BOARD OF GOVERNORS
Alan A. Borger Sr. Executive Conference Room (E1-270 EITC)

AGENDA
Presenter
Page

1. PRESENTATION - Dr. Digvir Jayas Research Overview at the University of Manitoba

## FOR ACTION

2. APPROVAL OF THE AGENDA Chair
3. MINUTES (Open Session) Chair

| 3.1 | Approval of the Minutes for the September 29, 2009 <br> meeting (Open Session) as circulated or amended |
| :--- | :--- | :--- |
| 3.2 | Business arising - none |

4. UNANIMOUS CONSENT AGENDA Chair

If any member of the Board wants to ask a question, discuss or oppose an item that is marked for the consent agenda, the member can have an item removed from the consent agenda by contacting the Secretary of the Board prior to the meeting or by asking that it be removed before the Chair calls for a mover and seconder for the motion to approve or receive, by unanimous consent, the items listed.


## FOR INFORMATION

6. UPDATES
6.1 Update from the UMSU \& GSA Presidents

## 7. FROM SENATE

7.1 Statement of Intent: Bachelor of Arts Integrated Studies

# Minutes of the Meeting of the Board of Governors <br> Open Session <br> September 29, 2009 

The meeting was held at $4: 00$ p.m. in the Alan A. Borger Sr. Executive Conference Room, E1270.

| Present: | T. Sargeant, Chair <br> J. Leclerc, Secretary |
| :--- | :--- |


| D. Barnard | A. Berg | P. Bovey | E. Bowness | A. Curran | J. Daly |
| :--- | :--- | :--- | :--- | :--- | :--- |
| R. Dhalla | J. Embree | M. Forsen | G. Hatch | J. Lederman | R. Mahé |
| H. Milan | W. Norrie | S. Rashid | M. Robertson A. Sabouni | R. Sigurdson |  |
| T. Strutt | M. Tripple | R. Zegalski |  |  |  |

## Assessors Present:

B. Austin-Smith J. Sealey

Officials Present:
E. Goldie
K. Inskip
D. Jayas
J. Keselman
D. McCallum

Regrets:
D. Ruth

## 1. Announcements

Mr. Sargeant welcomed the Board to the first meeting in the Alan A. Borger Sr. Executive Conference Room. The Chair also reminded members of the Board of the upcoming dinner on November $9^{\text {th }}$.

## 2. Approval of the Agenda

It was moved by Dr. Embree and seconded by Ms. Forsen:

THAT the agenda for the September 29, 2009 Open Session be approved as circulated.
2. Minutes
2.1 Open Minutes

It was moved by Ms. Lederman and seconded by Ms. Bovey:

THAT the minutes of the June 16, 2009 Open Session be approved as circulated.
CARRIED
3.2 Business Arising - Update on Policy and Procedures: Conflict of Interest
4. Unanimous Consent Agenda

It was moved by Dr. Sigurdson and seconded by Mr. Berg that the Board of Governors approve and/or receive for information the following:

THAT the Board of Governors approve nine new offers, nine amended offers, and the withdrawal of three offers, as set out in Appendix A of the Report of the Senate Committee on Awards [dated May 19, 2009].

THAT the Board of Governors approve seven new offers, four amended offers, and the withdrawal of four offers, as set out in Appendix A of the Report of the Senate Committee on Awards [dated June 15, 2009].

THAT the Board of Governors approve the Report of the Senate Committee on Awards [dated July 31, 2009].

THAT the Board of Governors approve the establishment of a Professorship in Spinal Cord Research.

THAT the Board of Governors approve the proposal for a Bachelor of Science (Major) and a Major Co-op in Biotechnology [as recommended by Senate June 24, 2009].

CARRIED

## 5. Report from the President

Dr. Barnard remarked that is has been a busy month and a successful launch to the new academic year.

## 6. Other Business

### 6.1 Election of the Chancellor

Mr. Sargeant discussed the process that will be followed to replace Chancellor Norrie and noted that the thirteenth Chancellor of the University of Manitoba will be elected in December or January during a joint session of Senate and the Board of Governors.

Ms. Bovey nominated the Chair, Mr. Sargeant, and the Vice-Chair, Ms. Lederman, to sit on the ad hoc Committee of the Committee of Election. Mr. Sargeant called three times for additional nominations. There were no further nominations. Mr. Sargeant and Ms. Lederman indicated that they were willing to serve on the Committee.

It was moved by Dr. Embree and seconded by Mr. Berg:

1. THAT, subject to concurrence by Senate, an ad hoc Committee of the Committee of Election, consisting of two members of the Board of Governors and two members of the Senate be established to:
a. Perform the functions required under the procedures for the Committee of Election which were used for the 2001 Chancellor election 9the nomination of the Chancellor, the method of election, the date of election and the announcement of the elected Chancellor);
b. Recommend to the Board and Senate on any issues which require consideration prior to the meeting of the Committee of Election (including an appropriate timetable for receipt of nominations and conducting the election.
2. THAT the Board of Governors name its two appointees to the ad hoc Committee.

CARRIED
The Board of Governors received the following items for information:

## 7. Reports

### 7.1 Update from the UMSU President

Mr. Rashid noted that it had been a productive summer for UMSU with the renovation of Degrees, the installation of CCTV in University Centre and the working on establishing an Answers booth on the Bannatyne campus for the second term of this year. Orientation week this year moved to a new location on the front steps of the Administration building and focused on welcoming all groups of students back to campus. Mr. Sabouni noted that the GSA was in the process of hiring three staff for the new graduate studies magazine that will be published and that a GSA office has been opened on the Bannatyne campus.

## 8. From Finance, Administration and Human Resources Committee

### 8.1 Duff Roblin Building Fire

Mr. Sargeant commended Mrs. McCallum and everyone involved with the recovery process on their hard work.

Motion to Move to Closed and Confidential Session

It was moved by Mr. Sabouni and seconded by Dr. Sigurdson:
THAT the Board of Governors move into Closed and Confidential Session.
CARRIED
Motion to Adjourn

It was moved by Ms. Bovey:

THAT the meeting adjourn.
CARRIED

Chair
University Secretary

## PRESIDENT'S REPORT: November 17, 2009

## I. GENERAL

Over the past several weeks, there has been a great deal of work undertaken on two projects designed to help improve services and programs, make optimal use of our resources, and address our budgetary constraints. The Optimizing Academic Resources (OARs) project, which focuses on improving the use of our academic resources, and the Resource Optimization and Service Enhancement (ROSE) project, which focuses on improving our services while reducing costs in a sustainable way, both are well underway and are benefiting from the involvement of and input from a many members of the university community.

These projects were the major focal point of the October 15 President's Town Hall, at which many members of our community participated and expressed their views. As was noted at the Town Hall, the university is pursuing these projects in order to create efficiencies, optimize our resources and create flexibility in existing budgets, so that we have more options when the provincial government announces our funding level and any changes related to tuition fee levels in the spring. The measures we are undertaking right now are meant to minimize the impact of potential reductions on the members of our community.

The House of Commons Standing Committee on Finance held hearings in Winnipeg on October 20. The University of Manitoba's presentation to this Committee focused on the three funding priorities articulated in its pre- budget submission to the committee: (1) Increased funding to the three major research granting agencies and increased funding for the indirect costs of research; (2) increased investment in university programs and services which support Aboriginal students; and (3) funding support for the establishment of a Canadian Cereals Research and Innovations Lab - an international Centre for Excellence in grain Crops at the University of Manitoba.

In late October, I attended meetings of the AUCC in Ottawa and while there, also took the opportunity to meet with federal MPs and senior federal officials. The AUCC meetings included a special session focused on innovation and its connection to research, featuring Dr. Bengt I. Samuelsson. Also in Ottawa, I attended the Dr. David Barber's presentation on Climate Change and Arctic Sea Ice at the Bacon and Eggheads breakfast on Parliament Hill, sponsored by the Partnership Group for Science and Engineering.

A committee has been established to provide advice on candidates for the position of Vice-President (External) and more generally on the role of the Vice-President (External). Joining me on the committee are: Terry Sargeant, Chair, Board of Governors; James Blatz, Chair, Senate Planning and Priorities Committee; David Collins, Dean, Faculty of Pharmacy; John Danakas, Director of Public Affairs; Mark Evans, President and CEO, Emerging Information Systems Inc.; Karen Grant, Vice-Provost (Academic Affairs); Paul Hess, Director, School of Art; Rosalyn Howard, Director of Learning and Development Services; Alanna Makinson, Vice-President (External), University of Manitoba Students' Union; Rennie Zegalski, Board of Governors.

On October 21 and 22, the University of Manitoba's Fall Convocation gave us a chance to celebrate the achievements of our students who have successfully completed their programs of study since Spring of 2009. In addition, honorary degrees were conferred upon: Andrew Bjerring, Richard Frost and John Lau. We also honoured new Distinguished Professors, a new Professor Emeritus, and the recipients of the Distinguished Alumni Award, the Distinguished Service award, and the Dr. and Mrs. H. H. Saunderson Award.

The Council of Presidents of Universities in Manitoba (COPUM), which I currently chair, recently met to discuss issues of mutual concern and identify priorities for collaborative work in the coming months. We have agreed on a number of issues of common interest related to the upcoming provincial budget and agreed to a joint effort to communicate these issues.

## II. ACADEMIC MATTERS

- October 7, 2009 marked the launch of the Optimizing Academic Resources (OARs) Project. The project will identify strategies to improve and reduce barriers to the effective use of our academic resources. Project Teams have been established to consider three areas of focus:
i. Academic Synergies and Efficiencies
ii. Rules, Regulations and 'Red Tape'
iii. Strategic Enrolment Management. Recommendations are anticipated by April 2010.

The Leadership Committee for the OARs project is co-chaired by Vice-Presidents Joanne Keselman and Digvir Jayas, and comprised of all deans and directors and senior academic administrators. The Leadership Committee will provide advice on the overall project direction.

- Three prominent University of Manitoba professors have been elected to the Royal Society of Canada, the country's most prestigious association of scholars and scientists:
- Dr. Digvir Jayas, Biosystems Engineering, world renowned leader in grain storage research;
- Dr. Noralou Roos, Community Health Sciences, founded the Manitoba Centre for Health Policy and pioneered the use of administrative data to identify the healthcare patterns of Manitobans over the past three decades;
- Dr. Ronald Stewart, Environment and Geography, global leader in precipitation processes within winter storms.

The official induction will be held on November 28, 2009 at the Canadian Museum of Civilization.

- Ken Standing, Physics and Astronomy, was selected to receive the Royal Society of Canada's 2009 Sir John William Dawson Medal. Dr. Standing is internationally renowned for innovations in time-of-flight mass spectrometry.
- The Faculty of Pharmacy hosted an evening with the World Presidents' Organization (WPO) on October 15, 2009. The WPO is a global organization of more than 4,600 business leaders who are or have been chief executive officers of major companies and who are "graduates" of the YPO (Young Presidents' Organization).
- For the second year in succession, the Faculty of Pharmacy's Class of 2009 was ranked first in Canada in the 2009 Pharmacy Examining Board of Canada (PEBC) Qualifying Examination!
- The first biennial Philanthropy and the Law Symposium, was hosted by the Faculty of Law and The Winnipeg Foundation in September attracted 150 participants. The inaugural theme, Law, Philanthropy and New Economic Challenges: Changing the Rules of Engagement, considered charity management and fiduciary responsibility, funding challenges for charities and non-profit organizations, as well as tax-driven governance of the philanthropic sector.
- Jim House, Human Nutritional Science, received the 2008 Centrum Foundation New Scientist Award for Outstanding Research. The New Scientist Award was established to recognize outstanding contributions to nutrition research by a member of the Canadian Society for Nutritional Sciences, who is within 15 years of completing their Ph.D.
- A full house of 225 alumni, friends and colleagues turned out for the Faculty of Dentistry's 2009 Alumni of Distinction Awards. Award recipients, Drs. Tom Breneman and Hester Rumberg, and honorary alumni membership awardee, Mr. Burton Cummings, were recognized.
- David Barber, Environment, Earth and Resources, received an invitation from the Communications Committee of the Partnership Group for Science and Engineering (PAGSE) to speak at the "Bacon and Eggheads" science lecture series on Parliament Hill in Ottawa on October 29th, 2009. This session brings together Parliamentarians with experts across the spectrum of science and engineering, and showcases outstanding Canadian accomplishments. PAGSE is an umbrella group of $25+$ national science and engineering organizations operating under the auspices of the Royal Society, and is co-sponsored by NSERC and the Speakers of the House of Commons and the Senate. This prestigious forum represents a unique opportunity to communicate important scientific work to a distinguished and highly influential audience, which includes key decision-makers.
- The Department of Supply Chain Management, Asper School of Business organized a unique Humanitarian Logistics: Relationship Building in Relief Supply Chain Conference in Ottawa in October 2009. Speakers and participants in the conference included Logistics and Supply Chain directors of the International Federation of Red Cross \& Red Crescent Societies, World Vision International, World Organization for Relief Logistics Developed and the World Food Program; the Chartered Institute of Logistics and Transport, Air Serv International, Airline Ambassadors International, Disabled Peoples' International, among others. Participants were involved in a simulated complex disaster where each was assigned roles in various humanitarian relief organizations. Working in teams they applied relationships building techniques in a simulated complex disaster.
- The Faculty of Arts unveiled its new "Wall of Recognition" commemorating the achievements of Arts students and staff at its annual Arts Celebrating Arts event. Senator Janis Johnson, Dr. Bill Valgardson, and Dr. Joanne Keselman were honored as this year's celebrated alumni.
- Extended Education's summer session course calendar received the 2009 Western Association of Summer Session Administrators (WASSA) Award for Best Catalogue (Calendar) in the Layout and Style category. The award recipients were: Summer Session staff (Bill Kops, Area Director, with Janine Lindsey, Darlene Lecuyer, Cheryl Hadaller), and Creative Services designers (Liz Bachmann and Gerald Beyak).
- The Children of the Earth High-school in Winnipeg won the Canadian Education Association 2009 Ken Spencer Award for Innovation in Teaching and Learning for their Medical Career Exploration Program. This program is the result of a partnership with Extended Education's Access Program, the Winnipeg School Division, the Pan Am Clinic and the Health Sciences Centre. The Medical Exploration program is designed to promote aboriginal students to a career in health care.
- Lot Shafai, Electrical and Computer Engineering, received the IEEE Antennas and Propogation Society's International Distinguished Educator Award for his contributions to antenna teaching and research by developing curriculum, numerical techniques, establishing links between industry and university, and its impact on students internationally.
- Faculty of Engineering's Centennial Book, Grinding "Geers" for 100 Years, has been printed and is available at the University of Manitoba.
- Noted photographer, Henry Kalen, has donated a large body of his photography collection to the University of Manitoba. The "Henry Kalen Archive" exhibit was launched the Faculty of Architecture on October 8, 2009 and the exhibit featuring a montage of his photographs will run until December 23, 2009. Kalen was born in Winnipeg and received his Bachelor of Architecture degree from the University of Manitoba in 1957.
- Ted McLaughlin, Jean Trottier, and Keith Millan, Landscape Architecture, were recognized by the Town of Minnedosa for their outreach efforts. These efforts, merging curriculum and service, included the deconstruction, recycling, and building of a community project.
- Jennifer Berry, social work student, has become the interim coordinator of StreetReach, a new agency to help sexually exploited and vulnerable youth. StreetReach brings together 22 social services and community organizations around the province and has been touted by Family Services and Housing Minister Gord Mackintosh as the first of its kind in Canada. StreetReach partners with the Winnipeg Police Service, Metis Child and Family Services, Child Find Manitoba, Marymound and Ma Mawi Wi Chi Itata Centre.
- Luke Sellick, jazz studies student, has been awarded the national Oscar Peterson Grant for Jazz Performance, which is a Developing Artists Grant of $\$ 10,000$ from the Hnatyshyn Foundation.
- Chad Reimer, music student, has won the position of Principal Tuba with the Regina Symphony after a rigorous audition process.
- Members of the Bison's women's basketball team launched a "Think Pink" campaign to help raise awareness of breast cancer while raising funds for the Canadian Breast Cancer Foundation. Team members wore limited edition pink uniforms during games against Cape Breton and the University of Winnipeg - uniforms that were later on display at the Women's Basketball Breast Cancer Research and Scholarship fundraiser, an event that featured a wine tasting, appetizers, auctions and live entertainment.
- A team of undergraduate students from the Departments of Food Science, Management and Human Nutritional Sciences placed in the top two in the Product Development Competition at the American Association of Cereal Chemistry Annual Meeting for its 'Crepe UP', a tasty gluten-free product made with pea and rice flours.
- Stanislaw Lozecznik, engineering graduate student and student member of the Northern Lights Chapter of the Solid Waste Association of North America (SWANA), won the Robert P. Stearns/SCS Engineers Scholarship. He was the only Canadian student recognized at this year's event.


## III. RESEARCH MATTERS

- Three new and three renewed Canada Research Chairs (CRCs) were announced in September, bringing the University of Manitoba total to 48 CRCs, with the six chairs totalling $\$ 4.8$ million in support. The new chairs are Drs. Jeffrey Marcus (Phylogenomics), Peter Eck (Nutrigenomics), Zahra Moussavi (Biomedical Engineering). The three renewed chairs are Drs. Fikret Berkes (CommunityBased Resource Management), Hao Ding (Genetic Modelling) and Phillip Gardiner (Physical Activity and Health Studies).
- Dr. Stephen Moses was recognized as one of only eight named recipients of the "Top Canadian Achievements in Health Research" by the Canadian Institutes of Health Research (CIHR) and the Canadian Medical Association Journal (CMAJ). The recognition is related to his research proving male circumcision reduces the risk of HIV infection.
- The Province of Manitoba announced $\$ 1.675$ million in funding for two genomics research projects on October 5th. Genome Prairie's Total Utilization of Fax Genomics (TUFGEN), led by Dr. Sylvie Cloutier (Agriculture and Agri-Food Canada and Faculty of Agricultural and Food Sciences), and Microbial Genomics for Biofuels and Co-Products from Biorefining Processes (MGB2), co-led by Drs. David Levin (Faculty of Agricultural and Food Sciences) and Richard Sparling (Faculty of Science).


