Supervisor 1	Supervisor 2	College	School	Project Title
Dr. Chris Tselepis	**Dr. Richard Horniblow**	Medical and dental Sciences	Biomedical sciences	Modulation of dietary iron for the enhancement of human health.
Dr. Eugenio Sanchez-Moran	**Kim Osman and Dr. Lindsey Leach**	Life and Environmental Sciences	Biosciences	Manipulating the control of the meiotic recombination to improve plant-breeding outcomes in crop species.
Dr. Andrew Lovering	**Dr. Patrick Moynihan**	Life and Environmental Sciences	Biosciences	Function of essential predation proteins.
Prof. David Grainger	**Dr. Pawel Grzechnik**	Life and Environmental Sciences	Biosciences	Why do some DNA sequences poison cells?
Prof. David Grainger	**Dr. Jess Blair**	Life and Environmental Sciences	Biosciences	Understanding Multiple Antibiotic Resistance in Gram-negative Bacteria.
Prof. David Grainger	**Dr. Manuel Banzhaf**	Life and Environmental Sciences	Biosciences	Understanding cholera pandemics.
Dr. Juliet Coates	**TBC**	Life and Environmental Sciences	Biosciences	Understanding signalling networks underpinning key developmental processes during plant evolution
Dr. Carolina Rezaval	**Prof. Alicia Hidalgo**	Life and Environmental Sciences	Biosciences	How does the brain make decisions when faced with conflicting options?
Dr. Yun Fan	**Dr. Neil Hotchin**	Life and Environmental Sciences	Biosciences	Understanding life after cell death?
Dr. Lindsey Leach	**Prof. Zewei Luo**	Life and Environmental Sciences	Biosciences	Genetic Analysis of Complex Phenotypes in Autotetraploid Potato?
Dr. Saverio Brogna	**Dr. Yun Fan**	Life and Environmental Sciences	Biosciences	Understanding the role that the RNA helicase UPF1 plays in sorting ribonucleoprotein (RNP) complexes and the mechanism by which this role of UPF1 might reduce cellular stress and cell degeneration.
Dr. Philippa Borrill	**Nicholas Bird**	Life and Environmental Sciences	Biosciences	How does heterosis affect yield, quality and disease resistance in hybrid wheat? (Has also included letter of support)
Dr. Matthias Soller	**Dr. Carolina Rezaval**	Life and Environmental Sciences	Biosciences	Molecular genetic characterization of Drosophila reproductive behaviours for exploitation in insect population control.

Dr. Aneika Leney	**Prof. Helen Cooper**	Life and Environmental Sciences	Biosciences	Developing mass spectrometry tools to characterise algae's highly efficient macromolecular machines.
Prof. Alicia Hidalgo	**Dr. Carolina Rezaval**	Life and Environmental Sciences	Biosciences	Structural plasticity and regeneration in the Drosophila brain.
Dr. Peter Winn	**Prof. Chris Thomas**	Life and Environmental Sciences	Biosciences	Machine Learning and Computational Analysis.
Prof. Tim Dafforn	**Prof. Lawrence Young & Dr Corinne Smith**	Life and Environmental Sciences	Biosciences	Uncovering the molecular basis of Epstein-Barr virus-induced cancers.
Prof. Tim Dafforn	**Dr. Daniel Hothersall**	Life and Environmental Sciences	Biosciences	Molecular Cookie Cutters: Cutting Edge Drug Discovery using G-Protein Coupled Receptors.
Dr. Pawel Grzechnik	**Dr. Saverio Brogna**	Life and Environmental Sciences	Biosciences	Transcriptional regulators of gene expression in human cells.
Dr. Manuel Banzhaf	**Dr. Patrick Moynihan**	Life and Environmental Sciences	Biosciences	Understanding Gram-negative envelope biogenesis using genome-wide approaches.
Prof. Mike Tomlinson	**Dr. Omar Qureshi**	Life and Environmental Sciences	Biosciences	Understanding tetraspanin regulation of the molecular scissor ADAM10.
Dr. Damon Huber	**Dr. Manuel Banzhaf**	Life and Environmental Sciences	Biosciences	Genetic analysis of the bacterial translocation machinery.
Dr. Philippa Borrill	**Dr. Daniel Gibbs**	Life and Environmental Sciences	Biosciences	Investigating the balancing act between yield and nutrient content in wheat.
Dr. Matthias Soller	**Dr. Ferenc Mueller**	Life and Environmental Sciences	Biosciences	Epitranscriptomic mechanisms in the maternal to zygotic transition of vertebrate embryos.
