<u>Name</u>	Email	Subject	Title
<u>Hannah Little</u>	Hannah.Little@uwe.ac.uk	Science Communication	<ul> <li>1) The cultural evolution of scientific information: exploring biases in science communication</li> <li>2) Exploring the use of comedy to communicate science: the advantages and risks of being funny</li> </ul>
<u>Clare Wilkinson</u>	Clare.Wilkinson@uwe.ac.uk	Science Communication	<ol> <li>Gender equality and STEM: Exploring student engagement with gender perspectives and their studies.</li> <li>Fertility Communication: A science communication study on representations of fertility in the UK print media.</li> </ol>
Emma Weitkamp	Emma.Weitkamp@uwe.ac.uk	Science and communication	<ol> <li>Environmental science cartoons: analysis of content (or) reader impact</li> <li>Performed science: exploring the audience for science theatre</li> </ol>
Annabelle Hodson	Annabelle.Hodson@uwe.ac.uk	Medicinal Chemistry	1) The development of green methods of synthesising medicinal agents.
Kevin Honeychurch	Kevin.Honeychurch@uwe.ac.uk	Biosensing	<ol> <li>Drugs in wastewater by LC/MS/MS.</li> <li>3D printed electrochemical flow cells.</li> </ol>
Adrian Crew	Adrian.Crew@uwe.ac.uk	Biosensing Technology	<ol> <li>Development of electrochemical sensors for soil analysis and monitoring?</li> <li>Environmental legacy from historical mining?</li> </ol>
<u>Tony Killard</u>	Tony.Killard@uwe.ac.uk	Biomedical, Biosensing	<ol> <li>Paper-based lateral flow blood coagulation devices</li> <li>Development of electrogenic methods for novel electrochemical coagulation monitoring devices</li> <li>Development of a D-dimer clotting time assay based on competitive inhibition</li> <li>Application of resonant transducers to study haemostasis</li> <li>Development of a method for the relative quantification of doped polyaniline formulations</li> <li>Measurement of trace breath gases for diagnostic applications</li> </ol>
<u>Aniko Varadi</u> <u>Saliha Saad</u>	Aniko.Varadi@uwe.ac.uk Saliha.Saad@uwe.ac.uk	Biomedical, Biosensing	<ol> <li>Early detection of the development of diabetic foot by using a digital nose device, NeOse.</li> <li>Investigation the clinical utility of periodontal disease for predicting glycaemic control and insulin responsiveness in diabetics.</li> </ol>
Ben de Lacy Costello	Ben.DeLacyCostello@uwe.ac.uk	Forensics and Biomedical	<ul> <li>a) Early detection of colon cancer using the detection of volatile disease markers by gas sensors and mass spectrometry</li> <li>b) The detection of trace explosives and compounds useful for medical diagnosis using multimode gas sensors</li> </ul>
<u>Emmanuel Adukwu</u>	Emmanuel.Adukwu@uwe.ac.uk	Biomedical Sciences, Public Health	<ol> <li>Antimicrobial, antiseptic and/or disinfectant capability of natural products against clinical and environmental pathogens</li> <li>Survival mechanisms of bacteria and fungi- spores and biofilms</li> <li>Race equality and STEM: Understanding perspectives and challenges associated with attainment and success.</li> </ol>

			<ul> <li>4) Investigating antibiotic compliance, mechanisms and drivers of resistance in the UK and abroad</li> <li>5) Global Health - Use of social science tools to investigate characteristics of and drivers of communicable and non-communicable diseases</li> </ul>
Elizabeth Anderson Joel Allainguillaume	Elizabeth3.Anderson@uwe.ac.uk>	Biomedical	Optimisation of a high-resolution melt (HRM) assay for therapeutic drug monitoring of hypomethylating agents in myelodysplastic syndrome (MDS).
