

Carnegie Undergraduate Vacation Scholarships 2017

University	Faculty/School	Student Name	Project title
Aberdeen	Engineering	Mr Danny Dunbar	Non-Destructive Damage Detection in Straight Vertical Risers
Aberdeen	Computing	Mr Alessandro Gillies	The role of extensivity in chaos-based cryptography
Aberdeen	Geosciences	Ms Lucinda Hardisty	Building a hot spring in the lab to investigate extra-terrestrial microbe fossilisation
Aberdeen	Chemistry	Mr Lhiam Paton	Arsenic compounds in squid
Aberdeen	Chemistry	Miss Caecilie Benckendorff	ATR-SEIRAS study of the formation of adsorbed CO on Pt electrodes during oxidation of formaldehyde
Abertay	Psychology and Social and Health Sciences	Miss Jade Colvin	Assessing the influence of video buffering delays on identification and stress in a CCTV task.
Abertay	Science and Engineering	Miss Danielle Hunter	An investigation into a one-step co-fuming process of superglue and dye for fingermark recovery
Abertay	Psychology and Social and Health Sciences	Miss Anna Moir	A study into the relationship between experiential avoidance and missing person proclivity
Dundee	Science and Engineering	Mr Raheem Beg	Alfven waves in moving solar plasmas
Dundee	Science and Engineering	Mr Calum Macdonald	The use of Matrix Groups in Public-Key Cryptography
Dundee	Humanities	Miss Ruby Main	Post-truth in language, and as phenomenon: An investigation into our relationship with fact
Dundee	Science and Engineering	Mr Murray McKay	Ultrasonic delousing
Dundee	Science and Engineering	Mr Thamsanqa Moyo	TransMundi, interactive tool for exploring map projections and curved manifolds
Dundee	Science and Engineering - Physics	Mr Graeme Nicoll	Using a semiconductor multilayer stack as a wavelength converter in a solar laser
Dundee	Social Science	Ms Kirsten Paterson	Preserving Battlefields -reconciling conflicting legal presumptions in favour of supporting sustainable development and ensuring preservation
Dundee	Science and Engineering	Mr Laim Trzaska	Identifying atomic scale defects in doped perovskite photovoltaic materials
Edinburgh	Science and Engineering , Chemistry	Mr Scott Docherty - Withdrawn	Bio-compatible methods for late-stage drug modification; iron-catalysed fluorination
Edinburgh	Medicine	Mr Chris Graham	Apex 5 -High altitude medical research expedition
Edinburgh	Physics and Astronomy	Mr Cameron Macfarlane	Resolving star formation spatially within high redshift galaxies using pixel colours
Edinburgh	Biomedical Sciences	Miss Tahimina Munir	Investigating the role of pericytes and Schwann cells in successful spinal cord regeneration in zebrafish
Edinburgh	Chemistry	Ms Emily Payne	Recovering gold from mobile phones
Edinburgh Napier	Health and Social Care	Miss Claire Daly	The life and work of Derek Hoy “ a Scottish nurse informatician”
Glasgow	Health and Life Sciences, Anatomy	Ms Fiona Ballantyne	Does AMPK in the perivascular adipose tissue respond to oxidant stress?
Glasgow	Biomedical Engineering	Miss Nadia Chafer	Building nano-scale optical components using DNA-origami
Glasgow	Life Sciences, Neuroscience	Ms Laura Chambers	An anatomical investigation of respiratory neurones in neonatal, juvenile and adult mice
Glasgow	Life Sciences, Marine Biology	Miss Rosalie Dowell	Assessing the presence of marine macro and micro plastic on beaches along the coast of Trincomalee, Sri Lanka
Glasgow	Culture and Creative Arts	Ms Tessa Barbara Ewart	India and Imperialism (Andrew Carnegie's travel album)
Glasgow	Psychology	Ms Lucy Caroline Grant	Socio-economic status as a moderating factor of the portion size effect
Glasgow	College of Arts	Mr Fergus Hall	A study of choral, jazz and Scottish traditional music for contemporary composition
Glasgow	Modern Languages and Culture	Ms Louise Hall	A comparison of late nineteenth-century French psychiatric discourse and Emile Zola- literary depictions of madness.
Glasgow	Education	Mr Billy Halliday	Ringin the Ages: Intergenerational Practice in Community Development
Glasgow	Medical, Veterinary Medicine	Mr Andrew McLean	Ventilator driving pressure during one-lung ventilation
Glasgow	Science and Engineering - Astronomy	Mr Eric McNeil	Simulating effects of velocity fields within solar prominences