Dr. Matthias Soller	**Dr. Peter Winn**	Life and Environmental Sciences	Biosciences	Identification of pathways deregulating neuronal ELAV/Hu RNA binding proteins in neurodegeneration.
Dr. Matthias Soller	**Dr. Pawel Grzechnik**	Life and Environmental Sciences	Biosciences	mRNA epigenetics: Charaterization of novel layer of gene regulation for essential brain functions.

Dr. Daniel Gibbs	**Dr. Christian Noble**	Life and Environmental Sciences	Biosciences	Characterisation and chemical inhibition of a novel regulatory module controlling chloroplast protein translation.
Dr. Marco Catoni	**Dr. Peter Lund**	Life and Environmental Sciences	Biosciences	Can transposons promote plant genome evolution?
Prof. Warwick Dunn	**Dr. Sarah Aldred**	Life and Environmental Sciences	Biosciences	How does the amino acid tryptophan impact on biochemical adaptation to exercise?
Prof. Tim Dafforn	**Prof. James Tucker**	Life and Environmental Sciences	Biosciences	Solving the Food Security Crisis by Developing Rapid Microbial Assays to Reduce Food Wastage.
Dr. Scott Hayward	**Dr. Luisa Orsini**	Life and Environmental Sciences	Biosciences	Understanding the rules of life 'on the edge'.
Prof. Nicholas Loman	**Prof. Laura Green**	Life and Environmental Sciences	Biosciences	Real-time genomic surveillance of African Swine Fever virus.
Dr. Graeme Kettles	**Dr. Philippa Borrill**	Life and Environmental Sciences	Biosciences	Understanding the languages of plant-microbe combat.
Dr. Andrew Plackett	**Dr. Juliet Coates**	Life and Environmental Sciences	Biosciences	Dissecting seed genetic networks through the evolution of plant life-cycle transitions.
Dr. Marco Catoni	**Dr. Walter Verwij**	Life and Environmental Sciences	Biosciences	Epigenetic contribution to grafting induced vigour in Solanaceous plants
Dr. Apoorva Bhatt	**Prof. Steve Busby**	Life and Environmental Sciences	Biosciences	Molecular mechanisms of growth and virulence in pathogenic mycobacteria
Dr. Tim Knowles	**Dr. Andrew Lovering**	Life and Environmental Sciences	Biosciences	Elucidating the mechanisms of outer membrane biogenesis
Dr. Jan Kreft	**Dr. Daniele Vigolo**	Life and Environmental Sciences	Biosciences	Combining microfluidics and mathematical modelling to study interactions between individual bacteria.
Dr. Patrick Moynihan	**Dr. Manuel Banzhaff**	Life and Environmental Sciences	Biosciences	Systems biology of mycobacterial infection.

Prof. Tim Dafforn	**Dr. Sarah L. Horswell**	Life and Environmental Sciences	Biosciences	Bionanoparticle formation for drug discovery.
Dr. Andrew Turnell	**Prof. Steve Smerdon**	Medical and dental Sciences	Cancer and Genomic Science	Role of APC/C subunit APC7 in regulating the function of the APC/C E3 ubiquitin ligase.
Dr. P-S Jayaraman	**Prof. Paula Mendes**	Medical and dental Sciences	Cancer and Genomic Science	Investigating protein glycosylation in bile duct cells.
Dr Rui Monteiro	**Dr Sascha Ott**	Medical and dental Sciences	Cancer and Genomic Science	The role of dll4 in Haematopoietic Stem Cell emergence.
Dr. Deena M.A. Gendoo	**TBC**	Medical and dental Sciences	Cancer and Genomic Science	Multi-omic profiling and identification of therapies for Patient-Derived Xenografts (PDX) and Patient-Derived Organoids (PDO) in Cancer.
Dr. Marco Saponaro	**Dr. Agnieszka Gambus**	Medical and dental Sciences	Cancer and Genomic Science	Transcription-replication crosstalk.
Dr. Danesh Moradigaravand	**Prof. Jean-Baptiste Cazier**	Medical and dental Sciences	Cancer and Genomic Science	Prediction of bacterial host and niche specificity from genomic data with machine learning methods
Dr. Fedor Berditcheveski	**Dr. Fiyaz Mohammed**	Medical and dental Sciences	Cancer and Genomic Science	Structure and function of tetraspanin complexes involved in autophagy.
Dr. Katja Gehmlich	**Prof. Andrew Dove**	Medical and dental Sciences	Cardiovascular sciences	The effect of substrate stiffness on cardiac performance.
Dr. Tim Overton	**TBC**	Engineering and physical sciences	Chemical engineering	Understanding and Engineering E. coli biofilm formation.