## IV. ADMINISTRATIVE MATTERS

- Resource Optimization and Service Enhancement Project (ROSE) project update - Members of the joint working team have conducted approximately 150 interviews and meetings with stakeholders across the University. The team continues to analyze potential quick wins as well as longer term opportunities focusing on both service delivery improvement and cost reduction. The team is in the process of validating, prioritizing, finalizing and quantifying opportunities for presentation to the ROSE steering committee later this month.
- Pandemic Planning Update - Meetings were held with the unions and the EMAPs advisory committee to discuss pandemic planning efforts. Information on H1N1 has been shared with Deans and Directors, Administrators, Middle Managers and is being widely circulated to students. The Institutional Pandemic Plan has been updated and can be accessed on the WEB along with FAQs for both staff and students on H1N1. The H1N1 vaccine clinic at the University began on October 26, 2009 in 218 Helen Glass and then moved to the Multi-Purpose Room in University Centre. The Pandemic Planning Committee is still meeting every two weeks and as of now, there have been no reported cases of H1N1 on the Fort Garry Campus and one reported case on the Bannatyne Campus.
- Duff Roblin Fire Recovery - A temporary location to test restored equipment has been set up at the Crop Technology Centre. The Council on Post Secondary Education has approved a funding request of $\$ 2.5$ Million for the installation of a sprinkler system which was not covered by insurance. Restoration is set to begin on the East side by mid-November.
- Fall Tuition Collection - Over 6,800 fee payments were receipted in person and 8,000 were received electronically. Electronic payment methods continue to increase so that $54 \%$ of fee payments are now received through web banking. Overall transaction volumes are higher than the previous year as undergraduate enrolment increased by $3.6 \%$ and credit hours increased by $2.4 \%$.
- Orientation 2009 went very well. N parking lot was closed for four days in order that UMSU sponsored social activities could safely take place in a central location. Not only did this allow for a safe and unique venue but also saved the grass in the quadrangle from the damage endured in previous years. This negotiated "trade off" resulting in the orientation period being reduced to 4 days.
- Banking Services -The University has entered into a 5 year agreement with the TD Bank for banking services following a formal RFP process. The TD Bank offered the most attractive package in terms of pricing and service resulting in significant savings for the University.
- Economic Impact Analysis - The Economic Impact Study has been finalized and the consultant has issued the report. A press release is being prepared by Public Affairs.
- University Centre - The University has partnered with ARAMARK to complete renovations in University Centre. UMSU is also involved. We are working together as a group to improve services in University Centre. Subway and Tim Horton's will be relocated and possibly the Manitoban. A temporary stage will be set up in the Fireplace Lounge to accommodate the upcoming Celebration and other main stage events.
- Domino Project -
- Art Research and Technology (ART) Lab - Patkau Architects presented the design for the ART Lab to the Exterior Environment Committee for input. Design plans are well underway. A construction forum for Drake Building occupants is being planned for the end of November to discuss access route changes, construction schedules, possible disruptions and other construction related issues. Construction is anticipated to begin in January 2010.
- Pembina Hall Residence - The design of the Pembina Hall 360 unit residence is largely complete and construction, once tendered, is anticipated to commence in January 2010.
- Tache Hall Redevelopment - The redevelopment project will provide space for the Marcel A. Desautels Faculty of Music, School of Art, A Music Library and a 400 seat concert hall. Patkau Architects met with Marcel Desautels and members of the Faculty of Music on September 11, 2009 to present a number of options for the concert hall. The redevelopment of Tache Hall will commence upon completion of the Pembina Hall Residence. In the interim, the Marcel S. Desautels Faculty of Music has expanded into the recently vacated Services Building.
- Russell Building Courtyard Opening - The official opening of the Russell Building courtyard took place on October 27, 2009. The outdoor courtyard has been revamped to provide an attractive outdoor gallery for students, faculty and staff.
- Stabbing - A student was stabbed outside the School of Music and suffered numerous stab wounds. The stabbing was an isolated incident and the victim was deliberately targeted. There was no other threat to the University at the time of the incident. The stabbing received wide spread media attention and the safety and security features in place at the Fort Garry Campus were reviewed.
- Power Outage - a major power outage occurred in Taché Hall and the Drake Building on the evening of October 18. Power was restored to Taché Hall in a few hours but was not restored to the Drake Building until 11:00 AM the next day.
- Wind Energy Turbine Project - A 50 foot tall, 5 kilowatt wind turbine now stands in Smartpark at the corner of Technology Trail and Chancellor Matheson. Students and faculty will have an opportunity to test the performance of a horizontal axis wind turbine and further their understanding of wind power generation for a period of three years.
- Smart Park Retention Pond - Excavation of the Lake 2 storm water retention pond began in September. The excavated earth has been transported to the Glenlea Research Centre. The naturalization phase which involves the identification of existing native plants for re-vegetation in the pond next spring is currently underway.
- Public Forum - A public forum is being held November $25^{\text {th }}$ in University Centre to assess the value/merit of an ongoing campus pub presence.


## v. EXTERNAL MATTERS

- Total funds raised as of November 2, 2009: $\$ 15,616,169.68$
- A Town Hall on the Resource Optimization Projects was held on October 15, 2009 in the EITC Atrium and connected with a video link to the Gaspard Theatre on the Bannatyne Campus and it was webcast. The town hall elicited news coverage in the Winnipeg Free Press and on CBC and CTV.
- On Thursday, October 15, 2009 the Manitoba Chapter of the World Presidents' Organization (WPO) toured the Bannatyne Campus followed by dinner and a presentation from Geoff Hicks, CIHR Canada Research Chair in Functional Genomics Director.
- The itsmyfuture.ca micro site, originally launched in Fall 2007 as a recruitment marketing tool to encourage prospective students to learn more about what its like to be a University of Manitoba student, has evolved to reflect the $U$ of $M$ 's position of offering "more" - integrating stronger messaging and defined positioning that recruitment officers can reference and rally around. The third year of the program will involve further expansion of site components to include 9 student bloggers, a new video contest feature targeted at current students, and greater integration with existing social media initiatives and umanitoba.ca. External advertising directed toward prospective students and their influencers (Winnipeg Transit bus back posters, Winnipeg Movie Theatres and on Hot 103) will be delivered through two phases to coincide with key recruitment timeframes, from October to December 2009, and February and March 2010.
- A new "prestige" publication that highlights excellence in education, research and community service at the University of Manitoba was published last week. Titled "More", it shares a look with the annual report and is intended as an impressive print piece to share with special visitors or those whom senior administrators visit.
- David Barnard, president and vice-chancellor, and Clayton H. Riddell, O.C., CEO \& chairman, Paramount Resources Ltd., co-hosted a breakfast in Calgary on Oct. 1, 2009, where Dr. Barnard spoke to Alberta-based donors, alumni and friends about the future of the University of Manitoba. The breakfast was held at the Calgary Petroleum Club, and more than 30 people turned out for the event.
- A reception for alumni and friends will be held in Hong Kong on Sunday, November 22, 2009, from 3:00 to $5: 30 \mathrm{pm}$ at the Conrad Hotel. The event will feature a piano performance by Dean of Music Edmund Dawe, and David Barnard will bring greetings. As this event precedes the symposium at Shantou University (http://www.umanitoba.ca/shantou-symposium//), several University of Manitoba representatives will be in attendance. The Alumni Association is working with the University of Manitoba Alumni Association in Hong Kong to make the arrangements and take the RSVPs.
- Manitoba Conservation partnered with Smartpark to plant 15 white spruce trees approximately $5^{\prime}$ tall at Smartpark under the Trees for Tomorrow Program. The value of these trees is $\$ 5,600$. Smartpark and Manitoba Conservation will also be preparing a draft plan for more extensive tree planting next spring at Smartpark.
- There is a University of Manitoba steering group, coordinated by the Government Relations Office, working with Federal Human Resource officials on the Champions Program. This program is a proactive strategy promoting the Public Service as a career choice for university graduates. The steering group includes John Alho, Associate Vice-President (External), George Maclean, Professor, Political Studies, Marek Debicki, Professor, Political Studies, David Ness, Associate Professor, Career Services, Lynda Peto, and Angela Bohonos, Employment Advisors, Career Services. Topics under discussion include the Masters in Public Administration course, Career Fair, Co-op programs, direct appointments of top level students to Public Service positions, a speaker's series by senior Federal officials, and a focus on improving employment equity in the Public Service including hiring aboriginal graduates.
- The Honourable Jim Rondeau, Minister of Science, Technology, Energy and Mines announced $\$ 1.3$ million in funding for research into health sciences, the environment and new technologies for the University of Manitoba on September 22. Dr. Digvir Jayas, Vice-President (Research) brought greetings on behalf of the University of Manitoba. This funding was provided through the Manitoba Research and Innovation Fund.
- Debbie McCallum and John Alho toured Dockside Green in Victoria, BC and the residential developments at both Simon Fraser University and University of British Columbia. The purpose of these tours was to get a better understanding of the challenges and opportunities inherent in developing an environmentally sustainable community and to see if there are lessons that could be applied to a possible future development at the University of Manitoba's Southwood lands.


## AGENDA ITEM: Establishment of the Manitoba Institute for Materials

RECOMMENDED RESOLUTION:

THAT the Board of Governors approve the establishment of the Manitoba Institute for Materials [as recommended by Senate November 4, 2009].

Action Requested: X Approval Discussion/Advice $\square$ Information

## CONTEXT AND BACKGROUND:

The University possesses significant strength in the area of materials in the Clayton H. Riddell Faculty of Environment, Earth, and Resources, the Faculty of Engineering, the Faculty of Science, and the Faculty of Agricultural and Food Sciences. There is also an interest in this field from the Faculty of Dentistry.

The proposed Institute would initially be a virtual entity, eventually growing into a physical entity which could be housed in basement of the Allen Building. Select instrumentation that could be used across a broad spectrum of materials activities would be housed in the physical entity; this equipment is currently housed in Science and Engineering buildings.

## RESOURCE REQUIREMENTS:

The proposal includes a five year budget for operations and renovations. Several Faculties and Departments as well as the Vice-President (Research) Office have committed funds for the five year plan. Members of the Institute have been successful in past applications to external funders and it is expected that they will continue to apply and be successful in obtaining funds.

University funding:
Revenue: $\$ 66,000 /$ year (Faculty and Institutional commitments)
Expenses: $\$ 66,000 /$ year (including administrative support, operating expenses, annual meeting, seminar program, public relations and teaching buyout for Director)

Non-university source of funding:
Revenue: $\$ 255,000$ (includes $\$ 75,000$ in user fees)
Expenses $\$ 255,000$ (including renovations of $\$ 205,000$ and Laboratory manager $\$ 50,000$ )
While the sub-committee of the Senate Committee on University Research recommended that the proposai upgrade the suppori provided to the Director, the Vice-President (Research) in discussion with three Deans and the Director of the proposed Institute agreed that this additional support would not be required initially but would be required in the future.

## IMPLICATIONS:

The proposed Institute will draw together and coordinate the work of six existing research centres, networks or facilities involving some 37 university faculty across seven departments drawn from four faculties, around the broad theme of research into materials. It aims to create a paradigm shift in how basic and applied materials research is carried out in the university by explicitly fostering networking and collaboration between researchers from different backgrounds and disciplines, whilst supporting existing activities and promoting the research and its value to external stakeholders.

## ALTERNATIVES:

N/A

CONSULTATION: [delete if not applicable]
N/A

UNIVERSITY

## Board of Governors Submission

Routing to the Board of Governors:

| Reviewed | Recommended | By | Date |
| :---: | :---: | :---: | :---: |
| X | X | Senate Committee on Awards | June 10, 2009 |
| $x$ | X | Senate Executive | October 21, 2009 |
| X | X | Senate | November 4, 2009 |
| $\square$ | $\square$ |  |  |
| $\square$ | $\square$ |  |  |
| Submission prepared by: |  | Senate |  |
|  |  |  |  |
| Submission approved by: |  | University Secretary |  |
| Attachments |  |  |  |
| - Correspondence from Dr. Digvir Jayas, Vice-President (Research) <br> - Report of the sub-committee of the Senate Committee on University Research <br> - Proposal for the Establishment of the Manitoba Institute for Materials |  |  |  |


| University | Office of the |
| :--- | :--- |
| of Manitoba | VIce-President (ReSEARCH) |

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## MEMORANDUM

TO: Mr. Jeff Leclerc, University Secretary
FROM: Digvir Jayas, Vice-President (Research) and Chair, Senate Committee on University Research

DATE: September 15, 2009
SUBJECT: Proposal to establish the Manitoba Institute for Materials
Attached is the proposal to establish the Manitoba Institute for Materials. According to the Policy on Research Centres, Institutes, and Groups, this proposal has been reviewed and approved by the Senate Committee on University Research.

The Manitoba Institute for Materials (MIM) will "create a paradigm shift of how both basic and applied materials science are carried out and applied at the University." At this time, there are numerous researchers at the University studying materials. This Institute would encourage and foster more networking and collaboration among the researchers with diverse backgrounds. This would increase visibility of the research programs both internally and externally to the University.

The following existing research centres, groups, and networks would contribute to the Institute: The Crystallography Research Centre, The Aerospace Materials Engineering Facility, The Nuclear Magnetic Resonance Facility, The Surface Characterization Facility, The Composite Materials and Structures Group, The ISIS Canada Research network.

The Institute will initial be a virtual entity, but will eventually grow into a physical entity. Only select instrumentation that could be used across a broad spectrum of materials activities would be housed in the physical entity. Currently this equipment resides in Allen, E-1, E-3 and the Wallace buildings. It is expected that members will apply for Canada Foundation for Innovation and NSERC for funds which will assist in the expansion of the Institute. The Allen building basement could be renovated to be the central facility. This could be done though funding such as CFI or WD.

The proposal includes a 5-year budget for operations and renovations. Several Faculties and Departments as well as the Vice-President (Research) Office have committed funds for the 5year plan. Members of the Institute have been successful in past applications to external funders ( $\$ 32 \mathrm{M}+$ in the past five years, circa December 2006) and it is expected that they will continue to apply and be successful in obtaining funds.

Please note that along with this proposal, is the report from the Senate Committee on University Research, clarification notes from the proposer, and email clarification from the Vice-President (Research) regarding some comments from SCUR and the actual recommendation to Senate.

Please include this report and recommendation on the next Senate agenda. Please feel free to contact me should you require any further information.

Thank you.
DSJ/nis
Encl.

## > Dear SCUR members:

$>$
$>$ The following message is being forwarded to you on behalf of Dr.
> Digvir Jayas, Chair of the Senate Committee on University Research. ${ }^{* *}$
$>$ Please note the revised motion ${ }^{* *}$
$>$
$>$
> During the March 12, 2009 of the SCUR a motion was passed for me to meet
$>$ with the appropriate deans and discuss issues raised during the SCUR
$>$ meeting in regard to the Composite Research Group (which currently
$>$ exists in the Faculty of Engineering) and Manitoba Materials Institute $>$ (MIM) (proposed). I had reported at the May 21, 2009 SCUR meeting that I
$>$ was not able to get the group together and therefore would report once
$>$ the meeting had occurred. On June 4th, I met with Drs. Ruth, Halden,
> Whitmore and Caley to discuss the issues raised at the March 12, 2009
$>$ meeting.
$>$.
$>$ The first issue deals with the Composite Research Group for which the
$>$ Faculty of Engineering has submitted a proposal to SCUR to establish a
$>$ Composite Research and Commercialization Centre (CRCC) (i.e., convert
$>$ the Group to a Centre). A sub-committee (Dr. Wittenberg (Chair) and Drs.
> Doering and Stirling (Members) was established on March 12th, 2009 to
$>$ review this submission. The concern during the March 12th meeting was
$>$ around overlap between CRCC and MIM. The CRCC's focus is on the
> manufacturing of composites for various applications and the MIM has
$>$ significant strengths for the characterization of materials from
$>$ different sources. The CRCC members may use the MIM- managed instruments
$>$. for understanding the properties of composites. Thus, CRCC is
> complementary to MIM with a very limited overlap to MIM and both could
$>c o-e x i s t$. The second issue dealt with the financial sustainability of
$>$ the MIM and the hiring of a "Research Coordinator" for the MIM in place
$>$ of administrative support. The financial plan for the MIM includes a
$>$ provision of the user fees for instruments by the members of the MIM and
$>$ other users from within and outside the University. With the growth of
$>$ the MIM, this revenue is expected to increase significantly and should
$>$ provide funds to support the MIM. Funding from the Faculties and Central
$>$ sources is to provide administrative support to the Director. The
$>$ research development is expected to be done by the Director and members
> of the MIM, therefore Deans Ruth, Halden, and Whitmore have indicated
$>$ that at this stage we should move forward with the MIM, as proposed, and
> not hire a "Research Coordinator". Evaluation of the MIM would then
> occur after three years, as suggested by the sub-committee chaired by
$>$ Dr. Trevan.
$>$
> Please let me know (with c.c. to gail_cornock@umanitoba.ca) by
$>$ Wedṇesday, June 10, 2009 if you require more information or you are able
$>$ to approve the motion as proposed by the sub-committee which is outlined
> below:
$>$
> *The sub-committee recommends to the Senate Committee on University
$>$ Research (SCUR) that the proposal to establish a Manitoba Institute for
$>$ Materials be passed to Senate for its approval.*
$>$
$>$ With sincere thanks.
$>$
> Gail Cornock
> Assistant to the Vice-President (Research)
> University of Manitoba
$>207$ Administration Building
$>$ Winnipeg, Manitoba R3T 2N2
$>$ Tel: 204-474-7859
> Fax: 204-474-7568
> e-mail: gail_cornock@umanitoba.ca
> www.umanitoba.ca/research
$>$ Bringing Research to Life
> Gail Cornock
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$>$ www.umanitoba.ca/research
$>$ *Bringing Research to Life *
$>$

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Telephone (204) 474-9348
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## UNVETRTY OF:" WMTOBA

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October 21, 2008

Dr. Joanne C. Keselman
Chair, Senate Committee on University Research
Room 207 Administration Building
University of Manitoba
Dear Joanne,
Attached please find a proposal to establish the Manitoba Institute for Materials as a Senate approved institute at the University of Manitoba. I have included the proposal following the University Policies and Procedures format, letters of financial commitment, letters of support and CVs for the initial membership.

Should you require further information, please let me know.
With thanks,


Mark Whitmore
Dean, Faculty of Science

UNiversity of Manitoba

256 Agriculture Building Winnipeg, Manitoba Canada R3T 2N2
Telephone (204) 474-6026
Fax (204) 474-7525

## MEMORANDUM

DATE: March 5, 2009
TO: Dr. Digvir Jayas, Chair Senate Committee on University Research

FROM:
Dr. Michael Trevan, Chair,


Sub-Committee Reviewing the Proposal to Establish a Manitoba Institute for Materials (MIM)

SUBJECT: Recommendation to Senate

## Preamble

The Faculty of Science forwarded to the Senate Committee on University Research (SCUR) a proposal to establish the Manitoba Institute for Materials (MIM).

The Policy on Research Centres, Institutes and Groups articulates procedures for the establishment of Research Centres at the University of Manitoba. Accordingly; a sub-committee of SCUR was struck to review the proposal to establish the Manitoba Institute for Materials. The sub-committee consisted of Dr. Michael Trevan, Dean, Faculty of Agricultural and Food Sciences; Dr. Roberta Woodgate, Associate Professor, Faculty of Nursing; Dr. Patricia Martens, Director, Manitoba Centre for Health Policy; and Mr. Suresh Neethirajan, Member, Graduate Students' Association: The sub-committee met on January 16, 2009.

## Observations

The sub-committee reviewed the extensive documentation provided by the proponents of the Manitoba Institute for Materials. Following discussion by the sub-committee a written submission was made to the Dean of the Faculty of Science and Dr W Caley, Director of the MIM Initiative, requesting clarification on a number of issues (Appendix A). Following a detailed written response from Dr Caley (Appendix B), the sub-committee communicated to the Chair by email any remaining concerns that they had: these are summarized below.

The proposed Institute will draw together and co-ordinate the work of 6 existing research centres, networks or facilities involving some 37 university faculty across 7 departments drawn from 4 faculties, around the broad theme of research into materials. It has the worthwhile aim of creating a paradigm shift in how basic and applied materials research is carried out in the
university by explicitly fostering networking and collaboration between researchers from different backgrounds and disciplines, whilst supporting existing activities and promoting the research, and its value, to external stakeholders. This is a challenging and ambitious agenda. It is not possible to describe the proposed research with any degree of brevity: even given longevity it would not be fully possible because a major point of the Manitoba Institute for Materials is to stimulate new avenues or research investigation or application.

The management model was the issue of main concern for the sub-committee. Whilst there is a clear description of the four main operational committees (Steering, Management, Facilities Management, and Educational Initiatives), little attention is paid in the documentation as to how the relationship between the Manitoba Institute for Materials and the existing centres and networks will be nurtured and facilitated. The sub-committee requested further information on this aspect (Appendix A), but was not fully convinced by the answer (Appendix B). Our conclusion was that these were relationships that might be difficult to capture on paper, and would undoubtedly, no matter what was written down, depend on commonsense and goodwill to operate effectively. The issues here range from details such as who, in which body, will be responsible for submitting or signing off on research grants, to broader issues of promotion and publicity of research outputs. It remains our contention that unless careful attention is paid to this aspect of the functioning of the Manitoba Institute for Materials it will be less than successful in achieving its aims.

