REPORT OF THE UNIVERSITY RESEARCH BOARD

(URB)

2012-13 Academic Development Fund New Research and Scholarly Initiatives Award Major Grant Competition

ADF Small Grants Competition Results, Spring and Fall 2011

FOR INFORMATION

1. **Academic Development Fund New Research and Scholarly Initiative Award - Major Grant**

The total budget for the Academic Development Fund in 2012-2013 is $1.5 million. Of this, $200,000 is required to support the Small Grants competition for 2012-2013.

This year SUPAD reviewed 62 applications for funding under the ADF, a marginal increase over the previous year when 61 applications were received. Of the 62 applications, 17 were recommended for funding. The total amount requested by these 62 applicants was $4,666,934 for 2012-2013.

As in previous years, SUPAD divided into three subgroups in order to facilitate the detailed review and preliminary ranking of the applications. The subgroups and the number of applications within each are noted below.

	Applications		Funding
	Received	Recommended	Recommended
Biosciences	33	8	$550,260
Physical and Mathematical Sciences & Engineering	15	5	$479,040
Social Sciences, Arts & Humanities	14	4	$251,457
	62	17	
			Total: $1,291,757

Applications involving computers were referred to the SCUP Subcommittee on Information Technology (SUIT) for technical assessment. SUPAD met once to evaluate the applications and related materials. Separate meetings of subgroups produced preliminary evaluations.

The total amount of the awards recommended for 2012-2013 is $1,291,757; details are provided on the attached table (**Appendix 1**).

2. **Academic Development Fund New Research and Scholarly Initiative Award - Small Grant Competition**

In the Spring 2011 Small Grant competition, 43 applications for ADF New Research and Scholarly Initiative Award Small Grant support were received from all constituencies for consideration for funding. Approximately $100,000 was available for allocation. The requests for funding amounted to $343,953, whereas a total of $105,642 was awarded among the 13 applications approved for funding.

In the Fall 2011 Small Grant competition, 45 applications were received for consideration for funding. Approximately $100,000 was available for allocation, whereas the requests amounted to $368,375. Of the 45 applications received, 14 were approved for funding that totaled $113,462.

Funding recommendations for the Spring 2011 and Fall 2011 Small Grant competitions are shown on **Appendix 2** and **Appendix 3** respectively.

APPENDIX 1

Research Development & Services

ADF - New Research and Scholarly Initiative Awards - Major Grant Results

November 2011

Assigned ID	PI Name		Department	Faculty	Project Title	Award
Biosciences						
12-102	Branfireun	B.	Biology	Science	*Optical sensors for the characterization of dissolved organic matter*	$53,000.00
Co-applicants:	Trick	C.	Biology	Science		
12-106	Gloor	G.	Biochemistry	Medicine & Dentistry	*ADF Major request for Illumnina MiSeq Instrument*	$132,500.00
Co-applicants:	Hegele	R.	Biochemistry & Medicine, Robarts	Medicine & Dentistry		
	Reid	G.	Surgery, Microbiology & Immunolog	Medicine & Dentistry		
12-107	Hamilton	D. W.	Dentistry	Medicine & Dentistry	*Reflected light DIC Microscope for Analysis of Live Cell Interactions with Biomaterials and Mineralized Tissues*	$81,930.00
Co-applicants:	J. Dixon, S. Sims		Physiology & Pharmacology	Medicine & Dentistry		
	E. Gillies, K. Mequanint, /		Chemistry, Chemical & BioChemica	Science, Engineering, Medicine & D		
	F. Lagugne-Labarthet,		Chemistry, Physics & Astronomy	Science		
12-113	Kerfoot	S.	Microbiology & Immunology	Medicine & Dentistry	*Genotyping, Molecular and Chromatin Biology (GMC) Support Core Facility*	$79,849.00
Co-applicants:	Heit	B.	Microbiology & Immunology	Medicine & Dentistry		
	DeKoter	R.	Microbiology & Immunology	Medicine & Dentistry		
	Kim	S.	Microbiology & Immunology	Medicine & Dentistry		
12-116	Lindo	Z.	Biology	Science	*Ecosystem Significance of Moss-Associated Cyanobacteria Nitrogen Fixation (ECOFIX Project)*	$75,085.00
Co-applicants:						
12-130	Sinclair	B.	Biology	Science	*Why are insects killed at low temperatures? A temperature-controlled micro-volume Ussing chamber to explore the role of gut epithelial transport in insect chilling injury*	$23,584.00
Co-applicants:						

