

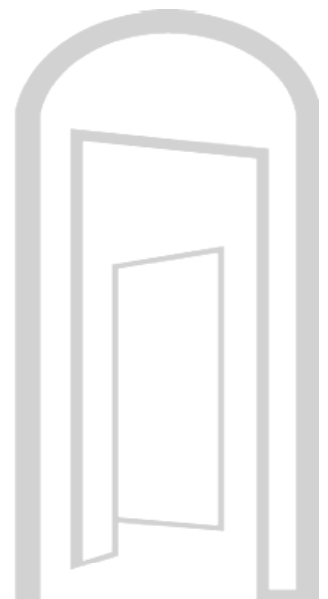


DALHOUSIE  
University

*Faculty of  
Graduate Studies*

Annual Report to the  
Killam National Conference  
2004

Killam  
Trusts



## Annual Report to the Killam National Conference 2004: Table of Contents

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Introduction .....	2
Killam Predoctoral Scholarships .....	2
Faculty of Graduate Studies Departmental Allocations .....	2
Killam Postdoctoral Fellowships .....	3
Killam Chairs .....	3
Dorothy J. Killam Memorial Lectures .....	3
Faculty of Science Killam Prize .....	3
Faculty of Science Killam Professorships .....	4
Killam Dinner .....	4
Administrative Updates .....	4

### Appendices

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Appendix 1: 2004 Killam Predoctoral Scholarship Competition Selection Committee .....	6
Appendix 2: Izaak Walton Killam Predoctoral Scholarships	
a. New & Renewal Summary .....	7
b. New 2004 – 2005 .....	8
c. Renewal 2004 – 2005 .....	9
Appendix 3: 2004 Killam Postdoctoral Fellowship Competition Selection Committee .....	11
Appendix 4: Killam Postdoctoral Fellowships – New 2004 .....	12
Appendix 5: Killam Postdoctoral Fellowships – Continuing 2004 .....	13
Appendix 6: 2004 Killam Chairs .....	15
Appendix 7: 2004 Killam Chair Reports	
a. Mary Anne White .....	16
b. Ransom Myers .....	22
c. Rafiqul Islam .....	26
d. Philip Rosson .....	30
Appendix 8: Killam Lecture Committee .....	34
Appendix 9: 2003 Dorothy J. Killam Memorial Lectures .....	35
Appendix 10: Faculty of Science Killam Professorship Recipients .....	37
Appendix 11: Chronicle Herald/Mail Star (Wednesday, October 8 <sup>th</sup> , 2003) .....	38
Appendix 12: Killam Postdoctoral Fellowship Advertising Campaign .....	39

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## Annual Report to the Killam National Conference 2004

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### INTRODUCTION

The Killam Endowment enables Dalhousie University to maintain five programmes:

1. Killam Predoctoral Scholarships from the Advanced Studies fund;
2. Funding for Faculty of Graduate Studies Departmental Allocations for Graduate Scholarships are provided by the Killam Memorial Research and Scholarship (Anonymous Donor) fund and the Killam Residue fund;
3. Killam Postdoctoral Fellowships from the Advanced Studies fund;
4. Killam Chairs from the Killam Chair fund; and
5. Dorothy J. Killam Memorial Lecture Series from the Killam Residue fund.

In recognition of the financial support provided to the Faculty of Science by the Killam Endowment, two additional awards were established in 1994-95:

1. Faculty of Science Killam Prize from the Faculty of Science Operating fund; and
2. Faculty of Science Killam Professorships from the Killam Memorial Salary fund.

### 1) KILLAM PREDOCTORAL SCHOLARSHIPS

Selection of the 2004-2005 Killam Predoctoral Scholarship recipients was made by the 2004 Killam Predoctoral Scholarship Competition Selection Committee members (see Appendix 1). The 2004-2005 Killam Predoctoral Scholarship competition concluded with the awarding and acceptance of 31 new awards to first-year and continuing students, while 57 students had their award renewed (see Appendix 2). Of the 88 2004-2005 Killam Scholars, 44 were successful in obtaining external awards from NSERC or SSHRC; 66 are Canadian, while 22 are students from 15 different countries.

### 2) FACULTY OF GRADUATE STUDIES DEPARTMENTAL ALLOCATIONS

The Killam Memorial Research and Scholarship (Anonymous Donor) fund and the Killam Residue fund, for the 2004-2005 academic year, award graduate scholarships to Canadian students in the Faculties/Departments/Schools/Programmes of Anatomy and Neurobiology, Biological Engineering, Biology, Chemistry, Civil Engineering, Classics, Community Health and Epidemiology, Computer Science, Earth Sciences, Electrical & Computer Engineering, English, Environmental Studies, French, Health & Human Performance, History, Human Communication Disorders, Interdisciplinary PhD, International Development Studies, Law, Mathematics, Me-

## Annual Report to the Killam National Conference 2004

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mechanical Engineering, Oceanography, Pathology, Pharmacology, Philosophy, Physics, Physiology & Biophysics, Psychology, and Sociology and Social Anthropology.

### **3) KILLAM POSTDOCTORAL FELLOWSHIPS**

The Killam Postdoctoral Fellow recipients were selected by the 2004 Killam Postdoctoral Fellowship Competition Selection Committee (see Appendix 3). Four (4) new Killam Postdoctoral Fellowships were awarded in the 2004 competition (see Appendix 4). Nine (9) Killam Postdoctoral Fellows continue at various stages of the second year of their fellowship (see Appendix 5). (See Appendix 12 for the Killam Postdoctoral Fellowship 2004 advertisements.)

### **4) KILLAM CHAIRS**

Four Killam Chairs have been established in Ocean Studies, Petroleum Engineering, Business Informatics, and Materials Science (see Appendix 6). Each Killam Chair was requested to prepare a report outlining the incumbent's work over the past year (see Appendix 7).

### **5) DOROTHY J. KILLAM MEMORIAL LECTURES**

Each year Dalhousie's Dorothy J. Killam Lecture Series attracts audiences from the wider Halifax and indeed Nova Scotia community to the university. The lectures have been held since 1976, with topics varying from the humanities to science and technology. Usually, the lectures are held in the fall, however, with the 2003 Congress of the Social Sciences and Humanities held in Halifax in May, it was decided to have the Killam Lectures held in conjunction with the Congress. As already reported in last year's Annual Report, the series was titled "New Perspectives in Conflict and Cooperation", with Richard Tremblay, Margaret McMillan, Roy Romanow, and Mary Robinson as speakers, attracting very large audiences. The 2004 Killam Lecture Series will again be in its regular fall period. Organized by Dr. John Kirk of the Department of Spanish, the series is titled "Mexico, Our *Other* North American Neighbour". The 2005 Dorothy J. Killam Lecture series will be organized by Dr. Philip Girard of the Faculty of Law, and is tentatively titled "Uniting People: Towards a New Global Order", focusing on international law and international governance and security.

### **6) FACULTY OF SCIENCE KILLAM PRIZE**

The Faculty of Science Killam Prize was established in recognition of the financial support provided to the Faculty of Science by the Killam Endowment. Prizes are awarded annually to enhance the career of promising scientists who have obtained their doctorate within the past eleven years. The Faculty of Science Killam Award is funded by the Dalhousie University Faculty of Science operating budget. The recipients of the 2004 Faculty of Science Killam Prize are John Gosse (Earth Sciences) and Daniel Waschbusch (Psychology).

## Annual Report to the Killam National Conference 2004

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### 7) FACULTY OF SCIENCE KILLAM PROFESSORSHIPS

The Faculty of Science Killam Professorships were established in recognition of the financial support provided to the Faculty of Science by the Killam Endowment. The Killam Professorships are funded by the Dalhousie University General Salary account. Currently 12 faculty members hold Faculty of Science Killam Professorships (see Appendix 10), each for a term of five years, to recognize the scientific research contributions of the Faculty's most outstanding scientists.

