

Images Of Research 2016 Winners:

Damian Roland – ‘Spotting the Sick Child – Development of the ‘POPS’ tool’ - Winner of the Best Image from the College of Medicine, Biological Sciences and Psychology

Fevers, breathing difficulty and vomiting illnesses in children cause a great deal of concern for their parents or carers but fortunately are generally self-limiting illnesses. However some children have more serious infections, such as meningitis or sepsis. “Spotting sick children” is not an easy task (as a pictorial representation how many boys and girls with unhappy faces can you spot?) It relies on listening well to parent concern, examining the children’s ‘vital signs’ and utilising clinician ‘gut feeling’. The Paediatric Observation Priority Score is one of a number of systems developed at Leicester Hospital and University to help differentiate between well and unwell children.

Sarah Hainsworth – ‘Fly Pupae’ - Winner of the Best Image from the College of Science and Engineering

Fly Pupae: Micro-computed X-ray tomography can be used in forensic applications for revealing the internal structure of objects. Here, the development of the internal structure of a blow fly can be used to identify the stage of development. Blow flies are used to estimate time since death (post mortem interval) in a forensic setting. The stunning detail in this image shows the development of legs, eyes and feeding tubes. We are leading the way in the use of micro-CT in forensic applications.

Stevie-Jade Hardy – ‘A Human Right’ - Winner of the Best Image from the College of Social Sciences, Arts and Humanities

This is Shireen. For Shireen, her family and her friends, hate-fuelled violence and hostility are ‘everyday’ experiences. The impact on Shireen’s life has been devastating; she no longer feels safe to walk down the street, to travel on public transport or to do a supermarket shop. Through our research we have connected with thousands of people just like Shireen who have been verbally abused, spat at and harassed because of their identity or perceived 'difference'. Too many victims suffer in silence, which is why we work with policy-makers and practitioners throughout the UK to improve their responses to hate crime.

Chris Nixon – ‘Star Eaters’ - Winner of the Peoples Choice Award

Star eaters: for supermassive black holes (SMBH) even an entire star is just a short snack. Usually SMBH take millions of years to finish a meal. But if a star passes too close they’ll rip it apart using their immense gravitational tidal force, and devour the stellar debris in only a few months. These events are some of the most luminous in the Universe, so we learn fundamental physics from them. Leicester’s physics department observes them with the Swift telescope and the theory group simulates them using DiRAC. The image shows a pair of SMBH messily enjoying their stellar treat!

Mark Williams – ‘Creature From the Black Lagoon’ - Winner of the Best Postgraduate Researcher Image

Looking like something from a Hollywood alien film, and with one end like an elephant’s trunk, and no clear indication of whether this was the head or tail end, this strange fossilized ‘worm-like animal with legs’ lived in the ancient seas of South China. The animal is part of a bonanza of some 250 different fossil organisms that are preserved, uniquely, with their soft anatomy including brains, guts and hairy legs. Mummified in rock for more than 500 million years, these fossils are a high fidelity record of one of Earth’s earliest animal-rich ecosystems.

Josephina Sampson – ‘Clustered centrosomes in cancer’ - Second Place for the Best Postgraduate Researcher Image

Normal cells have two centrosomes whereas cancer cells frequently have more. This image shows cells taken from a neuroblastoma undergoing division with more than two centrosomes (green). To survive, these cells cluster the extra centrosomes into two poles thereby creating a bipolar spindle (red) that can equally segregate the duplicated DNA (blue) between two daughter cells. Our aim is to identify mechanisms that cancer cells use to cluster centrosomes and which can then be inhibited to selectively kill the tumour without affecting normal tissues.

Images Of Research 2016 submissions:

Aarti Patel – ‘Untitled’

Babies born prematurely are at risk of visual impairment and require multiple examinations to determine whether surgical intervention is required. Recently a handheld spectral domain optical coherence tomography (HH SD-OCT) device has become available that can take images to microscopic precision without even touching the eyes. We are investigating whether imaging structures in the eyes important for sight using HH SD-OCT can improve prediction of which premature babies have the highest risk of visual impairment and guide timely surgical intervention.

Alex Sutton – ‘Visualisations to assist the analysis of “Which treatment is best?”: a collaboration between medical statisticians and computer scientists from academia and industry’

By simultaneously analysing trial results for all treatments for a disease, “Which treatment is best?” can be answered. Their multidimensional nature means such analyses are challenging to visualise. A novel graph is presented to overcome this, applied to rheumatoid arthritis. The spheres represent the treatment options and the lines connecting them show where trial comparisons exist. The cylindrical bars show how the duration of disease in individual trials deviates from the average. Some treatments have been trialled in patients with longer durations of disease than others. This information should be taken into account in the analysis to produce reliable results.