The final concern of the sub-committee was that the level of administrative support to be provided to the Director was inadequate and inappropriate. We were unanimously of the view that a full-time research coordinator is essential for the successful establishment and development of the Manitoba Institute for Materials, particularly given its complexity and size. This view is based on other experience within the university, of the building of complex multidisciplinary research teams.

## Recommendation

The sub-committee recommends to the Senate Committee on University Research (SCUR) that the proposal to establish a Manitoba Institute for Materials be passed to Senate for its approval on condition that the support provided to the Director is upgraded. It is also recommended that the period of approval be limited in the first instance to 3 years at which point the nature of the Manitoba Institute for Materials working relationships with its constituent centres, networks and facilities be reviewed.

Attachments

- Appendix A
- Appendix B

Request by SCUR sub-committee for further information
The sub-committee of SCUR, Michael Trevan (chair), Pat Martens, Roberta Woodgate and Suresh Neethirajan met on Friday $16^{\text {th }}$ January to review the proposal for the formation of the Manitoba Institute of Materials. Whilst broadly supportive of the concept of the Institute the sub-committee would be grateful for a response to the following issues before it completes its review. We are asking for this in written form because we feel that your responses might be usefully included within the rest of the application "package".

The application (p 3) describes the Institute as a virtual body that will co-ordinate existing research activities across the university. The sub-committee agreed that this could indeed be a very useful function that would be the major "added value" that the Institute would contribute to the broad spectrum of existing materials based research in the university. However, by page 10 it is proposed that the Institute, its equipment and laboratories could be housed in 200 to 760 sq.m. of the Allen building basement, which makes the Institute seem more real than virtual. We would be grateful therefore if you could clarify whether it is intended that the Institute's primary function is to co-ordinate and help grow the research and HQP education functions of its individual members and groups (i.e. the virtual institute concept) or to be a real functional research laboratory/facility in its own right. It might be that it is intended that the Institute will move over time from virtual to real, but this is not clear. If this is the intention then it could have significant consequences for our second issue (q.v.).

The Institute is described as coordinating "the research of...existing research centres, groups or networks" but we can find no information on how in practice the relationship between these existing bodies and the MIM is to be managed. For example, will these other bodies be affiliated to the MIM; will they make reference to the MIM in publications or grant or equipment applications; will new equipment or facilities belong to MIM or to those groups/centres/individual collaborators who have most need of it? If over time the MIM moves from being virtual to real, what effect will this have over the nature of those relationships?

Our third issue was again related to the role of the MIM intention to "enhance the functionality of all researchers and research groups by way of providing a new multidisciplinary environment..." Experience elsewhere in the university suggests that this requires a proactive approach utilizing rather more, and different, resources than this proposal contains. To be specific we would be more convinced that MIM would achieve this very worthwhile aim if it were to employ a full-time research development coordinator to work alongside the Director, rather than a part-time administrative assistant. Your reflection on this issue would be most welcome.

Lastly, we note the detailed description of the various committees and levels of membership through which the MIM intends to operate. However, none of these bodies
contains any representation from outside the university from industry or government. In the light of this we would be grateful if you could explain how the MIM intends to garner the input and advice of its external partners and stakeholders.

In conclusion may I repeat that the sub-committee sees great value in what you are trying to achieve with the MIM, particularly highlighting to external stakeholders the breadth and depth of materials research at the university, and in stimulating research through facilitating multidisciplinary collaborations across the various internal boundaries. Any clarity that you can add to the issues we have raised will be of great help in moving our deliberations forward.

Michael Trevan
Monday, January 19, 2009

Michael Trevan
Chair, Sub-committee of SCUR
Re: Response to issuies related to the proposal for the formation of the Manitoba Institute for Materials

Dear Michael
Thank you for reviewing the MIM proposal and offering the opportunity to respond to several issues. My response is below.

Issue 1. The intent is both. Initially it will be virtual but eventually it will become a physical entity. The major function is indeed to coordinate and help grow the research and HQP education functions of individual members and groups involved in materialsrelated activities at the university. However, to enhance the visibility of the MIM the proposal includes renovation of space that would serve as a visible portal for materials research activities at the university. This would also serve as the liaison between internal and external activities. Therefore the intent is to house only selected instrumentation that is user friendly across a broad spectrum of materials activities, primarily in the area of materials microstructural characterization, along with a modest sample preparation area. Individuals or groups, internal or external, could then access the broader university materials community to pursue their materials needs (the virtual part) via both a dedicated web-site and assistance from MIM members and personnel.

Issue 2. With reference to my response to Issue 1, there is the expectation that some new microstructural instrumentation will be situated in the Institute to offer services of a general nature. The relationship between MIM and other centres/groups is envisaged as being collaborative. The MIM will evolve from providing, for example, a compilation of existing equipment, user fees and policy procedures to a harmonized university approach to such policies and procedures. The "coordination" part is intended to ensure that the various centres/groups are both aware of each other's activities and of the availability of accessible instrumentation infrastructure. Many individuals from these other units provided cvs in support of the proposed MIM knowing that as members of the new institute they will have an opportunity to participate in a broad spectrum of materials activities including a dedicated seminar series, visiting researchers and opportunities for enhanced graduate student interactions. However, their organizations will not be managed by the MIM. Rather, when appropriate, it is expected that the MTM will lead collaborative grant/equipment applications, especially in the area of securing infrastructure funding. The decision on whether or not to house infrastructure belonging to an individual or group under the umbrella of the MIM will be left to them, as long as such infrastructure is compatible with services and space available in the MIM.

Issue 3. The part-time administrative assistant position was suggested as a way to assist the Director in establishing the Institute in its formative year(s). There is no doubt that the position will evolve into a full-time research development coordinator to proactively promote the MIM.

Issue 4. Page 5, section 3(b)(ii) does include external collaborators as Associate Members. However, perhaps a more appropriate response to the question is that although not specifically noted in the proposal, once established, the MIM intends to appoint an advisory board. This will be made up from external stakeholders and partners, for example membership from the local NSERC office, the aerospace sector/MARCC, the local consulting community, ISIS Canada, Province/WED, Hydro, Composite Innovation Centre. Initial discussions have already been held with several of these organizations. In addition, individuals from these and other external groups will be invited to participate in the seminar series. This latter involvement will facilitate direct communication between external stakeholders and the university researchers and research students.

In conclusion, thank you for the opportunity to respond. Should you have any other questions or require further clarification please let me know.

Bill Caley
Friday January 23, 2008.

Proposal to establish the

## Manitoba Institute for Materials

as a Senate approved Institute of the University of Manitoba

October 10, 2008

Proponent: Materials Research Initiative Working Group
Dr. Digvir Jayas, Associäte VP Research
Dr. Norman Halden, Dean, Clayton H. Riddell Faculty of Environment, Eatth and Resources
Dr. Douglas Ruth, Dean, Faculty of Engineering
Dr. Mark Whitmore, Dean, Faculty of Science
Dr. William Caley, Director, University of Manitoba Materials Initiative
Document author: William Caley tel: 474-9023
email: caleywf@cc.umanitoba.ca

## 1. Name of Research Centre/Institute.

Manitoba Institute for Materials

## 2. Description and Justification

## 2 (a) Mission and Objectives

Mission - To create an internationally recognized research and educational environment that facilitates collaboration and innovative research in materials at the University of Manitoba.

Objectives

1. Facilitate multidisciplinary materials research at the University, and provide advice on its, and associated infrastructure's, further development
2. Encourage the exchange of knowledge and expertise among researchers
3. Increase visibility of materials research occurring at the University
4. Secure multiuser, broadly accessible infrastructure for materials research
5. Coordinate and create major funding proposals
6. Help to maintain the research readiness of multiuser research infrastructure
7. Establish a multidisciplinary educational environment
8. Represent the interests of the entire materials research community
9. Serve as an interface to government and industry
10. Facilitate the development of discoveries and the transfer of knowledge and IP related to materials research outside the University, working closely with the University's Technology Transfer Office.

Rationale - Materials research is the foundation of technology, and increasingly the foundation of our understanding of the environment, biology and health care. The impact of advanced materials envelops every aspect of the modern world. Breakthroughs resulting in new technologies invariably trace their origins to two things: 1) fundamental
research in the basic properties of matter, and 2) research aimed at manipulating properties (e.g. structural, chemical, electrical, magnetic, optical) by controlling the structure (both electronic and geometric) via interactions at the atomic and molecular level, often in ways that do not otherwise occur in nature. Indeed, nearly every materials research program has an ultimate objective either of designing metamaterials with novel and controlled properties or of developing a better understanding of naturally-occurring minerals and materials and their relationship to the constantly changing environment.

The Manitoba Institute for Materials will create a paradigm shift of how both basic and applied materials science are carried out and applied at the University. There is a large number of materials researchers at the University who are actively pursuing topics in the fundamental science of complex materials. What is needed is a mechanism to explicitly foster networking and collaboration between researchers with different backgrounds and from diverse disciplines, as well as to maintain, build and enhance the research capabilities of the University's materials scientists. Their research programs would also benefit considerably through increased visibility, both within the University and beyond. The large pool of expertise in materials could then be used much more effectively to propel the applied research programs to new levels of innovation and excellence, thus capitalizing on this know-how and becoming a potent economic driver for Manitoba industries. The Institute will also stimulate the research and training environment within the University by organizing a regular seminar series and by bringing in visiting scientists for discussions, seminars, and longer term stays. Finally, the Institute will provide a platform for leveraging grant applications of members for equipment and personnel to enhance the research at the University.

Initially, the MIM will be a virtual institute that will coordinate the research of the following existing research centres, groups or networks including:

- The Crystallography Research Centre
- The Aerospace Materials Engineering Facility
- The Nuclear Magnetic Resonance Facility
- The Surface Characterization Facility
- The Composite Materials and Structures Group
- The ISIS Canada Research Network (www.isiscanada.com).

World-class materials research is also being performed in smaller groups, laboratories and facilities across the campus. The Manitoba Institute for Materials will be unique in that it intends to enhance the functionality of all researchers and research groups by way of providing a new multidisciplinary environment that bridges the gap between research areas. The institute will assist in recruiting world-class researchers to the University.

## 2 (b) Scope of activities envisioned

The Institute has identified a number of multidisciplinary research themes (Appendix A), initially to build collaborations. These include areas ranging from electronic materials to spin glasses, from nanostructures to polymers and soft biomaterials, from complex structured metamaterials to Superalloys, from composite material systems and intelligent
sensing to high performance computing materials research, from magnetic materials to photonic and phononic microsystems, and from MEMS and NEMS to minerals as well as to research related to the environment. The generic focus areas that are envisioned will be dynamic in the sense that they are expected to evolve and change as the materials science and engineering field grows, and research activities at the University develop.. The Institute's activities will have the following components:

- The Institute will promote outreach to industry and government organisations to solve emergent problems.
- The Institute will provide a unique recruitment tool to attract students and faculty to the University.
- The Institute will encourage co-supervision of students across departmental and Faculty boundaries.
- The Institute will provide a support structure that allows members to pursue the infrastructure needed to facilitate world-class research in complex materials as. well as to apply for research funds from provincial, national and international sources.
- The Institute will provide a forum for strategic planning regarding materials research including infrastructure development and sustainability with such advice being provided to Faculties and the University Administration.
- The Institute will establish and maintain a web site that indicates the scope of research interests, capabilities and activities at the University. This site will serve as a database of expertise and instrumentation relevant to materials research. It will also promote and advertise research in the science of materials at the University, highlighting its activities and strengths.
- An annual report summarizing the activities and research interests of the Institute and its members will be assembled and distributed.


## 2 (c) Research benefits and opportunities likely to result from the establishment of the Institute

The issues to be discussed in this section have been largely addressed previously in sections 2(a) and 2(b).

Briefly, there are at present some clear multidisciplinary collaborations occurring between members within a department, across departmental boundaries and across Faculty boundaries. In recent years collaborative efforts in the form of collective proposals to CFI and NSERC for equipment and infrastructure funding have formed the basis for the need for a more structured approach to materials research at the university.

## 3. Constitution

3(a) Organisational structure/roles and responsibilities of committees
The Manitoba Institute for Materials will have the following structure. As the initiative progresses across Faculty and Department lines, the committees will be adjusted as appropriate to be inclusive.
(i) A Director (with secretarial support as appropriate) reporting to the Vice President Research or designate.
(ii) A Steering Committee consisting of the Vice President Research or designate, the Deans of the Faculties of Science, Engineering and the Clayton H.Riddell Faculty of Environment, Earth and Resources or their designates, and the Director. This is the University committee responsible for the overall fiscal operation of the Institute.
(iii) A Management Committee consisting of the Director and representatives from each participating Faculty. This committee promotes and provides direction for the activities of the Institute at the University. It also facilitates industrial and other external
interactions as well as the addition of new Members, Associate Members, Student Members and Visitors to the Institute. Committee members are appointed based on nominations from Members and approved by the Steering Committee. The Management Committee is also advisory to the Director.
(iv) A Facilities Management Committee with membership from each unit with instrumentation involved in the initiative. This committee is responsible for management of materials facilities, preparation and upkeep of a web-site that will list facilities, contact personnel and charge-out rates, as well as identification of upcoming funding opportunities. Committee members are appointed based on nominations from Members and approved by the Management Committee.
(v) An Educational Initiatives Committee with three members from the overall membership of the Institute. This committee will provide leadership in promoting interdisciplinary courses, both graduate and undergraduate, in science and engineering at the University and pursue opportunities for external funding as appropriate (e.g. NSERC CREATE Program). Committee members are appointed on nominations from Members and approved by the Management Committee.

## 3(b) Categories of membership and the criteria of each of these categories

(i) Members: Faculty of the University (including Adjunct Professors) that form the member groups (listed in this document) will be the initial Members. Only Members can become part of the committee structure of the Institute.
(ii) Associate Members: These include all postdoctoral fellows and research associates that are supervised by Members, in addition to long term visitors to the Institute and other
external collaborators such as individuals with positions in industry or government as appropriate.
(iii) Student Members: Graduate and undergraduate students supervised by Members.
(iv) Visitors: Researchers that visit the Institute for short periods of time, normally less than twelve months.

3(c) Procedures whereby appointments will be made for each membership category Members will be appointed based on nominations made by Members and approved by the Management Committee.

Associate Members will be added to the Institute roster through their affiliation with Members

Student Members will be part of the Institute through their supervisors who are Members of the Institute.

Visitors will be approved through their work affiliation with Members of the Institute.

## 3(d) The privileges and responsibilities of membership.

Members will have the responsibility of performing and publishing cutting edge, worldclass research in premier peer-reviewed journals.

Members will perform, if and as appropriate, multidisciplinary experimental and theoretical research.

Members will foster links with other researchers in the Institute as well as outside the Institute. Members will cultivate associations with Industry and Government Laboratories.

Members will attend regular (duly constituted) meetings.
Members will have the privilege of accessing equipment that is a part of the distributed infrastructure associated with the Institute, subject to infrastructure access policies.

Members are responsible for encouraging interactions between students.
Members will co-supervise undergraduate and graduate students as well as postdoctoral fellows where it is appropriate.

Members are required to explicitly name the Institute, and Institute funding if applicable, in any work that arises from the Institute's environment and resources. For example, in a peer-reviewed publication, the member's contact information would include the affiliation with the Institute. This will provide one of the primary mechanisms that will increase the visibility of the Institute and the University.

## 4. Management

## 4(a) Reporting

The Manitoba Institute for Materials will report to the Vice President (Research) of the University (or designate) through the Director.

## 5. Proposed Initial Membership

The following is not intended to be exclusive. Rather, it is a listing of those who have indicated an interest in the proposed Institute to date.

## Chemistry

Dr. M. Bieringer
Dr. M. Freund ${ }^{2}$
Dr. T. Hegmann
Dr. S. Kroeker
Dr. H. G. Schreckenbach
Civil Engineering
Dr. A. Mufti ${ }^{1,2,3}$
Dr. D. Polyzois ${ }^{1,2}$


Dr. N. Rattanawangcharoen ${ }^{2}$
Dr. A. Shalaby ${ }^{2}$
Dr. D. Svecova ${ }^{1,2}$
Dr. A. Woodbury
Electrical and Computer Engineering
Dr. D. Buchanan
Dr. D. Oliver
Dr. C. Shafai
Dr. D. Thomson
Food Science
Dr. M. Scanlon
Dr. H. Sapirstein
Geological Sciences
Dr. M. Fayek
Dr. N. Halden
Dr. F. Hawthorne

[^0]Dr. W. Caley
Dr. M. Chaturvedi
Dr. R. Jayaraman ${ }^{2}$
Dr. O. A. Ojo ${ }^{2}$
Dr. N. Richards
Dr. Q. Wang
Physics and Astronomy
Dr. S. Cadogan
Dr. C.-M. Hu
Dr. J. Page
Dr. R. M. Roshko
Dr. B. W. Southern
Dr. J. Vail
Dr. J. van Lierop
Dr. M. Whitmore
Dr. G. Williams
${ }^{1}$ Member of ISIS Canada
${ }^{2}$ Member of the Composite Materials and Structures Research Group
${ }^{3}$ President of ISIS Canada

## 6. Physical Resources

## 6(a)(i) Available research facilities, current strengths and weaknesses

Materials related instrumentation and equipment infrastructure is distributed and resides primarily in Allen, E-1, E-3 and Wallace buildings as well as elsewhere in the University. The major weakness is a lack of coordination between materials researchers together with the rising infrastructure costs accentuated by the decentralised nature of materials research at the University.

## 6(a)(ii) Library Statement for the Proposed Manitoba Institute of Materials

Prepared by
Marie Speare, Bibliographer for Chemistry, Sciences and Technology Library
The Manitoba Institute of Materials is being proposed to bring together researchers from various departments and faculties at the University of Manitoba who are currently engaged in materials science research. The University of Manitoba Libraries has developed collections to support existing courses and research activities within the individual departments involved. The primary collections related to materials science are held in the Sciences and Technology Library and Engineering Library. Collections in textiles and biomaterials are also located in the Elizabeth Dafoe Library and the Neil John Maclean Health Sciences Library, respectively.

Over the last five years the Libraries has been improving the monograph and journal collections in the area of materials science. Over $\$ 19,000$ has been allocated for one-time purchases to improve the monograph collections that support the Canada Research Chairs engaged in materials science research. The journal collection for materials science research has also improved with the addition of several journals since 2001. Examples include: Journal of Applied Physics, Chemistry of Materials, Materials Science and Engineering R: Reports, Journal of Materials Chemistry, Journal of Applied Crystallography, Physics and Chemistry of Minerals, Structure and Bonding.

The University of Manitoba Libraries has a good collection of high impact journals in the subject area. ISI's 2006 Journal Citation Reports was used to assess its current strength. The Libraries subscribe to $87 \%$ of the journals with ISI impact factors greater than $1^{1}$ in subject areas related to materials science and $90 \%$ of the journals with impact factors greater than 2. A total of 166 materials science journals with impact factors greater than 1 are available. (See Appendix B for details.) An additional 117 lower impact journals in these subjects are also available. Some journals that fall outside of the subjects selected for this assessment, such as journals in the area of inorganic and solid state chemistry, would provide additional support. Several of the journals in the collection are only accessible in electronic format with backfiles for approximately the last 10 years.

Although the journal collection in the area of materials science is strong, there are some higher impact journals that are unavailable. Examples include: MRS Bulletin, Journal of Materials Research, Journal of Nanoscience \& Nanotechnology, Journal of Vacuum Science Technology A, Journal of Vacuum Science Technology B, Current Nanoscience, Electrochemical and Solid State Letters and Journal of the Electrochemical Society. It is also anticipated that a new journal, Nature Nanotechnology, will become increasingly important for materials science research. New baseline funds of $\$ 10,948$ would be necessary to subscribe to these titles. At this time, articles from these journals will have to be requested from the Libraries' free Document Delivery service which now offers a post to Web feature that provides desktop delivery for journal articles.

