# Carnegie Trust for the Universities of Scotland Summary Report: Undergraduate Vacation Scholarships 2021 Round

## 1. Submissions and review process

## 1.1. Summary data

- 211 applications were received.
- 184 were assessed while 27 were not reviewed as they did not fit the remit of the scheme.
- 3 applications were withdrawn.
- There are currently 81 active scholarships, 43 of which are in the Arts, Humanities and Social Sciences and 38 in Science, Engineering and Technology.
- The total amount awarded was £246,388 with an average award value of £3,042.
- The scheme experienced a 17% increase in applications in comparison to 2020, likely as a consequence of other funders opting to suspend comparable schemes (due to the pandemic).

## 1.2. Peer review process

A notable impact of the pandemic on both the PhD and Vacation Scholarship schemes has been a reduction in the availability of established reviewers, coupled with difficulty in recruiting ad hoc assessors. As a consequence, the decision was made to revert back to exclusively internal review for the 2021 round of the scheme.

As is typical proposals were reviewed against the following criteria:

- Candidate fit
- Academic ability
- Significance and originality
- Overall quality

In light of the ongoing pandemic the suitability/adaptability of the proposed research, was also taken into consideration.

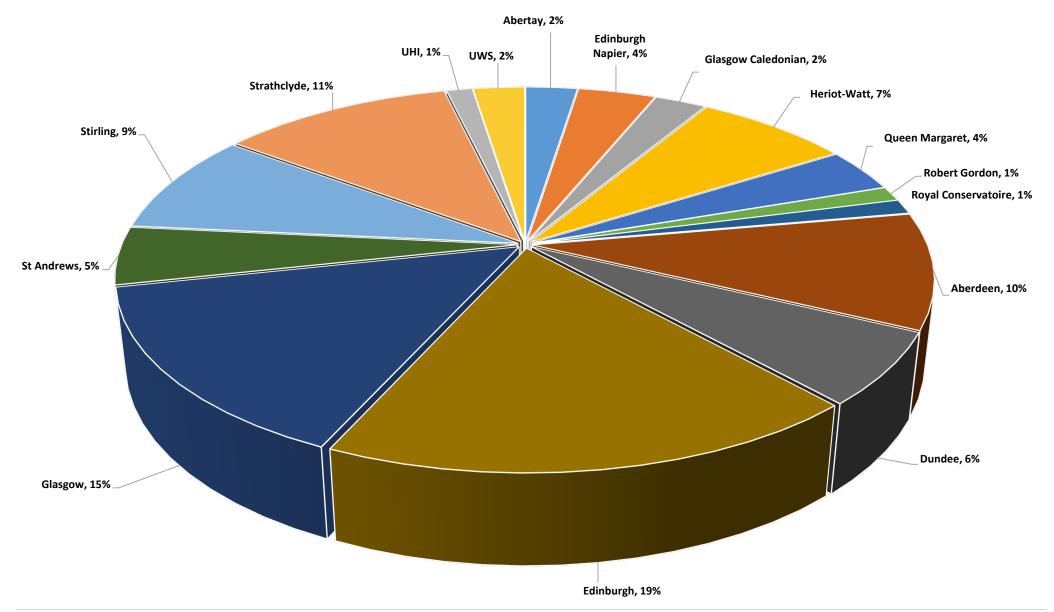
## 2. Awards and success rate

## 2.1. Overall success rate

Excluding withdrawn and ineligible applications, the overall success rate was 44.8 per cent. The table below shows the numbers of applications received and the awards made by university of affiliation:

University	Applied	Cancelled	Withdrawn	Awarded	Success Rate
Abertay University	4	0	0	2	50%
Edinburgh Napier University	6	0	0	3	50%
Glasgow Caledonian University	5	0	0	2	40%
Glasgow School of Art	0	0	0	0	N/A
Heriot-Watt University	12	0	0	6	50%
Queen Margaret University	7	0	0	3	43%
Robert Gordon University	2	0	0	1	50%
Royal Conservatoire of Scotland	2	0	0	1	50%
University of Aberdeen	20	0	1	8	40%
University of Dundee	27	0	0	5	19%
University of Edinburgh	37	0	0	15	41%
University of Glasgow	28	0	0	12	43%
University of St Andrews	19	0	1	4	21%
University of Stirling	11	0	0	7	64%
University of Strathclyde	26	1	1	9	35%
University of the Highlands & Islands	1	0	0	1	100%
University of the West of Scotland	4	0	0	2	50%
Total	211	1	3	81	38%
Success	rate excludi	ng ineligible	& withdrawn a	pplications:	44.8%