Prof. Paula Mendes	**Prof. Robin May**	Engineering and physical sciences	Chemical engineering	Development of synthetic glycan affinity reagents to study the capsular structure of fungal pathogens.
Dr. Pola Goldberg-Oppenheimer	**Dr. Tim Overton**	Engineering and physical sciences	Chemical engineering	Advanced, Integrated Device Technology (AIDTech) for Rapid, Portable Detection of Foodborne Pathogens - from 'Farm to Fork'.
Dr. Taghi Miri	**Dr. Tim Overton**	Engineering and physical sciences	Chemical engineering	Safety and shelf-life of reformulated food products.
Dr. Ruchi Gupta	**Dr. Graeme Kettles**	Engineering and physical sciences	Chemistry	Biosensor for catching a cereal killer.
Prof. Rachel O'Reilly	**Dr. Katja Gehmlich**	Engineering and physical sciences	Chemistry	Nano-particle based delivery to the heart.
Dr. Melanie Britton	**Dr. Anna Peacock**	Engineering and physical sciences	Chemistry	Artificial metalloproteins as novel MRI contrast agents.
Dr. Anna Peacock	**Dr. Paul Davies**	Engineering and physical sciences	Chemistry	Artificial metalloenzyme design with late transition metal active sites.
Dr. Sarah L. Horswell	**Prof. Tim Dafforn**	Engineering and physical sciences	Chemistry	Breaching Bacterial Cell Membranes.

Dr. Paco Fernandez-Trillo	**Dr. Tim W Overton**	Engineering and physical sciences	Chemistry	Nucleating the growth of biolfilms for biocatalysis with polymer chemistry.
Prof. James Tucker	**Dr. Sarah L. Horswell**	Engineering and physical sciences	Chemistry	Biological Behaviour of Metal-modified DNA.
Prof. James Tucker	**Dr. Anna Peacock**	Engineering and physical sciences	Chemistry	DNA molecular machines: Light-triggered Motion on a DNA Scaffold.
Dr. Paco Fernandez-Trillo	**Prof. Robin May**	Engineering and physical sciences	Chemistry	novel transfection agents as tools for biology.
Dr. Paramaconi Rodriguez	**Dr. Paco Fernandez-Trillo**	Engineering and physical sciences	Chemistry	Affordable ligand-based electrochemical detection of bacterial toxins.
Dr. Paco Fernandez-Trillo	**Dr. Estrella Luna-Diez**	Engineering and physical sciences	Chemistry	Nucleic acid delivery to plants. Towards improved protection and development of crops.
Dr. Sarah Kuehne	**Dr. Gowsihan Poologasundarampillai**	Medical and dental Sciences	Dentistry	Identification and Characterisation of bile salt binding proteins in Clostridium difficile spores: their role in triggering germination.
Dr. Sarah Kuehne	**Prof. Mike Millward**	Medical and dental Sciences	Dentistry	The role of cyclic di-nucleotides in the pathogenesis of Fusobacterium nucleatum.
Dr. Sarah Kuehne	**Dr. Sophie Cox**	Medical and dental Sciences	Dentistry	Development of a co-culture system to improve pre-clinical dental implant testing.
Dr. Joshua Larsen	**Dr. Jan-Ulrich Kreft**	Life and Environmental Sciences	Geography, Earth and Environmental Sciences	Does E. coli survive in rivers on its way from the farm to the fork?
Prof. Iseult Lynch	**Alex Fisher**	Life and Environmental Sciences	Geography, Earth and Environmental Sciences	Application of nanomaterials in precision agriculture for global food security.
Prof. Vincent Gauci	**Dr. Graeme Kettles**	Life and Environmental Sciences	Geography, Earth and Environmental Sciences	Can trees be made 'greener'? Mitigating methane emissions from forestry and bio-energy plantations using synthetic microbial communities.
Dr. Maria Makarova	**Prof. Dylan Owen**	Medical and dental Sciences	Immunology and Immunotherapy	Metabolic engineering of yeast species for medium-chain fatty acid production.
Dr. Zania Stamataki	**Dr. Rupert Kenefeck**	Medical and dental Sciences	Immunology and Immunotherapy	Immunotherapy in human tissues, using TCR-bispecifics and advanced real-time imaging modalities.
Prof. Dylan Owen	**Dr. Maria Makarova**	Medical and dental Sciences	Immunology and Immunotherapy	How membrane lipids regulate immune cell function.
Dr. Rebecca Drummond	**Dr. Elizabeth Ballou**	Medical and dental Sciences	Immunology and Immunotherapy	How does the host influence the pathogen?
