

### Carnegie Undergraduate Vacation Scholarships 2016

University	Faculty/School	Student Name	Project title
Aberdeen	Language and Literature	Mrs Sarah Docherty	Field Research on the Effects of the Economic Crisis on Resurging Catalanian Nationalism
Aberdeen	Physical Sciences	Ms Dana Druka	Accumulation of Arsenic in Kyrgyz rice
Aberdeen	Physical Sciences	Miss Gaynor Lawrence	The synthesis and characterisation of twist-bend nematic liquid crystals
Aberdeen	Engineering	Mr Lewis McRae	Thermodynamic modelling and parameterisation of bioethanol fuel substitution
Aberdeen	Physical Sciences	Mr Straun Simpson	Synthesis of Cancer Targeting TiO <sub>2</sub> Nanoparticles
Aberdeen	Medical Sciences	Mr Andrew Young	A new non-genomic signalling pathway for retinoic acid receptors and importance for neuronal survival
Abertay	Social and Health Sciences	Miss Samantha Allan	Assessing optimal context for interactive screen media use for people with Age-Related Macular Degeneration.
Abertay	Social and Health Sciences	Mr Joseph Hamilton	Evaluation of Social Media Usage for Missing Persons Investigations by Police Scotland
Dundee	Arts and Social Sciences, School of Humanities	Mr John Mark McLaughlan	The social and economic implications of the cottar class in the Highlands, c. 1790-1900
Dundee	Physical Sciences	Mr Dominic De Franco	Utilising crowdsourcing and technology to improve diet, food expenditure and meal preparation time.
Dundee	Social Sciences	Miss Catriona Mackay	War and Peace in Syria: An Evaluation of Peace Solutions for the Syrian Civil War
Edinburgh	Science and Engineering	Mr Aaron Bradley	The effect of galaxy mergers on nuclear activity
Edinburgh	Veterinary Sciences	Miss Sophie Burdett	Investigating the influence of canine morphology on body surface area
Edinburgh	Biological Sciences	Mr Innes Jarmson	Structure-function studies of the kinetochore Dam1 complex
Edinburgh	Biomedical Sciences	Ms Louise Mackenzie	Forward Genetic Analysis of a Spinal Muscular Atrophy Model in <i>C.elegans</i>
Edinburgh	Medicine and Veterinary Medicine	Ms Lois Mackie	Investigating the epigenetic origins of pluripotency in early mouse embryos using histone modification inhibitors
Edinburgh	Medicine & Veterinary Medicine	Ms Alanna Thomson	Investigation of the role of Nav1.7 channels in sex-dependent regulation of C fibre activity-dependent slowing in inflammatory pain.
Glasgow	Social Science and Psychology	Ms Stephanie Allan	Risky Business: a link between sleep disruption and risk taking behaviour?
Glasgow	Mathematics and Statistics - Physical Sciences	Mr Oliver Allen	The dynamics of metal foam breakdown and coalescence with application to material science
Glasgow	Cardiovascular & Medical Science	Miss Angela Boal	Effect of Dietary Sodium and Chloride on Heart Rate and Heart Rate Variability
Glasgow	Science and Engineering (Physics and Astronomy)	Miss Rachel Gray	The Alcubierre Drive as a Potential Source for Gravitational Wave Bursts
Glasgow	Science and Engineering	Mr Fergus Hayes	Neutrino correction to improve the search for Higgs bosons decaying into bottom quarks
Glasgow	Science and Engineering	Mr David Johnstone	A phenomenological exploration of the role, function and meaning of young adults' volunteering.