The chart on the following page displays the proportion of awards made by university:

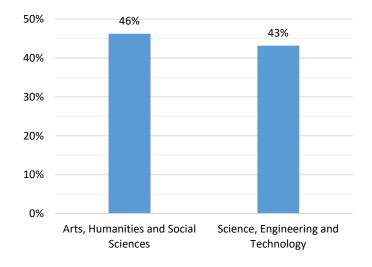


## 2.2. Success rate by field

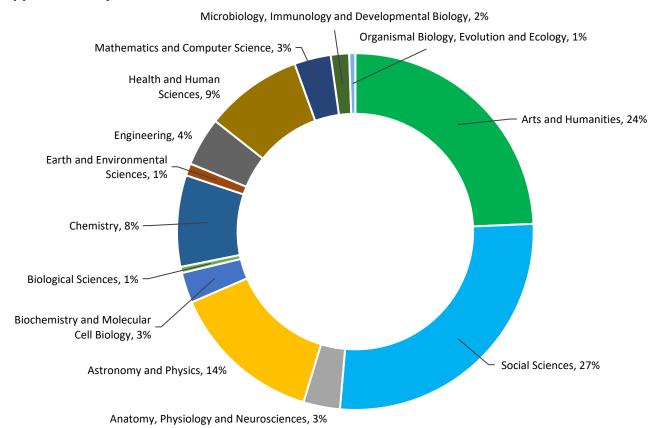
The following table provides a breakdown of applications by panel and research area, excluding withdrawals and those submissions that did not meet the remit of the scheme. Arts, Humanities and Social Science subjects received 93 applications while Science, Engineering and Technology subjects attracted 88 submissions. The Social Sciences accounted for just over half of AHSS applications at 49, five more that Art and Humanities. Within Science, Engineering and Technology, Astronomy and Physics attracted the highest number of applications with 25, followed by Health and Human Sciences at 16 and chemistry at 15.

Breakdown by Panel and Research Area	Applied	Awarded
Arts, Humanities and Social Sciences	93	43
Arts and Humanities	44	22
Social Sciences	49	21
Science, Engineering and Technology	88	38
Anatomy, Physiology and Neurosciences	6	3
Astronomy and Physics	25	11
Biochemistry and Molecular Cell Biology	5	2
Biological Sciences	1	0
Chemistry	15	9
Earth and Environmental Sciences	2	0
Engineering	8	3
Health and Human Sciences	16	3
Mathematics and Computer Science	6	4
Microbiology, Immunology and Developmental Biology	3	3
Organismal Biology, Evolution and Ecology	1	0
Grand Total	181	81

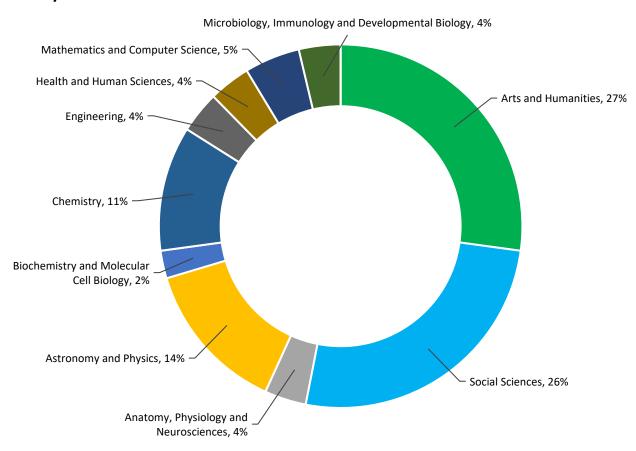
The doughnut charts on the following page display the percentage of applications and awards by research area, excluding withdrawals and those submissions that did not meet the remit of the scheme. The chart below displays the success rate by panel area, excluding withdrawals. 46 per cent of applications under the Arts, Humanities and Social Sciences category were successful, whereas 43 per cent of applications under Science, Engineering and Technology were successful.