### 8) KILLAM DINNER

The 2003 Killam Dinner was held on Tuesday, October 7 in University Hall and the Great Hall of the University Club, having outgrown its traditional location in Shireff Hall. This annual event is an important occasion to mark the achievements of the Killam Scholars and Postdoctoral Fellows, and is establishing a reputation as one of the main social events of the year. The approximately 240 guests included Killam Trustees Mr. George Cooper, Ms. Ann McCaig, and Mr. John Matthews, as well as new and renewal Killam predoctoral scholars, postdoctoral fellows, Killam Chairs and Research Professors, members of the various Killam selection committees, and many other guests. Speakers at the dinner included President Tom Traves, Mr. George Cooper, and Killam Research Chair Dr. Mary Anne White. The annual announcement of all Killam Scholarship and Fellowship award recipients was placed in the Chronicle Herald of October 8 (see Appendix 11), to publicly honour the recipients. The advertisement also is popular with the scholarship holders as a memento, and of course serves to publicize the Dalhousie Killam programmes in the community.

### 9) ADMINISTRATIVE UPDATES

Administration and support for the continued success of the Killam programmes at Dalhousie is an important and rewarding task for the Faculty of Graduate Studies. I am pleased to acknowledge the important role of the staff in the FGS office in the organization and administration of the scholarship and fellowship programmes, and in the organization and success of other Killam events at Dalhousie. In addition, the support of the members of the various selection committees, graduate coordinators and staff in academic units, staff in the Financial Services and Personnel Services offices, and the Killam Trust office is gratefully acknowledged.

Respectfully submitted

Jan C.T. Kwak, Dean  
Faculty of Graduate Studies

# Appendices

Appendix 1:  
2004 Killam Predoctoral Scholarship Competition Selection Committee

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**ELECTED FACULTY**

<b>Name</b>	<b>Term End</b>	<b>Department</b>
Swapna DasGupta	2007	Economics
Jacqueline Gahagan	2007	Health & Human Performance
Gary McGonagill	2007	Classics
Roman Smirnov	2007	Mathematics & Statistics
Christopher Bell	2006	History
Fran Cozens (on leave – Bruce Grindley to replace F. Cozens while on leave)	2006	Chemistry
Pauline Gardiner-Barber	2006	Sociology & Social Anthropology
Jason Gu	2006	Electrical & Computer Engineering
John Newhook	2006	Civil Engineering
Richard Devlin	2005	Law
Jill Grant	2005	Planning

**STANDING MEMBERS**

- Carolyn Watters, Associate Dean, FGS (Coordinating Chair)
- Margaret J. Wood, Killam Administrator, FGS
- Killam Trustees (receive all papers, agendas, minutes, notice of meetings related to Killam Scholarship only)
  - George Cooper
  - John Matthews
  - M. Ann McCaig
  - Robert Wyman

Appendix 2a:

Izaak Walton Killam Predoctoral Scholarships – New & Renewal Summary

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<b>NEW &amp; RENEWAL SUMMARY</b>	
Total New Masters Degrees - Female	8
Total New Masters Degrees - Male	2
Total New Doctoral Degrees - Female	13
Total New Doctoral Degrees - Male	8
<b>Total New</b>	<b>31</b>
Total Renewal Masters Degrees - Female	4
Total Renewal Masters Degrees - Male	3
Total Renewal Doctoral Degrees - Female	21
Total Renewal Doctoral Degrees - Male	29
<b>Total Renewal</b>	<b>57</b>
<b>Total Killams</b>	<b>88</b>

<b>SCHOLARSHIP SUMMARY 2004-05</b>	
New Awards	\$303,343.32
Renewal Awards	\$643,716.32
Travel	\$10,000.00
<b>Total</b>	<b>\$ 957,059.64</b>

Appendix 2b:

Izaak Walton Killam Predoctoral Scholarships – New 2004-2005

Last Name	Given Name	Dept	Deg	Citizenship	Year of Eligibility	Gender	External Award	Total Killam Award
Barresi	Tony	Earth Sciences	MSc	Canadian	1 of 2	M	NSERC CGSM	\$1,000.00
Bassnett	Madeline	English	PhD	Canadian	1 of 3	F	SSHRC Doctoral	\$3,000.00
Baum	Julia	Biology	PhD	Canadian	1 of 3	F	NSERC Julie Payette	\$14,666.67
Belluccini	Federica	Interdisciplinary PhD	PhD	Student Visa (Italy)	1 of 3	F		\$18,533.33
Bottos	Shauna	Psychology	PhD	Canadian	1 of 3	F	NSHRF	\$0.00
Byrne	Tammy	English	MA	Canadian	1 of 2	F	SSHRC CGSM	\$1,500.00
Cheraghi	Nader	Civil Engineering	PhD	Student Visa (Iran)	1 of 3	M		\$27,830.00
Chevrier	Vincent	Physics	MSc	Canadian	1 of 2	M	NSERC PGSM	\$1,700.00
Chikowero	Moses	History	PhD	Student Visa (Zimbabwe)	1 of 3	M		\$18,533.33
Collins	Andrea N	English	PhD	Canadian	1 of 3	F		\$23,000.00
Drummond	Brie	Biology	MSc	Student Visa (USA)	1 of 2	F		\$15,886.66
Eaton	David	History	PhD	Canadian	1 of 3	M		\$23,000.00
Finkler	Lilith	Interdisciplinary PhD	PhD	Canadian	1 of 3	F	NSHRF	\$0.00
Goldwater-Adler	Samantha	Psychology	PhD	Canadian	1 of 3	F	SSHRC CGSM	\$5,500.00
Grant	Valerie	Psychology	PhD	Canadian	1 of 3	F	CIHR - CGSM	\$5,500.00
Gravel	Jeannine	HUCD	MSc	Canadian	1 of 2	F	NSERC CGSM	\$1,500.00
Ings	Steven	Earth Sciences	PhD	Canadian	1 of 3	M	NSERC CGSD2	\$0.00
Ishigami	Yoko	Psychology	MSc	Student Visa (Japan)	1 of 2	F		\$23,830.00
Moon	Erin	Psychology	PhD	Canadian	1 of 3	F	SSHRC CGSM	\$5,500.00
Nazarava	Katsiaryna	Physics	PhD	Student Visa (Belarus)	1 of 3	F		\$18,533.33
Ottaway	Paul	Math & Stats	PhD	Canadian	1 of 3	M	NSERC PGSD	\$2,000.00
Pearson	Jason	Chemistry	PhD	Canadian	1 of 3	M	NSERC PGSM	\$2,000.00
Qi	Qiufen	Interdisciplinary PhD	PhD	Permanent Resident	1 of 3	F		\$23,000.00
Renault	Nisa	Pathology	MSc	Permanent Resident	1 of 2	F	CIHR - CGSM	\$1,500.00
Schulz	Tyler	Biology	PhD	Canadian	1 of 3	M	NSERC PGSD	\$16,000.00
Shahin	Khaled	Civil Engineering	PhD	Permanent Resident	1 of 3	M	NSERC CGSD2	\$0.00
Sherratt	Marian	SOSA	MA	Student Visa (Bermuda)	1 of 2	F		\$23,830.00
Sleno	Lekha	Chemistry	PhD	Canadian	1 of 2	F	NSERC/Sumner	\$0.00
Tougas	Jane	Computer Science	MCSC	Canadian	1 of 2	F	NSERC CGSM	\$1,500.00
Whalen	Tara	Computer Science	PhD	Canadian	1 of 2	F		\$23,000.00
Woodman	Tessah	HAHP	MA	Canadian	1 of 2	F	SSHRC CGSM	\$1,500.00

Total New – 25

Male - 8

Female - 17

Masters

Male - 2

Female - 10

Doctoral

Male - 6

Female - 9



Appendix 2c:

Izaak Walton Killam Predoctoral Scholarships – Renewal 2004-2005

Last Name	Given Names	Department	Deg.	Citizenship	Year of Eligibility	Gender	External Award	Total Killam Award
Anderson	James A.	Philosophy	PhD	Canadian	2 of 3	M	SSHRC Doctoral	\$3,000.00
Bahr	Peter	Philosophy	PhD	Canadian	4 of 4	M	SSHRC Doctoral	\$3,000.00
Batongbacal	Jay	Law	JSD	Student Visa (Philippines)	2 of 3	M	Trudeau Foundation	\$0.00
Bonakdarpour	Arman	Physics	PhD	Canadian	2 of 3	M	NSERC PGS D	\$16,000.00
Bradbury	Ian Robert	Biology	PhD	Canadian	2 of 3	M		\$23,000.00
Brown	Ralph Blake	History	PhD	Canadian	4 of 4	M	SSHRC Doctoral	\$3,000.00
Carter	Michael	Chemistry	PhD	Canadian	2 of 3	M	Alzheimer's Soc/Sumner	\$0.00
Cheng	Karen	Chemistry	PhD	Canadian	3 of 3	F	NSERC CGS D	\$0.00
Dolcos-Bazgan	Calin Emanoil	Anat & Neurobiology	PhD	Student Visa (Romanian)	2 of 3	M		\$27,830.00
Erdmann	Saskia	Earth Sciences	PhD	Student Visa (German)	2 of 3	F		\$27,830.00
Fabian	Steven	History	PhD	Canadian	2 of 3	M	SSHRC CGSD	\$3,000.00
Fleischauer	Michael	Physics	PhD	Canadian	2 of 3	M	NSERC CGS D	\$0.00
Gomez	Geraldine	Pharmacology	PhD	Canadian	2 of 3	F	NSERC PGSD2	\$2,000.00
Hanke	Felix	Physics	PhD	Student Visa (German)	2 of 2	M		\$27,830.00
Hardie	David C.	Biology	PhD	Canadian	3 of 3	M		\$23,000.00
Harker	Kenneth Troy	Psychology	PhD	Canadian	3 of 3	M	NSERC CGS D	\$7,666.67
He	Yanjing	Mathematics	PhD	Student Visa (China)	2 of 2	F		\$23,000.00
Hoshino	Richard	Mathematics	PhD	Canadian	3 of 3	M	NSERC CGS D	\$0.00
Hu	Zhifei	Civil Engineering	PhD	Student Visa (China)	2 of 3	M		\$27,830.00
Huybers	Sherry	HAHP	MA	Canadian	2 of 2	F	NSHRF	\$1,176.00
Jakubinek	Michael	Physics	MSc	Canadian	2 of 2	M	NSERC PGSM	\$1,700.00
Jones	Eluned	English	PhD	Canadian	2 of 3	F	SSHRC - JRJ	\$3,000.00
Kehler	Daniel Gordon	Biology	PhD	Canadian	2 of 2	M		\$23,000.00
Kelly	Noreen	Oceanography	PhD	Canadian	3 of 3	F	NSERC PGSD2	\$2,000.00
Kretz	Lisa	Philosophy	PhD	Canadian	2 of 3	F	SSHRC CGS D	\$0.00
Lipp	Judith	Interdisciplinary PhD	PhD	Canadian	2 of 3	F	SSHRC Doctoral	\$3,000.00
Ma	Changning	Elec & Comp Eng	PhD	Student Visa (China)	3 of 3	M		\$7,666.66
MacPherson	Amy Christine	Psychology	PhD	Canadian	3 of 3	F		\$23,000.00
Mahmoud	Nesreen Samir	Biological Engineering	PhD	Student Visa (Egypt)	3 of 3	F		\$23,000.00
Mailloux	Julie	Environmental Studies	MES	Canadian	2 of 2	F	Quebec Gov't Award	\$4,000.00
Marshall	Susanne	English	PhD	Canadian	2 of 3	F	SSHRC Doctoral	\$3,000.00
Mboudjeke Nzale	Jean Guy	French	PhD	Student Visa (Cameroon)	2 of 2	M		\$27,830.00
Meek	Heather	English	PhD	Canadian	3 of 3	F		\$23,000.00
Mothana	Belquis	Chemistry	PhD	Canadian	2 of 3	F	NSERC PGSM/Sumner	\$5,667.00
Mustafiz	Shabbir	Civil Engineering	PhD	Student Visa (Bangladesh)	2 of 3	M		\$27,830.00
O'Neill	Daniel Walton	Environmental Studies	MES	Canadian	2 of 2	M	NSERC PGSM	\$1,700.00
Osmond	Allison L.	Physiology & Biophysics	PhD	Canadian	2 of 3	F		\$19,000.00
Ottier	Audrey	Intl Dev Studies	MA	Canadian	1 of 1	F		\$6,333.33
Ovans	Robyn	Chemistry	PhD	Canadian	2 of 2	F	NSERC PGS D	\$2,000.00





**Appendix 3:  
2004 Killam Postdoctoral Fellowship Competition Selection Committee**

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**ELECTED FACULTY**

<b>Name</b>	<b>Term End</b>	<b>Department</b>
Malcolm Heywood	2007	Computer Science
Steven Morris	2006	Anatomy & Neurobiology
Richard Nowakowski	2006	Mathematics & Statistics
Jason Robert	2006	Philosophy
Pak Yuet	2006	Chemical Engineering
John Baxter	2005	English
Irene Oore	2005	French
Bruce Grindley	2005	Chemistry
Djordje Grujic	2005	Earth Sciences

**STANDING MEMBERS**

- Carolyn Watters, Associate Dean, FGS (Coordinating Chair)
- Margaret J. Wood, Killam Administrator, FGS
- Killam Trustees (receive all papers, agendas, minutes, notice of meetings related to Killam Scholarship only)
  - George Cooper
  - John Matthews
  - M. Ann McCaig
  - Robert Wyman

Appendix 4:  
Killam Postdoctoral Fellowships – New 2004

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Name	Gender	Doctoral University	Discipline	Appointment Date	Research Topic
Sigbjorn Hervik	M	University of Cambridge	Mathematics & Sciences	May 2004	Cosmology and general relativity: questions around the homogenous and isotropic universe
Gabor Lukas	M	York University	Mathematics	January 2005	Topology, group theory and quantum mechanics
Cherif Matta	M	McMaster University	Chemistry	May 2004	Computational chemistry: the influence of electric fields on DNA conformation
Naomi Siew	F	Ben-Gurion University	Biochemistry and Molecular Biology	July 2004	Bioinformatics: large scale comparisons of Haloarchaea genomes

Appendix 5:  
Killam Postdoctoral Fellowships – Continuing 2004

Name	Gender	Doctoral University	Discipline	Appointment Date	Research Topic
Marie Baader	F	Columbia University	History	September 2003	Embourgeoisement of Jews in Germany during the early stages of industrialization
Merel Dalebout	F	University of Auckland	Biology	June 2003	Population studies of bottleneck whales in areas off shore Nova Scotia and in Davis Strait.
Steven Baur	M	University of California, Los Angeles	Musicology	August 2003	Intersection of popular and serious musical life in the USA in the latter part of the 19 <sup>th</sup> century.
Joshua Gonsalves	M	New York University	English	May 2003	John Keats' role in collaborative dramatic production
Uri Gophna	M	Tel-Aviv University	Microbiology	June 2003	Effect of acquisition of foreign DNA on the evolution of pathogens.
Sean Lawrence	M	University of British Columbia	English	September 2002	<i>Gifts on Stage: Generosity in Elizabethan Drama</i> , examining the question of generosity and exchange in Renaissance English drama.
Petar Mitrasinovic	M	Florida State University	Chemistry	January 2003	The role of "peroxyl radical" based on the reactions of vitamin C in a biological environment.

Appendix 5:  
Killam Postdoctoral Fellowships – Continuing 2004

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Name	Gender	Doctoral University	Discipline	Appointment Date	Research Topic
Kevin Strychar	M	Central Queensland University	Marine Biology	January 2003	Canadian deep-sea coral fauna, genetic exchange among populations & their resilience to climate change and environmental stress.
Raymond Syvitski	M	University of British Columbia	Pharmacy	September 2002	Determining the structure and function of a small membrane-associated protein using NMR spectroscopy.

Appendix 6:  
2004 Killam Chairs

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<b>Chair</b>	<b>Incumbent</b>	<b>Year of Appointment</b>
Materials Science	Mary Anne White	1997 (3-year extension to 2004)
Ocean Studies	Ransom Myers	1997 (3-year extension to 2004)
Petroleum	Rafiqul Islam	2000
Business Informatics	Philip Rosson	2002

## Appendix 7a: 2004 Killam Chair Reports – Mary Anne White

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### **Introduction**

The main aim of my research concerns experimental investigations of properties of materials. Teaching interests are related, and mainly concern the relationships between structure of materials and their properties. In this report year, a large portion of my time has been dedicated to materials research initiatives both within Dalhousie University, and interacting with outside groups (other universities, government laboratories, industry, and funding agencies), associated with my role as Director of the Institute for Research in Materials.