Glasgow	Life Sciences	Ms Briana Nelis	Targeting Mitochondrial Metabolism as a Therapeutic Strategy in Chronic Myeloid Leukaemia
Glasgow	Medical, Veterinary Medicine	Miss Laura Nutton	Outcome Prediction in a Tertiary Neurological Intensive Care Unit
Glasgow	Psychology	Miss Clare Paton	How emotional perception of faces is influenced by sleep and circadian timing.
Glasgow	Life Sciences	Miss Jessica Simpson	Dogs as a potential reservoir of clinically relevant strains of Clostridium difficile
Glasgow	Mathematics and Statistics	Mr Rhys Wells	Models of low genus curves
Glasgow Caledonian	Health and Life Sciences, Podiatry	Miss Lucy Forsyth	Intrinsic foot muscle cross-sectional area in people with and without plantar heel pain
Heriot-Watt	Mathematics	Mr Connor Evans	Integrable Higher Gauge Field Equations
Heriot-Watt	Engineering and Physical Sciences	Mr Kieran Ross	Single Photon Imaging
Heriot-Watt	Physics, Engineering	Mr Christopher Sparling	Development of components and infrastructure for an ultra-high vacuum spectrometer
Heriot-Watt	Engineering, Physical Science	Mr Dominic Taylor	Physicochemical ageing in nanocomposites
Highlands and Islands	Archaeology	Miss Victoria Carroll	Community archaeology in Scotland: current practice and future directions
Highlands and Islands	Psychology	Mrs Emma Rait	No text worth dying for: The role of Emotion Regulation in a safe driving campaign
Highlands and Islands	Archaeology	Ms Romayne Wainwright	The Red Deer - Iconic in Scotland Past and Present?
Queen Margaret	Psychology & Sociology	Ms Susan Gray	The Lived Experiences of Parents with Children on the Autistic Spectrum in Lanarkshire
Queen Margaret	Arts, Social Sciences and Management	Mr Samuel Gulliver-Goodall	Before and after Brexit: a sociology of the textile industry in the Scottish Borders
Robert Gordon	Computing and Digital Media	Miss Cara Henderson	Recolouring Tools as a Method to Improve Accessibility within Integrated Development Environments (IDE)
Robert Gordon	Gray's School of Art	Mr Marcus Murison	Exploring the overlooked and unacknowledged
Robert Gordon	Computing Science and Digital Media	Miss Zaklina Rycko	UI Clues as a method to aid older adults from giving away personal data online
Robert Gordon	Computing Science and Digital Media	Mr Graham Stead	Web accessibility guidelines and how they may apply to future media applications
St Andrews	Modern Languages	Miss Madeleine Evison	The Social and Economic Influence of German Migrants on the British Sugar Industry
St Andrews	Science, Chemistry and Physics	Mr Callum Flannigan	Novel Electronic Materials: Single Molecular Switches
St Andrews	Computer Science	Mr Liam McMenamie	Machine Learning Labelling of Medical Consultations for Latent Patient Emotions
St Andrews	Biology	Miss Rebecca McNeil	The functional significance of coloration in sharks
St Andrews	Physics and Astronomy, Mathematics and Statistics	Mr Adam McRoberts	Construction of a 2-Dimensional Field Theory for Matrix Product States
St Andrews	Physics and Astronomy	Ms Laura O'Donnell	A compact, robust, and portable laser for probing an atomic clock
Stirling	Biological and Environmental Sciences	Mr Oscar Clarke	Are sunscreens a threat to our oceans?
Stirling	Biological and Environmental Sciences	Miss Rowan Watt	Inhibition of cdk4/6 combined with retinoic acid as a potential therapy for acute myeloid leukaemia.
Strathclyde	Engineering	Mr Euan Andrew	Sustainable Energy for Development
Strathclyde	Engineering	Mr Jack Ballantine	Determining the mechanism of RF gel production using NMR and controlled synthetic processes.
Strathclyde	Physics	Mr Andrew Daffurn	Simulating NV Centres in Diamond
Strathclyde	Mathematics and Statistics, Physics	Mr Alistair Ferguson	Configuration Study For The Improved Application of Atomic Magnetometry To Archaeological Surveying

Strathclyde	Science, Immunology and Pharmacology	Miss Katie Flight	Using ToF-SIMS techniques to assess biophysical interactions between proteinase-activated receptor (PAR) peptidases and the cell membrane
Strathclyde	Humanities	Miss Catherine Flynn	The Construction of English Identity in the works of Alan Bennett
Strathclyde	English, Journalism and Creative Writing	Ms Rebecca Gallacher	Changing the Tune: Exploring the Influence of Music on Literature- Form and Narrative
Strathclyde	Science, Biochemistry	Mr Derek Hardie	Using a multi-cyclin dependent kinase inhibitor to target stroma-mediated chemotherapy resistance in Acute Myeloid Leukaemia
Strathclyde	Engineering	Miss Lauren Johnston	A computational model of blood flow in normal and diseased arteries
Strathclyde	Government and Public Policy	Mr David Legg	Candidate Literature and Locality
Strathclyde	Business School, Economics	Ms Mhairi Love	Gender inequality in labour market participation in Scotland
Strathclyde	Business School, Economics	Mr Sam MacArthur	Understanding variations in property and land values in Scotland
Strathclyde	Chemical and Process Engineering	Mr Andrew Manson	Investigating the glass transition in linear chain molecules using configurational temperature
Strathclyde	Engineering	Mr Andrew Mawbey	Laser induced incandescence for measurement of size and volume of nanoparticles for pollution control
Strathclyde	Business School, Economics	Mr Adam McGeoch	The Effect of UK Mortgage Market Regulation on Lending
Strathclyde	Humanities and Social Sciences, Psychology	Miss Rachel Morrison	Understanding the relationship between screen use, sleeping problems and self-harm in adolescents
Strathclyde	Humanities and Social Science	Ms Rebecca Russell	Shakespeare 401+
West of Scotland	Science and Sport	Mr Kerr Paterson	Reliability of the Physiowave [®] , ^c Impedance Cardiography Device during Semi-Recumbent Cycling Exercise
West of Scotland	Science and Sport	Mr Jordan Templeton	Validity of a novel ultrasound transducer to detect hydration status