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November 2011

Assigned ID	PI Name		Department	Faculty	Project Title	Award
12-131	Thorn	G.	Biology	Science	*High yield, high purity DNA from difficult sources*	$49,129.00
Co-applicants:	N. Keyghobadi, G. Tho		Biology	Science		
	Macfie	S.	Biology	Science		
	Southam	G.	Biology/Earth Sciences	Science		
12-133	Zanette	L.	Biology	Science	*Very large outdoor aviaries for conducting critical experiments on inter-seasonal and inter-generational effects on avian physiology, neurobiology, behaviour and ecology*	$55,183.00
Co-applicants:	C. Guglielmo, B. MacD		Biology	Science		
	MacDougall-Shackleton	S.	Psychology	Social Science		
	Sherry	D.	Psychology	Social Science		
					Biosciences	**$550,260.00**

Physical & Mathematical Sciences, and Engineering

12-201	Barmby	P.	Physics & Astronomy	Science	*Probing Star Formation in Nearby Galaxies with Astroinformatics*	$83,937.00
Co-applicants:	Bauer	M.	Computer Science	Science		
	Katchabaw	M.	Computer Science	Science		
12-205	Corcoran	P.	Earth Sciences	Science	*Earth's ancient climatic and surface processes as determined from rhythmite successions in the Gowganda Formation, Huronian Supergroup, Ontario, Canada*	$53,487.00
Co-applicants:	Webb	E.	Earth Sciences	Science		
	Longstaffe	F.	Earth Sciences	Science		
12-208	Newson	T. A.	Civil & Environmental Engg	Engineering	*Ultrasound Optimisation of Tonometric Assessment in the Management of Glaucoma*	$80,664.00
Co-applicants:	Hutnik	C.	Ophthalmology	Medicine & Dentistry		
	Campbell	G.	Medical Biophysics	Medicine & Dentistry		
	Hill	K.	Biology	Science		
12-211	Sadrekarimi	A.	Civil & Environmental Engg	Engineering	*Cyclic Ring Shear Device for Large Displacement Testing of Materials*	$116,100.00
Co-applicants:	El Naggar	M. H.	Civil & Environmental Engg	Engineering		
	Yanful	E.	Civil & Environmental Engg	Engineering		
	Newson	T.	Civil & Environmental Engg	Engineering		

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Assigned ID	PI Name		Department	Faculty	Project Title	Award
12-214	Xu	C.	Chemical & Biochemical Engg	Engineering	*Developing Novel Supported Metal Catalysts for a Bio-oil Platform Forest Biorefinery*	$144,852.00
Co-applicants:						
					Physical & Mathematical Sciences, and Engineering	**$479,040.00**
Social Sciences, Arts and Humanities						
12-305	Dozois	D.	Psychology	Social Science	*Symptom Reduction and Prevention of Affective Disorders*	$137,891.00
Co-applicants:						
12-306	Greene	E.	Classical Studies	Arts & Humanities	*The Vindolanda Field School Research Excavation*	$42,369.00
Co-applicants:						
12-309	Morton	J. B.	Psychology	Social Science	*Genetic and social-environmental influences on self-regulation early in development*	$48,390.00
Co-applicants:	Daley	M.	Computer Science & Biology	Science		
12-311	Sherry	D.	Psychology	Social Science	*Long-distance migration and the avian brain*	$22,807.00
Co-applicants:						
					Social Sciences, Arts and Humanities	**$251,457.00**
					TOTAL:	**$1,280,757.00**

16/04/2012

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ADF - New Research and Scholarly Initiative Awards - Small Grant Results