The following summarizes my activities during my eighth and final year as Killam Research Professor in Materials Science. (Note that in 2001 it was decided to extend my five-year term for an additional three years, to June 30, 2004.)

### **Ongoing Scientific Research:**

During the 2003-2004 academic year, the following research projects were ongoing:

- Thermal stability of inclusion compounds, including gas hydrates;
- Physical and chemical properties of nanomaterials;
- Thermoelectric materials;
- Thermochromic materials;
- Thermal properties of framework materials;
- Thermal stability of racemates;
- Thermal and related properties of ivory.

This research was supported by NSERC Research programs, the Killam Funds, the Canada Foundation for Innovation, the Atlantic Innovation Funds and various other partners. It was carried out with the assistance of one research associate (Bi-Zing Zhan, PhD Hong Kong University of Science and Technology, and former Killam Post-doctoral Fellow), three PhD students (Douglas MacLaren, BSc UPEI, NSERC/Killam Scholar; Robert Marriott (BSc and MSc University of Lethbridge, NSERC/Killam Scholar; Catherine Kennedy, BSc St. Francis Xavier University; NSERC/Killam Scholar), two MSc students (Rong Sun, BSc Nanjing University; Michael Jakubinek, BSc Queen's University, NSERC/Killam Scholar), and two undergraduate students (Mary Fawcett and Brian Thompson, both at Dalhousie University).

### **Publications**

#### *Journal Articles Published:*

- Structure, Thermal and Transport Properties of Clathrates Sr<sub>8</sub>Zn<sub>8</sub>Ge<sub>38</sub>, Sr<sub>8</sub>Ga<sub>16</sub>Ge<sub>30</sub> and Ba<sub>8</sub>Ga<sub>16</sub>Si<sub>30</sub>, L. Qiu, I.P. Swainson, G.S. Nolas and M.A. White, Physical Review B 70, 035208 (8 pages) (2004).

## Appendix 7a: 2004 Killam Chair Reports – Mary Anne White

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- Functionalization of a nano-faujasite nanozeolite with PEG-grafted PMA tethers, using atom transfer radical polymerization, B.-Z. Zhan, M. A. White, P. Fancy, C. A. Kennedy and M. Lumsden, *Macromolecules* 37, 2748-2753 (2004).
- The Cymbal as an Instructional Device for Materials Education. Mary Anne White and Peter MacMillan, *Journal of Materials Education* 25, 13-17 (2003).

### *Papers Accepted for Publication:*

- Design rules for reversible thermochromic mixtures, D. C. MacLaren and M. A. White, in press in *J. Mater. Sc.* (2004).
- Simple methods for estimation of heat capacities of solids: Implications for thermoelectrics, M. A. White, L. Qiu and G. Nolas, *Thermal Conductivity* 27, in press (2004).
- Crystallinity of Hybrid Nanozeolite-Poly(ethylene oxide) Composites, C. A. Kennedy, B.-Z. Zhan and M.A. White, in press in *J. Composite Materials*, in press (2004).
- Comparison of Ab Initio and Group Additive Ideal Gas Heat Capacities, R. A. Marriott and M.A. White,\* in press in *AIChE Journal* in press (2004).
- Thermodynamics: Phases and Phase Equilibria. *Encyclopedia of Condensed Matter Physics*, in press (2004).

### *Book Chapters in Press:*

- Thermal Conductivity of Insulators and Glasses, V. Murashov and M.A. White. Chapter in “Thermal Conductivity”, in press (2004), Kluwer; T. Tritt, Editor.
- Ceramics and Glasses, R. Sun and M.A. White. Chapter in “Thermal Conductivity”, in press (2004), Kluwer; T. Tritt, Editor.

### **Conference and/or Seminar Presentations**

- Design Rules for Reversible Thermochromic Mixtures. 87th Canadian Society for Chemistry Conference and Exhibition, London, Ontario, May 2004.
- Mechanical and thermal properties of a natural nanocomposite: Ivory. American Physical Society, Montreal, March 2004. (Poster)

## Appendix 7a: 2004 Killam Chair Reports – Mary Anne White

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- Mechanical properties of a natural nanocomposite: Ivory. Materials Research Society, Boston, December 2003. (Poster)
- Simple methods for estimation of heat capacities of solids: Implications for thermoelectrics. International Conference on Thermal Conductivity, Knoxville, TN, October 2003. (Invited lecture)
- The Role of Neutrons in Investigations of Dynamics in Materials. Symposium on the Canadian Participation at the Spallation Neutron Source, McMaster University, Hamilton, ON, October 2003. (Invited lecture)
- Thermodynamics of Clathrates: Past, Present and Future. 58th Calorimetry Conference, Brigham Young University, Laie, Hawaii, July 2003. (Plenary Lecture)
- Thermochromism: Evolution of a research project. Department of Chemistry, Simon Fraser University, November 2003. (Graduate-Student-Invited Seminar)
- Zeolites: fascinating structures give impressive properties. General Motors Corporation, Research & Development Center, Warren, Michigan, September 2003. (Invited lecture)

### **Teaching**

During 2003-2004, I taught Chemistry/Physics 3303B (Materials Science, a third year class with two lectures and one tutorial per week for 14 weeks). This was the third time that this course had been given jointly as a Chemistry and Physics class, and, although the two classes had students with quite different backgrounds, it seemed to be successful. In addition, I taught Chemistry 5303B (Physical Properties of Materials), a graduate class with four hours of meetings per week, three in common with Chem/Phys 3303A.

### *Theses Supervised and Completed:*

- R. Marriott, "Thermodynamic Stability Studies of Racemic and Conglomerate Enantiomeric Crystals," 2004.
- D. C. MacLaren, "Investigations of Reversible Thermochromic Mixtures", 2003.
- R. Sun, "Combinatorial Studies of Thermal and Electrical Transport in Amorphous Si/Ge Superlattices," 2004.

### **Research Funding**

During the 2003-4 year, the following grants/contracts for which I was principal applicant, were active:

- "Facilities for Materials Characterization", Canada Foundation for Innovation and Other Partners, \$5.2 million, 2003-7.

## Appendix 7a: 2004 Killam Chair Reports – Mary Anne White

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- “Materials Technology Network for Atlantic Canada, MatNet”, Atlantic Innovation Fund, \$6.4 million.
- NSERC Discovery Grant, \$79,600 *p.a.*
- NSERC Major Facilities Access Grant for Facilities for Materials Characterization, \$133,000 *p.a.*

The first two sources of funds were largely spent over this report year to establish the "Facilities for Materials Characterization," part of the Institute for Research in Materials at Dalhousie University. These Facilities were officially opened by The Honourable Geoff Regan, on April 30, 2004.

### **For the General Public**

- *Materials Research: Aids for Disaster Preparedness*. Shad Valley Program, Dalhousie University, 2004.
- *Chemistry in Our Lives*. Nursing Summer Camp for African Nova Scotian Youth, Dalhousie University, 2004.
- *Links Between Materials Science and the Year One Chemistry Curriculum*. 87th Canadian Society for Chemistry Conference and Exhibition, London, Ontario, June 2004. (invited lecture)
- *Materials Research: Changing Our Lives*. Shad Valley Program, Dalhousie University, July 2003.
- Guest on one-hour science phone-in, "Maritime Noon", CBC Radio, 11 times, 2003-2004.
- Interviewed on "Quirks and Quarks", CBC Radio, May 2004. (*How does sun screen work?*)
- Interviewed on "Good Question", CBC Radio, Saint John, NB, August, 2003 (*How can you keep pop from going flat?*)

### **Service to the Academic Community**

*Dalhousie:*

- Member, supervisory and examining committee, 7 MSc/MEng or PhD students supervised by other professors
- Member, PhD Chairs Panel
- Member at Large, Dalhousie Faculty Association Executive
- Program Co-Chair, Open House 2004

Appendix 7a:  
2004 Killam Chair Reports – Mary Anne White

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- Director, Institute for Research in Materials
- Chair, Advisory Committee, Institute for Research in Materials
- Member, Facilities Management Committee, Institute for Research in Materials