The Libraries subscribes to several databases that index the material science literature. The following databases are available to the University of Manitoba community:

- Compendex
- GeoRef
- Metadex
- SciFinder Scholar
- Inspec
- Web of Science
- Scopus

[^1]The Libraries also provides access to RefWorks, a web-based bibliography and database manager. RefWorks has several features that facilitate sharing of references with colleagues including sharing accounts, creating read-only accounts or using RefShare to share folders with colleagues.

The University of Manitoba Libraries currently has the resources to support the research areas proposed for the Manitoba Institute of Materials. Ongoing additional funding would, however, add depth to the journal collection.

## 6(b) Future requirements

To provide a world-class training environment in the science of materials, a goal of MIM is to become a nation-wide synthesis and characterization facility for materials. To complement the current equipment resources; members intend to apply for Canada Foundation for Innovation (CFI) funds. Successful applications to agencies such as CFI and NSERC (e.g. MRS; RTI) will provide the necessary monies for expansion and operation of equipment, infrastructure and facilities.

A central facility, as part of the overall infrastructure, would be highly beneficial. One potential opportunity is for the MIM to apply for funding such as CFI and WD to renovate the basement of the Allen building ( $760 \mathrm{~m}^{2}$ in total) to house some of the Institute and its equipment and laboratories. Tentative plans are being explored. Initially; Phase I renovation could include $200 \mathrm{~m}^{2}$ to house new microstructural instrumentation as well as a seminar room and office space to serve as a visible portal for the Institute. Subsequent renovations for the remaining $560 \mathrm{~m}^{2}$ could be for newly-acquired groups of characterisation instrumentation intended to provide a suite of complementary materials characterisation capabilities to serve both internal and external clients.

## 7. Financial Resources

The Manitoba Institute for Materials intends to be an Institute geared towards providing a world-class training and research environment for the science of materials. The Institute's basic mandates can be initiated with much of the existing infrastructure. However, for the Institute to be a successful enterprise, funds will be required both to sustain the maintenance and infrastructure presently at the University and to establish a multidisciplinary Institute. This Institute should also have a physical location within which materials research can be conducted; as well, the location should function as a portal that will be viewed by the outside community as a node for such research activities locally, regionally, nationally and internationally. The proposed budget is for each of the first five years and is intended to address needs to establish the Institute. However, concurrently the Members will also. collaborate to secure new equipment and infrastructure funding from, for example, CFI, and NSERC (e.g. MRS) with a view to provide long-term fiscal support for the multidisciplinary materials sector of research at the University of Manitoba. A proposed budget for each of the first five years is given below in Budget A. In addition, Departmental, Faculty and Institutional commitments
for the further development and maintenance of materials infrastructure at the University (each of the first five years) are given in Budget $B$ and proposed non-university sources of funding in Budget C.

## (A) Annual Operating Budget (each of five years)

| Revenue | Amount/year |
| :---: | :---: |
| Science | \$11,800 |
| Environment | \$7,600 |
| Engineering | \$7,600 |
| Central Funds | \$27,000 |
| Physics and Astronomy | \$2,000 |
| Chemistry | \$2,000 |
| Food Science | \$2,000 |
| Electrical and Computer | \$2,000 |
| Mechanical and Manufacturing | \$2,000 |
| Civil Engineering | \$2,000 |
| Total | \$66,000 |
| Expenses |  |
| Administrative support (part time) | \$37,000 |
| Miscellaneous operating expenses (web-site, supplies, travel) | \$12,000 |
| Annual meeting | \$3,000 |
| Seminar program | \$5,000 |
| Public relations | \$1,000 |
| Teaching buyout for Director | \$8,000 |
| Total | \$66,000 |

## Expenses

Administrative support (part $\$ 37,000$
time)
Miscellaneous operating $\$ 12,000$
expenses (web-site, supplies, travel)
Annual meeting $\quad \$ 3,000$
Seminar program $\quad \$ 5,000$
Public relations $\$ 1,000$
Teaching buyout for Director $\$ 8,000$

Total $\$ 66,000$
(B) Commitments for Further Development and Maintenance of Materials Infrastructure (each of five years)

It is expected that the new Institute will serve the entire University materials research community, especially considering the broad scope and nature of "materials" activities.

Therefore, the proposed Institute will be a model for interdisciplinary research that the University can showcase to the external community.

Although specific plans for future renovations are tentative, the proponents have developed a budget which is notionally based on a Phase 1 renovation of $200 \mathrm{~m}^{2}$. All or part of this could be in the Allen Building basement, or it could be distributed. Based on discussions with Physical Plant personnel (e.g. Mr. Al Griffiths/Prof. Rudy Schilling, Jan. 25,2008 ) the renovation cost would be up to $\$ 400$ per square foot, range depending on services needed and, for the Allen Building, whether or not there is a requirement for a second exit (safety/code). Therefore we estimated the cost for Phase I renovations to be $\$ 800 \mathrm{~K}-\$ 1 \mathrm{M}$. Several funding sources (e.g. WD, Province, indirect costs) will be explored to complete these renovations. Pending the outcome of the 2008 CFI applications; the University may renovate a central area or several areas depending on services required for instrumentation (see Budget (C)).

## Proposed budget (each of five years). Proposed non-university sources of funding are given in Budget (C).

## Revenue

| Science | $\$ 50,000$ |
| :--- | ---: |
| Engineering. | $\$ 25,000$ |
| Environment, Earth, Resources | $\$ 15,000$ |
| University + Physical Plant | $\$ 90,000$ |
| User Fees | $\$ 75,000^{*}$ |
| Total | $\$ 255,000$ |
| Expenses | $\$ 205,000$ |
| Renovations | $\$ 50,000$ |
| Laboratory manager | $\$ \mathbf{2 5 5 , 0 0 0}$ |

*Estimate based on average of $\$ 75 / \mathrm{h} \times 10 \mathrm{~h} / \mathrm{wk} \times 2$ instruments

## (C) Proposed Non-University Funding Sources (e.g. CFI/WD)

The funds secured will depend upon the institutional support in (B) and the opportunities available. To date a significant level of success has been achieved by various members of the University materials research community ( $\$ 32 \mathrm{M}+$ in the past five years, circa December 2006). The intent is to build on these successes and be in a position to capitalise on present/future opportunities. Two sources are proposed as follows:
(a) CFI. Section 3.2, CFI Call for Proposals, Feb. 15, 2008 states "Construction and renovations essential for housing the infrastructure effectively are also considered eligible". Assuming two materials-related proposals for the present (2009) competition and a minimum of $\$ 10 \mathrm{M}$ for both (CFI contribution $\$ 4 \mathrm{M}$ ) leaves considerable room for matching the institutional contribution in Budget (B).
(b) WD. The recent (January, 2008) support of infrastructure for composites research by WD, largely for manufacturing/macroscopic investigations provides an opportunity for parallel applied microscopic capabilities. Ongoing discussions with the Composites Innovation Centre (S. McKay) suggest that there is a potential for the proposed Manitoba Institute for Materials to provide microcharacterisation support for composites research. Based on these discussions, it is the intent of the proponent of the Institute to approach WD for infrastructure funding upon approval of the Institute.

## 8. Statements of Support and Commitment

## 8(a) Letters of support

(i) A. Mufti, ISIS
(ii) S. McKay, Composites Innovation Centre
(iii) R. Ludwiok, Manitoba Hydro
(iv) R. Jayaraman, Composite Materials and Structures Research Group
(v) K. Boucher, Standard Aero
(vi) W. Tennesey, TestLabs International
(vii) D'Arcy Phillips, MAHRCC

8(b) Letters of commitment
(i) V.-P. Research
(ii) Dean of Science
(iii) Dean of Engineering
(iv) Dean of Environment, Earth, Resources
(v) Head of Chemistry
(vi) Head of Civil Engineering
(vii) Head of Electrical and Computer Engineering
(viii) Head of Food Science
(ix) Head of Mechanical and Manufacturing Engineering
(x) Head of Physics and Astronomy

## APPENDIX A

## Suggested Research Areas of Interest

## - Complex crystalline materials and nanostructures

From prescription drugs to cookware to computer chips, many materials that are used every day are made of crystals that possess special properties. The properties of any material are largely determined by how its atoms are arranged. For crystalline materials, the atomic arrangement, as well as the arrangement of crystals themselves, are basic to their physical behaviour. Many modern synthetic materials have intentionally tailored atomic or crystal arrangements. Knowing how atoms are arranged in new compounds is fundamental to understanding how to tailor materials chemically and physically to get the desired properties (e.g. for use in new electronic devices). This interdisciplinary thrust area brings together researchers who wish to understand the fundamental behaviour of technologically important materials, such as catalysts, ionic conductors, superconductors, alloys, ceramics, cements, magnets, and radioactive waste forms.
Examples of ongoing research: Magnetic, electronic and transport properties of materials, nanostructures, superalloys, complex minerals, phononic crystals
Potential participants: Bieringer, Cadogan, Chakraborty, Chaturvedi, Hawthorne, Hegmann, Hu, Kroeker, Page, Roshko, Southern, van Lierop, Wang, Williams.

## - Composite material systems

The need to develop light but strong materials to improve on fuel efficiencies in transportation and to improve the performance of engineering structures explicitly requires a good foundation in materials science research. The University can point to success stories in the application of this science, such as the Composites Innovation Centre (CIC) at Smartpark, the ISIS Canada Research Network and the Composite Materials and Structures Research Group. Continued innovation in composites, including those developed from biological materials, will require sound fundamental research to understand the role of structure and bonding at various length scales in dictating the limits of performance as density is decreased. A key question in the adoption of composites from renewable resources is what processing strategies can be devised to compensate for deficiencies in raw material properties (due to natural variability) so that performance targets for bio-composites can be consistently met.

Examples of ongoing research: Aerospace composite materials, intelligent sensing for innovative civil engineering structures, fiber reinforced polymer materials, fabrics, composites generated from biological materials, oil seed resins, "breathable" and "smart" textiles and wound dressings.

Potential participants: Jayaraman; Members of the proposed Composites Research and Commercialization Centre, El-Salakawy, McNeill, Mufit, Members of Composite Innovation Centre, Polyzois, Svecova, Dental Science researchers.

- High Performance Computing (HPC) materials research

The rapid advances of massively parallel computing, coupled with equally impressive developments in theoretical analysis, have generated an extraordinary growth in our ability to model and predict the behaviour of materials and to visualize the results. As a result, computational science is entering a new era that promises to revolutionize our understanding of materials, expanding our knowledge beyond that of idealized systems to touch the real materials that enrich our lives. HPC embraces all aspects of equipment, people, data, software and access capabilities and is essential to the needs of researchers in all disciplines. HPC facilities provide the researcher community with opportunities for inter-institutional and multi-disciplinary collaboration, facilitating research and innovation that would otherwise be impossible.
Examples of ongoing research: Computational chemistry, physics, fluid dynamics and electromagnetics: magnetic materials, biomaterials, spintronics, polymers, soft matter, composite materials, microwave imaging
Potential participants: Alfa, Bibeau, Bridges, Chakraborty, Cullen, Dietrich, Gough, Kroeker, LoVetri, McLeod, Okhmatovski, Ormiston, Rattanawangcharoen, Rasmussen, Schrechenbach, Shah, Snelgrove, Soliman, Southern, van Lierop, Whitmore, Woodbury

## - MEMS and NEMS

Nanosystems technologies (NST's) are making possible the construction of complex systems that possess the benefits of high integration of multi-disciplinary technologies and small size. NST's include microelectronics, micro-fluidics, micro-electromechanical systems (MEMS), nano-electro-mechanical systems (NEMS) and photonics. Several technologies are often combined on a single nanosystem device, enabling the production of powerful devices. Microsystem devices are already greatly impacting our lives, and over the next decades, NST's will impact our world as much as microelectronics has done over the last 30 years.

The expected impact of NST has resulted in nanotechnology being identified as a strategic area by governments worldwide. The investment by government organizations in 2003 was over $\$ 2.5$ billion US. Canada is reacting to this opportunity by investing in several NST research facilities, including the Nano-Systems laboratory at the University of Manitoba. The Nano-Systems Fabrication Laboratory (NSFL) was established to support the nanotechnology efforts of University of Manitoba researchers and Manitoba
industry. It is the only facility in Manitoba, and one of only a handful in Canada, capable of micro/nano-scale manufacturing.

Examples of ongoing research: MEMS for next generation smart adaptive antennas for vehicle systems and telecommunications, Nano-probe instruments for in-situ IC testing and material science, Molecular Junctions, low dimensional junctions, Micro-sensors for electric and magnetic field sensing, Sensors for structural health monitoring for Civil Engineering, Investigation of nano-system fabrication technologies, Micro-pressure sensors for human hearing studies, Micro-tweezer systems, Micro-fluidics for thermal cooling, energy storage, and bio-sensors, Ultra thin films for nanoelectronics and biosensors, Large deflection micro-mirrors for optical switching, microfluidics, microresonators, sensors, and Biomems.

Potential participants: Bridges, Buchanan, Freund, Oliver, Shafai, Thomson, Wang,

## - Photonic and Phononic interactions with materials

The interaction of photons and phonons with matter allows materials to be probed over a wide range of length and time scales, providing vital information for understanding their basic properties. Phonons are also one of the elementary excitations of materials, so that their interaction with other excitations (electrons, magnetic moments...) is also of fundamental importance. This multidisciplinary research area involves material properties that include (i) single atoms and molecules. (excitation, ionization, probing, manipulation), (ii) complex molecular systems (biological, pharmaceutical, chemical including distributed optical fibre sensing), (iii) nanostructures (quantum dots, nanofabrication, nanomachines, surface structures), (iv) microscopic interactions (optical tweezers, cell interactions, linear and non-linear photoacoustic interactions), and (v) millimeter and larger scale systems (ultrasonic and acoustic interactions in mesoscopic materials). The common themes that emerge from the complementarity of the many different approaches involved (optical and ultrasonic imaging, time-resolved measurements, fluorescence detection, spectroscopy, multi-photon and phonon spectroscopy, polarization detection, studies of non-linear processes, and intensity and phase measurements) form the basis from which new collaborations and scientific breakthroughs may be expected.
Examples of ongoing research: Imaging of complex materials, scattering and absorption in complex materials, mesoscopic wave phenomena, surface acoustic wave devices, $X$-ray scattering and diffraction, NMR and Mössbauer spectroscopies, photon and phonon correlation spectroscopies

Potential participants: Cadogan, Chakraborty, Hawthorne, Hegmann, Kroeker, Oliver, O'Neil, Page, Scanlon, van Lierop, Wang,

## - Soft and disordered materials; liquid and solid crystals

The study of soft materials - such as complex fluids, macromolecules, particulate suspensions, porous materiails, foodstuffs and biological materials - is a rapidly growing area that encompasses both new scientific discoveries and diverse practical applications.

Many of these materials are mesoscopic, having internal structures on length scales between atomic dimensions and bulk that determine their properties. There is a natural synergy with disordered hard materials, whether disorder is inherent at the atomic scale as in crystalline solids, glasses and complex minerals, or at larger scales as in assemblies of nanoparticles. The study of solid materials underlies much current and emerging technology involving optical, electronic and spintronic phenomena. This interdisciplinary thrust area brings together researchers from a wide range of disciplines who share an interest in unraveling the many scientific challenges associated with the complexity of these materials and exploring their imaginative and exciting uses.
Examples of ongoing research: Glasses, nanoparticles and spin glasses; polymer and biomaterials, mesoscopic materials, materials for nuclear waste immobilization,optical, electronic and spintronic properties of ionic and semiconducting crystals, complex minerals, protein structure, tissue and cellular structure, viral architectures, textiles

Potential participants: Bassim, Bieringer, Cadogan, Chakraborty, Duckworth, Fulcher, Kroeker, Hawthorne, Hegmann, O'Neil, Page, Peeling, Roshko, Saperstein, Scanlon, Schrechenbach, Sherriff, Southern, Vail, Whitmore, Williams

## - Surfaces, interfaces and ultrathin films

The performance of many of the key materials that play a critical role in today's technology are dominated by the structure and chemistry of their interfaces. The properties of these interfaces are controlled by layers that can be as little as a few atoms or molecules thick. Our ability to understand the physics and chemistry of interfaces and, in turn, manipulate their properties will ultimately determine the direction of future developments in fields ranging from biotechnology to electronics. This interdisciplinary area will bring together researchers focused on the characterization and production of interfaces, both within materials as well as at surfaces, and it will stimulate development of the understanding and methodologies required to create the next generation of advanced materials and devices.

Examples of ongoing research: Electronic and magnetic materials, polymer structures,
superalloys, environmental crystallization, liquid crystals
Potential participants: Bridges, Buchanan, Chaturvedi, Freund, Hawthorne, Hegmann, Oliver, Perreault, Southern, Thomson, van Lierop, Wang, Whitmore

## - Complex natural systems

There is a pressing need to increase our knowledge on how and to what extent waters, minerals and life interact. Many environmental and industrial processes are traceable using isotopes, isotopic ratios and trace elements, as such anthropogenic forcing can be distinguished from natural background. Work can be done to improve ore beneficiation, reduce energy costs and design new sequestration strategies. Ultimately the economic impact is the mitigation of environmental impact before the damage is done and the monitoring of global change.

Examples of ongoing research: Use of light and heavy isotopes and trace elements to monitor exchanges between the Earth's crust, the hydrosphere and the biosphere, characterization and quantification of the distribution of trace elements in • zoned minerals, crystal chemistry and structural crystallography; Use of isotope and trace element fractionation to understanding ore genesis and contaminant dispersal

Potential participants: Fayek, Halden, Hawthorne, Wang, Bekker

## APPENDIX B

## Checking Results from ISI's 2006 Journal Citation Reports

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage Held | Total Checked | Total Held | Percentage Held | Total Checked | Total Held |
| Applied Physics | 86\% | 21 | 18 | 80\% | 45 | 36 |
| Condensed Matter Physics | 85\% | 13 | 11 | 95\% | 38 | 36 |
| Materials Science, Biomaterials | 100\% | 5 | 5 | 90\% | 10 | 9 |
| Materials Science, Ceramics | n/a | n/a | n/a | 71\% | 7 | 5 |
| Materials Science, Composites | 100\% | 1 | 1 | 100\% | 5 | 5 |
| Materials Science, Characterization and Testing | n/a | n/a | n/a | 100\% | $3^{2}$ | 3 |
| Materials Science, Coatings and Films | 0\% | 1 | 0 | 63\% | 8 | 5 |
| Materials <br> Science, <br> Multidisciplinary | 86\% | 37 | 32 | 86\% | 86 | 74 |
| Materials Science, Textiles | n/a | n/a | n/a | 100\% | 2 | 2 |
| Polymer Science | 87\% | 15 | 13 | 84\% | 37 | 31 |
| Nanoscience and Nanotechnology | 86\% | 14 | 12 | 81\% | 21 | 17 |
| Total (duplicate titles removed) | 90\% | 78 | 70 | 86\% | 193 | 166 |

[^2]
## Senate Motion on the Target Poverty Day of Action for November $5^{\text {Th }} 2009$

Whereas the University of Manitoba Senate acknowledges the role of students in increasing government funding and other support for post-secondary education;

AND Whereas the UMSU has declared a Day of Action on November 5th, 2009 to raise public awareness about the chronic underfunding of post-secondary education and to demand the Federal and Provincial governments provide sufficient funding to have an affordable, high-quality post-secondary educational system;
and Whereas this year's Day of Action is being held in conjunction with the Winnipeg chapter of Make Poverty History as part of the Target Poverty campaign intended to reduce and eventually eliminate poverty in the Province of Manitoba;

Be it resolved that Senate acknowlege November 5th, 2009 as the Day of Action, and that all academic staff shall be made aware of this fact; and

Be it further resolved that Senate affirm the importance of the Target Poverty issue and that students, faculty and staff be encouraged to participate in the Day of Action, as they are able to do so;

Be it further resolved that Senate encourages colleagues, when possible, to accommodate the absence of students participating in the Day of Action on November $5^{\text {th }}, 2009$;

BE IT FURTHER RESOLVED THAT the Senate endorse activities to increase awareness of the need for the Federal and Provincial governments provide sufficient funding to have an affordable, high-quality education at the post-secondary level, and that all members of the university community be encouraged to participate in these events; and

Be it further resolved that the Senate acknowledges that an affordable, high-quality post-secondary education system works to reduce and eliminate poverty.