March 2011

Assigned ID	PI Name		Department	Faculty	Project Title	Award
Biosciences						
SG11-01	Adams	S.	Comm Sci & Disorders	Health Sciences	*Evaluation of a New Speech in Noise Treatment Program for Individuals with Parkinson's Disease*	$8,068.00
Co-applicants:						
SG11-10	Duggal	N.	Clin Neurological Sci	Medicine & Dentistry	*MR Diffusion Tensor Imaging of Sensorimotor Cortex in Cervical Myelopathy*	$7,150.00
Co-applicants:	Bartha	R.	Medical Biophysics	Medicine & Dentistry		
	Kowalczyk	I.	Medical Biophysics	Medicine & Dentistry		
SG11-21	Leipert	B.	Nursing	Health Sciences	*Policies and Practices of Rural Public Health Nurses to Promote Rural Women's Health: A Pilot Study*	$8,500.00
Co-applicants:	Regan	S.	Nursing	Health Sciences		
SG11-23	McGavin	M.	Microbiology & Immunology	Medicine & Dentistry	*Organic acid stress response of hypervirulent community acquired MRSA*	$8,000.00
Co-applicants:						
					Biosciences	**$31,718.00**
Physical & Mathematical Sciences, and Engineering						
SG11-03	Asokanthan	S.	Mechanical & Materials Engg	Engineering	*Inertial Sensory Network for 3D Motion Tracking and Patient Monitoring*	$8,290.00
Co-applicants:	McLachlan	R.	Clin Neurological Sci	Medicine & Dentistry		
SG11-16	Huang	Y.	Chemistry	Science	*Porous Materials for Hydrogen Storage*	$8,510.00
Co-applicants:						

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ADF - New Research and Scholarly Initiative Awards - Small Grant Results

March 2011

Assigned ID	PI Name		Department	Faculty	Project Title	Award
SG11-19	Kelly	G.	Biology	Science	*Assessing the Teratogenic Effects of Iron-Oxidizing Bacterial Biomass on Zebrafish Embryogenesis*	$6,873.00
Co-applicants:	Karamanev	D.	Chemical & Biochemical Engg	Engineering		
SG11-20	Kerr	M.	Chemistry	Science	*Synthetic Cardiolipin Analogs as Biological Probes*	$8,500.00
Co-applicants:	Madrenas	J.	Microbiology & Immunology	Medicine & Dentistry		
SG11-37	Tutunea-Fatan	R.	Mechanical & Materials Engg	Engineering	*Optimized micromachining of porous titanium foams as synthetic bone replacements*	$8,500.00
Co-applicants:						
				Physical & Mathematical Sciences, and Engineering		**$40,673.00**

Social Sciences, Arts and Humanities

SG11-06	Baxter	J.	Geography	Social Science	*A Preliminary Investigation of Waste Policy and Practice in Two Ontario Municipalities*	$8,500.00
Co-applicants:						
SG11-15	Hayden	E.	Psychology	Social Science	*A preliminary investigation of the structural and functional neural correlates of early stress*	$7,700.00
Co-applicants:	Joanisse	M.	Psychology	Social Science		
SG11-30	Rajan	T.	English	Arts & Humanities	*William Godwin's Mandeville: an annotated edition with introduction*	$8,469.00
Co-applicants:						

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ADF - New Research and Scholarly Initiative Awards - Small Grant Results

March 2011

Assigned ID	PI Name		Department	Faculty	Project Title	Award
SG11-42	Zaric	G.	Ivey Business School	Business	*Economic Evaluation of Nalmefene for the Treatment of Alcoholism*	$8,500.00
Co-applicants:	Zur	R.	Ivey Business School	Business		