Andrew Fry – ‘Understanding the mechanics of cancer cell division’

This image shows a human cell in the process of mitosis as it divides in two. It was taken using a fluorescence microscope and reveals the chromosomes, on which the entire human genome is encoded. The chromosomes (blue) are moved into the centre of the cell through the action of fibrous microtubules (green) and attach to the chromosomes through specialised protein structures, called kinetochores (red). This stage of mitosis is known as metaphase, following which the duplicated chromosomes will be pulled apart to opposite ends of the cell before the cell cleaves in two.

Andrew Hopper – ‘Leicester historians with the wheelchair of Sir Thomas Fairfax at the National Civil War Centre’

Dr Andrew Hopper and Dr Eric Gruber von Arni of the Centre for English Local History, with the wheelchair of Thomas, Lord Fairfax, parliamentarian commander-in-chief during the English Civil Wars. This year Dr Hopper and Dr Gruber von Arni co-curated the exhibition ‘Battle-Scarred’ at Newark-on-Trent’s National Civil War Centre. This showcased their research on maimed soldiers, war widows, medical provision and military welfare during this important conflict. The exhibition presented what might be learnt today from seventeenth-century practices, and invited visitors to reflect on whom the responsibility should fall of caring for those maimed and bereaved by today’s wars.

Benjamin Hall – ‘The Martian Space Plasma Environment’

We present a snapshot of the Martian plasma environment resulting from the solar wind (a stream of supersonic energetic particles from the Sun) interacting directly with the Martian upper

atmosphere. The solar wind flows in from the left, whereupon it is rapidly slowed, heated, and redirected around Mars (yellow bow shaped region).

The cavity inside of this presents a region in which the Martian atmosphere is protected from the solar wind. Over time, the already thin Martian atmosphere is eroded by the solar wind.

Understanding this interaction is paramount to evaluating the plausibility of an ancient eden on Mars.

Chee Kay Cheung – ‘Shining a light into the kidney’

IgA nephropathy is a common form of kidney disease worldwide, and is characterised by the abnormal deposition of the antibody, Immunoglobulin A (IgA), on the filters of the kidney. Despite current therapy, around 30% of patients progress to kidney failure, necessitating dialysis or kidney transplantation. This image shows the deposition of IgA (in red) on a kidney filter, using a new technique called multiphoton microscopy that allows us to study how IgA is handled by different parts of the kidney. Increasing our understanding of this interaction will ultimately help us develop new treatments for this condition.

Christine Pulla – ‘The web of life’

Cells are the building blocks of our tissues and organs. This is an epithelial cell from the outer layer of your skin, stained to show the structural components. These cells can move to repair damage to the skin to restore the function of this important barrier organ. This cell has been treated to block the migratory mechanisms and is unable to move. My lab investigates the mechanisms that underpin skin wound healing and scarring to find treatments to help heal chronic wounds and reduce wound scarring and fibrosis.

Clare Gunby – ‘The Pocket’

I’m angry about the size of my pockets! Men’s clothing has them, whilst women’s are small, if having them at all. Christian Dior said men have pockets to keep things in, women for decoration. An essentialist take on gender roles embodied in fashion - women’s dress is for admiration, men’s for utility! Pockets, can therefore serve as shorthand for erroneous gender assumptions. Assumptions that extend into ideas about sex. Hegemonic beliefs around sexual instigators and gatekeepers, for example, underpin sexual offences. My research matters because it examines these assumptions, including the taken-for-granted pocket that scaffolds, however subtly, wider gender inequality.

Dan Stewart – ‘Geophysical Survey of Roman Knossos’

My research is built on big historical questions that cut across landscapes – what was the impact of Rome on Crete? What was the place of the mythic past in Roman Knossos? How can historic landscapes be protected in the contemporary world? These questions and the landscape of a vanished city are approached through the meticulous investigation of discrete parcels of land. 30m by 30m grids are draped on the Cretan countryside, and we walk each metre of these squares carrying a gradiometer in order to peer beneath the surface, guided by red pegs and survey tapes, walking on history.