*External:*

- Director, Materials Technology Network for Atlantic Canada
- Associate Member, International Association of Chemical Thermodynamics
- Editor for Materials Science for McGraw-Hill *Encyclopaedia of Science and Technology*
- Reviewer for the following journals: *Canadian Journal of Physics*, *Thermochimica Acta*, *Chemistry of Materials*, *Canadian Journal of Chemistry*, *Journal of Physics C: Condensed Matter*, *Physical Review B*
- Member, Appeal Panel, NSERC
- Member, APICS (Atlantic Provinces Council on Sciences) Education Committee
- Member, International Council on Materials Education
- Member, Engineering and Physical Sciences Research Council (EPSRC) Peer Review College, UK
- Member, International Advisory Committee, International Conference on Chemical Thermodynamics, Beijing, 2004

**Honours/Notable Highlights of the Year**

- Director of the Institute for Research in Materials which opened \$11 million Facilities for Materials Research, April 2004.
- won APICS/Canpolar Science Communication Award (2004)
- Inducted in Discovery Centre Hall of Fame (2003)

Appendix 7a:  
2004 Killam Chair Reports – Mary Anne White

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**Concluding Comments**

It has been my privilege to hold the Killam Research Chair in Materials Science since 1996. When I was first nominated for this position, the Chair of my department indicated that it could change my life. Perhaps I scoffed at that remark, but the position has been a remarkable platform for me and, by extension for Dalhousie University, in many ways.

In particular, it has allowed me time to reflect more thoroughly on my research goals and directions than would otherwise have been possible. During the tenure of the Chair, I authored a total of 45 refereed publications. Remarkably, of these, nine were related to educational matters, something for which I rarely had time as a regular professor. In addition, I had two books and four book chapters published. While my publication rate was higher than previously, more importantly, the significance of our work has improved considerably, as evidenced by the broadening of its impact, and its use by others.

Reduced teaching meant that I had more time to travel to research conferences and other research labs, to present our work. This helped me find the most important problems to solve in our field. In addition, our work is more "known" as a result of this higher profile.

Most importantly, I had both time and status to reflect on major research activities within Dalhousie University, and national and international opportunities. As a result, along with several colleagues, we convinced Dalhousie University to establish the Institute for Research in Materials in 2002. The interdisciplinary approach to research which IRM provides is taking us in new and exciting directions, and provides momentum to many recent developments at Dalhousie University.

These advances would not have been possible without the support of the Killam Trusts, for which I will be eternally grateful. The Killam Chair did, indeed, change my life.

Mary Anne White  
September 30, 2004

## Appendix 7b: 2004 Killam Chair Reports – Ransom Myers

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Within the last year, Ransom Myers' research has produced 4 stories that have received international media attention (papers in *Science*, *Nature*, *Proceedings of the National Academy of Sciences*, and *Ecology Letters*). The following is brief summary of the work being carried out in the Myers lab. For more details, please consult <http://www.fish.dal.ca/>.

### **1) PEW Global Shark Assessment**

The PEW Global Shark Assessment is a new initiative to conduct regional assessments of shark populations worldwide. The objectives of the project are (1) estimate the pre-exploitation population sizes, (2) estimate current population parameters, and (3) predict the outcome of current management practices and recommend the practices necessary to ensure shark survival.

Sharks (and other elasmobranches) are particularly vulnerable to fishing pressure due to several factors. They are long-lived, slow to reproduce, and produce few offspring compared with most other fish species. Hence, directed fishing can much more quickly decimate a shark population than other fish species. In addition, sharks are often taken as bycatch in multispecies fisheries, in which the target species are much quicker to replenish themselves than the sharks. The potential benefits of shark conservation are great. In protecting a host of large, charismatic, but particularly vulnerable species, shark conservation offers the opportunity to protect not just sharks, but the myriad other species and ecosystems with which and in which sharks interact. Hence, at stake are not merely sharks, but our still vastly misunderstood marine realm.

Currently, there exist both substantial amounts of unanalyzed data on sharks and a large number of dedicated shark biologists. However, these two key resources have not, as yet, been utilized to their full potential. Over the past year, Dr. Myers has begun to assemble a team of modeling and statistical experts to produce a global assessment, with an emphasis on producing results in a form that is accessible to decision makers. Specifically, this research will:

- locate data and develop analysis techniques that demonstrate the magnitude of the declines in shark populations on a global scale,
- effectively communicate the results, and
- force conservation action.

### **2) Future of Marine Animal Populations (FMAP)**

The Future of Marine Animal Populations is an international network to develop statistical models that can be used by the Census of Marine Life to design field-sampling programs, synthesize data, make predictions, and further our understanding of the limits of knowledge.

## Appendix 7b: 2004 Killam Chair Reports – Ransom Myers

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In collaboration with researchers from around the world, analysis has begun the following regions:

Argentina, South Atlantic	Dr. Luis Lucifora
Asia	Scott Sherrill-Mix (PhD candidate)
Tropical Pacific	Peter Ward (PhD candidate)
Northwest Atlantic, Gulf of Mexico	Julia Baum (PhD candidate), Drs. Andrew B. Cooper and Ernst Linder (University of New Hampshire)
Mediterranean	Francesco Ferretti (PhD candidate)
Northwest Atlantic	Dr. Gunnar Stefansson (University of Iceland)
S.E. Asia/Australia	Dr. Mark Costello (University of Auckland)
Reef Sharks	spatial meta-analysis of data has been proposed jointly with several groups

Myers is also collaborating with other projects affiliated with the Census of Marine Life to improve data gathering and management for future statistical and modeling efforts.

### **3. Declines in Large Predatory Fish**

Dr. Myers has recently produced a number of papers that estimate the population sizes of large predatory fish from pre-exploitation to the present. This baseline information is crucial so that we are not drawn into complacency by a false perception of recent, post-exploitation population levels as the norm. An important component of these projects is the development of statistical methods for historical data that can be used for future projects.

### **4. CenSeam and CMarZ Collaborations**

CenSeam, the Census of Marine Life's Census of Seamounts project, aims to conduct a representative sampling of the world's seamounts as well as a comprehensive synthesis of seamount data. Given the large number of seamounts in the oceans, comprehensive sampling is not possible. Dr. Myers and Master's candidate Derek Tittensor are currently working to assist CenSeam by developing a statistically rigorous sampling procedure that will fill critical knowledge gaps and target understudied regions and types of seamounts. Myers is also assisting the Census of Marine Zooplankton (CMarZ) in efforts to improve global diversity assessments and distribution models for

## Appendix 7b: 2004 Killam Chair Reports – Ransom Myers

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zooplankton. As part of this work, Ransom Myers helped coordinate two workshop on seamount and zooplankton research at Woods Hole Oceanographic Institute in September 2004.

### **5. Tagging of Pacific Pelagics**

Dr. Myers is also working to provide methods and models for working with data derived from the Tagging of Pacific Pelagics (TOPP) research program. TOPP (funded by the Census of Marine Life) applies new technologies to obtain an understanding of the environmental basis for the movements and behaviors of large pelagic animals in the North Pacific.

The following people are involved with this project: Greg Breed (PhD. Candidate), Mike Stokesbury (PhD. Candidate), Dr. Joanna Mills Flemming (Switzerland), Dr. Ian Jonsen (Department of Biology, Dalhousie University), and Dr. Chris Field (Department of Mathematics and Statistics, Dalhousie University).

### **6. Nova Scotia Leatherback Turtle Working Group**

The Myers lab monitors the distribution, movement, and population dynamics of leatherback turtles as part of the Nova Scotia Leatherback Turtle Working Group. This project is a collaborative marine turtle research and conservation initiative involving fishermen and university-affiliated biologists in Atlantic Canada.

### **7. Meta-Analysis and Animal Movement**

Movement is an important component of most animals' life history; it defines the scales at which animals interact with their environment and can have strong influence on other demographic rates. In 2003-2004, Dr. Myers began working to provide a more powerful and coherent statistical framework for analysis of animal trajectory data than was previously available to ecologists. The framework allows behavior to be inferred directly from multiple animal trajectories, while accounting for both process and estimation uncertainty. This method has great potential for understanding how different marine animals interact with their environments. This knowledge is crucial for the design of effect conservation and management plans for marine species, such as leatherback turtles.