AGENDA ITEM: Policy and Procedures on the Naming of Buildings, Parts of Buildings and Space

## RECOMMENDED RESOLUTION:

THAT the Board of Governors approve the revisions to the Policy on Naming of Buildings, Parts of Buildings and Space [as recommended by Senate October 7, 2009].

```
Action Requested:
X Approval (Policy)
\(X\) Information
(Procedures)
```


## CONTEXT AND BACKGROUND:

The documents have been developed to update the policy to better practice, separate policy matters from procedural matters, clarify approval processes and provide a documented mechanism for the withdrawal of a naming on a building, part of building or space.

## RESOURCE REQUIREMENTS:

## N/A

## IMPLICATIONS:

N/A

## ALTERNATIVES:

## N/A

## Board of Governors Submission

Routing to the Board of Governors:

| Reviewed | Recommended | By | Date |
| :---: | :---: | :---: | :---: |
| x | X | Senate Committee on Honorary Degrees | September 21, 2009 |
| X | x | Senate Executive | September 23, 2009 |
| x | x | Senate | October 7, 2009 |
| Submission prepared by: |  | Senate |  |
|  |  |  |  |
| Submission approved by: |  | University Secretary. |  |
| Attachments |  |  |  |
| - Policy on the Naming of Buildings, Parts of Buildings and Space (for approval) <br> - Procedures on the Naming of Buildings, Parts of Buildings and Space (for information) |  |  |  |

## Report of the Senate Committee on Honorary Degrees

## Preamble

1. Since last reporting to Senate, the Committee on Honorary Degrees considered a new Policy and Procedure on the Naming of Buildings, Parts of Buildings and Spaces.

## Observations

1. The Senate Committee on Honorary Degrees considered a new Policy and Procedure that sets out the conditions under which buildings, parts of buildings and spaces may be named in honour of individual(s) or organizations.
2. The documents have been developed to update the policy to better practice, separate policy matters from procedural matters, clarify approval processes and provide a documented mechanism for the withdrawal of a naming on a building, part of building or space.
3. The documents codify the past practice of having the President approve the minimum values of gifts related to naming of spaces in recognition of philanthropy.

## Recommendation

THAT Senate recommends that the Board of Governors approve the Policy and Procedure on the Naming of Buildings, Parts of Buildings and Space.

Respectfully submitted,

Dr. W. Norrie, Chair
Senate Committee on Honorary Degrees
Terms of Reference:
http://www.umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/501.htm
/ki


### 1.0 Reason for Policy

To set out the conditions under which buildings, parts of buildings and spaces may be named in honour of individual(s) or organizations.

### 2.0 Policy Statement

### 2.1 General

2.1.1 Persons or organizations who may be honoured by the naming of a building, part of a building or space include the following:
a) Persons or organizations who have contributed to the life and mission of the University of Manitoba (contributions may include teaching, research, scholarship service or creative work).

OR
b) Persons or organizations who have contributed to the cultural, social and economic well-being of the people of Manitoba, Canada and the world in areas which are of major interest to the University of Manitoba, and/or which are directly associated with the University. other assets, enable the University of Manitoba to further its mission.
2.1.2 The underlying principle of any naming is that the person(s) or organization(s) for whom the space will be named and the University should both be honoured by the naming of the building, part of a building or space.
2.1.3 The name may refer to a foundation, individual, family or similar unit or to a respectable commercial or business unit.
2.1.4 In the case of naming in recognition of philanthropy, the University President shall determine the minimum values of donations for any and all newly named buildings, parts of buildings and spaces. The guiding principle will be that the gift received has a correlation to the cost of the named building, part of building or space.
2.1.5 The autonomy of the University and the academic freedom of the professoriate to which the University of Manitoba is committed shall be safeguarded at all times. The attribution of a name does not imply or confer any involvement or oversight into the operations of the University or any of its units.
2.1.6 It is the University's intention to respect the Donor's intent. If, however, circumstances change so that the entire amount of the gift is not received by the University in due course, the University may, at its option, remove the Donor's name from the named space, or any part therein or thereon where the Donor's name appears, or reduce the form of recognition set out herein and/or offer the Donor an alternate naming opportunity and benefits commensurate with the Donor's level of giving.
2.1.7 In the event of a space-use change or renovation which affects the naming and form of recognition the University will inform the Donor if possible, and the University and the Donor will consult as to options available at that time.
2.1.8 Ultimate authority to accept or decline any naming proposal at the University of Manitoba rests with the Board of Governors.
2.1.9 Ultimate authority to discontinue the designated name of a building room or area, or to transfer the name to another building, room or area rests with the Board of Governors.
2.1.10 Notwithstanding any other provision of this policy, no naming will be approved or existing naming be continued, that will call into serious question the public respect of the University.

### 3.0 Accountability

### 3.1 The University Secretary is responsible for advising the President that a formal

 review of the Policy is required.
### 4.0 Secondary Documents

4.1 The Board of Governors may approve Procedures which are secondary to and

### 5.0 Review

5.1 Formal Policy reviews will be conducted every ten (10) years. The next scheduled review date for this Policy is October 1, 2019.
5.2 In the interim, this Policy may be revised or rescinded if:
(a) the Approving Body deems necessary; or
(b) the relevant Bylaw, Regulations or Policy is revised or rescinded.
5.3 If this Policy is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:
(a) comply with the revised Policy; or
(b) are in turn rescinded.

### 6.0 Effect on Previous Statements

6.1A This Policy supercedes the following:
(a) all previous Board/Senate Policies, Procedures, and resolutions on the subject matter contained herein; and
(b) all previous Administration Policies, Procedures, and directives on the subject matter contained herein;
6.1B This Policy supersedes Policy 227 "Naming of Buildings, Parts of Buildings and Special Units", approved by Senate November 6, 1985 and modified February 1, 1999.

### 7.0 Cross References




### 1.0 Reason for Procedure(s)

To, pursuant to the Policy: Naming of Buildings, Parts of Buildings and Spaces, set out the procedures for:
a) the naming of buildings, parts of buildings, and spaces; and
b) the withdrawal of a naming.

### 2.0 Procedure(s)

### 2.1 Naming of Buildings

2.1.1 Proposals for the naming of an entire building shall be forwarded, in confidence, to the University Secretary, who shall place such proposals on the agenda of the next meeting of the Senate Committee on Honorary Degrees.
2.1.4 A Naming Request Proposal for naming buildings as a result of a philanthropic gift, must be developed in conjunction with the Vice-President (External) and submitted to the University Secretary for approval by the Senate Committee on Honourary Degrees.
2.1.2 Both Senate and the Senate Committee on Honorary Degrees shall base any decision on a naming of an entire building upon the criteria outlined in the Policy on Naming Buildings, Parts of Buildings and Spaces.
2.1.3 The naming of any entire building shall require the approval of Senate meeting in closed session following a recommendation from the Senate Committee on Honorary Degrees.

### 2.2 Naming of Parts of Buildings and Spaces

2.2.1 The naming of a part of a building or space within the University shall be the
2.2.2 Proposals for the naming of any parts of buildings or spaces shall be forwarded, in confidence, to the University Secretary, who shall place such proposals on the agenda of the next meeting of the Senate Committee on Honorary Degrees.
2.2.3 A Naming Request Proposal for naming any parts of buildings or spaces as a result of a philanthropic gift, must be developed in conjunction with the Vice-President (External) and submitted to the University Secretary for approval by the Senate Committee on Honorary Degrees.
2.2.4 The Senate Committee on Honorary Degrees shall base any decision on the naming of a part of a building upon the criteria outlined in the Policy on Naming Buildings, Parts of Buildings and Spaces.
2.2.5 The Senate Committee on Honorary Degrees shall report to Senate on each of its approvals of such names, in closed session, without penalty of retroactive denial, except for guidance in future decisions and possible revision of the criteria or guidelines.

### 2.4 Withdrawal of a Naming

### 2.4.1 Upon recommendation of the President, the Senate Committee on Honorary Degrees may:

a) determine, in a closed session meeting:
i) that the actions or conduct of any persons or organization for whom a building, part of a building or space is named is materially immoral or unethical in nature;
ii) if such person has displayed a lack of integrity that would cause the University significant embarrassment; and
b) recommend to a closed session of Senate that the naming be withdrawn.
2.4.2 The decision to withdraw a naming shall be determined by the Senate in closed session.

### 2.5 Form of Recognition

2.5.1 The attribution of a name is the singular aspect of this honour and will be recognized by suitable signage and an appropriate dedication.
2.5.2 If the entity named should be demolished or substantially altered, the University will determine the appropriate historical recognition. In such instances, the University shall ensure that appropriate consultations occur.

### 3.0 Accountability

3.1 The University Secretary is responsible for advising the President that a formal review of the Procedure is required.
4.1 Formal Procedure reviews will be conducted every ten (10) years. The next scheduled review date for these Procedures is October 1, 2019.
4.2 In the interim, these Procedures may be revised or rescinded if:
(a) the Approving Body deems necessary; or
(b) the relevant Bylaw, Regulation(s) or Policy is revised or rescinded.

### 5.0 Effect on Previous Statements

5.1A This/these Procedure(s) supersede(s) the following:
(a) all previous Board/Senate Procedures, and resolutions on the subject matter contained herein; and
(b) all previous Administration Procedures, and resolutions on the subject matter contained herein; and
(c) all previous Faculty/School Council Procedures stemming from the Faculty/School Council Bylaw and academic and admission Regulations and any resolutions on the subject matter contained herein; and

### 6.0 Cross References

Cross References
[Indicate names and numbers of other specific Governing Documents which should be cross referenced to this Governing Document. Include section \# of other Governing Documents if appropriate.]

Cross referenced to:(1) Policy: Naming of Buildings, Parts of Buildings, Spaces and Special Units

## AGENDA ITEM: Policy and Procedures on Research Centres, Institutes and Groups RECOMMENDED RESOLUTION:

THAT the Board of Governors approve the revisions to the Policy on Research Centres, Institutes and Groups [as recommended by Senate October 7, 2009].

Action Requested:<br>\[ \begin{aligned} \& X Approval- Discussion/Advice X<br>\& (Policy) \end{aligned} \]

## CONTEXT AND BACKGROUND:

Revisions to this policy address funding issues which recognize the difficulty of obtaining external funding faced by some disciplines. As such, wording has been changed from an expectation of self-sufficiency to an expectation that the centre will seek external funding. Other revisions are editorial to update position titles.

The Procedures relating to the establishment of Research Centres, Institutes and Groups have been revised to include a review of the proposal by the Chair of the Senate Planning and Priorities Committee (SPPC) who will make a determination of whether a review of the proposal by SPPC is necessary.

