate: Journeys and Turning Points

Criminologists at City, University of London will work with Islington community partners to co-produce detailed biographies for the 15 most prolific offenders in one of the Borough's most deprived areas. Crucially, it will include young offenders and their families/carers as an equal voice in research activities to better understand serious youth violence and enhance the local multi-agency approach to addressing it.

Edinburgh Napier University - The Seven Kingdoms of Wester Hailes: Developing Researchers in Place

The collaborative Seven Kingdoms project brings together researchers from Edinburgh Napier University and community partners from Wester Hailes to develop a team of community researchers. The project will complement the community's existing local place plan framework, with an approach that is participatory, polyvocal, performative and based in place.

Keele University - Social Innovation through University Partnership (SIT-UP): Developing a Keele Deal for Social Inclusion

SIT-UP (Social Innovation through University Partnership) supports a commitment to achieving a positive impact on the economic and social life of Stoke on Trent and Staffordshire. This project will build on research and innovation work with local partners to better understand and tackle the barriers to achieving social inclusion in the area.

Manchester Metropolitan University – 100 Year Street

The 100 Year Street will see URBED+ researchers at Manchester Metropolitan University and Liverpool-based social enterprise Squash work together, sharing social and spatial mapping technology, local knowledge and visions to engage communities in long-term planning of public space in Toxteth for food and energy sustainability.

Museum of London Archaeology - Evidence from the Edge: materialising poverty present and past

The MOLA-led project will develop and evaluate methods of co-creation in archaeological research with Volunteer Centre Hackney, Single Homeless Project, The Big Issue, and local communities. These partnerships will be strengthened through participation in future large-scale co-designed projects and will embed new practices into research work at MOLA.

Swansea University - Copperopolis: Place-making, engagement and heritage-led regeneration

With partners in schools, volunteer groups, private enterprise and charitable foundations, this project is set to bring researchers from Swansea University together with a diverse range of voices in the challenge of translating rich industrial heritage, through digital and creative approaches, into active narratives in the social, economic and cultural regeneration of the region.

University of Exeter - Using nature to foster stronger communities

The Growing Communities Through Nature action research project is a partnership between the University of Exeter, Cornwall Council, South Kerrier CIC and Cornwall's Voluntary Sector Forum to explore different ways to engage the public in improving local open spaces to increase biodiversity and social engagement.

University of Liverpool - The City Conversation – Building Place Based Partnerships for Inclusive Growth

Against a backdrop of austerity and increasing demand for services, the project provides a different conversation with communities on issues that impact on daily lives, local residents will be trained in research methods to gather intelligence and the findings shared with public sector partners to inform and shape services in Liverpool.

University of Wolverhampton - CAPTURE: Community Action-research Partnership Training University Research and Engagement

Through its CAPTURE project the University of Wolverhampton will provide training and support to a diverse cohort of community-based researchers in a deprived neighbourhood in Wolverhampton. Working with local partners, the trained researchers will be able to shape improved services, and 're-write the script' for the area.

Staffordshire University - How to 'Keep Talking': sustainable community research teams in deprived areas

Keep Talking will work with the community research team from Get Talking Hardship, a research project that involved citizens in understanding the experiences of people in hardship. It will to understand how universities and community organisations can work in partnership to build sustainable structures for citizens to create positive change for people experiencing poverty.

Teesside University - TV Lab: establishing a partnership approach to intra- and inter-community engagement

This project will work with disadvantaged Tees Valley communities investigating ways to harness research to improve and understand economic and social wellbeing in the region. It will empower residents to take the role of the researcher rather than the 'researched', tackling issues that matter to them most.

Place based projects – environment

Rothamsted Research - Delivering a community supported vision for achieving net zero carbon targets within a livestock farmed environment - impacts on the landscape, communities and livelihoods in the Ruby Country, Devon

Changes in policy, consumer demand and targets to decarbonise our economy are placing increasing pressure on the viability of the UK livestock industry. Rothamsted Research and the University of Exeter are working with community and creative partners in the Ruby Country, Devon to develop a community supported vision for achieving net zero targets, alongside a sustainable, thriving rural community.

University of Stirling - Re-energising Clackmannanshire: engaging communities around energy for a healthier, wealthier and greener future

Through engagement, collaboration and innovative co-creation, this project aims to understand everyday energy challenges facing disadvantaged communities in Clackmannanshire, Scotland, and explore sustainable pathways towards a healthier, wealthier and greener future for local people. Engaging communities and working with local organisations are essential components to achieving a low carbon future.

Place based projects – culture

The Open University - BG Reach (Blaenau Gwent residents engaging in arts, community and heritage)

BG Reach supports residents of Blaenau Gwent to explore their heritage and identity through creative arts. Community members will be helped to articulate those reflections through fiction, art, song-writing and oral history. An exhibition will be produced from participants' work, celebrating Blaenau Gwent's rich history and culture, and rebuffing the stigma often associated with the area.

University of the West of Scotland - Evidencing the impact of cultural regeneration on poverty: A collaborative approach

This project is a collaboration between University of the West of Scotland's Centre for Culture, Sport and Events (CCSE), Renfrewshire Council, and the STAR project. It seeks to identify and share the evidence for arts and culture and their contribution to poverty alleviation, exploring how arts and cultural activity can contribute to enhancing communities' wellbeing and prosperity.

University of York - Stories in the Sky: digital placemaking

University of York archaeologists and the Residents' Association of Park Hill Flats in Sheffield are co-producing a digital application to enhance resident-led tours of the estate. This will engage visitors with the complex history of this 1950s council housing initiative, currently undergoing regeneration, and becoming home to a diversified community.