### **8. Development of XML-based data standards for international data storage/retrieval/sharing of fisheries data**

We are currently investigating the Ocean Biogeography Information System (OBIS) standard as a candidate data format to interface with various Future of Marine Animal Populations (FMAP) modeling systems. OBIS is part of the larger Global Biodiversity Information Facility (GBIF) initiative and has received considerable interest from the biodiversity research community. The OBIS standard is used to store, retrieve, and share a variety of data of interest to GBIF and we are experimenting with expanding its use for fisheries data. In particular, we are expanding the OBIS standard to better suit statistical time-series where an estimate of the uncertainty is important and means of handling zero values are required. The extended OBIS standard (unofficially called OBIS+) will be used both for data storage/retrieval/sharing through OBIS and for model inputs and outputs in FMAP.

## Appendix 7b: 2004 Killam Chair Reports – Ransom Myers

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### **9. Models of Global Biodiversity**

Boris Worm, in collaboration with Dr. Myers, has received FMAP funds to develop statistical and process models for global marine biodiversity, including the identification of diversity hotspots. The first part of this work was published in the journal of the *Proceedings of the National Academy of Sciences*, and received global press coverage. These methods will be extended to other taxa, and tools will be produced that can be widely used. Collaboration with physical oceanographers is underway.

### **10. Prediction**

Initial estimates of extinction rates in the marine environment have been uninitiated this year. A National Center for Ecological Analysis and Synthesis (NCEAS) workshop is being proposed that would bring researchers together worldwide to study this issue. In addition, Masters candidate, Jennifer Ford, is modeling the joint role of climate change and effects of aquaculture on the survival of wild salmonids in the oceanic stages. This analysis will be targeted for the journal *Science* in 2005.

### **11. Stock Recruitment Database**

Dr. Myers continues to maintain and enhance a web-accessible Stock Recruitment Database. This site consists of maps, plots, and numerical data relating to over 600 fish populations (over 100 species) from all over the world.

## Appendix 7c: 2004 Killam Chair Reports – Rafiqul Islam

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### **Award Received by Dr. Islam**

- Received Crown and Eagle Gold Medal of honor (Russian Academy of Natural Sciences) for excellence in Research and Education (for the book: Revolution in Education - world's first knowledge-based University curriculum)

### **Awards/scholarships Received by R. Islam's students**

- Alireza Nouri, Killam, postdoctoral fellowship, University of Alberta, 2004.
- Muhannad Aldarbi, Presidential Teaching Assistant Award, 2004.
- Shabbir Mustafiz, Environmental Design Contest winner (part of a team of 4), New Mexico, USA.
- Nancy Bjorndalen, CGS-D (35k/year), University of Alberta, Petro-Canada Award (\$5k), 2004.

### **International Activities**

- Showed two documentaries (Revolution in Education and Economics of Intangibles) created by Dr. Islam's research group in various occasions, including one in presence of the Minister of Education, Jordan, Director of Economic Development, Libya, etc.
- Met with several CEOs of Energy, Environment, and Communication organizations and visited two private Universities of Turkey. Future collaboration planned.
- Lectured a group of researchers from the Ministry of Environment and Forestry, Bangladesh. Follow-up activities planned.

### **National Initiatives**

- Following organizations were contacted during 2003-2004 academic year: Schlumberger (USA), Husky Oil, BP America, Chevron-Texaco, Evionyx (New York), Champion Chemicals, Crostek Corp. (Alberta), St Stephen boatworks, Kwesawek Energy. All resulted in follow-up R&D activities, including two NSERC strategic proposals along with a number of I2I proposals.

### **The Research Accomplishment of 2004**

- The biggest accomplishment of the year 2004 was the successful completion of the NSERC-CRD (Shell Canada/PRAC) \$500,000 research project. Following is a summary of this research.
- Number of graduate students trained: 22

## Appendix 7c: 2004 Killam Chair Reports – Rafiqul Islam

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- Number of non-graduate students/researchers trained for research: 10 (including post-doc, visiting scholar, etc.)
- Fraction of Canadian/Resident employed in the project: nearly 60%
- Fraction of Placement of those involved in the project: 100 % ((all placed in PhD programs or industry, academia, etc.)
- Number of publications: 72 (50 refereed publications, others conference presentations and non-refereed publications)
- Industry contacts: Schlumberger (both Canada and USA, through Islam and Butt), Husky Oil (through Butt and Islam), BP America (Houston, through Islam), Chevron-Texaco (Calgary, through Islam) Evionyx (New York, through Islam), Champion Chemicals (Calgary, through Islam), Shrieve Chemicals (Houston, through Islam), Crostek Corp. (Alberta, through Islam), St Stephen boatworks (through Islam), and Kwesawek Energy (through Islam). All resulted in follow-up R&D activities.
- Number of follow-up research proposals: 13 (4 pending) proposals emerged from this project.
- Number of funded research projects: 9 (AIF (Islam), DFO (Islam), NSERC Discovery (Islam), NSERC equipment (Islam), NSERC equipment (Islam co-PI), NSERC CRD (S. Butt PI), CRC and CFI (Vaziri), NSERC CRD (Islam co-PI))
- Total amount of follow-up research funds: \$ 6 million (over \$3 million cash)
- Awards received by the PI: R. Islam received Einstein Gold Medal of Honor (highest honor of the Russian Academy of Natural Sciences) and Crown and Eagle Gold Medal of Honor for excellence in Research and Education.
- Award received by co-PI: H. Vaziri was nominated (by U. Western Ontario) and was successful as Canada Research Chair with full funding from CFI as well as other sources. This proposal emerged from Task 3 of the current CRD project. Vaziri didn't finally accept the chair but continues to be involved in the follow-up research from his tenure with BP America.
- Awards received by students involved in the project: 10 (NSERC scholarships, Killam scholarships, Environment Canada scholarship, Innovation awards, Environmental Design Contest winner, etc.)

### **Media Coverage of Islam's Research Activities**

- Eleven (11) interviews of Dr. Islam was published on TV, Radio and various magazines

## Appendix 7c: 2004 Killam Chair Reports – Rafiqul Islam

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### **Faculty Mentoring**

- Has written five proposals with over five collaborators from various disciplines.

### **Collaboration with Outside Universities**

- Collaborated with three University professors from outside of Dalhousie.

### **Editorial Responsibility**

- Has conducted editorial responsibilities for Energy Sources, J. Pet. Sci. Eng., etc.

### **Service For National and International Organizations**

- Serves as the Chair of the Halifax Section of SPE Atlantic Section. Also, is the chairman of the Advisory Council, International Energy Foundation.

### **Conference Organization and Chairmanship**

- Was involved in the organizing committee of two international conferences.

### **Graduate Courses Taught**

- Taught three graduate courses and one directed study course in the last academic year.

### **Research Grants Applied in 2004**

- Applied for two NSERC strategic grants, with matching money of over \$1 Million from various industry partners.

### **Departmental Committee**

- Serves as the Chair of the Promotion Tenure Committee, Civil Engineering, 2004.

### **HQP Training**

#### *Postdoctoral Fellow/Visiting Scholars*

- Trained two post-doc and several research associates.

#### *Graduate Students*

- Three PhD's and seven MASc's completed their program. Placement of these students is 100%.

Appendix 7c:  
2004 Killam Chair Reports – Rafiqul Islam

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*Current students*

- At present supervises seven PhD students and two MSc students. Three PhD students are scheduled to defend in Fall 2004.

**Thesis Advisory/Examining Committee**

- Served on 1 PhD student examining committee

**Publications**

- 26 refereed publications, 3 invited speeches, and 8 non-refereed conference papers.

## Appendix 7d: 2004 Killam Chair Reports – Philip Rosson

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### **Report of Activities Undertaken During the Academic Year 2003/04**

I was on sabbatical leave during the past year and used the opportunity to complete a number of research projects as well as to initiate new ones. I also carried out a number of regular faculty tasks during the leave period.

#### **Research projects**

The work carried out can be grouped under a number of research themes.

1. Innovation
2. The Internet and marketing
3. Other marketing issues

#### **Innovation**

I have a continuing interest in examining the role played by technological innovation in the formation and growth of firms, particularly smaller firms in Canada. The clustering of firms in geographic areas is also a topic under current study, with particular attention being paid to the emerging life-sciences industry in Nova Scotia. This work is being undertaken as part of a SSHRC-funded Major Collaborative Research Initiative.