David Siveter – ‘Spectacular 430 MILLION-YEAR-OLD ‘VIRTUAL FOSSILS’ help interpret the evolution of life’

Understanding of the history of life on Earth relies heavily on the fossil record, and especially on rare cases of exceptional preservation, where soft parts of animals and entire soft-bodied animals are preserved. We have discovered such fossils in 430 million year old rocks in Herefordshire in the Welsh Borderland. This fossil deposit of global importance contains many types of animals. They are ‘extracted’ as high fidelity three-dimensional virtual fossils that yield a wealth of information on animal palaeobiology, biodiversity and the history of life and are crucial in resolving controversies about the evolution of animals still alive today.

Dawn Watkins – ‘Law in Children’s Lives ‘

The Law in Children’s Lives project marks the first step towards gaining an understanding of the legal capabilities of children, both nationally and internationally. A new and original feature of the research was the specially-designed digital game ‘Adventures with Lex’ that we used to gather information from over 600 children aged 8-11 years in Leicestershire. As well as telling us much about children’s legal knowledge and understanding, the study has demonstrated the benefits of including elements of gaming into research, and we consider that there is potential for this approach to be applied in a range of further research settings.

Duncan Murdock – ‘Fossils Are Rotten’

Fossils are rotten. Three hundred million years ago, a small worm gulped its last breath and died. Its body began to rot and, were it not for the peculiar conditions of the sediments it was laid to rest in, would have been lost forever. Fortunately for us, what remained was preserved in rock – a rotten fossil. But how much rotted away before it was fossilised? By decaying modern relatives in the lab we can model this missing history, and build better-informed reconstructions of extinct animals - improving our fundamental understanding of evolution and the building of the modern biosphere.

Elizabeth Jones – ‘Small Town Urbanity in Nineteenth-Century Wales.’

When looking at Small Welsh towns in Nineteenth-century Wales, most urban historians take heed of the infamous encyclopedia Britannica entry; for Wales, see England. However Welsh towns were very different from their English cousins. Overlooked because of their small populations, antiquated appearance and perceived unimportance, most have been dismissed for being little more than villages. By researching the evolution of Usk, a small town in Monmouthshire, it will be demonstrated that characteristics associated with urbanity existed within them and argue that the definition of urban needs to be adapted when looking at Wales.

Emma Jones – ‘An invitation to imagine a world where complete accounts of research are always published’

*“He rose at dawn, fired with hope, Shot o’er the harbour-bar, He reach’d the ship, caught the rope, And whistled to the morning star”** When you were young you had appendicitis. Clinicians cared for you, but the research they used was lacking. It involved “thinking badly or not thinking at all” (Greenwood, 1932). *“Then twilight came, and the evening bell”** When you were old, you had Alzheimer’s. Clinicians cared for you, but the research they used was still lacking. It was often incomplete (Jones et al, 2016). Clinicians’ and patients’ wishes that complete accounts of research can be used, matter. (**Alfred Tennyson*)

Emma Raven – ‘Iron Heart of the Crystal – Neutron crystal structure of ascorbate peroxidase compound II’

It shows a red heme group (like that found in haemoglobin) buried inside a heme peroxidase enzyme. The enzyme is responsible for catalysing the oxidation of Vitamin C (ascorbate). The structure is about to be published in Nature Communications.

Geoff Belknap – ‘Citizen Science, and the Uncovering of History of Female Scientists’

The image within this image is an important historical artefact. Depicting a microscopical section of a rat-flea, this was an important contribution to science by Mabel Rhodes, a name lost to history. This picture helps us rediscover the contributions of women to science in the early 20th century. But, looking at the whole picture, tells another story: the discovery of this scientific heroine was not made by professional historians, but rather by ‘citizen scientists’ working on sciencegossip.org. The story of this image is one where the public takes an active role in researching our collective pasts.

Giannis Koukkidis – ‘Salads and *Salmonellas*’

Lettuce is an important part of a healthy diet, but recently has become associated with a growing risk of food poisoning from bacteria such as *Salmonella*. Our research has shown juices released from lettuce leaf cut-ends caused *Salmonella* to grow even when the salad bag was in the fridge. Scarcely, tiny traces of salad juice helped the *Salmonella* to attach to salad leaves so strongly that washing could not remove them, and triggered the pathogen to become more aggressive and able to infect those who ate the salad. Greater attention has therefore to be made to keeping salads microbiologically safe.

Giovanna Puppini – ‘Advertising Cultures’

Advertising is everywhere and free: just like the air we breathe, it surrounds us and we live in it almost unconsciously. Advertising is part of the urban landscape and tends to use global strategies, as this picture recently taken in Kyoto demonstrates.