Jennifer May Mo Salehan	Jennifer2.May@uwe.ac.uk Mo.Salehan@uwe.ac.uk	Biomedical	<ol> <li>Investigation of genotoxicity in the bone marrow.</li> <li>Interaction between leukaemic and bone marrow stromal cells.</li> </ol>
<u>Sarah Dean</u>	Sarah4.Dean@uwe.ac.uk	Biomedical	<ul> <li>1) Breast cancer co-cultures with breast cancer cell lines and other cells found in the breast such as adipose and fibroblasts.</li> <li>2) Role of Fatty acid binding proteins (FABPs) in leukaemia.</li> </ul>
Tim Craig	Tim.Craig@uwe.ac.uk	Biomedical	<ul> <li>1) Alzheimer's Disease and Type-2 Diabetes – investigating the link between two modern plagues.</li> <li>2) Osteoarthritis and metabolism – how does diet cause damage to bones?</li> </ul>
Jonathon Hull	Jonathon2.Hull@uwe.ac.uk	Biomedical	<ol> <li>Neurological metabolism of amino acids in mammals Sus domesticus, Bos taurus and Ovis aries.</li> <li>Amino acid metabolism in leukaemia and correlation with patient survival and genetics.</li> <li>The role of amino acids in the survival of leukaemic cells and cell lines.</li> </ol>
<u>Jason Mansell</u>	Jason.Mansell@uwe.ac.uk	Biomedical	<ol> <li>Polydopamine-functionalised titanium as a novel surface finish for dental and orthopaedic applications.</li> <li>Exploring the potential of converging vitamin D and cytoskeletal signalling networks in tackling bone cancer.</li> <li>Mussel-inspired reactive platforms for enhancing the performance of bone graft substitutes and implantable ceramics.</li> </ol>
Lynne Lawrance	Lynne.Lawrance@uwe.ac.uk	Biomedical	<ul> <li>1) Exploring issues of sustainability in the laboratory setting (In collaboration with Georgina Gough)</li> <li>2) Exploring uncertainty of measurement in clinical microbiology – would most suit biomedical science students but would consider others with microbiology background</li> </ul>
<u>Bahareh Vahabi</u>	Bahareh.Vahabi@uwe.ac.uk	Biomedical	Investigating the role of mucosa in mediating the spontaneous contractions of the urinary bladder
<u>Adam Thomas</u>	Adam7.Thomas@uwe.ac.uk	Biomedical	<ol> <li>Invesitgating a novel role of p53</li> <li>Are microplastics genotoxic?</li> <li>How do neuronal cells die? Implications in neurodegeneration and glioblastoma.</li> </ol>
David Qualtrough	David.Qualtrough@uwe.ac.uk	Biomedical	1) Investigating the role of the microbiome in colorectal cancer.

			<ul><li>2) The potential role of oestrogen signalling in colorectal cancer metastasis.</li><li>3) The role of Hedgehog signalling in breast cancer metastasis</li></ul>
<u>Mike Ladomery</u>	Michael.Ladomery@uwe.ac.uk	Biomedical	<ol> <li>1) Targeting oncogene with splice switching oligonucleotides</li> <li>2) Targeting the CLK splice factor kinases in cancer.</li> <li>3) Function of the conserved RNA-binding protein CrGRP1 in algal adaptation to environmental stress.</li> </ol>
<u>Myra Conway</u>	<u>Myra.Conway@uwe.ac.uk</u>	Biomedical	<ol> <li>1) Targeting signalling pathways in Alzheimer's disease.</li> <li>2) Understanding nutrient restriction and its potential therapeutic advantages to improve cognitive health.</li> <li>3) Targeting novel pathways to treat triple negative breast cancer.</li> </ol>
Ruth Morse Mark Steer	Ruth.Morse@uwe.ac.uk Mark.Steer@uwe.ac.uk	Biomedical	Isolation and differentiation of mesenchymal stem cells from birth related tissues, to develop 3D tissue models
Ruth Morse	Ruth.Morse@uwe.ac.uk	Biomedical	<ol> <li>Development of a 3D liver model for toxicity and genotoxicity testing.</li> <li>Assessment of thalidomide as a microtubule inhibitor in the generation of therapy related malignancy and peripheral neuropathy</li> <li>Establishment of green fluorescent protein labelled haematopoietic cells for use in toxicity and genotoxicity testing.</li> <li>Investigating the resolution of DNA cross-links through novel DNA repair pathways.</li> <li>Investigating cellular altruism in human tissue models.</li> <li>The use of mitogens and natural plant products as targeted therapeutics in cancer.</li> <li>A measure of genomic instability in leukaemogenesis.</li> </ol>
<u>Alexander Greenhough</u>	Alexander.Greenhough@uwe.ac.uk	Biomedical Sciences	<ul> <li>You will join a research active laboratory funded by the Wellcome Trust, Bowel Cancer UK and industrial (pharmaceutical/biotech) and academic partners. Your MRes will dovetail with these externally funded projects giving you the opportunity to work in an interdisciplinary team.</li> <li>Current projects include: <ol> <li>Understanding hypoxia-induced signalling mechanisms during microenvironment-driven cancer cell adaptation.</li> <li>Targeting GPCR signalling in colorectal and pancreatic cancer.</li> <li>How does Aspirin prevent cancer? Understanding Aspirin's mechanism of action in the clinical response of cancer patients to therapy.</li> </ol> </li> </ul>
<u>Kathryn Yuill</u>	Kathryn.Yuill@uwe.ac.uk	Biomedical	<ol> <li>Investigating calcium signalling in myocytes</li> <li>Pharmacological regulation of ion channel function</li> </ol>
Adrian Kendrick	Adrian.Kendrick@uwe.ac.uk	Biomedical	Hospital based projects on Sleep & Lung Function.