The following journal article was published during the leave period.

- Philip Rosson & Charles Davis, "Electronic Marketplaces and Innovation: The Canadian Experience." *International Journal of Information Technology and Management*, 3 (1), 2004, 41-58.

A book chapter was both accepted and published during the leave year.

- Philip Rosson & Carolan McLarney, "Biotechnology Companies and Clustering in Nova Scotia," In *Clusters in a Cold Climate: Innovation Dynamics in a Diverse Economy*, D. Wolfe & M. Lucas, Eds., McGill-Queen's University Press and School for Policy Studies, Queen's University, 2004, 73-94.

A paper was presented and published during the leave year.

- Philip Rosson, "Clusters and Innovation in Biotechnology." *Proceedings*, 19th. International IMP Conference, Lugano, 2003, CD-ROM.

A conference paper was submitted for presentation consideration during the leave year. It was subsequently accepted.

## Appendix 7d: 2004 Killam Chair Reports – Philip Rosson

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- Philip Rosson & Jeremy Hall, "Entrepreneurship, Innovation and Ethics in the Turbulent Internet Age," Accepted for presentation, Euro-Asian Management Studies 2004 Conference.

A book chapter had been previously accepted for publication and required final revision. It will be published later in 2004.

- Philip Rosson, "SEGA Dreamcast: National Football Cultures and the New Europeanism," in *Corporate Nationalism: Sport, Cultural Identity, and Transnational Marketing*, Eds., Michael Silk, David Andrews & C. Cole, Berg Publishers, 2004, 167-185.

### **The Internet and marketing**

I have a strong interest in the impact of Internet technology on marketing, particularly how the Internet enables small companies to expand their international operations. This is reflected in the work noted below.

A book chapter had been previously accepted for publication and required final revision.

- Philip Rosson, "The Internet and SME Exporting: Canadian Success Stories," in *International Entrepreneurship in Small and Medium Size Enterprises: Orientation, Environment and Strategy*, Ed., Hamid Etemad, Edward Elgar Publishing, 2004, 145-177.

A journal article was accepted for publication during the leave year.

- Philip Rosson, "Buying and Selling Prescription Drugs on the Internet: Canada-US Trade." *Journal of Electronic Commerce in Organizations*, 2 (4), 2004, 47-62.

A paper was presented and published during the leave year.

- Elie Chrysostome & Philip Rosson, "The Internet and SMEs Internationalization: Promises and Illusions," *Proceedings*, International Business Division, Quebec City, ASAC Conference, 2004, CD-ROM.

A conference paper has been accepted for conference presentation and is in final preparation.

- Michelle Saulnier & Philip Rosson, "Walk Don't Run: The e-Business Readiness of Canadian SMEs," 6th. McGill International Entrepreneurship Conference, September 2004.

## Appendix 7d: 2004 Killam Chair Reports – Philip Rosson

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### **Other marketing issues**

Two other research projects have resulted in publications this year. One concerns the impact of mergers and acquisitions on the visual identity systems of the combining companies. The other focuses on the management of international trade fair exhibits.

A journal article was accepted and published during the leave year.

- Philip Rosson & Mary Brooks, "Corporate Visual Identity and M&As: An Exploratory Study," *Corporate Reputation Review*, 7 (2), 2004, 181-194.

A conference paper was submitted for presentation consideration during the leave year. It has since been accepted.

- Mary Brooks, Philip Rosson & Horand Gassmann, "Influences on Corporate Visual Identity Choices Post-M&A," Accepted for presentation, Euro-Asian Management Studies 2004 Conference.

A journal article was accepted for publication during the leave year.

- Rolf Seringhaus & Philip Rosson, "An Analysis Model for Performance Measurement of International Trade Fair Exhibitors." Accepted for publication, *Problems and Perspectives in Management*, 2004.

### **Other faculty tasks**

I completed field interviews with companies and support organizations for SSHRC grant on life sciences clustering in Nova Scotia. Participated in meeting of the life sciences working group in Toronto, December 2003. Attended the Innovation Systems Research Network national conference, Vancouver, May 2004, to discuss progress on the grant. I acted as the external examiner for Catherine Leroy-Beltran, PhD candidate at HEC-Montreal, July 4, 2003. Her thesis entitled "The internationalization process in large Mexican companies" was accepted in partial fulfillment of degree requirements.

I continued to act as a research supervisor for the following Master of Electronic Commerce students during the leave year: Ann Janega (graduated October 2003), Michelle Saulnier (graduated May 2004), Bryan Burns (potential graduate October 2004). I also supervised a Saint Mary's EMBA student (Margaret Anderson) whose topic on the value of design was of interest to the Board of DBNS (see below).

I gave a faculty seminar in the MacKay series on "Entrepreneurship, Innovation and Ethics," November 2003.

My reviewing activities during the year included: Academy of Marketing Science Conference, 2004; SSHRC Grant Competition, 2004; Journal of Business Research, 2003, 2004; Canadian Journal of Administrative Sciences Best Paper Award, 2004.

Appendix 7d:  
2004 Killam Chair Reports – Philip Rosson

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I was awarded three grants from the Centre for International Business Studies and ACOA. These were: \$5,000 for a case study on soccer sponsorship, and two international marketing exercises, \$1,000 each, June 2004.

I attended monthly Design in Business Nova Scotia (DBNS) Board meetings, and completed a *pro bono* report for DBNS on "The hotel market for designers of products and ideas."

Appendix 8:  
Killam Lecture Committee

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<b>Name</b>	<b>Term End</b>	<b>Department</b>
Keith Sullivan	2007	Public Administration
Lars Osberg	2006	Economics
John Kirk	2005	Spanish (2004 lecture series organiser)
Donald Mitchell	2005	Psychology
James MacKinnon	2004	Petroleum Engineering
Dawn Morrison		Public Relations
Jan Kwak, Dean (Chair)		FGS

## Appendix 9: 2004 Dorothy J. Killam Memorial Lectures

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### **Mexico: Our Other North American Neighbour** September 30, October 5 & 21, 2004

With our eyes, emotions and wallets continually focused on our next-door neighbour to the south, Canadians may tend to forget that the North American family has, in fact, three members. Yet, Mexico's relationship with Canada is large and growing all the time. Mexico is our fourth largest market and a million Canadians visit there each year. This year also marks the 60th anniversary of formal diplomatic ties. The 2004 Killam lecture series will explore Mexico – its challenges, its future and its culture – and seek to give insight into our OTHER North American neighbour.

All lectures will take place at Ondaatje Hall, Marion McCain Arts And Social Sciences Building, 6135 University Ave, Dalhousie University, Halifax, Nova Scotia.

#### **Mexico and the Challenges of the 21st Century**

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Date & Time: Thursday September 30, 8:00 p.m.  
Speaker: Cuauhtémoc Cárdenas

Mexico, with a population of just over 100 million people, faces many challenges in the near and medium future. After voting out a political party which had dominated Mexico for over seven decades, a new party, the PAN, has been in power since 2000, and Mexicans will be returning to the polls in 2006. This lecture will examine the social, political and economic problems facing Mexico – and the positions taken by the leading political actors on these. The second half of the presentation will outline an alternative, progressive view of the reforms needed to ensure improved public administration, economic growth, and improvement of social services. The lecture is designed to give Canadians an overview of the challenges facing their other North American neighbour.

Cuauhtémoc Cárdenas is widely credited with having won the presidential election in 1988, only to have it fraudulently stripped from him. The son of former President Lázaro Cárdenas, and the father of the current governor of the state of Michoacán, Cuauhtémoc Cárdenas is one of Mexico's leading political figures. Because of his disillusionment with political corruption, he founded the PRD, a left-of-centre political party, and on three occasions was a presidential candidate. He was also an extremely popular mayor of Mexico City (pop. 20 million), North America's largest city between 1997 and 2000. Currently he is the president of the Foundation for Democracy in Mexico City.

#### **Canada, Mexico and the Future of North America**

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Date & Time: Tuesday October 5, 8:00 p.m.  
Speaker: Andrés Rozental

The North American Free Trade Organization has had a major impact upon all three-member nations, with trade and investment relationships thriving in the past decade. Trade between Mexico and Canada has tripled during that period, and Canada is now Mexico's second largest market.