Janet Nale – ‘*Clostridium difficile* bacteriophages are effective anti-biofilm agents’

Clostridium difficile causes antibiotic-induced diarrhoea and death in 10% of patients. Conventional antibiotics (e.g. vancomycin) cannot penetrate the protective extracellular polymeric substance (EPS) in biofilms and could result in treatment failure and recurrent *C. difficile* infection (CDI). We showed that pre-treatment of surfaces with bacteriophages (viruses of bacteria) (A) prevented biofilm formation and eliminated aggregated bacteria (B, C). In addition, bacteriophages lysed the EPS (D), matured biofilms (E) and free bacteria (F). Thus, bacteriophages are highly promising in the targeted eradication of CDI and are being developed to either supplement or replace antibiotics.

John Goodwin – ‘Pearl Jephcott (1900-1980): The ‘Czechoslovakia’ Notebook’

A central feature of sociological practice is to continually record the things we encounter, hear and observe to stimulate our sociological imagination. Pearl Jephcott was an exceptional sociologist who epitomised this ‘craft’. Now largely forgotten, a reanalysis of her richly detailed notebooks is essential if we are to both fully understand her contribution to the discipline and to bring her unique sociological contribution back into view. These notebooks, alongside other forms of marginalia and research ephemera, so often overlooked, reveal much about the history of the discipline and those who have contributed to it.

Jun Li – ‘Untitled’

My research is about Garden City theory applied in modern China cities. This picture was taken in this year when I did the field research on the Garden City environment. The weather of that day, a moment of raining and a moment of sunny, full of change. When I return from a boat trip and turn back my eyes I found this beautiful moment, I took it at once. We can see the relationship between animals, human and nature were harmonious. The blend of urban and rural made the city incorporated more idyllic features.

Kristina Wright – ‘Kenyan artist Michael Soi painting at an exhibition of his work in Seoul, South Korea.’

As the world becomes increasingly globalised, the need to interact with different cultures and understand disparate viewpoints is more important than ever, and the arts can provide salient means of connection. My doctoral research in museum studies at the University of Leicester will examine intersections between Africa and Asia in art museums, using my years of living and working in both Kenya and South Korea as context for my study. Completing a PhD will enable me to apply my unique accumulation of experiences and interests to teaching and curating in ways that engage and unite people.

Laura Gray – ‘Are activity trackers telling us the truth about our physical activity level?’

Over the past few years there has been an explosion in commercially available physical activity trackers, e.g., Fitbit, Jawbone, which allow people to track and receive feedback on their activity level. In the UK, 6 million people now own an activity tracker but, despite the popularity of these there is very little research on their accuracy. We aim to test the accuracy of six popular activity trackers devices (both cheap and expensive) when worn on both the dominant and non-dominant hand. Which will be the most accurate? Will they over estimate the number of steps people do? Will the cheap ones be as accurate as the expensive ones? These are just some of the questions we want to answer.

Loveday Hodgeson – ‘Feminist International Judgments Project: Women’s Voices in International Law’

The Feminist International Judgments Project is a unique venture in which participants will collaborate in the ‘real world’ task of (re)writing key international judgments from a feminist perspective. A feminist international judgments project is both timely and relevant. Feminists are increasingly at the forefront of critical international legal scholarship; in practice, however, feminists’ work has arguably struggled to make much of an impact on mainstream international law and in judicial thinking. International Law is an area notoriously dominated by male perspectives and a number of feminists have expressed concern about the silencing of women’s voices in international law. This project rises to the challenge of adopting innovative approaches in order to address this omission.

Luciano Ost – ‘Embedding smart and runtime techniques to improve multi-core systems’ reliability’

Multi-core processors are embedded in several systems, including mobile devices, cars and supercomputers. While employing COTS processors enhances system performance and decreases design cost, the unreliability of such components allied to the increasing chip power densities and the continuous technology shrink is making multi-core systems more susceptible to soft errors. Soft errors induced by the exposition of such systems to radiations and noise fluctuations may cause critical failures on underlying system behaviour, which can lead to financial or human life losses. The aim of my research is to investigate novel runtime techniques and tools to improve the whole system reliability

Maria Theresia Walach – ‘The Auroral Heart’

The auroras in the Earth’s atmosphere are partially driven by the solar wind, a stream of energetic particles and magnetic energy, interacting with the terrestrial magnetic field. This interaction can inject particles into the inner parts of our magnetic system, where they can affect satellites, but also create auroras. This false-colour image, looking down at the aurora around the Northern hemisphere magnetic pole, shows a heart-shaped aurora, a rare phenomenon where the aurora near noon is created by particles coming from the solar wind. By assessing auroral dynamics, we can study the coupling between the two systems.