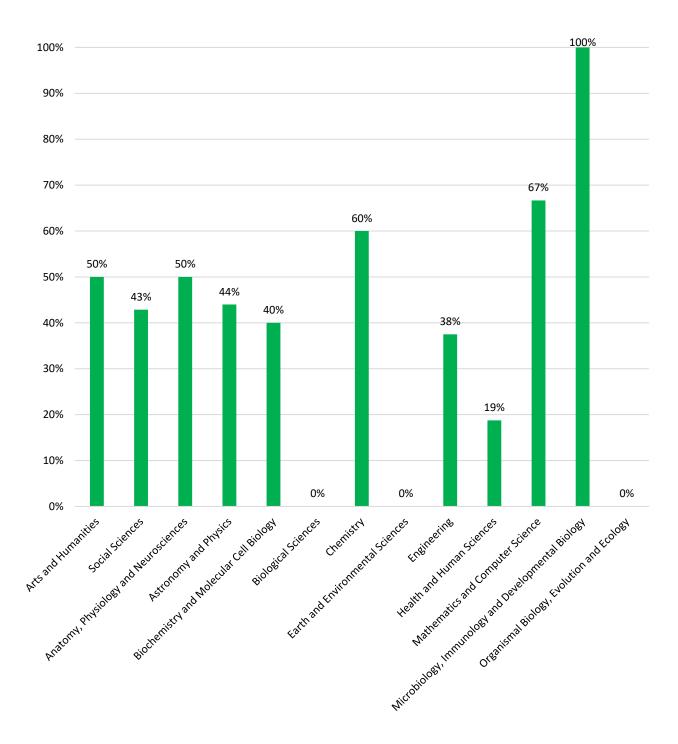
## **Applications by Research Area**



### **Awards by Panel and Research Area**

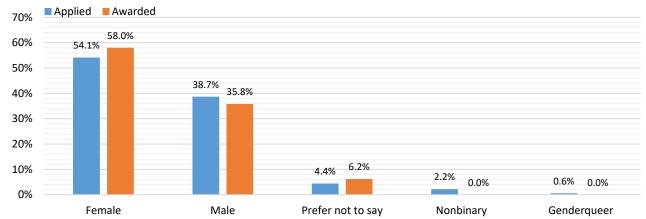


The most successful research area was Microbiology, Immunology and Developmental Biology which returned a success rate of 100% (it should be noted however that only three eligible applications were received for this area), followed by Mathematics and Computer Science with 67%, and Chemistry at 60%. The least successful areas this year were Organismal Biology, Evolution and Ecology, Earth and Environmental Sciences and the Biological Sciences all with a 0% success rate (although again it should be noted that the number of eligible applications received was very low, with only 4 across all three areas).