## RESOURCE REQUIREMENTS:

## N/A

## IMPLICATIONS:

## N/A

## ALTERNATIVES:

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N/A
```

UNIVERSITY
of MANITOBA

## Board of Governors Submission

Routing to the Board of Governors:

| Reviewed | Recommended | By | Date |
| :---: | :---: | :---: | :---: |
| X | X | Senate Committee on University Research | September 10, 2009 |
| x | x | Senate Executive | September 23, 2009 |
| x | x | Senate | October 7, 2009 |
| Submission prepared by: |  | Senate |  |
|  |  |  |  |
| Submission approved by: |  | University Secretary. |  |
| Attachments |  |  |  |
| - Policy on the Naming of Buildings, Parts of Buildings and Space (for approval) <br> - Procedures on the Naming of Buildings, Parts of Buildings and Space (for information) |  |  |  |


| University | Office of The |
| :--- | :--- |
| of Manitoba | Vice-President (Research) |

207 Administration Building Winnipeg, Manitoba
Canada R3T 2N2
Telephone (204) 474-6915
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www.umanitoba.ca

## MEMORANDUM

TO: Mr. Jeff Leclerc, University Secretary
FROM: Digvir Jayas, Vice-President (Research)


DATE: $\quad$ September 10, 2009
SUBJECT: Policy and Procedure: Research Centres, Institutes and Groups
COPIES: Drs. Glavin and Ristock, Associate Vice Presidents (Research)

Attached is the Research Centres, Institutes and Groups revised Policy and Procedures. Please include the report for information on the next Senate agenda.

Thank you.
DJ/nis

Attach.


### 1.0 Reason for Policy

To outline the general guidelines of the Senate Committee on University Research (SCUR) on the establishment and administration of centres, institutes and groups that focus primarily on research and research-related activities (e.g. research training, research dissemination). These guidelines are administered on behalf of SCUR by the Office of the Vice-President (Research). For information on the establishment of centres, institutes or groups that have a primary mandate other than research, contact the VicePresident (Academic) and Provost.

### 2.0 Policy Statement

### 2.1 Definitions:

### 2.1.1 Research Centre/Institute

A research centre/institute is a formally structured organizational unit of the University. It is established under the authority of the Board of Governors, normally on the recommendation of the Senate of the University. The purpose of a research centre/institute is to focus and sustain research in specific areas and
to encourage research collaborations among disciplines and between
Departments, Faculties and Schools. Research centres/institutes also provide unique training opportunities for students and serve as a valuable information source for the community at large.

Research centres/institutes normally provide for the strengthening, coordination or facilitation of research scholarly activities not readily undertaken within the University's department structure, building upon the expertise, competence and staff interest existing at the University.

Research centres/institutes are generally expected to:
a) have clearly identified goals and objectives;
b) have some degree of permanence, transcending collaboration on a particular, limited project;
c) bring together scholars from different disciplines and/or areas of specialization within a particular discipline;
d) maintain high levels of research productivity;
e) foster the training of future researchers, especially in regard to research skills;
f) attract post-doctoral fellows, visiting professors, and other scholars;
g) cooperate with scholars at other universities and/or institutions; and
h) seek external funding in order to operate on a cost recovery basis.

In pursuit of their objectives, research centres/institutes may establish communication links inside and outside the University, and organize seminars and symposia.

On occasion, research centres/institutes may involve formal partnerships with other universities and/or institutions. University involvement in such joint centres/institutes is subject to formal agreement.

### 2.1.2 Research Group

A research group is an association of University scholars who share research interests and who engage in collaborative or closely related research activities. The purpose of a research group is to promote and facilitate communication and collaboration among its members, and to establish the legitimacy of the group both inside and outside the University.

### 2.2 Policy Governing the Establishment of Research Centres/Institutes

### 2.2.1 Every research centre/institute within the University is accountable

 through its director to a University officer - a department head, dean, or the VicePresident (Research) as appropriate. Financial responsibility for the centre/institute is vested with this University officer. Faculty/School deans/directors shall report to the Vice-President (Research) on all matters related to research centres/institutes.2.2.2 The director of a research centre/institute is administratively responsible for the research unit. Directors will exercise general supervision over the operation of the unit with specific responsibilities varying wiṭh the size of the unit as well as the complexity of its policies and operations.

For any joint faculty/school initiative, the directors shall be responsible to whichever department head, dean or director (or the Vice-President (Research and External-Programs) is so designated either in the initial proposal to create such a unit, or as subsequently recommended and approved. In general, only those units which cannot appropriately be administered at the department or faculty level shall be the responsibility of the Vice-President (Research).
2.2.3 All research centres/institutes shall be financially secure with core funding derived from either the University or other sources. In this regard, while the University supports several-may provide support to research centres/institutes through its operating budget, research centres/institutes are generally expected to be financially-self-sufficient through external cost recovery seek external funding to support their activities (i.e. through grants, contracts, donations or fee-for service).
2.2.4 Research centres/institutes shall not normally require the hiring of new full-time academic faculty. Each member, including the director, should hold an appointment in an academic department ${ }^{(1)}$. If release time is required, this should be purchased by the research centre/institute under terms and conditions agreeable to the appointee's department and faculty. Selection of a research centre/institute director is the responsibility of the University officer to whom the director will report.
2.2.5 While the organizational and administrative structures of research centres/institutes vary as a function of their objectives, size and funding arrangements, all research centres/institutes shall normally have an advisory committee. The specific terms of reference of such committees may vary from one unit to another; however, the general purpose of these committees is to provide advice on the unit's activities and programs.

### 2.2.6 All University research centres/institutes must conform with University

 policies and procedures. In particular, all research centres/institutes shall adhere to the University's policy with respect to the recovery of indirect costs on research contracts.
### 2.3 Policy Governing the Establishment of Research Groups

Research groups are established under the authority of the Vice-President (Research), normally on the recommendation of the department head (where appropriate) and dean/director.

### 3.0 Accountability

The University Secretary is responsible for advising the President that a formal review of the Policy is required.

### 4.0 Secondary Documents

The Approving Body may approve Procedures which are secondary to and comply with this Policy.

### 5.0 Review

5.1 Formal Policy reviews will be conducted every ten (10) years. The next scheduled review date for this Policy is $\qquad$
5.2 In the interim, this Policy may be revised or rescinded if:
(a) the Approving Body deems necessary; or
(b) the relevant Bylaw, Regulations or Policy is revised or rescinded.
5.3 If this Policy is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:
(a) comply with the revised Policy; or
(b) are in turn rescinded.

### 6.0 Effect on Previous Statements

This Policy supersedes Research Centres, Institutes and Groups effective March 6, 1996

### 7.0 Cross References

Cross References
Indicate names and numbers of other specific Governing Documents which should be cross referenced to this Governing Document. Include section \# of other Governing Documents if appropiliate.]

Cross referenced to: (1) Procedures Research Centres, Institutes and Groups


## 1. Reason for Procedure(s)

To set out the procedures secondary to the policy: Research Centres, Institutes and Groups.
2. Procedure(s)

### 2.1. For Establishing Research Centres/Institutes

### 2.1.1. Approval process

The authority to establish research centres/institutes resides with the Board of Governors, normally on the recommendation of the Senate of the University. Proposals for research centres/institutes are transmitted from SCUR to the Chair of the Senate Planning and Priorities Committee to determine if SPPC review is required, and to Senate through its Executive Committee. Prior to their transmittal to SCUR, proposals for the establishment of research centres/institutes are normally supported by departmental and faculty councils, as appropriate.

It is expected that a group of researchers will already have discovered the advantages of collaborative work and academic interchange before proposing the formal establishment of a research centre/institute. Researchers should have an established record of research and publication in their fields, as well as, success in securing external support for their research.

Proposals must be comprehensive enough to allow the merits and feasibility of establishing a research centre/institute to be assessed, and shall include the following:

## a) Name of Research Centre/Institute.

b) Description and Justification. This shall include:
i. a concise statement of the mission and objectives of the proposed research centre/institute and their relationship to the strategic plan of the University;
ii. an identification of the scope of activities envisaged; and
iii. a description of the research benefits and opportunities likely to result from the establishment of the research centre/institute, including an indication of how the proposed research centre/institute would facilitate research among scholars within the University and in the wider community.
c) Constitution. This shall include a description of:
i. the organization structure of the proposed research centre/institute, including the roles and responsibilities of its various committees;
ii. the categories of membership and the criteria of each of these categories;
iii. procedures whereby appointments will be made for each membership category; and
iv. the privileges and responsibilities of membership.
d) Management. This should identify the University officer to whom the proposed research centre/institute reports and in whom financial responsibility is vested.
e) Proposed Membership. This shall include a listing of the proposed membership of the research centre/institute broken down by the various membership categories, where applicable. For each proposed member, an abbreviated curriculum vitae shall be provided which details the following information: degree held, employment experience, professional activities, research interests, research funding record (last five years), and record of research achievements (last five years).
f) Physical Resources. This shall include:
i. a listing of available research facilities (e.g. library holdings, laboratories, space, equipment), including an indication of current strengths and weaknesses;
and
ii. an indication of future requirements, including a proposed strategy for obtaining these resources.
g) Financial Resources. This shall include a detailed budget proposal for the first three to five years which includes the anticipated revenue from all sources (i.e. University, government, industry, recovery of indirect costs, royalties, etc.) and proposed annual operation costs, as well as plans for achieving financial self-sufficieney through seeking external funding cost recovery.
h) Statements of Support and Commitment. Letters of support and commitment should be signed by the appropriate University officer(s) (i.e. department head, dean/director, the Vice-President (Research)). Any commitments or agreements to provide space, teaching release time or other resources, including the recovery of indirect costs from contract research, should be documented and signed by those authorized to make such commitments In the absence of such statements, it will be assumed that no such commitments or agreements have been made.

### 2.1.3. Review of proposal

On the receipt of a proposal to create a new research centre/institute, SCUR will appoint an Ad Hoc Review Committee, normally consisting of not more than four members, at least two of whom shall be members of SCUR. This Ad Hoc Review Committee will submit a summary report and recommendation to SCUR which, in turn, will forward it recommendation in accordance with the approvals process previously described. In favourble cases, the Senate will recommend to the Board of Governors the establishment of the research centre/institute for a period of three to five years, with continuation subject to a review process.

### 2.2. Annual Reporting Requirements

To facilitate the conduct of periodic review of research centres/institutes, the director of each research centre/instate shall provide an annual report to the University officer to whom he/she reports as well as to the chair of SCUR. This report should detail: the activities of the centre and its personnel, including research accomplishments, graduate training and other research-related activities (e.g. conferences, workshops, seminars, etc.); and its financial status.

### 2.3. For Reviewing Research Centres/Institutes

In order to ensure that all research is consistent with the goals of the University and that research centres/institutes reflect positively on the general reputation of the University, all research centres/institutes shall be reviewed by SCUR on a periodic basis but not less often than every five years.

### 2.3.1. Review Process

2.3.1.1. Notice of the review will be communicated to the director of the research centre/institute by the Chair of SCUR at least nine (9) months prior to the end of the mandate of the research centre/institute.
2.3.1.2. In response to this notification, the director of the research centre/institute shall submit to the Chair of SCUR a report, as per schedule $A$, which contains the following:
a) a description of how and why the centre/institute has achieved or revised its original objectives; a detailed listing of its research training accomplishments; a current membership list; and a detailed financial statement;
b) a five-year plan which identifies future research directions and development strategies;
c) letters indicating continued support for the research centre/institute from appropriate department heads and faculty/school deans/directors; and
d) the names of individuals who could provide external assessments of the research centre/institute.
2.3.1.3. On the basis of this report as well as a review of annual reports, SCUR shall determine whether a formal, independent review committee should be struck to conduct a full review of the research centre/institute. If a full review of the research centre/institute is not warranted, in that it is clear that the research centre/institute either qualifies for continuation or that it does not, SCUR will recommend to Senate that the research centre/institute continue for a period of three to five years, or that it be terminated, without further review. Any legal agreements that affect the status of the research centre/institute must be taken into consideration in the formal recommendation.

### 2.3.1.4. In the event that a full review is required, a Review

 Committee will be appointed by the Chair of SCUR in consultation with SCUR at least six (6) months prior to the end of the mandate of the Centre. The membership of the Review Committee shall normally include: a senior researcher with administrative experience and no direct involvement in the research centre/institute (preferably a former dean or department head) who shall act as Chair of the committee; the director of another research centre/institute; a researcher who is not affiliated with the research centre/institute but is knowledgeable in the field of its research activity; the Chair of SCUR or his/her designate to assess financial and institutional concerns; and other members as deemed appropriate.2.3.1.5. The mechanism by which the Review Committee elects to conduct the review shall be at the discretion of the committee in consultation with the Chair of SCUR. Notwithstanding, the primary focus of the review shall be an assessment of: the extent to which the research centre/institute has fulfilled its objectives; the appropriateness of is future goals; and its current and projected financial viability. The review process should involve meetings with the director and members and should also include the solicitation of external assessments as well as discussion with
non-members of the research centre/institute from related departments/fields.
2.3.1.6. The Review Committee shall provide a written report to the Chair of SCUR within four months of being established. Before submitting this report, the Chair of the Review Committee shall provide a copy of the report to the director of the research centre/institute under review to ensure that the report contains no factual errors. The director may submit a written commentary on the report to the Chair of SCUR.
2.3.1.7. SCUR will consider the report of the Review Committee, consulting with the Committee and director of the research centre/institute as necessary before making a recommendation to Senate concerning the future of the centre/institute. The recommendation may be: continuation with review in 5 years; continuation with review in 1, 2, or 3 years; or termination. Any legal agreements that affect status of the research centre/instate must be taken into consideration in the formal recommendation.

### 2.4. For Establishing Research Groups ${ }^{(2)}$

### 2.4.1. Approval Process

The official recognition and designation of a research group is at the approval of the Vice-President (Research), normally on the recommendation of the department head (where applicable) and dean/director.

A designated research group has the privileges of: identification as a separate unit for University publication purposes as well as use of University letterhead with the group designation; and, if needed, a separate set of accounts for the group's use.

### 2.4.2. Contents of the Proposal

Recommendations to establish research groups should be forwarded by the department head (where applicable) and dean/director to the VicePresident (Research) for consideration. Such recommendations should be accompanied by the following information:
a) Name of Research Group
b) Objectives and Rationale for Formation of the Research Group (including confirmation that its establishment will not detract from existing academic programs).
c) Description of the Constitution of the Research Group in terms of:
i. its organization structure;
ii. conditions of membership;
iii. reporting procedures; and
iv. mechanisms for regular review and assessment (which should include a brief annual report to the Vice-President (Research).
d) List of Members and Abbreviated Curriculum Vitae.
e) Statement signed by the director of the research group, department head (where applicable) and dean/director detailing any understandings among the research group, department head (where applicable) and dean/director (including the provision of space, teaching release, sharing of the recovery of indirect costs on contract research, other resources, etc).

### 2.4.3. Notification

Upon approval, the Vice-President (Research) will notify SCUR of the formation of the research group, which, in turn, will inform Senate.

## 3. Accountability

The University Secretary is responsible for advising the President that a formal review of the Procedure is required.

## 4. Review

4.1. Formal Procedure reviews will be conducted every ten (10) years. The next scheduled review date for this/these Procedure(s) is/are $\qquad$ _.
4.2. In the interim, this/these Procedure(s) may be revised or rescinded if: 4.2.1. the Approving Body deems necessary; or
4.2.2. the relevant Bylaw, Regulation(s) or Policy is revised or rescinded.

## 5. Effect on Previous Statements

These Procedure(s) supersede(s) Research Centres, Institutes and Groups, 1996

## 6. Cross References

## Cross References

[Indicate names and numbers of other specific Governing Documents which should be cross referenced to this Governing Document. Include section \# of other Governing Documents if appropriate.]

Cross referenced to: (1) Policy Research Centres, Institutes and Groups
${ }^{(1)}$ The appointment category of Research Affiliate may be used to designate the formal affiliation of faculty members with research centres/institutes.
${ }^{(2)}$ It should be noted that not all research collaborations require formal recognition and designation. Indeed, the University encourages the informal formation of groups of research collaborators.

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## Board of Governors Submission

## AGENDA ITEM: Revision to Policy on Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships

## RECOMMENDED RESOLUTION:

THAT the Board of Governors approve the revisions to the Policy on Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships [as recommended by Senate October 7, 2009].

## Action Requested:

X Approval (Policy)

## CONTEXT AND BACKGROUND:

The current policy was established March 22, 1979 by the Board of Governors and regulates the administration of scholarships, bursaries or fellowships that discriminate on the basis of race, creed, political belief, colour, ethnic or national origin, sex, or age.

Three revisions are being proposed: the first is to replace reference to "Scholarships, Bursaries or Fellowships" in the policy with "Awards"; the second is to refer to the applicable characteristics set out in section $9(2)$ of the Manitoba Human Rights Code rather than to have a list of applicable characteristics; and thirdly, to expand upon the circumstances in which a request for an exception to the policy may be warranted.

## RESOURCE REQUIREMENTS:

N/A

## IMPLICATIONS:

N/A

## ALTERNATIVES:

## N/A

## Board of Governors Submission

Routing to the Board of Governors:

| Reviewed | Recommended | By | Date |
| :---: | :---: | :---: | :---: |
| x | x | Senate Committee on Awards | August 27, 2009 |
| X | x | Senate Executive | September 23, 2009 |
| x | X | Senate | October 7, 2009 |
| Submission prepared by: |  | Senate |  |
|  |  |  |  |
| Submission approved by: |  | University Secretary. |  |
| Attachments |  |  |  |
| - Correspondence regarding revisions to the Policy <br> - Policy on the Non-acceptance of Discriminatory, Scholarships, Bursaries or Fellowships |  |  |  |

FROM: Mr. Peter Dueck
Executive Director, Enrolment Services
Ms Jane Lastra
Director, Financial Aid and Awards
RE: $\quad$ Proposed Revision to the Policy on the Non-acceptance of Discriminatory Scholarships, Bursaries or Fellowships

The Financial Aid and Awards Offices recommends, to the Senate Committee on Awards, that the policy on the Non-acceptance of discriminatory scholarships, bursaries or fellowships (established March 22, 1979 by the Board of Governors) be revised, as set out in Attachment I to this memo. The existing policy stipulates that:

As a matter of principle, the University of Manitoba will not administer any new scholarship, bursary or fellowship that discriminates on the basis of race, creed, political belief, colour, ethnic or national origin, sex, or age.
Any exceptions to this principle shall be made only with the consent of the unit concerned, the Senate Committee on Awards, and the Senate. A request for such exceptions shall be indicated by the Committee on Awards.

The following revisions to the policy are proposed.
(1) The title of the policy is to be amended to Non-acceptance of discriminatory awards.
(2) The first paragraph is to be revised to specify that the University will not administer any new student awards that discriminate on the basis of applicable characteristics set out in section 9(2) of the Manitoba Human Rights Code (proclaimed in force December 10, 1987, and as amended from time to time).
For the Committee's information, the applicable characteristics currently listed in section 9(2) of the Code are as follows:
(a) ancestry, including colour and perceived race;
(b) nationality or national origin;
(c) ethnic background or origin;
(d) religion or creed, or religious belief, religious association or religious activity;
(e) age;
(f) sex, including pregnancy, the possibility of pregnancy, or circumstances related to pregnancy;
(g) gender-determined characteristics or circumstances other than those included in clause;
(h) sexual orientation;
(i) marital or family status;
(j) source of income;
(k) political belief, political association or political activity;
(l) physical or mental disability or related characteristics or circumstances, including reliance on a dog guide or other animal assistant, a wheelchair, or any other remedial appliance or device.
(3) The revised second paragraph expands upon the circumstances in which a request for an exception to the policy may be warranted, pending approval by the appropriate bodies at the University.


### 1.0 Reason for Policy

1.1 The principal purpose of the policy on the Non-acceptance of discriminatory awards is to ensure that student awards (scholarships, prizes, fellowships, and bursaries, etc.) that are approved by the Senate Committee on Awards and established at the University of Manitoba adhere to the tenets of the Manitoba Human Rights Code. The object is to ensure that the student award program at the University does not exclude any group(s) of students on the basis of those characteristics set out in the Manitoba Human Rights Code.
1.1 The policy on the Non-acceptance of discriminatory awards provides for exceptions by authorizing the Senate Committee on Awards and the Senate to establish awards that support and encourage the educational goals of groups of students who are underrepresented in the student population of the University and who have been exposed to systemic discrimination. In such cases, the establishment of discriminatory awards is intended to encourage these students to pursue higher education and to increase their enrolment at the University.

### 2.0 Policy Statement

2.1 As a matter of principle, the University of Manitoba will not administer any new
2.2 scholarship, prize, fellowship, or bursary that discriminates on the basis of the 'applicable characteristics' enumerated in section 9(2) of the Manitoba Human Rights Code (proclaimed in force December 10, 1987, and as amended from time to time).
Exceptions are occasionally warranted when it can be demonstrated that systemic discrimination may exist that results in the under-representation of identified subpopulations in Manitoba and/or when the proposed award has as its object the amelioration of conditions of disadvantaged individuals or groups, including those who are disadvantaged because of any applicable characteristic referred to in subsection 9(2) of the Manitoba Human Rights Code. Any exception to this principle shall be made only with the consent of the unit concerned, the Senate Committee on Awards, and the Senate. A request for such an exception shall be indicated by the Committee on Awards.