Social Sciences, Arts and Humanities **$33,169.00**

TOTAL: **$105,560.00**

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October 2011

Assigned ID	PI Name		Department	Faculty	Project Title	Award
Biosciences						
FG11-08	Clarke	C.	Anesthesiology & Perioperative	Medicine & Dentistry	*Determination of the Vascular Supply of the Thoraco-Lumbar Spinal Cord by Arterial Spin Labelling MRI*	$7,500.00
Co-applicants:	St. Lawrence	K.	Biomedical Physics	Medicine & Dentistry		
	Forbes	T.	Vascular Surgery	Medicine & Dentistry		
	Nicolaou	G.	Anesthesiology & Perioperative Mec	Medicine & Dentistry		
FG11-13	Dykstra	A. D.	Comm Sci & Disorders	Health Sciences	*The effects of botulinum toxin A on speech intelligibility and communicative participation in individuals with oromandibular dystonia*	$8,471.00
Co-applicants:	Jog	M.	Comm Sci & Disorders	Health Sciences		
FG11-30	Nichols	A. C.	Otolaryngology	Medicine & Dentistry	*Control of Head and Neck Squamous Cell Cancers (HNSCC) with Oncolytic Poxviruses*	$8,293.00
Co-applicants:	Barrett	J. W.	Otolaryngology	Medicine & Dentistry		
	Mymryk	J.	Microbiology & Immunology	Medicine & Dentistry		
FG11-32	Oudshoorn	A.	Nursing	Health Sciences	*Information and Communication Technology use and Wellbeing in the Context of Homelessness*	$8,467.00
Co-applicants:	Donelle	L.	Nursing	Health Sciences		
	Grzyb	A.		Info. & Media Stud.		
FG11-42	Vasudev	A.	Psychiatry	Medicine & Dentistry	*Quantify the Ventro Medial Pre Frontal Cortex (vMPFC) responsiveness to Parasympathetic Nervous System (PNS) modifiers in Late Life Depression (LLD)*	$8,500.00
Co-applicants:	Shoemaker	K.	Kinesiology	Health Sciences		
	Mitchell	D.	Psychiatry	Medicine & Dentistry		
					Biosciences	**$41,231.00**
Physical & Mathematical Sciences, and Engineering						
FG11-03	Banerjee	N. R.	Earth Sciences	Science	*Construction of a Custom Gas Purification System to Enable Advanced Clumped Isotope Measurement of CO2 Isotopologues in Planetary Materials*	$8,500.00
Co-applicants:	Webb	E.	Earth Sciences	Science		

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ADF - New Research and Scholarly Initiative Awards - Small Grant Results

October 2011

Assigned ID	PI Name		Department	Faculty	Project Title	Award
FG11-07	Cami	J.	Physics & Astronomy	Science	*Investigating the formation of fullerenes in space*	$8,314.00
Co-applicants:						
FG11-22	Jiang	L.	Mechanical & Materials Engg	Engineering	*A study of Stretchable Nanoscale Piezoelectricity-based Energy Harvesting*	$8,500.00
Co-applicants:						
FG11-36	Sadrekarimi	A.	Civil & Environmental Engg	Engineering	*Magnetic Treatment of Fine-grained Soils*	$7,232.00
Co-applicants:						
				Physical & Mathematical Sciences, and Engineering		**$32,546.00**
Social Sciences, Arts and Humanities						
FG11-11	De Viveiros	G.	French	Arts & Humanities	*Le naturalisme et les femmes: le cas de Jane de la Vaudère (1857-1908)*	$8,500.00
Co-applicants:						
FG11-17	Hodgetts	L.	Anthropology	Social Science	*A zooarchaeological investigation of food, ritual and power in the nascent Viru state*	$6,256.00
Co-applicants:	Millaire	J.F.	Anthropology	Social Science		
FG11-18	Howie	L. A.	Anthropology	Social Science	*Cave Use and Pilgrimage Circuits of the Ancient Maya: A New Approach to the Documentation and Comparative Analysis of the Material Residues of Ritual Practice*	$8,493.00
Co-applicants:						

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ADF - New Research and Scholarly Initiative Awards - Small Grant Results

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Assigned ID	PI Name		Department	Faculty	Project Title	Award
FG11-23	Jorgensen	D. W.	Anthropology	Social Science	*Mobile phones and changing interpersonal networks in Papua New Guinea: a pilot study*	$8,453.00
Co-applicants:						
FG11-25	Larsen	M. A.		Education	*International Service Learning: A Case Study of the Impact of Western Heads East*	$7,983.00
Co-applicants:	Gough	R.	Western Heads East	Education		
					Social Sciences, Arts and Humanities	**$39,685.00**
					TOTAL:	**$113,462.00**