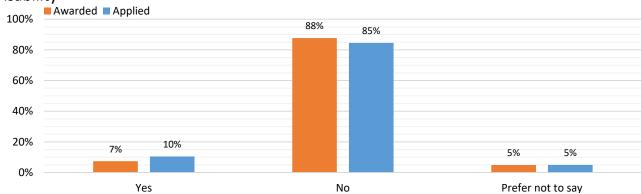


## 3. Equal opportunities

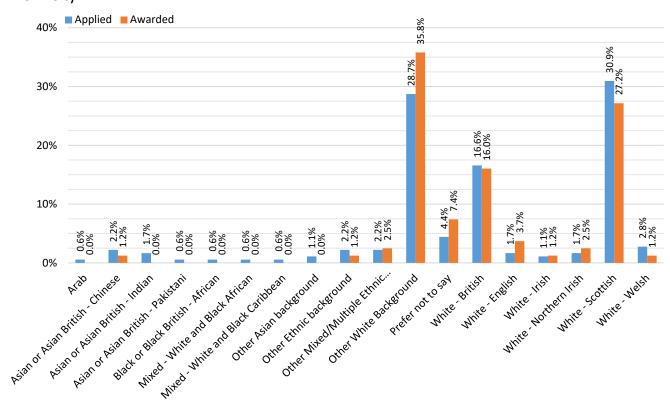
#### Gender



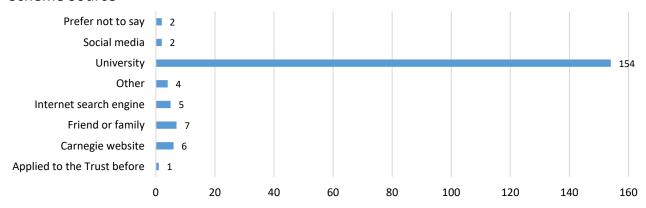
#### Disability



### Ethnicity



## Scheme Source



# 4. List of Awardees

First Name	Surname	Title of the research project	University	Amount awarded
Philip	Abramson	Catalysis of inverse electron demand Diels-Alder reactions within a supramolecular capsule	University of Edinburgh	£2,660
Anna	Ahlback	Abnormal development of synovial macrophages by prenatal exposure to plasticizers?	University of Edinburgh	£3,990
Jonathan	Anderson	What Is The Nature And Scope Of Our Cognitive Goals?	University of St Andrews	£1,330
Elias	Aoubala	Development of a Mono-propellant Catalytic Igniter System	University of Glasgow	£3,325
Henry	Archer	The Interactive Manipulation and Efficient Fabrication of Photonic Membranes.	University of St Andrews	£3,990
Sophie Zoe	Archontis	Should Artificial Intelligence Need To Believe In Itself?	University of Glasgow	£1,663
Virginia	Arena	Covid-19 and young people's employment: impact and future policy initiatives.	University of the West of Scotland	£2,660
Anna	Bailey	Synthesis and Spectroscopy of Bimetallic Lanthanide Complexes: Watching Energy Flow in Single Molecules	University of Glasgow	£3,990
Faidra	Batsaki	Synthesis of stapled peptides and examination of their physicochemical properties as CGRP antagonists for migraine treatment	Heriot-Watt University	£3,325

Valerio	Biancone	Neural Adaptations to Low-Load Resistance Training with Blood-Flow Restriction: A Motor Unit Analysis	University of Stirling	£1,995
Jack	Borrill	The Impact of Festival Participation on Jazz Musicians	Edinburgh Napier University	£2,660
Catherine	Bouchard	Britain's New Hope: Has the Brexit vote increased the UK energy industry's carbon risk premium compared to the EU's	University of Glasgow	£2,328
Nathalie	Braun	Making a 'Complete Human Brain' model	University of Edinburgh	£2,660
Lorenzo	Carfora	Theoretical Understanding of Atomic Clocks perturbations.	University of Strathclyde	£3,325
Ross	Clark	Applying the Kalman filter to improve prospective optical gating for beating heart imaging	University of Glasgow	£2,660
Yvonne	Clarke	Investigation of Aldehyde Dehydrogenase 2 activators for Parkinson's Disease using Human Neurons with Synucleinopathy	University of Edinburgh	£3,990
Ryan	Connor	Novel properties of flat energy band states	University of Strathclyde	£3,990
Kieran	Cowan	How Much the Centre Holds: The Causal Effect of Proximity to Political Centres on Public Good Provision, Evidence from India	University of Stirling	£1,995
Julia	Darrouy	How can crafts be used as a method of creating community-led art making?	Royal Conservatoire of Scotland	£2,328
Henry	Davidson	An investigation of country-by-country reporting for EU banks from 2015-2019	University of Dundee	£1,663
Marion	Devigne	Insular husbandry practises in the Late Medieval period: a zooarchaeological and ethnographic study of the Isle of Gunna, Inner Hebrides.	University of Aberdeen	£2,660
Katelin	Donaldson	Investigating the impact of the Large Magellanic Cloud (LMC) on the local density and velocity dark matter distributions	University of Edinburgh	£3,325
Sarah	Donaldson	Basal Lubrication of Ice Sheets	University of Glasgow	£2,660
Callum	Duffy	The effect of the Scottish Government's handling of the COVID-19 pandemic on public opinion of Scottish Independence.	University of Edinburgh	£2,993