Glasgow	Physical Sciences	Mr Scott McCreadie	Topographical Survey and Archaeological Analysis of the Landscape of Skalanes, E Iceland
Glasgow	Medical, Veterinary and Life Sciences	Miss Beth Poulton	Establishing the existence of an anatomical reservoir of African trypanosomes within the mammalian host
Glasgow	Politics and Social Sciences	Ms Fiona Ross	Responses to the Rothesay Refugees: A discourse analysis of receiving community narratives
Glasgow	Engineering	Mr Stuart Shilliday	Validation of Planetary Rover Mathematical Models
Glasgow	Psychology	Ms Hollie Sneddon	Attending To Voices: The Impact of Listener Age on Perceiving Vocal Threat and Dominance
Glasgow Caledonian	Biological Sciences	Miss Louise Giles	The effect of Hypoxia on Connexin43 expression â€” a biomarker for ischaemic conditions
Heriot-Watt	Life Sciences/Biological Sciences	Mr Samuel Collins	Investigation of heat shock gene expression to evaluate effects of anthropogenic noise in <i>Lymnea stagnalis</i>
Heriot-Watt	Mathematical and Computer Sciences	Mr Alan Dodgson	Noise in Differential Equations for Molecular Movement
Heriot-Watt	Engineering and Physical Sciences/Physics	Mr Kieran Fraser	Interaction of an Ultrafast Laser Light Pulse with Type-II Superconductor
Heriot-Watt	Engineering and Physical Sciences/Physics	Mr Fraser Pike	Development of dual-comb frequency metrology using femtosecond Er: fibre lasers
Heriot-Watt	Engineering and Physical Sciences/Physics	Mr Donald Risbridger	Optical isolation of cells to create pure cultures
Heriot-Watt	Engineering and Physical Sciences/Physics	Mr Christy Simpson	Probing the Precision of Infrared Photonic Doppler Spectrographs
Highlands and Islands	Marine Science	Miss Hanna Ewen	The impact of seaweed farming on sediment geochemistry
Queen Margaret	Health Science	Miss Mhairi Paul	Understanding the Dynamics of Hepatocyte Proliferation in Liver Regeneration
Queen Margaret	Public Sociology	Ms Yvonne Smith	Rural Youth Poverty and Homelessness
Robert Gordon	Painting - Gray's School of Art	Miss Jessica Barrie	Discovering Contemporary Art in Central Europe
Robert Gordon	Painting - Gray's School of Art	Miss Alison Gray	The Mystery of the Bog People of Northern Europe
Robert Gordon	Computing and Digital Media	Miss Kirsty Noble	Increasing Board Game Interaction with Projected Content
Robert Gordon	Pharmacy and Life Sciences	Ms Anna Stevens	Devise an analytical protocol for the analysis and testing of historical mounting fluids used in the preservation of pathology specimens.
Robert Gordon	Engineering and Mechanical Engineering	Mr Craig Stout	Thermoaerodynamic efficiency improvement of heat exchangers with the use of symmetrical and asymmetrical aerofoil fins
Robert Gordon	Engineering	Mr Scott Walker	Experimental Investigation and Control of an Oilwell Drill-String with Stick-Slip Vibrations
St Andrews	Physics and Astronomy	Miss Angela Breimann	The variability of forming Sun-like stars
St Andrews	Chemistry	Miss Alice Bumstead	Investigation into organic ferroelectrics of the sarcosine family and their low temperature phase transitions
St Andrews	Computer Science	Mr Callum Fare	Advanced machine learning driven computer vision analysis of ancient coins

St Andrews	Physics and Astronomy	Ms Ophelia Gunn	Tracing Galaxy Evolution with Peanuts
St Andrews	Psychology and Neuroscience	Miss Anna Hadjitofi	A Study of Grid Cell Distortion: What happens when we get lost?
Stirling	Natural Sciences	Miss Lorna Haddow	Using a reciprocity prime to increase organ donation in the UK.
Stirling	Biological and Environmental Sciences	Miss Laura Hepburn	Probing the specificity of memory in the innate cellular immune response of insects
Stirling	Natural Sciences	Miss Catherine Mercer	Assessing population structure and demographic performance of <i>Fagus sylvatica</i> at its southern range edge
Stirling	Natural Sciences	Miss Claire Mitchell	Visual number estimation and shape: common or different mechanisms?
Strathclyde	Civil and Environmental Engineering	Ms Mary Anderson	Returning heavily contaminated soils to beneficial use
Strathclyde	Engineering	Mr Gavin Andrew	Growth kinetics of paracetamol single crystals as a function of the presence of impurities
Strathclyde	Physics	Mr Patrick Bevington	Understanding polarization shaping for control of nonlinear propagation
Strathclyde	Humanities and Social Science	Mr Callum Creaney	Shetland, Rebus and Scotland: a study in the cultural importance of Scottish television adaptation.
Strathclyde	Physics	Ms Shannan Foylan	Analysis and optimisation for sensitive unshielded optically pumped magnetometry
Strathclyde	Physics	Ms Anna Gribbon	Measurements of magnetic forces with an atom interferometer
Strathclyde	Business School	Miss Shannon Harris	Investigating the Impact of Religion on Entrepreneurial Opportunity Recognition
Strathclyde	Chemical and Process Engineering	Mr Joshua Holder	Metal-organic frameworks as adsorbents for carbon capture and storage
Strathclyde	Humanities and Social Science	Miss Alexandra Imrie	Developing electrophysiological methods for the detection of Alzheimer's disease
Strathclyde	Mathematics and Statistics	Mr Matthew Keith	Analysis of Degenerate Biaxial States in Nematic Liquid Crystal Materials
Strathclyde	Humanities and Social Science	Miss Sophie McNaughton	East End Pubs and West Coast Girls: A Collection of Short Stories
Strathclyde	Humanities and Social Science	Mr Ross Stephen	Impact and Access of Interest Groups on the Mental Health Act in Scotland
West of Scotland	Media, Culture and Society	Miss Stephney Kelso	The role of expectancies, motivations, and behaviours as predictors of alcohol disclosures online
West of Scotland	Science and Sport	Ms Abbie McGuire	Individual Differences In People's Abilities to Recognise Faces
West of Scotland	Science, Biological Sciences	Mr Ronnie Mooney	The Biological Activity of Quaternary Ammonium Compounds Against <i>Acanthamoeba</i>