Dr Zania Stamataki	**Prof. Jon Preece**	Medical and dental Sciences	Immunology and Immunotherapy	Deciphering the mechanism of enclysis: new tools for cell biology in live human tissues.
Dr. Daniel Fulton	**Dr. Vincenzo Marra**	Medical and dental Sciences	Inflamation and aging	Investigating the influence of myelin plasticity of neutral circuit function.

Prof. Davide Calebiro	**Prof. David Poyner**	Medical and dental Sciences	Metabolisms and systems research	The dynamics of the RAMP-G protein coupled receptor interactions studied by single molecule imaging.
Dr Caroline Gorvin	**Prof. Dmitry Veprintsev**	Medical and dental Sciences	Metabolisms and systems research	Understanding how GPCRs integrate nutritional and hormonal signals at the hypothalamic arcuate nucleus.
Dr. Ildem Akerman	**Dr. David Hodson**	Medical and dental Sciences	Metabolisms and systems research	Regulation of pancreatic beta cell identity.
Prof. Willem van Schaik	**Prof. Alan McNally**	Medical and dental Sciences	Microbiology and Infection	Alcohol tolerance in Enterococcus faecium'.
Prof. Tim Mitchell	**Dr. Hasan Yesilkaya**	Medical and dental Sciences	Microbiology and Infection	Development of new biological adjuvants and vaccines for prevention of bacterial infections.
Dr. Jess Blair	**Dr. Michelle Buckner**	Medical and dental Sciences	Microbiology and Infection	Targetting efflux pumps to combat antibiotic resistance
Dr. Dietmar Heinke	**Prof. Howard Bowman**	Life and Environmental Sciences	Psychology	Developing and testing computational models of human cognitive abilities using EEG data: A case study in complex visual scene analysis.
Dr. Matthew Apps	**Prof. Ole Jensen**	Life and Environmental Sciences	Psychology	Neural and computational mechanisms of motivated behaviour.
Dr. Damian Cruse	**Prof. Howard Bowman**	Life and Environmental Sciences	Psychology	The neural and physiological mechanisms of conscious experience.
Dr. Patricia Lockwood	**Dr. Stephane De Brito**	Life and Environmental Sciences	Psychology	Behavioural and brain mechanisms of social decision-making.
Dr. Magdalena Chechlacz	**Prof. Georgios Gkoutos**	Life and Environmental Sciences	Psychology	The genetics of cognitive ageing: neuromodulators and prefrontal cortex.
Dr. Magdalena Chechlacz	**Prof. Hamid Dehghani**	Life and Environmental Sciences	Psychology	Cognitive deficits and accelerated brain ageing in older adults at risk for undiagnosed sleep apnea.
Dr. Stephane De Brito	**Prof. Peter Tino**	Life and Environmental Sciences	Psychology	Enhancing Neuroimaging Genetics through Meta-analysis (ENIGMA): Antisocial Behaviour working group.
Dr. Bernhard Staresina	**Dr. Simon Hanslmayr**	Life and Environmental Sciences	Life and Environmental Sciences	Shaping memories during sleep
Dr. Ned Jenkinson	**Dan Phillips**	Life and Environmental Sciences	SportEx	Improving transcranial direct current stimulation to enhance motor behaviour.

Dr. Sarah Aldred	**Dr. Eric Hill**	Life and Environmental Sciences	SportEx	IPSCs as a model to study APP processing.
Dr. Sam Lucas	**Dr. Helen McGettrick**	Life and Environmental Sciences	SportEx	In vitro and in vivo vascular response to exercise-induced changes in blood flow.
Dr. Catarina Rendeiro	**Dr. Gavin Bown**	Life and Environmental Sciences	SportEx	Food for Thought: Understanding how cocoa flavonoids modulate the brain vasculature across the lifespan.
Dr. Yu-Chiang Lai	**Prof. Gareth Lavery**	Life and Environmental Sciences	SportEx	Affinity- and chemical-based proximaty labelling method to study protein-protein interaction in vivo.
Dr. Raymond Reynolds	**Prof. James Tresilian**	Life and Environmental Sciences	SportEx	The integration of visually-guided interception with balance.
Dr. Alex Wadley	**Dr. Sarah Aldred**	Life and Environmental Sciences	SportEx	Understanding the role of immune checkpoints in the regulation of T-cell migration.
Dr. Leigh Breen	**Dr. Yu-Chiang Lai**	Life and Environmental Sciences	SportEx	The influence of obesity, exercise and diet on age-related skeletal muscle deterioration: New mechanistic insights.
Dr. Martin Whitham	**Dr. Paul Harrison**	Life and Environmental Sciences	SportEx	Understanding exercise-induced extracellular vesicle tropism.