Raufs	Dunamalijevs	Audio-Visual Deep Reinforcement Learning in Image-Oriented Environments	Robert Gordon University	£3,990
Benjamin	Duncan	The effect of small-scale processes on solar active region coronal evolution.	University of Dundee	£1,995
Natasha	Fugmann	Eyewitness Identification Accuracy and Confidence-Accuracy Relationship for Familiar Identifications	Queen Margaret University	£3,990
Olivia	Gardener	How the French Revolution Affected the Reading Practices of St. Andrews University Students and the Wider Gentry.	University of Glasgow	£3,990
Sarah	Gardiner	The importance of self-relevant goals in the development of prospective memory in pre-school children.	University of Stirling	£3,990
Eric	Gemmell Gorriz	The effect of morpholine ring on novel antimalarial drug solubility and activity	University of Glasgow	£3,325
Dirk	Goldschmitt	Contextual effects on numerosity estimation, a psychophysical and EEG study	University of Stirling	£3,990
Katharina	Grabowski	T Cell Activation and Tolerance to Human Malaria Parasites in vitro	University of Edinburgh	£2,328
Jindrich	Hajek	Modelling exciton energy conversion for next- generation bio-inspired light harvesting	Heriot-Watt University	£3,990
Rebecca	Hart	Improving young adults? visual short-term memory capacity: harnessing the benefits of visual semantics and strategic training	University of Strathclyde	£3,990
Miriam	Hauser	Zero Emissions Green Ammonia Power Technology	University of Edinburgh	£3,990
Laura	Ibanez Gomez	The anomalously large diffuse-layer capacitance of the Pt(111) aqueous electrolyte interface	University of Aberdeen	£2,660
Paul	Ireland	Simulating GMOT Laser cooling systems	University of Strathclyde	£3,325
Peter	Jones	Neutrophil Modulation of T cell PD-1 Expression	University of Edinburgh	£2,660
Carmen	Jongepier	Does social media consumption shape perceptions of inequality?	University of Strathclyde	£3,325

Georgia	Katakou	Women and political exile in the Greek junta	University of Edinburgh	£1,995
Jacqueline	Kennard	A comparative analysis of eighteenth-century library borrowing records for evidence of the Enlightenment in provincial Scotland	University of Stirling	£3,990
Sarah	Kiaras-Attari	The Nature of Motherhood in the Colonial Caribbean	University of Edinburgh	£1,663
Martina	Kopcanova	The influence of aperiodic EEG features on neural markers of neuro-cognitive dysfunction in Alzheimer?s disease and type 2 diabetes	University of Dundee	£3,325
Rosamund	Latto	Forgotten Women of Craiglockhart	Edinburgh Napier University	£3,990
Amy	Lawrence	Investigating the impact of the expansion of the Funded Early Learning Care (ELC) scheme on local authority nurseries in Glasgow.	Glasgow Caledonian University	£3,325
Elena	Leeke- Kuenzler	T.S. Eliot and Visual Culture	University of Stirling	£2,660
Iuliia	Lemesheva	At The Intersection of Fairness and Effectiveness: Intersectionality as a Social Movement Strategy	University of Strathclyde	£3,990
Jack	Liddall	Between Independence and Union. Finding a Constitutional Middle Ground	University of Edinburgh	£2,328
Shi Pei	Loo	Disrupting Glycolytic Pathways in Human Monocytes to Alleviate Inflammation in Rheumatoid Arthritis.	University of Glasgow	£1,330
Chloe	Mackie	Women and hearing voices: Investigating the impact of stigma	University of the West of Scotland	£3,325
Cara	Magennis	The impact that reservations have on CEDAW and how does this effect the gender pay gap specifically in Scotland	Edinburgh Napier University	£2,660
Sara	Marinoni	FUEL FOR THE DEAD: an anthracological investigation of wood-fuel use in Bronze Age cremation burials at Love Lodge Farm, Carmarthenshire	University of the Highlands & Islands	£2,993
Marta	Martin Grund	Are IMF loans a tool for U.S. multinational corporations to get market space?	University of Glasgow	£3,990
Leoni Shirin	Masroujah	Fool me once, don't fool me twice: Testing stimulus generalization theory of impression formation	University of Aberdeen	£3,990