### 3.0 Accountability

3.1 The University Secretary is responsible for advising the President that a formal review of the Policy is required.
3.2 It is the responsibility of the Senate Committee on Awards and the Senate to review terms of reference for all new awards (e.g., scholarships, bursaries, fellowships, prizes, medals, exhibitions, etc.) and to ensure that these terms comply with the Policy.

### 4.0 Secondary Documents

4.1 The Approving Body may approve Procedures which are secondary to and comply with this Policy.
4.2 Administration may approve Procedures which are secondary to and comply with this Policy, subject to the following limitations:

### 5.0 Review

5.1 Formal Policy reviews will be conducted every ten (10) years. The next scheduled review date for this Policy is $\qquad$ .
5.2 In the interim, this Policy may be revised or rescinded if:
(a) the Approving Body deems necessary; or
(b) the relevant Bylaw, Regulations or Policy is revised or rescinded.
5.3 If this Policy is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:
(a) comply with the revised Policy; or
(b) are in turn rescinded.

### 6.0 Effect on Previous Statements

6.1 A This Policy supersedes the following:
(a) all previous Board/Senate Policies, Procedures, and resolutions on the subject matter contained herein; and
(b) all previous Administration Policies, Procedures, and directives on the subject matter contained herein;
(c) this Policy supersedes Policy 419 Non-acceptance of discriminatory scholarships, bursaries, or fellowships (Effective date, March 22, 1979) [Previous Governing Document no./title/effective date]

### 7.0 Cross References



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## Board of Governors Submission

## AGENDA ITEM: Report of the Senate Committee on Awards - Part A [dated August 27, 2009]

## RECOMMENDED RESOLUTION:

THAT the Board of Governors approve four new offers, nine amended offers, and the withdrawal of one offer, as set out in Appendix A of the Report of the Senate Committee on Awards [dated August 27, 2009].

Action Requested: $X$ Approval $\square$ Discussion/Advice $\square$ Information

## CONTEXT AND BACKGROUND:

The Senate Committee on Awards met on August 27, 2009, to approve four new offers, nine amended offers, and the withdrawal of one offer.

RESOURCE REQUIREMENTS:

The Awards will be funded from the various sources of funding identified within the Report.

## IMPLICATIONS:

$N / A$

## ALTERNATIVES:

N/A

CONSULTATION: [delete if not applicable]
All of these award decisions meet the published guidelines for awards as approved by Senate and were reported to Senate for information on October 7, 2009.

## Board of Governors Submission

Routing to the Board of Governors:

| Reviewed | Recommended | By | Date |
| :---: | :---: | :---: | :---: |
| X | $X$ | Senate Committee on Awards | August 27, 2009 |
| X | X | Senate Executive | September 23, 2009 |
| X | X | Senate | October 7, 2009 |
| $\square$ | $\square$ |  |  |
| $\square$ | $\square$ |  |  |
| Submission prepared by: |  | Senate |  |
|  |  | _ |  |
| Submission approved by: |  | University Secretary |  |
| Attachments |  |  |  |

## REPORT OF THE SENATE COMMITTEE ON AWARDS - PART A

## Preamble

Terms of reference for the Senate Committee on Awards include the following responsibility:
On behalf of Senate, to approve and inform Senate of all new offers and amended offers of awards that meet the published guidelines presented to Senate on November 3, 1999, and as thereafter amended by Senate. Where, in the opinion of the Committee, acceptance is recommended for new offers and amended offers which do not meet the published guidelines or which otherwise appear to be discriminatory under the policy on the Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships, such offers shall be submitted to Senate for approval. (Senate, April 5, 2000)

## Observations

At its meeting of August 27, 2009, the Senate Committee on Awards approved four new offers, nine amended offers, and the withdrawal of one offer, as set out in Appendix A of the Report of the Senate Committee on Awards (dated August 27, 2009).

## Recommendations

On behalf of Senate, the Senate Committee on Awards recommends that the Board of Governors approve four new offers, nine amended offers, and the withdrawal of one offer, as set out in Appendix A of the Report of the Senate Committee on Awards (dated August 27, 2009). These award decisions comply with the published guidelines of November 3, 1999, and are reported to Senate for information.

Respectfully submitted,
Dr. Philip Hultin
Chair, Senate Committee on Awards

## Appendix A

## MEETING OF THE SENATE COMMITTEE ON AWARDS

August 27, 2009

## 1. NEW OFFERS

## David S. Bloom, M.D., and Rosalind Bloom Bursary in Medicine

Dr. David S. Bloom (M.D./61, B.Sc. Med./61) and his wife, Rosalind Dalfen Bloom (B. Comm., McGill University) have established an endowment fund at the University of Manitoba, with an initial gift of $\$ 7,425$. The Manitoba Scholarship and Bursary Initiative has made a contribution to the fund. The purpose of the fund is to support students in the Faculty of Medicine. The available annual income from the fund will be used to offer one bursary to an undergraduate student who:
(1) is enrolled full-time in any year of study in the Undergraduate Medical Education Program in the Faculty of Medicine and is in good standing;
(2) has demonstrated financial need on the standard University of Manitoba bursary application form.

The selection committee will be named by the Dean of the Faculty of Medicine (or designate).

## Dr. John (Jack) Neilson Research Award in Oral-Systemic Health

In memory of the founding Dean of the Faculty of Dentistry, Dr. John (Jack) Neilson, the Neilson family has established an endowment fund at the University of Manitoba, with an initial gift of $\$ 50,000$ in 2009. The fund will be used to offer scholarship support for students undertaking graduate thesis research in the area of oral-systemic health. The available annual income from the fund will be used to offer one or more scholarships to graduate students who:
(1) are enrolled full-time in the Faculty of Graduate Studies, in the Master of Dentistry (Periodontics) program;
(2) have achieved a minimum degree grade point average of 3.5 (or equivalent) based on the last 60 credit hours of study;
(3) are conducting thesis research in the area of oral-systemic health related to periodontal or implant diseases;
(4) who have received approval for their research ethics protocol from a Research Ethics Board;
(5) have established at least one research collaboration with a faculty member or clinical resident from a medical sciences or other health-related discipline outside of dentistry.

The selection committee will have the discretion to determine the number and value of awards offered each year.
Candidates will be required to submit a letter of application, a research proposal, and a letter of support from their supervisor. The award is not automatically renewable but previous recipients may reapply.
Recipients may hold the Dr. John (Jack) Neilson Research Award in Oral-Systemic Health concurrently with any other awards, consistent with policies in the Faculty of Graduate Studies.

The Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Dentistry (or designate) to name the selection committee, which will include the Division Head, Periodontics and the Director, Graduate Periodontics.

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

## Kerry Pearlman Endowment Fund Bursary

In memory of Kerry Pearlman (LL.B./82), the Manitoba Association of Crown Attorneys has established an endowment fund at the University of Manitoba with an initial gift of $\$ 21,775$. The available annual interest from the fund will be used to offer one bursary to a student who:
(1) is enrolled full-time in any year of study in the Faculty of Law at the University of Manitoba;
(2) has achieved a minimum cumulative grade point average of 2.5 ;
(3) has demonstrated financial need on the standard University of Manitoba bursary application form.

The selection committee will be the Faculty of Law Awards Committee.

## Theodore (Ted) Peter Schaefer Graduate Award in Chemistry

Family and friends of Ted Schaefer have established an endowment fund at the University of Manitoba in his memory. The fund will be used to offer scholarships to graduate students in the Department of Chemistry who have demonstrated ability in research. The available annual income from the fund will be used to offer one scholarship to a student who:
(1) is registered as a full-time student in the Faculty of Graduate Studies, in a Master's or Doctoral program delivered by the Department of Chemistry;
(2) has demonstrated exceptional research ability at either the undergraduate or graduate level;
(3) has achieved a minimum degree grade point average of 3.5 (or equivalent) over (i) the last two regular academic sessions completed if he or she is in the first two years of graduate studies and (ii) all graduate level sessions if he or she is beyond the first two years of graduate studies.

Research ability may be determined by research publications or presentations at local, national, or international scientific conferences. Chemistry students in the first year of graduate studies will be evaluated based on CHEM 4710-Research Project in Chemistry or Biochemistry or an equivalent course.

In order to be considered for this award, students must submit the Department of Chemistry's Application for Scholarship Support. The award is renewable, but previous recipients must re-apply each year to be considered and will be in equal competition with other candidates.
The Dean of the Faculty of Graduate Studies will ask the Chair of the Scholarships Committee of the Department of Chemistry to convene the selection committee for this award.

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

## 2. AMENDMENTS

## T.A. (Stoney) Anderson Gold Medal

The terms of reference for the T.A. (Stoney) Anderson Gold Medal, which is offered to the student graduating from the Asper MBA program with the highest academic standing, have been revised to allow the Asper MBA program to identify the recipient each fall, rather than each spring. The recipient will be selected from among all graduands in the previous calendar year, including February, May, and October graduands.

## Archer Daniels Midland Fellowship

Two amendments have been made to the terms of reference for the Archer Daniels Midland Fellowship, which is offered to students in the Asper MBA program.

- Students who are registered part-time will now be considered for the award, in addition to fulltime students.
- A statement has been added to indicate that preference will be given to full-time students.
- Criterion (2) has been revised to clarify that candidates' degree grade point average will be determined based on the last 60 credit hours of study.


## Associates Award for Study in the Asper MBA Program

A number of amendments have been made to the terms of reference for the Associates Award for Study in the Asper MBA Program, which is offered to the student graduating from the Asper MBA program with the second highest academic standing.

- The revised terms allow the Asper MBA program to identify the recipient each fall, rather than each spring. The recipient will be selected from among all graduands in the previous calendar year, including February, May, and October graduands.
- The required degree grade point average has been changed from: at least 3.75 to: normally at least 3.75.
- A number of editorial changes have been made.


## Canadian Masonry Research Institute Scholarship

A number of revisions have been made to the terms of reference for the Canadian Masonry Research Institute Scholarship, which is open to Master's students in Architecture, City Planning, Interior Design, and Landscape Architecture. The changes are intended to ensure that the award can be offered at the time the recipient is entering the second year of his or her Master's program.

- Candidates' degree grade point average is to be calculated based on the first year of study in the Master's program. Previously, students were assessed once they had completed all of the required course work toward a Master's degree.
- Criteria (3) and (4) have been revised to broaden the pool of applicants to any student who is conducting research specifically related to unit or stone masonry studies. Previously, to be considered for the award, candidates were required to be conducting research for a Master's thesis, design thesis, or comprehensive examination in one of these two areas.
- Membership on the selection committee will no longer include the Dean of the Faculty of Architecture as an ex officio member. The committee must now include a representative from each department whose students have applied for the scholarship in the year that the award is tenable.


## Dackow Family Bursary

The terms of reference for the Dackow Family Bursary, which is a renewable entrance bursary for graduates of Wynyard Composite High School, have been amended following an additional contribution to the endowment fund for this award.

- The terms now direct the University to use both the available interest from the fund, including any annual and unspent revenue, to offer the renewable bursaries.
- The value of the initial entrance bursary has been increased from: $\$ 2,500$ to: $\$ 3,000$.
- The value of subsequent disbursements (or renewals), in the second, third, and fourth years of study, for students who:
- continue in the B.Comm.(Hons.) or the B.Sc.(Hons.) program with a declared major in Actuarial Mathematics has been increased from: $\$ 3,500$ to: $\$ 6,000$;
- continue in any other undergraduate program, in any Faculty or School, has been increased from: $\$ 1,500$ to: $\$ 3,000$.


## Jane Davie Memorial Bursary

A number of revisions have been made to the terms of reference for the Jane Davie Memorial Bursary.

- The second paragraph has been revised to reflect that the donor for this award, Mrs. Emma Marshall, has established an endowment fund to support the award. The award has been offered as an annually funded award since it was established in 2004.
- The value of the Bursary has been amended from: $\$ 400$ to: the available annual income from the fund.
- A number of editorial changes have been made.


## Department of Mathematics Entrance Scholarships

The terms of reference for the Department of Mathematics Entrance Scholarships have been amended to increase the value of the scholarships from: the cost of one half course (3 credit hours) to: $\$ 500$.

## James I. Elliott Bursary in Agricultural and Food Sciences

The terms of reference for the James I. Elliott Bursary in Agricultural and Food Science have been amended to increase the value of the bursary from: $\$ 500$ to: $\$ 1,000$.

## Charles E. Frosst Scholarship and Medal in Pharmacy

The terms of reference for the Charles E. Frosst Scholarship and Medal in Pharmacy have been amended, as the donor no longer produces a medal.

- The name of the award has been changed to: Charles E. Frosst Scholarship in Pharmacy.
- The donor will offer the recipient a copy of the Merck Manual in place of the medal and in addition to the $\$ 1,000$ monetary award.
- In the opening paragraph, the name of the donor has been updated from: the Charles E. Frosst \& Company of Montreal to: Merck Frosst Canada Ltd.
- The selection committee is now identified as the Faculty of Pharmacy Awards Committee, rather than the Senate of the University, which reflects current practice.
- A number of editorial changes have been made.


## 3. WITHDRAWALS

## Loewen Foundation Fellowships in Responsible Wood Utilization

The terms of reference for the Loewen Foundation Fellowships in Responsible Wood Utilization were withdrawn, as all of the available funds have been disbursed to students.

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## Board of Governors Submission

## AGENDA ITEM: Report of the Senate Committee on Awards - Part B [dated August 27, 2009]

## RECOMMENDED RESOLUTION:

THAT the Board of Governors approve the Report of the Senate Committee on Awards Part B [dated August 27, 2009].

Action Requested: $X$ Approval: Discussion/Advice $\square$ Information

## CONTEXT AND BACKGROUND:

The Senate Committee on Awards reviewed the application for two amended offers, the "Elizabeth Lughinbuhl Memorial Award" and the "Dr. Margaret Marchand Scholarship" that appear to be discriminatory according to the Policy for Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships. Letters of support were received from Dr. Bate, Head of Computer Science for the Elizabeth Lughinbuhl Memorial Award; and from Dean Whitmore, Faculty of Science for the Dr. Margaret Marchand Scholarship.

## RESOURCE REQUIREMENTS:

The Awards will be funded from various donations as identified within the Report.

## IMPLICATIONS:

The need to change the terms for the Dr. Margaret Marchand Scholarship reflects the increase in the number of female students in science. Previously, the award targeted women as an underrepresented group in science. With the amendment, the award will now target women in the numerical sciences, an area where women are still currently underrepresented.

## ALTERNATIVES:

## N/A

CONSULTATION: [delete if not applicable]
The amendments to these awards were approved by Senate on October 7, 2009.

## Board of Governors Submission

Routing to the Board of Governors:

| Reviewed | Recommended | By | Date |
| :---: | :---: | :---: | :---: |
| X | x | Senate Committee on Awards | August 27, 2009 |
| X | X | Senate Executive | September 23, 2009 |
| x | x | Senate | October 7, 2009 |
| $\square$ | $\square$ |  |  |
| $\square$ | $\square$ |  |  |
| Submission prepared by: |  | Senate |  |
|  |  |  |  |
| Submissio | approved by: | University Secretary |  |

## Attachments

- Report of the Senate Committee on Awards - Part B


## REPORT OF THE SENATE COMMITTEE ON AWARDS - PART B

## Preamble

Terms of reference for the Senate Committee on Awards include the following responsibility:
On behalf of Senate, to approve and inform Senate of all new offers and amended offers of awards that meet the published guidelines presented to Senate on November 3, 1999, and as thereafter amended by Senate. Where, in the opinion of the Committee, acceptance is recommended for new offers and amended offers which do not meet the published guidelines or which otherwise appear to be discriminatory under the policy on the Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships, such offers shall be submitted to Senate for approval. (Senate, April 5,2000 )

## Observations

At its meeting of August 27, 2009 the Senate Committee on Awards reviewed two amended offers that appear to be discriminatory according to the Policy for Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships.

At its meeting of August 27, 2009, the Senate Committee on Awards approved amendments to the policy on the Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships.

## Recommendations

The Senate Committee on Awards recommends that Senate and the Board of Governors approve two amended offers, as set out in Appendix A of the Report of the Senate Committee on Awards - Part B (dated August 27, 2009).

The Senate Committee on Awards recommends that Senate and the Board of Governors approve revisions to the policy on Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships, as set out in Appendix B of the Report of the Senate Committee on Awards - Part B (dated August 27, 2009).

Respectfully submitted,
Dr. Philip Hultin
Chair, Senate Committee on Awards

## Comments of the Senate Executive Committee: The Senate Executive Committee endorses the report to Senate.

## Appendix A

## MEETING OF THE SENATE COMMITTEE ON AWARDS

August 27, 2009

## 2. AMENDED OFFERS

## Elizabeth Lughinbuhl Memorial Award

The following amendments have been made to the terms of reference for the Elizabeth Lughinbuhl Memorial Award.

- The name of the award has been changed to: Elisabeth Luginbühl Memorial Award.
- The value of the award has been amended from: normally $\$ 500$ to: normally the available annual interest from the fund.
- A new requirement has been added to offer the award specifically for female students studying Computer Science.
- A statement has been added to allow the University to offer the award to a male student, who meets the academic requirements for the award, in any given year that there is no qualified female candidate.
- Criterion (2) has been revised to clarify that those students in Year 3 of both the Bachelor of Computer Science (Honours) and the Bachelor of Computer Science (Honours) Cooperative Option will be considered for the award.
- In criterion (2), high standing is now defined as a minimum degree grade point average of 3.5.
- The membership of the selection committee will no longer include the Director of Computer Services as an ex officio member.
- A number of editorial amendments have been made.
(Attachment I)


## Dr. Margaret Marchand Scholarship

A number of revisions have been made to the terms of reference for the Dr. Margaret Marchand Scholarship.

- A number of editorial changes have been made to the first paragraph in order to provide a history of this scholarship and to describe the revised purpose of the fund. The revised paragraph now reads:

In 1992, Dr. Margaret Owchar Marchand (B.A., Mathematics/45) established an endowment fund at the University of Manitoba to support scholarships (initially \$350) for women students entering the Faculty of Science. Initially valued at $\$ 10,000$, the fund has grown considerably over the years through additional gifts from Dr. Marchand. By 2009, enrolment of female students in most Science programs had increased markedly, and the Scholarship was, therefore, amended to encourage female students to enter the numerical sciences, in particular. The available annual interest on this fund will be used to offer one or more scholarships, with a minimum value of $\$ 1,000$ each, to students who...

- The pool of candidates has been changed from: female students entering the Faculty of Science from a high school in rural Manitoba to: female students who have graduated from a high school in rural Manitoba and who are enrolled full time (minimum 24 credit hours) in the

Faculty of Science, in any Major or Honours program in the numerical sciences (including actuarial mathematics, computer science, mathematics, and statistics) leading to either a Bachelor of Science or a Bachelor of Computer Science degree.

- In order to be considered for the award, students must have achieved a minimum degree grade point average of 3.5 in the first year of study at the University.
- A statement has been added giving the selection committee the discretion to determine the number and value of scholarships offered each year, with the proviso that the minimum value will be $\$ 1,000$.


# To: Dr. Phil Hultin, Chair, Senate Committee on Awards 

From: Dr. J. Bate, Head, Department of Computer Science
Re: Changes of terms of reference for the Elizabeth Luginbuhl Award
June 18, 2009

The Department of Computer Science fully supports the proposed change to the terms of reference of the Elizabeth Luginbuhl Memorial Award which would require it to be awarded to a female student whenever possible. This is fully in keeping with the spirit and intent of the award, and is a welcome change given the severe underrepresentation of female students in Computer Science.

I understand that current policies require that the under-representation of any target group in such an award be demonstrated over a 5 year period. The situation in Computer Science is striking and easily demonstrated.

Honours Program (based on Nov. 1 enrolment in a B.C.Sc. degree)

| Year | Male | Female |
| :--- | :---: | :---: |
| $2007-2008$ | 86 | 8 |
| $2006-2007$ | 78 | 7 |
| $2005-2006$ | 118 | 11 |
| $2004-2005$ | 124 | 17 |
| $2003-2004$ | 84 | 8 |

Major Program (based on Nov. 1 enrolment in the Major program in Computer Science)

| Year | Male | Female |
| :--- | :---: | :---: |
| $2007-2008$ | $\mathrm{n} / \mathrm{a}(*)$ | $\mathrm{n} / \mathrm{a}(*)$ |
| $2006-2007$ | $\mathrm{n} / \mathrm{a}(*)$ | $\mathrm{n} / \mathrm{a}(*)$ |
| $2005-2006$ | 154 | 13 |
| $2004-2005$ | 195 | 16 |
| $2003-2004$ | 100 | 14 |

$\left.{ }^{*}\right)$ Following the switch to Aurora, male/female data is only available at the Faculty level, and no longer broken down to the Departmental level. Data could still be presented for the Honours program because all students in a B.C.Sc. program must be in Honours Computer Science. But B.Sc. students are in no identifiable department. Although 2 years of data are absent, the under-representation is apparent, and I assure you that there was no dramatic increase in the number of female students in the Major program in 2006-8.

Yours truly,

Dr. John Bate
Head, Department of Computer Science

# THE UNIVERSITY OF MANITOBA <br> Faculty of Science Office of the Dean 250 Machray Hall INTER-DEPARTMENTAL CORRESPONDENCE 

DATE: $\quad$ September 24, 2009
TO: Dr. D. Barnard, Chair, Senate Executive Committee
FROM: Mark Whitmore, Dean, Faculty of Science


RE: $\quad$ Revised Terms of Reference, Dr. Margaret Marchand Scholarship

I understand that a question was raised at the recent Senate Executive Committee meeting regarding the proposed amendments to the terms of reference for the Dr. Margaret Marchand Scholarship, and the proportion of male and female students in the pool of eligible candidates.

The pool is female students who have graduated from a high school in rural Manitoba and who are enrolled in a major or honours program in the numerical sciences. These programs are those offered by the Department of Computer Science, the Department of Mathematics and the Department of Statistics, plus ones offered jointly with other Departments. The percentage of female students in these programs has been below $30 \%$ in each of the past five years, and below $20 \%$ in four of those five.

Defining the eligible pool to be students in a group of programs is an established practice. For example, in the past, the university has established scholarships open to women in the "physical sciences", a pool which includes students in groups of programs from two Faculties.

## AWARDS OFFICE

SEP 252009
UNIVERSITY OF MANITOBA.

# THE UNIVERSITY OF MANITOBA <br> Faculty of Science <br> Office of the Dean <br> 250 Machray Hall <br> INTER-DEPARTMENTAL CORRESPONDENCE 

DATE: July 22, 2009
TO: Dr. Phil Hultin, Chair, Senate Committee on Awards
FROM: Mark Whitmore, Dean, Faculty of Science


RE: $\quad$ Revised Terms of Reference, Dr. Margaret Marchand Scholarship

I am pleased to support the proposed Revised Terms of Reference to the Dr. Margaret Marchand Scholarship.

The fact that the terms of reference need to be revised is good news: it reflects the increase in the number of female students in science. In fact, overall, the proportion of female graduates in the Faculty of Science was $48 \%$ in 2006 and $44 \%$ in 2007, the most recent years for which data are available. However, the proportion within the numerical sciences is much lower. As indicated in the attached table, it ranged from $14 \%$ to $26 \%$ over the five-year period of 2003 to 2007 . These data are taken from the IS Books, and 2007 is the most recent set available.

## Female and Male Graduates by Year of Graduation



69 94: 42\%| (5 Year total)

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## AGENDA ITEM: Report of the Senate Committee on Awards [dated September 29, 2009]

## RECOMMENDED RESOLUTION:

THAT the Board of Governors approve three new offers, nineteen amended offers, and the withdrawal of one offer, as set out in Appendix A of the Report of the Senate Committee on Awards [dated September 29, 2009].