## Appendix 9: 2004 Dorothy J. Killam Memorial Lectures

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While the main thrust of NAFTA as a free trade policy has been achieved, it is time to look to the future. We need to examine now the next stage of North American integration. Do we need more North American institutions? How can we devise mutually beneficial policies? This lecture will present ideas being considered in Mexico, and encourages a discussion of Canadian perceptions regarding the future of North America.

Andrés Rozental's diplomatic career spans three decades. A former ambassador to the United Kingdom and Sweden, representative in Geneva to various UN bodies, and Deputy Foreign Minister of Mexico, in 2000 he was named Ambassador at Large and Special Presidential Envoy by President Vicente Fox. He is a leading authority on international issues, and is the author of two books and numerous articles on Mexican foreign policy and international affairs. Since 1997 he has been the president of Rozental and Asociados, and is chairman of the Grupo Industrial Omega, a diversified Mexican industrial group. He is also the President of the Mexican Council on Foreign Relations.

### **A Matter of Life and Death: Towards An Understanding of Mexican Culture**

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Date & Time: Thursday October 21, 8:00 p.m.  
Speaker: Homero Aridjis

This lecture will be a whirlwind tour across three millennia of Mexican culture, in all its breadth and astonishing variety. We will visit pre-Columbian pyramids at Teotihuacán, Zapotec, Aztec and Mayan ceremonial centres, painted pots and codices, and exuberant Renaissance and Baroque monasteries and churches. We will examine José Guadalupe Posada and Manuel Manilla broadsheets, post-Revolutionary murals, Surrealist painters Frida Kahlo, Remedios Varo and Leonora Carrington. We will explore today's lively avant-garde art scene, Day of the Dead and Santa Muerte ceremonies, the colourful festivals, masks and textiles of dozens of ethnic groups, plus modern masters Juan Rulfo and Octavio Paz, Luis Buñuel and the Golden Age of Mexican film, and much, much more.

Homero Aridjis is one of Mexico's foremost poets and novelists. He was born in the state of Michoacán in 1940 to a Greek father and Mexican mother. Two collections of his poetry have appeared in English, *Blue Spaces* and *Exaltation of Light*, as well as three novels, *Persephone*, *1492: The Life and Times of Juan Cabezón of Castile* (for which he was awarded the Grinzane Cavour Prize), and *The Lord of the Last Days: Visions of the Year 1000*. Twice the recipient of a Guggenheim Fellowship, he has taught at Columbia University, and Indiana University (which awarded him an honorary doctorate in 1993). He is the founder and president of the Group of 100, an international environmentalist organization of writers, artists, and scientists and has been the president of PEN Club International. He has been Mexican ambassador to the Netherlands and Switzerland, and lives in Mexico City.

Appendix 10:  
Faculty of Science Killam Professorship Recipients


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<b>Faculty</b>	<b>Incumbent</b>	<b>Year Awarded</b>
Oceanography	John Cullen	2000 -2001
Biology	Hal Whitehead	2000-2001
Chemistry	Amares Chatt	2001-2002
Physics	Richard Dunlap	2001-2002
Psychology	Patrick McGrath	2001-2002
Oceanography	Chris Beaumont	2002-2003
Psychology	Richard Brown	2002-2003
Chemistry	James Pincock	2003

<b>New</b>		
Biology	Tom MacRae	2004-2005
Chemistry	Jean Burnell	2004-2005
Earth Sciences	Martin Gibling	2004-2005
Psychology	Dennis Phillips	2004-2005


Appendix 11:

Chronicle Herald/Mail Star (Wednesday, October 8<sup>th</sup>, 2003)



**DALHOUSIE** **FACULTY OF GRADUATE STUDIES**  
*University* [www.dalgrad.dal.ca](http://www.dalgrad.dal.ca)

## Congratulations to our Killam Scholars



 Dalhousie University's Killam Scholarships & Fellowships are among the most prestigious graduate awards in Canada. Established by Dorothy Killam in memory of her husband Izaak Walton Killam, these pre-doctoral scholarships and postdoctoral fellowships attract the brightest and best students to Dalhousie University and Nova Scotia. The Faculty of Graduate Studies is proud to honour this year's recipients.

<p><b>NEW KILLAM POSTDOCTORAL FELLOWS</b></p> <p>Maria Baader Steven Baur Merel Dalebout Joshua Gonsalves Uri Gophna</p> <p><b>CONTINUING KILLAM POSTDOCTORAL FELLOWS</b></p> <p>Christian Bracher Petar Mitrasinovic Kevin Strychar Raymond Syvitski</p> <p><b>NEW KILLAM PRE-DOCTORAL SCHOLARS</b></p> <p>James Anderson Jay Batongbacal Arman Bonakdarpour Ian Bradbury Seth Cain Michael Carter Moses Chikowero Călin Emanoil Dolcoş - Băzgan Melanie Eelman Saskia Erdmann Steven Fabian Michael Fleischauer Geraldine Gomez Felix Hanke Yanjing He Zhifei Hu Sherry Huybers Michael Jakubinek Eluned Jones</p>	<p>Daniel Kehler Lisa Kretz Judith Lipp Julie Mailloux Susanne Marshall Jean Guy Mboudjeke Nzale Belquis Mothana Shabbir Mustafiz Julia Nordmann Daniel O'Neill Cheluchi Onyemelukwe Allison Osmond Audrey Ottler Robyn Ovans Corey Owen Paul Ragogna Matthew Rankin Yan Rodriguez-Evora Sunnie Rothenburger Stephen Russell Michael Rygel Gobinda Saha Meredith Schwartz Matthew Smalarz Pamela Talbot Bin Tang Gregory Thiemann Garnett Wilson Liang Zhao</p> <p><b>CONTINUING KILLAM PRE-DOCTORAL SCHOLARS</b></p> <p>Muhannad Al-Darbi Peter Bahr Victoria Bell</p>	<p>Cheryl Birch R. Blake Brown Karen Cheng Michael DiSanto Yong Geng David Hardie K. Troy Harker Timothy Hatchard Richard Hoshino Noreen Kelly Peter Lichodziejewski Changning Ma Amy MacPherson Nesreen Mahmoud Shana McGuire Heather Meek Jennifer Mummery Alireza Nouri Seamus O'Neill Yiran Peng Markus Poetzsch Cynthia Richard Victoria Seaville Klein Heather Spinney Connie Stewart Ernest Yoh Tan Tara Taylor Kerry Walker Nicholas Wilkinson Jane Willenbring Tabitha Wood Jennifer Woodrow Jin Yue</p>
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Dalhousie University, one of  
Canada's five Killam Universities

DR. JAN KWAK — Dean of Graduate Studies

Appendix 12:  
Killam Postdoctoral Fellowship Advertising Campaign



**DALHOUSIE  
University**

**Izaak Walton Killam  
Postdoctoral Fellowships  
2004**


**VALUE**  
Fellowships valued at \$40,000\* per year, plus a travel allowance, and one-time research (\$3,000\*) and conference travel (\$1,000\*) grants. Fellowships are tenable for up to two years at Dalhousie University in most fields of study. \* 2003 Amount

**QUALIFICATIONS**  
Applicants should have recently completed a PhD (a doctorate completed prior to 2002 is not eligible) at a recognised university and have no current affiliation with Dalhousie University.

**DEADLINE**  
Completed applications must be received by December 15th, 2003.

**INQUIRIES**  
Izaak Walton Killam Postdoctoral Fellowship  
Faculty of Graduate Studies, Dalhousie University  
Halifax, Nova Scotia, Canada B3H 4H6  
E-Mail: graduate.studies@dal.ca

[www.dalgrad.dal.ca/killam](http://www.dalgrad.dal.ca/killam)



**Appearances**

<i>Publication</i>	<i>Issue Dates</i>	<i>Cost (in CDN dollars)</i>
The Chronicle of Higher Education	June 14, September 6	\$ 1,497
Times Higher Educational Supplement	June 14, September 6	\$ 981
Nature	June 13, September 15	\$ 2,260
University Affairs	June/July, August/September	\$ 684
CAUT Bulletin	September	\$ 105
<b>TOTAL</b>		<b>\$ 5,527</b>