Timothy	Matthews	Mapping the structural inconsistencies of appeal procedures across environmental law.	University of Dundee	£1,995
Clara	McKenzie	Commemoration of French Civilians aiding MI9's rescue of allied pilots during the Second World War, new angles on Anglo-French relations.	University of Glasgow	£1,330
Adam	McLauchlan	Heterometallic Catalysis in Lactide Ring-Opening Polymerisation: Group IV and I/II Salen Complexes	University of Edinburgh	£3,990
Filip	Meger	Advancing the scope of an iron-catalysed C(sp2)-H borylation system to carboarenes	University of Strathclyde	£3,325
Hannah	Mimiec	Community Land Ownership and the Green Recovery from Coronavirus	University of Glasgow	£2,660
Samuel	Muirhead	Feasibility of Push-Through Hyperloop Airlock Architecture	University of Strathclyde	£3,325
Amanda	Nordqvist	How rational is the eye of the beholder?: Testing transitivity in the appreciation of beauty	University of Aberdeen	£3,325
Caitlin	O'Neil	Characterisation of New Materials for Quantum Spin-Liquids	University of St Andrews	£3,990
Leah	Ophir	The cognitive and emotional effects of social isolation on adolescents, and impact on executive function and social interaction abilities.	University of Dundee	£2,660
Kacper	Patej	In search of interstellar glycine - characterisation of spectroscopic properties under extreme conditions via computational simulation	University of Edinburgh	£3,990
Ema	Pereira	The influence of individual attitudes and bias awareness on gender-based judgements of scientific credibility	Abertay University	£3,658
Zivile	Puospekaite	Invariance Properties of the Quaternionic Hopf Map with Respect to the Finite Subgroups of SO(3)	University of Aberdeen	£2,660
Sebastian	Robarts	Full-field modelling of OPO cavities with tailored nonlinear crystals	Heriot-Watt University	£2,660
Dina	Roggero	A trial and investigation into the effectiveness of a virtual befriending scheme for socially isolated adults	Heriot-Watt University	£3,990
Emma	Ruse	Sustainability of Theatre Funding in Scotland	Queen Margaret University	£1,995

Matthew	Russell	Paladium sulfide as a hydrogenation catalyst	University of Aberdeen	£2,660
Lewis	Russell	2D Simulation of FtsZ Filaments and their Self-Arrangement modelled through application of Brownian and Langevin Dynamics.	University of Strathclyde	£3,990
Tina	Sarapa	Development of a new green photoactivatable protein for the use in photoactivation localisation microscopy.	Heriot-Watt University	£2,328
Hayley	Smith	What 'posh' sounds like across Scotland.	Queen Margaret University	£2,660
Olga	Sokolenko	Assessing the impact of video conferencing class size on learning and well-being.	Abertay University	£2,660
Amina	Sternkopf	Investigating the role of the ciliary gene CEP41 in autism spectrum disorder using human cortical organoids	University of Edinburgh	£1,995
Weronika	Szlachetka	Identifying the best timepoints for transcriptomic analysis in 3-dimensional brain organoids comparing mouse and human brains	University of Aberdeen	£2,660
Anni	Taitto	An Epidemic of Inequality: A Study of the Impacts of Deprivation and COVID-19 Pandemic on Access to University Education	Glasgow Caledonian University	£3,990
Oscar	Thompson	Vertical and Horizontal Transmission of Attitudes and Behaviours Surrounding Covid-19 Vaccinations.	Heriot-Watt University	£2,660
Noah	Vaughan- Roberts	Localised states of fermions in a spacetime obeying conformal gravity	University of St Andrews	£3,990
Oliver	Walton	21st Century Exoticism in Contemporary Western Cinema	University of Stirling	£1,995
Viktor	Yanev	Modelling of a Soft Fluidic Actuator using Feed- Forward Neural Network for Regression Analysis	University of Aberdeen	£3,990