Shona Nelson	Shona.Nelson@uwe.ac.uk	Microbiology	Investigating strategies to control or eradicate mono- and multi-species bacterial biofilms.

<u>Alexandros Stratakos</u>	alexandros.stratakos@uwe.ac.uk	Biological Sciences	<ol> <li>Development of advanced drug delivery systems against bacterial infections</li> <li>Tackling antimicrobial resistance: Degradation of antibiotics using non-thermal technologies in different matrices</li> <li>Discovery of novel agents to inhibit microbial virulence and pathogenicity</li> </ol>
<u>Helen Green</u>	Helen4.Green@uwe.ac.uk	Forensics	<ol> <li>Detection of low level DNA during VWM processing</li> <li>Enhancement of latent fingermarks on shot gun cartridges</li> <li>The transfer and persistence of fibres</li> </ol>
James Costello	James.Costello@uwe.ac.uk	Chemistry	Controlling Molecular Shape – Computational and Structural Studies of Organometallic Catalysts
<u>Robin Thorn</u>	Robin2.Thorn@uwe.ac.uk	Microbiology	<ol> <li>Investigating microbial metabolomics for better diagnostics; using selective ion flow tube         <ul> <li>mass spectrometry to investigate microbial metabolic processes</li> <li>Modelling wound biofilms – development of novel treatment strategies</li> </ul> </li> </ol>
<u>Darren Reynolds</u>	darren.reynolds@uwe.ac.uk	Health and Environmental Sciences	<ul> <li>Driving Impact through Research (note all projects will involve external partners/collaborators). Project examples include;</li> <li>1) Biotechnology - Microbial metabolomics (smelling technology) for healthcare diagnostics (e.g. wounds);</li> <li>2) Applying wound biofilms models for investigating treatment strategies and antimicrobial resistance</li> <li>3) Application of sensor technologies for water and food</li> <li>4) Biofilms and Cave Slime – removing metals from water</li> <li>5) Microbial processing or organic matter in freshwater systems</li> <li>6) Rainwater Harvesting and Drinking Water</li> <li>7) Bread to beer – reducing food waste using biotechnology</li> </ul>
<u>Dann Turner</u>	Dann2.Turner@uwe.ac.uk	Biological Sciences	<ul> <li>1) Isolation, genome sequencing and annotation of novel bacteriophages of Acinetobacter spp.</li> <li>2) Nucleic acid modifications - evasion of bacterial defense systems by bacteriophages</li> <li>3) Battening the hatches - the role of prophages in the biology of Acinetobacter spp.</li> </ul>
Rachael Akpri	Rachael.Akpiri@uwe.ac.uk	Ecotoxicology	<ol> <li>Assessment of Cyp1a1 P450 Metabolic activity in BDPA exposed sponge cells of Hymeniacidon perlevis.</li> <li>The Role of Aryl hydrocarbon receptors and reactive oxygen species in B[a]P induced DNA damage in the sea sponge Hymeniacidon perlevis.</li> </ol>
<u>John Hancock</u>	John.Hancock@uwe.ac.uk	Biological Sciences	Reactive compounds and gases used in cell signalling. These projects will investigate the roles of reactive oxygen species, nitric oxide, hydrogen sulfide or hydrogen gas in a model biological system. The impact on such compounds on the molecular events in cells will be studied with a view to gaining a greater understanding of how such molecules fit into the intricate web of cell signalling events. Model organisms may range across both animal and plant kingdoms, depending on specific interests.

Carrie Brady	Carrie.Brady@uwe.ac.uk	Biological	Screening for potential pathogenic bacteria in broad-leaf species in Westonbirt Arboretum.