Mesut Erzurumluoglu – ‘Breathtaking genes’

A ‘Circos’ plot depicting how chronic obstructive pulmonary disease (COPD) has become a global concern – the 3rd biggest killer, defined by poor lung function. Our work shows that many parts of our DNA play a role in our lung health. Peaks in red are newly discovered regions, and the blue ones were previously identified by other groups. Millions of genetic variants from tens of thousands of individuals were analysed in this study. The identified genes will help us understand why some of us have better lung function, and lead to the identification of drug targets of potential relevance to COPD. FEV1: Forced expiratory lung volume in 1 second; FVC: Forced lung volume capacity; FEV1/FVC: the ratio of the two measurements. Labels in the outer circle show the name of the

nearest gene to the newly identified (red) variants. X-axis: Genomic position of variant in genome (chromosome number in the outer circle), Y-axis: Statistical significance of variant in this study (higher the peak the greater the significance)

Michael Barer – ‘SURVIVAL OF THE FATTEST – a TB bacterium (approximately 0.003 mm in length)’

An enhanced image of the tubercle bacillus coughed up by a patient photographed through a microscope in the in The Gambia. The red fat droplets had not been seen before. They are linked to the bug's survival when exposed to antibiotics and to its transmission. We are studying these “Fat and Lazy” bacteria to develop faster treatments and better ways of stopping spread of the disease. TB kills two people every minute of every day, infects one third of humanity and treatment currently takes six months.

Nicholas Vass – ‘Visual Community Organising’

This research investigates the forms that grassroots community organising takes when it uses graphics and visuals both for internal work and external communication. The research process involved interviews, participant observation and the gathering of visual material and texts produced by seven collectives (see poster).

As communities of practice, the collectives are usually composed of visual artists, activists and sociologists. They work in solidarity with different communities against various forms of exploitation: they focus on gender violence and migrant labour while relating those to resource exploitation and climate change, framing their work within decolonial and emancipatory politics. The research will present and analyse these collectives' work in the form of a comic.

Paul Dickinson – ‘A Brightspot on a glass darkly’

Until around 3000 years ago The Bismarck Archipelago, east of Papua New Guinea, was the furthest eastwards that the diffusion out of Africa of cognitively and anatomically modern humans had reached. Shedding light on how the people of these islands lived, and on how they thought is important to our wider understanding of the processes and mechanisms underpinning this migration. This Brightspot on a 6000-year-old obsidian blade results from hafting. It is key to the body of evidence that shows that complex societies exchanged goods within social networks, produced standardized stone tools and understood concepts of style and group identity.

Professor Emmanuel Georgoulis, Dr Andrew Morozov and Andrea Cangiani – ‘Chaotic Ice Cream Cones’

Snapshot of the chaotic evolution of a three-dimensional, three-species cyclic competition model. The overall chaotic behaviour does not appear near the boundary, where a new kind of travelling waves appear. These “ice cream cone”-shaped travelling waves have not been observed before in the mathematical literature and may hold clues on the colourful decoration patterns of certain seashells!

Ravi Purohit, Dr Zhanhan Tu, Helen Kuht – ‘Infants’ eye scan’

The examination of the posterior segment of the eye using Hand-Held Optical Coherence Tomography (HH-OCT) from the patients' perspective. The HH-OCT uses infrared to capture a series of high resolution cross-sectional images of the retina (B-scans) which, when combined, may contribute to a single volumetric scan. The screen in the photograph demonstrates a cross-sectional scan of an individual's retina; including the optic nerve head and the fovea, both of which are relevant anatomical structures important for ophthalmological clinical analysis. The images obtained from HH-OCT have contributed to improved diagnosis and a greater understanding of many paediatric ophthalmological conditions.

Rob Hirst – ‘Transmission Electron Microscope image of the unusual case of swollen human respiratory cilia’

Transmission Electron Microscope image of the unusual case of swollen human respiratory cilia. These were discovered in the airways of patients with rare genetic ciliopathies. Ciliopathies include diseases where the intra-axonemal retrograde transport proteins malfunction. We believe this causes accumulation of cellular material in the cilia tip, the cilia do not move very well and recurrent chest infections are common in these patients.