Joel Allainguillaume	Joel.Allainguillaume@uwe.ac.uk		
Jacqueline Barnett	Jackie.Barnett@uwe.ac.uk	Biological	Biosensor development for the detection of Cacao Swollen Shoot Virus
Joel Allainguillaume	Joel.Allainguillaume@uwe.ac.uk		
Joel Allainguillaume	Joel.Allainguillaume@uwe.ac.uk	Biological	Metagenomics studies of the microbiota of fermented cacao beans in chocolate
Andy Wetten	Andy.Wetten@uwe.ac.uk	Biological	Cacao swollen shoot virus and its mealybug vector
Pete Maxfield	Andy.Wetten@uwe.ac.uk	Environmental Sciences	Carbon flux modelling and remote sensing
<u>Stephanie Sargeant</u>	<u>Stephanie.Sargeant@uwe.ac.uk</u>	Environmental Sciences	<ul> <li>1) Microbial processing of carbon compounds (VOCs) in freshwater systems</li> <li>2) Marine phytoplankton production of climate relevant gas compounds</li> <li>3) Microbial turnover of carbon compounds (VOCs) in rainwater</li> <li>4) Investigating the plastisphere: microbial communities on plastic debris</li> <li>5) Investigation of plankton gas production in the Arctic due to climate stressors</li> <li>6) Impacts of co-metal limitation on open ocean microbial populations</li> </ul>
<u>Neil Willey</u>	<u>Neil.Willey@uwe.ac.uk</u>	Biological Sciences & Environmental Sciences	<ol> <li>Biological Sciences (lab/meta-analysis) – Nutrients &amp; Contaminants In Primary Producers.</li> <li>Toxic metals in Food. Stoichiometry of Plants.</li> <li>Cons &amp; Env Science (field/lab/ modelling) – Radionuclides In the Severn Estuary Salt-Marshes. Uptake of radionuclides by plants. Predicting 'peak P' and its wastes.</li> </ol>
Heather Macdonald	Heather.Macdonald@uwe.ac.uk	Biological & Environmental Sciences	1) Evolution of signalling pathways. Project will investigate ABA, light and Auxin signalling in the unicellular green alga Chlamydomonas reinhardtii
<u>Sam Bonnett</u>	Sam.Bonnett@uwe.ac.uk	Environmental Sciences	<ol> <li>Ecosystem services within lowland peatland systems in Siberia and Somerset</li> <li>Impact of burning management on microbial decomposition in an upland peatland chronosequence</li> </ol>
<u>Mark Steer</u>	Mark.Steer@uwe.ac.uk	Conservation Sciences	<ol> <li>Developing environmental DNA survey protocols for burrowing and/or arboreal mammals: novel applications for genetic survey techniques.</li> <li>Rewilding: biodiversity and environmental responses to rewilding projects</li> </ol>
<u>Grainne McCabe - Stephanie</u> Sargeant	gmccabe@bristolzoo.org.uk Stephanie.Sargeant@uwe.ac.uk	Conservation Sciences (Bristol Zoo)	Utilising eDNA technology to assist with African penguin conservation
Grainne McCabe	gmccabe@bristolzoo.org.uk	Conservation Sciences (Bristol Zoo)	<ol> <li>Manatee population survey in Costa Rica</li> <li>Large mammal survey in Monte Alén National Park, Equatorial Guinea.</li> </ol>
Amanda Webber - Sam Cotton	awebber@bristolzoo.org.uk SCotton@bristolzoo.org.uk	Conservation Sciences (Bristol Zoo)	Investigating natural resource use and livestock management by local communities living within Sahamalaza-Iles Radama National Park, northwest Madagascar

<u>Daphne Kerhoas</u>	<u>dkerhoas@bristolzoo.org.uk</u>	Conservation Sciences (Bristol Zoo)	<ol> <li>Drivers of illegal hunting in the Philippines</li> <li>Social and ecological impacts of community livelihoods projects and their effectiveness</li> <li>Habitat preference and population density of the Visayan warty pig</li> <li>Recording devices to survey for bleeding-heart doves, testing in Bristol Zoo</li> <li>Best-practice for captive breeding and reintroduction of Negros bleeding-heart doves</li> </ol>
<u>Tim Bray</u>	TBray@bristolzoo.org.uk	Conservation Sciences (Bristol Zoo)	<ul> <li>Bristol zoological society is involved in the conservation of the Critically Endangered lemur leaf frog. The project has partnered with the Veragua Rainforest Foundation and the 2019 project season is being planned.</li> <li>1) Can we identify threats to amphibian persistence in the region? Specifically is it possible to identify the presence of chytrid fungal pathogens in the habitat and relate this to abiotic factors and amphibian presence?</li> </ul>
			2) What are the population dynamics of the lemur leaf frog and other Critically Endangered frogs of the northern edge of the Fila Matama in the Cordillera de Talamanca?
<u>Mark Abrahams</u>	MAbrahams@bristolzoo.org.uk	Conservation Sciences (Bristol Zoo)	<ol> <li>Using Geographic Information Systems to analyse forest fragmentation or climate change at Bristol Zoological Society field conservation project sites – desk</li> <li>Validating and applying the use of invertebrate derived DNA (dung beetle gut contents) to monitor populations of rare/ hunted vertebrates in tropical forests – lab or field</li> <li>What are the advantages and disadvantages of different terrestrial invertebrate taxa for use in IDNA/indicators of forest mammals? – Lit review + possibly expert opinion</li> <li>Using camera traps as a tool to facilitate human-wildlife coexistence in instances of wildlife crop damage in rural, biodiverse areas e.g. by warty pigs in the Central Panay Mountain Range, the Philippines - Lit review + possible expert opinion + possible data collection in the UK / at a Bristol zoo project site</li> </ol>
<u>Aimee Oxley</u>	<u>AOxley@bristolzoo.org.uk</u>	Sustainability (Bristol Zoo)	<ol> <li>How sustainable are field conservation projects? Evaluating the carbon footprint of conservation work overseas.</li> <li>Quantifying carbon sequestration and avoided emissions resulting from conservation actions.</li> <li>Understanding the different water requirements for species at the zoo (experimental component - can water be stored, reduced or re-used?)</li> <li>Measuring and modelling the carbon footprint of keeping various animal species at Bristol Zoo.</li> </ol>

<u>Paul Lintott</u>	Paul.Lintott@uwe.ac.uk	Conservation Sciences	<ol> <li>Assessing the effectiveness of green infrastructure for biodiversity and human health and wellbeing</li> <li>Enhancing landscape connectivity within the urban matrix for biodiversity</li> <li>The effectiveness of green bridges for biodiversity</li> <li>Assessing the impact that music festivals have on wildlife</li> <li>Determining the impact that electric vehicles will have on biodiversity</li> <li>Assessing the impact of offshore wind turbines on bats and birds</li> <li>An assessment of the public's willingness to pay to support green infrastructure</li> </ol>
<u>Jim Vafidis</u>	Jim.Vafidis@uwe.ac.uk	Conservation Sciences	<ul> <li>1) Dentifying opportunities and developing monitoring solutions in conservation using UAVs and spatial analysis. Flood management and habitat restoration</li> <li>2) Dising thermal imaging to monitor nesting birds in sensitive environments</li> <li>3) Developing a protocol for identifying Ash Die back and other diseases using UAVs</li> </ul>
Emma Stone	Emma4.Stone@uwe.ac.uk	Conservation Sciences	<ol> <li>Predictors of meso carnivore occupancy and diet in Kasungu National Park Malawi</li> <li>Foraging and roosting ecology of Mops bat in Lilongwe city Malawi</li> <li>Predictors of bat species diversity and abundance in montane fragmented woodlands of the Nyika plateau Malawi</li> <li>Genetic diversity of high altitude montane bats in the mountains of Malawi</li> <li>Behavioural and foraging ecology of Nycteris bats in Kuti wildilfe reserve, Malawi through radio tracking</li> <li>Roosting, behavioural ecology, parasites and acoustics of bats in urban areas of Malawi</li> <li>Disturbance and predation effects on Eidolon helvum (Straw coloured fruit bat) in Lilongwe city Malawi (Nov to April only)</li> <li>Impacts of lighting on bats (UK or Malawi)</li> <li>Ecology and spatial behaviour of dormice in urban areas of Malawi using box traps and radio tracking</li> <li>Experimental studies to understand the importance of ditch management on bats in Somerset</li> <li>Urban bat ecology in Bristol UK</li> </ol>
Bethan Hindle	bethan.hindle@uwe.ac.uk	Conservation sciences	Exploring changes in invertebrate abundance and distribution under climate change. Investigating the effects of microhabitat on phenological mismatch

Angelina Sanderson Bellamy	BellamyA1@cardiff.ac.uk	Environmental Sustainability	1) Peas Please: Increasing access to vegetable consumption to align culturally appropriate
			UK diets with the EAT-Lancet diet for healthy and sustainable outcomes.
			Research activity may include online food diaries, understanding household vegetable
			waste, online/phone interviews and literature review (specific topic to be determined and
			based on specific interests of the students).
			2) Strengthening biocultural resilience of Maya Food Systems to engage sustainably with
			tourism development.
			Research activity may include literature review (e.g. on food tourism, biocultural diversity &
			food production), secondary data analysis and analysis of primary ethnographic data.
			3) Evaluating impact from green infrastructure interventions for increasing rural resilience
			Research activity may include key stakeholder interview, workshop, and literature review.