Rona Aldo – ‘Supersonic flow modelling thrusts forward airframe-engine design integration of large twin aircraft’

Aeroacoustic researchers in Engineering developed with Airbus France an integrated time-resolved model of the supersonic dual-jet and of its broad-band shock-associated noise, for large twin aircraft at cruise conditions. The tool enables a multi-disciplinary system optimization of both flow and noise, towards more environmentally friendly, fuel-efficient, quieter aircraft.

The model reveals the critical role of organised structures in the secondary nozzle shear-layer in generating ‘noisy’ interactions and an uneven jet plume, producing an intense acoustic field that radiates towards the fuselage. Changes in the jet structure aim to help cutting CO₂ emissions by 75% and noise by 65% by 2050.

Rozita Adib – ‘The microtubule cytoskeleton’

Cells rely on a cellular skeleton for structural support, just as our body relies on bones. Microtubules are a key component of the cytoskeleton and help cells keep their shape, transport material and complete division. However, unlike bones, microtubules are highly dynamic switching between phases of growth and shrinkage.

This fluorescence microscope image shows EB proteins (green) localized to the growing ends of microtubules (red). DNA within the nucleus is stained blue. Our research is aimed at understanding the molecular mechanisms that control microtubule organization and thereby control cell shape, migration and division.

Ruslan Davidchack – ‘Tadpole’

This is an image of the Ueda strange attractor, generated by chaotic motion of a periodically forced damped anharmonic oscillator. The attractor is shaded according to the angle between the stable and unstable manifolds, which changes between 0 (black) and π (white). The lines where the colour switches between black and white, called homoclinic tangencies, show locations where the stable and unstable manifolds are parallel. These lines are important for the construction of a generating partition of the attractor, which enables faithful representation of the real-space chaotic dynamics in terms of an infinite sequence of symbols, called symbolic dynamics.

Sarah Johnson – ‘Persistence of Flood Waters - Vale of York - Autumn 2015’

Flooding in the UK last winter caused significant damage to homes and businesses. Many farms were also affected, causing damage to agricultural crops. Crop yields are severely affected by waterlogging and crops can be killed if flooded for more than two weeks. Data over the Vale of York, acquired by the new Sentinel-1 satellite, reveals some fields in the area were flooded for over 100 days, impacting on both agricultural grassland and arable crops. This is the first time multi-temporal satellite datasets have been used to assess the impact on agriculture of a long term flood event.

Sarah Thornton – ‘Senyum’

After an exhausting day of fieldwork my research assistant, Dudin, tries to make me smile (and succeeds). Together we spent 1.5 years counting over 61,000 fish. We found 47 different fish species and completed the first in-depth fish and water quality surveys in the Sabangau Forest and River (Indonesia): providing a baseline for future river monitoring. I also investigate the importance of

fish(ing) to local communities using interviews and focus groups. My PhD therefore looks at how interdisciplinary research approaches can support the conservation and management of the river and forest habitats that so many people, including Dudin, depend on.

Tu Zhanhan – ‘Hope’

Approximately 3.3 billion people are at risk of malaria and with 214 million episodes annually, 88% of which occur in the African region. Cerebral malaria, the most severe complication of malarial infection, causes death in approximately 15-25% of cases, the majority of whom are children. This image is a colour representation of parasitized retinal vessels in a Malawian child measured using a high resolution imaging technique called hand-held optical coherence tomography (HH-OCT). It is hoped that this technique will improve the diagnosis and treatment of this disease and in so doing reduce deaths caused by malaria globally.

Wendy Fitzgibbon – ‘Supervisible’

Criminology aims to shed light on the minds and actions of people who commit offences. However the people who offend often are invisible particularly when they serve their sentences in the community. Supervisible is a powerful and positive research method which taps into the latent creativity of those on supervision. By selecting and producing their chosen images they are able to convey their experiences to each other and to the wider public. These images and the experiences and emotions they both convey and elicit may make it more difficult to ignore the lived experiences of those undergoing supervision.

Yewande Okuleye – ‘Sense about Cannabis’

Let's imagine, the cannabis plant was discovered today. Scientists would isolate and synthesise a range of cannabinoids and terpenes, creating a rich pipeline of pharmaceuticals to treat conditions ranging from chronic pain to childhood epilepsy. However, this is not the case because policy makers, medical professionals, the press, politicians and the public have predominantly experienced cannabis through the lens of prohibition. My research uses visualisation and language to destabilise the prohibition narrative with the view to (re)frame entrenched ideas about the cannabis plant. This strategy provides a space to open up a dialogue about the emergence of cannabis based medicine.