```
Action Requested:
\(X\) Approval Discussion/Advice
Information
```


## CONTEXT AND BACKGROUND:

The Senate Committee on Awards met on September 29, 2009, to approve three new offers, nineteen amended offers, and the withdrawal of one offer.

RESOURCE REQUIREMENTS:

The Awards will be funded from the various sources of funding identified within the Report.

IMPLICATIONS:
N/A

## ALTERNATIVES:

N/A

CONSULTATION: [delete if not applicable]
All of these award decisions meet the published guidelines for awards as approved by Senate and were reported to Senate for information on November 4, 2009.

## Board of Governors Submission

Routing to the Board of Governors:

| Reviewed | Recommended | By | Date |
| :---: | :---: | :---: | :---: |
| $X$ | $x$ | Senate Committee on Awards | September 29, 2009 |
| X | X | Senate Executive | October 21, 2009 |
| X | X | Senate | November 4, 2009 |
| $\square$ | $\square$ |  |  |
| $\square$ | $\square$ |  |  |
| Submission prepared by: |  | Senate |  |
|  |  |  |  |
| Submissio | n approved by: | University Secretary |  |
| Attachmen |  |  |  |

## REPORT OF THE SENATE COMMITTEE ON AWARDS

## Preamble

Terms of reference for the Senate Committee on Awards include the following responsibility:
On behalf of Senate, to approve and inform Senate of all new offers and amended offers of awards that meet the published guidelines presented to Senate on November 3, 1999, and as thereafter amended by Senate. Where, in the opinion of the Committee, acceptance is recommended for new offers and amended offers which do not meet the published guidelines or which otherwise appear to be discriminatory under the policy on the Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships, such offers shall be submitted to Senate for approval. (Senate, April 5, 2000)

## Observations

At its meeting of September 29, 2009, the Senate Committee on Awards approved three new offers, nineteen amended offers, and the withdrawal of one offer, as set out in Appendix A of the Report of the Senate Committee on Awards (dated September 29, 2009).

## Recommendations

On behalf of Senate, the Senate Committee on Awards recommends that the Board of Governors approve three new offers, nineteen amended offers, and the withdrawal of one offer, as set out in Appendix A of the Report of the Senate Committee on Awards (dated September 29, 2009). These award decisions comply with the published guidelines of November 3, 1999, and are reported to Senate for information.

Respectfully submitted,
Dr. Philip Hultin
Chair, Senate Committee on Awards

## Appendix A

## MEETING OF THE SENATE COMMITTEE ON AWARDS

September 29, 2009

## 1. NEW OFFERS

## Deanna B. Cohen Bursary

Mr. Edwin Cohen (B.Comm./57) and Mrs. Deanna Cohen (B.S.W./61) offer an annual bursary at the University of Manitoba, to support graduate students in Social Work. The annual bursary will initially be valued at $\$ 1,500$. The Jewish Foundation of Manitoba, which holds the capital used to generate the annual amount for the bursary, will confirm the bursary value with the Financial Aid and Awards Office at the University on an annual basis.
The donors agree to fund the Bursary for a term of five years, beginning in the 2010-2011 academic session, with the right to renew the commitment for successive five year terms exercisable during the fourth year of any five year term. In the fourth year of any term, the donors will advise the Financial Aid and Awards Office, in writing, of their intention either to renew their commitment for an additional term or to withdraw the award.

The bursary will be offered to a graduate student who:
(1) is enrolled full-time in the Faculty of Graduate Studies, in the first year of the Master of Social Work or the Ph.D. in Social Work;
(2) has achieved a minimum cumulative grade point average of 3.0 (or equivalent) based on the last 60 credit hours of study;
(3) is undertaking a thesis or an advanced field placement in the area of gerontology;
(4) has demonstrated financial need on the standard University of Manitoba bursary application form.

In any given year that no candidate meets the criteria set out in the preceding paragraph, the bursary will be offered to an undergraduate student who:
(1) is enrolled full-time in the Faculty of Social Work, in the second, third, or fourth year of the Bachelor of Social Work, Interfaculty Option in Aging;
(2) has achieved a minimum degree grade point average of 2.5 ;
(3) has demonstrated financial need on the standard University of Manitoba bursary application form.
The selection committee will be named by the Dean of the Faculty of Social Work (or designate).

## Abraham and Mary Mathai University Entrance Scholarships

In memory of Abraham and Mary Mathai, their daughter offers three entrance scholarships, valued at $\$ 500$ each, for graduates of the International College of Manitoba who are admitted to the University of Manitoba. One scholarship will be offered to the student who:
(1) has successfully completed a University Transfer Program (UTP) Stage 2 in Arts, Business, Engineering, or Science at the International College of Manitoba;
(2) has achieved a minimum grade point average of 3.5 based on a minimum of 24 credit hours;
(3) in the next ensuing academic session, is admitted to, and is registered full-time in the Faculty of Arts, the Faculty of Engineering, the I.H. Asper School of Business, or the Faculty of Science;
(4) is determined by the selection committee to be the most improved student over the course of his or her studies at the International College of Manitoba.

The International College of Manitoba will nominate one candidate each year. The nominating committee for this award shall be comprised of staff and faculty from the College, other than the donor for this award. The nomination will be forwarded to the University of Manitoba.
The selection committee will be named by the Director of Financial Aid and Awards (or designate).

Two scholarships will be offered to students who:
(1) have successfully completed a University Transfer Program (UTP) Stage 2 in Arts, Business, Engineering, or Science at the International College of Manitoba;
(2) have achieved the first and second highest grade point averages, with a minimum grade point average of 3.5 , based on a minimum of 24 credit hours;
(3) in the next ensuing academic session, are admitted to, and are registered full-time in the Faculty of Arts, the Faculty of Engineering, the I.H. Asper School of Business, or the Faculty of Science.
The selection committee will be named by the Director of Financial Aid and Awards (or designate).

## E.H. Price Entrance Scholarships for Engineering

E.H. Price provides $\$ 10,000$ annually to the University of Manitoba to offer the E.H. Price Entrance Scholarships for Engineering. The Financial Aid and Awards Office will confirm the availability of funding with E.H. Price each year prior to offering the Scholarships. E.H. Price offers these Scholarships as part of the Faculty of Engineering's initiative to establish an awards program that offers entrance scholarships to strong students admitted to the Faculty through the direct entry stream. Each year, forty entrance scholarships, valued at $\$ 250$ each, will be offered to undergraduate students who:
(1) have been admitted to, and register full-time in, their first year of study in the Faculty of Engineering via direct entry;
(2) have achieved high standing, with a minimum average of 85 percent on those courses considered for the University of Manitoba General Entrance Scholarship program.
The selection committee will be the Scholarships, Bursaries, and Awards Committee of the Faculty of Engineering.

## 2. AMENDMENTS

## B.A. and E.W. Finkle Prize in Anthropology

Several changes have been made to the terms of reference for the B.A. and E.W. Finkle Prize in Anthropology.

- At the donor's request, the name of the award has been changed to the Dr. Joan F. de Pena Prize in Anthropology.
- Two references to "G.P.A." have been amended to clarify that students are assessed based on their degree grade point average.
- A number of editorial changes have been made.


## Minerva Safety in Engineering Design Prize

A number of amendments have been made to the terms of reference for the Minerva Safety in Engineering Design Prize.

- In order to increase the pool of candidates, individual students who complete a thesis that addresses issues of workplace safety and health will also be consider for the prize, in addition to teams of students who complete a design project that focuses on these issues.
- It follows that references to the specific courses for which the prize was previously offered (BIOE 4580, CIVL 4590, ECE 4600, MECH 4860) have been removed from the terms; and
- membership of the selection committee will no longer include the instructors of the design courses noted above; and
- the process by which a call for nominations will be announced to engineering course instructors has been revised.
- A number of editorial changes have been made.


## Portnoy Award

Two changes have been made to the terms of reference for the Portnoy Award.

- Interdisciplinary Case Studies (currently numbered DENT 4020) has been added to the list of eligible courses.
- The membership of the selection committee has been amended to include the Course Coordinator for Interdisciplinary Case Studies.
- A number of editorial changes have been made.


## Statistical Association of Manitoba Bursary

Several amendments have been made to the terms of reference for the Statistical Association of Manitoba Bursary, which is offered to students entering the third or fourth year of a major or honours program in Statistics at either the University of Manitoba or the University of Winnipeg.

- The opening paragraph has been revised to reflect that the donors for this award, members of the Statistical Association of Manitoba, have established an endowment fund at the University of Manitoba to support the award. The award has been offered as an annually funded award since it was established in 1990.
* The value of the bursary has been amended from: $\$ 200$ to: the available annual interest from the fund will be divided equally to offer two bursaries.
- Each year, one of the two bursaries is to be offered to a student at the University of Manitoba and one to a student at the University of Winnipeg.
- Normally, one bursary will be offered at each institution. The selection committee at each university will, however, have the discretion to offer multiple bursaries, of equal value, where two or more candidates are determined to be equally qualified.
- The selection committee at each university will be named by the Head of the Department of Statistics (or designate). Previously, the committee included one representative of the Statistical Association of Manitoba and one representative of the Department of Statistics at each university.


## Harold E. Welch Memorial Graduate Scholarship

Amendments made to the terms of reference for the Harold E. Welch Memorial Graduate Scholarship follow from the amalgamation of the Departments of Botany and Zoology into the Department of Biological Sciences.

- As the graduate stream in 'zoology' will no longer be offered, the revised terms specify that the scholarship will be offered to a student who is either entering, or registered in, the first year of an M.Sc. or Ph.D. program in 'biological sciences, with a focus in animal biology.'
* The selection committee is to be named by the Head of the Department of Biological Sciences.


## Winnipeg Society of Financial Analysts Prize

Several changes have been made to the terms of reference for the Winnipeg Society of Financial Analysts Prize.

- The name of the award has been amended to the 'Chartered Financial Analysts Society of Winnipeg Prize.' One other reference to the donor organization in the first paragraph has also been updated to reflect the change to the Society's name.
- The prize will now be offered to the student who has achieved the highest grade in the course Investments (currently numbered FIN 3410 ) with a minimum grade of $B+$, within the previous 12 months, and who meets the other requirements established in the terms. Previously, the award was offered to the student who had achieved the highest grade point average in either Investments and Security Analysis or Investments and Financial Markets and Institutions within the previous 18 months.
- A number of editorial changes have been made.


## Manitoba Scholarship and Bursary Initiative

Terms of reference for 13 awards were revised to reflect that the Manitoba Scholarship and Bursary Initiative has made a contribution to the endowment or trust fund for the award.

- Ray and Joan Bailey Bursary
- Wayne Cadogan Award
- Michael Cox Scholarship
- Clifford H. Edwards C.M., O.M., Q.C. Memorial Bursary
- Great-West Life Student Athletic Award
- Dr. Cameron Jay Memorial Scholarship
- John A. Russell Alumni Bursaries
- Harry Seidler and John Russell Recruitment Award in Architecture
- Arun Sud Memorial Scholarship
- Dr. Emőke J.E. Szathmáry Graduate Fellowship in Biological Anthropology
- Frances Mīay Teiford Bursary
- Charles H. Thomsen Award in Landscape Architecture
- Margaret Tobin Bursary for Single Parents in Social Work


## 3. WITHDRAWALS

## SHOWCASE Award

The terms of reference for the SHOWCASE Award were withdrawn, as the SHOWCASE research fair has been discontinued.

# FOR INFORMATION ONLY 

UNIVERSITY
of Manitoba
Board of Governors Submission

## AGENDA ITEM: Statement of Intent RE: Bachelor of Arts Integrated Studies

## RECOMMENDED RESOLUTION:

For information only.
Action Requested:
Approval Discussion/Advice $X$ Information

## CONTEXT AND BACKGROUND:

The Faculty of Arts has submitted a Statement of Intent for a Bachelor of Arts: Integrated Studies Degree. The proposed degree is a three-year program to be offered in collaboration with Extended Education. The proposed degree would require areas of concentration rather than a major/minor requirement, providing a more flexible path for degree completion but also ensuring academic rigor.

## RESOURCE REQUIREMENTS:

Will be provided in the full program proposal.

## IMPLICATIONS:

The proposed program would serve working adults who have completed some post-secondary education (e.g. completed certificates or diplomas or credit courses) and wish to complete a degree. The BA: Integrated Studies would meet a critical need in Manitoba, build on existing areas of strength, and move the institution in directions identified as priorities. This will be done by providing opportunities for lifelong learning, integrating strong links with the community, and increasing enrolment by accessing the pool of motivated adult learners seeking a university degree and retaining students in certificate and diploma programs for more advanced studies.

## ALTERNATIVES:

## N/A

CONSULTATION: [delete if not applicable]
Extended Education conducted focus groups and interviews with potential students and senior administrators of Manitoba Hydro, the Manitoba Lotteries Commission, the Canadian Institute of Management, the Human Resource Management Association of Manitoba, the Manitoba Liquor Control Commission, the Manitoba Public Insurance Corporation, the Government of Manitoba Department of Training and Development and the City of Winnipeg.

## Board of Governors Submission

Routing to the Board of Governors:

| Reviewed | Recommended | By | Date |
| :---: | :---: | :---: | :---: |
| x | $\square$ | Faculty of Arts |  |
| X | $\square$ | Senate Executive | September 23, 2009 |
| x | $\square$ | Senate | October 7, 2009 |
| $\square$ | $\square$ |  |  |
| $\square$ | $\square$ |  |  |
| Submission prepared by: |  | Senate |  |
|  |  |  |  |
| Submissi | approved by: | University Secretary |  |

## Attachments

- Statement of Intent


## STATEMENT OF INTENT

Institution
$\square$ Brandon University
University of ManitobaAssiniboine Community College
University of Winnipeg
Collège universitaire de Saint－Boniface

Program Overview
$\square$ Program Name：Integrated Studies
$\square$ Credential to be offered：Bachelor of Arts：Integrated Studies
$\square$ Does the program require accreditation from a licensing group？
Keewatin Community CollegeYES
$\boxtimes \mathrm{NO}$
If yes，name group
Length of the program：$\times 3$ YearsProposed program start date：TBA $\qquad$
Day／Montl／Year
Which department（s）within the institution will have responsibility for the program？ Faculty of Arts
$\square$ As compared to other programs your institution will be proposing，is the priority of this program：

$$
\begin{aligned}
& \boxed{\text { High }} \\
& \square \text { Medium } \\
& \square \text { Low }
\end{aligned}
$$

$\square$ Is this a new program？
$\square$ Is this a revision of an existing program：
If YES，name program
What are the impacts of changing this program？Will the program be available to part－time students？
区 YESNO
$\square$ Will this program have a cooperative education component？
If YES，how long with the field placement be？
$\square$ Will the program contain an option to assess the prior learning of students，to grant credit for the skills／knowledge already present？YES

## Provide Details

$\square$ Will there be distance delivery options？

## 区 YES

NOProvide Details．
In 2007／08 Extended Education offered over 280 course sections from 11 faculties and schools by distance and online delivery．Where appropriate to their individualized academic／leaming plans，students will be eligible to take these courses for credit toward the Bachelor of Arts：Integrated Studies．In addition，new courses will be developed as identified in the curriculum plan．
$\square$ Will this program be delivered jointly with another institution？YES $区 N O$

If YES，name the institution
$\square$ Are similar progranes offered in Manitoba or other jurisdictions？
If YES，indicate why this program is needed（e．g．，area of specialization）
There are currently several programs in Canada that offer this credential geared to adult leamers．For example，Simon Fraser University offers an interdisciplinary program in Liberal and Business Studies，and University of New Bqunswick offers a Bachelor of Integrated Studies．Both programs have attracted a new group of leamers to their respective institutions：highly motivated adults with some post－secondary education（degree，certificate，and diploma），work experience and the skills to succeed in a university environment．Both programs have developed an admission policy that ensures learners will be able to function at the post－secondary level．The proposed Bachelor of Arts：Integrated Studies would be modeled in part on such programs in Canada and would attract a new group of learners to the University of Manitoba and retain persons who have completed certificates and diplomas as new degree students．
$\square$ What articulation, block transfer or credit transfer arrangements will you be looking at developing for this program?
The Bachelor of Integrated Studies will utilize the existing Pan-Canadian Protocol (1996) to which the University of Manitoba is a signatory and will assess certificate and diplomas on a course-by-course articulation in keeping with the University's current practice of course evaluation for post-secondary course work.

## Specific Program Information

## 1. Program Description

$\square$ Describe the program and its objectives:
The proposed Bachelor of Arts: Integrated Studies is a three-year degree program to be offered by the Faculty of Arts in collaboration with Extended Education. The proposed degree would require areas of concentration rather than a major/minor requirement, providing a more flexible path for degree completion but also ensuring academic rigor (e.g., appropriate writing and quantitative skills, breadth requirements, and an appropriate percentage of upper level courses).

The proposed program would serve working adults who have completed some post-secondary education (e.g., completed certificates or diplomas or credit courses) and wish to complete a degree. First, the proposed degree will formally recognize the education completed by certificate or diploma holders. Second, it will provide adults a flexible curriculum model (e.g., concentrations of study rather than the traditional major/minor approach). Third, it will provide flexible course scheduling suitable for working adults. Hence, variable modes of delivery (e.g., blended, online, videoconference, weekend/weekend) would be incorporated as needed.

The BA: Integrated Studies would meet a critical need in Manitoba, build on existing areas of strength, and move the institution in directions identified as priorities. Building a Brighter Future (2003) states that the University of Manitoba should "be at the centre of our community... [and] seek opportunities to enable Manitobans to learn throughout their lifetime." In the recent Draft Strategic Planning Framework 2009-2014 (circulated from May 13, 2009), President Barmard assessed internal Strengths and external Opportunities for the University based on the outcomes of this previous strategic plan. These included the University's strong connection to the community, the "broad range of programs and choice", and "the supportive leaming/work environment" (Strengths, p. 2, Table) and the "interest from [the] external community," opportunity for "enrolment growth from economic uncertainty, the "miversity of first choice for all Manitobans," and "connections with the Aboriginal community" (Opportunities, p. 2, Table). The Bachelor of Arts: Integrated Studies would provide a program in which working adults can complete an undergraduate degree that recognizes their prior post-secondary education and experience, and that provides purposeful scheduling of offerings and individualized academic planning. It underscores these Strengths and capitalizes on the Opportunities; while it thwarts identified Threats ["competition for students. . .," "changing demographics," and local indifference ("taken for granted") p. 2, Table] by increasing the pool of motivated adult learners seeking a university degree and retaining students in certificate and diploma programs for more advanced study; recognizing the changing pathways for students to enter university education; and working in partaership with employers in the private and public sectors to enhance career opportunity and progression for employees. In addition, the Bachelor of Arts: Integrated Studies undercuts the "silo mentality" identified in the draft strategic plan as a current Weakness by providing a flexible, yet rigorous liberal arts education that permits students to select broadly across Faculty, School, and disciplinary boundaries and to ladder previous certificate and program credentials towards B. A. completion; while it has been developed by working across units at the University and in consultation with stakeholders in the private/public sectors.

## $\square$ Provide an overview of the content to be taught in this program:

The degree program will be comprised of 90 credit hours of study. Students will be eligible to receive transfer credit $\geq 18$ credit hours from post-secondary education course work. Participants in the program will be required to complete 21 credit hours of foundation courses; a choice of an area of concentration ( 18 credit hours); and 51 credit hours of electives. Thirtysix (36) credit hours must be completed at UM to satisfy the residency requirement; 15 credit hours of course work must be completed at the 2000 level or above and 6 credit hours of course work must be completed at the 3000 level or above.

## Foundation Courses (21 credit hrs)

The purpose of these courses is to provide a transition to university level study, as well as a foundation in liberal arts. The foundation courses were identified to provide students with the knowledge and skills for successful participation and mobility in the workforce drawn from the information provided in interviews and focus groups with employers and potential students.

ARTS 1100 Introduction to University (3) (Integrated Studies Section)
EDUR 1560 Adult Learning and Development (3)
SWRK 2080 Interpersonal Communication Skills (3) or ENGL 0930 English Composition (3)
XXXX laaa Understanding and Using Data (3)
XXXX 1aab Leadership Theory and Practice (3)
XXXX labb Introduction to Social Sciences I and II (6) (major concepts in Psychology, Sociology, Anthropology and Political Studies with the intent that these courses fulfill the prerequisite for upper level courses in Psychology, Sociology, Anthropology and Political Studies)

Until such time that Introduction to Social Sciences I and $I I$ are approved, students will be permitted to substitute 6 credit hours of 1XXX from the Department of Anthropology, Political Studies, Psychology, or Sociology, as best fits their future curricular choices. Similarly, until such time that Understanding and Using Data is approved, students will be required to take a 3 credit hour course than satisfies the ' M ' (mathematics) requirement.

Two new areas of concentration (Cultural Literacy and Diversity and The Changing Workplace) are being developed specifically for this program, in response to the information provided by potential employers and students about appropriate areas of study for a degree for working adults.

The new concentrations are described below. In addition to the two new areas of concentration, students may choose to complete any minor program currently approved by the Faculty of Arts, which will be referred to as a concentration for purposes of this degree.
a) Proposed concentration in Cultural Literacy and Diversity ( 18 cr hrs ) to be selected from the sample list of courses. The purpose of this concentration is to provide learners with a broad understanding of Canadian culture and society.

| CDN | 1130 | Introduction to Canadian Studies (6) |
| :--- | :--- | :--- |
| CDN | 3730 | Canadian Identity: An Interdisciplinaty Approach (3) |
| NATV | 1220 | The Native Peoples of Canada Part I (3) |
| NATV | 1240 | The Native Peoples of Canada Part II (3) |
| PHIL | 2290 | Ethics and Society (3) |
| PSYC 2410 | Social Psychology 1 (3) Note: PSYC 1200 prerequisite to be accommodated by the proposed Introduction |  |
| to Social Sciences I and II |  |  |
| SOC $2320 \quad$ Canadian Society and Culture (3) Note: SOC 1200 prerequisite to be accommodated by the proposed |  |  |
| Introduction to Social Sciences. |  |  |
| SOC $2330 \quad$ Social Psychology in a Sociological Perspective (3) Note: SOC 1200 prerequisite to be accommodated by |  |  |
| the proposed Introduction to Social Sciences I and II. |  |  |
| SOC $2370 \quad$ Ethnic Relations (3) Note: SOC 1200 prerequisite to be accommodated by the proposed Introduction to |  |  |
| Social Sciences. |  |  |

b) Proposed concentration in The Changing W'orkplace ( 18 cr hrs) to be selected from the sample list of courses. The purpose of this concentration is to provide leamers with an understanding of the workplace and its changing nature.

ANTH 2500 Culture, Technology and Environment (3) Note: ANTH 1200 prerequisite to be accommodated by the proposed Introduction to Social Sciences I and II.
ECON 1210 Introduction to Canadian Economic Issues and Policies (3)
ECON 2410 The Manitoba Economy (3)
ECON 2360 Women in the Canadian Economy (3)
LABR 1260 Working for a Living (3)
LABR 1290 Intro to the Canadian Labour Movement (3)
LABR 3060 Workplace, Health and Safety (3) (Prerequisite is 1260 and 1290)
NATV 1220 The Native Peoples of Canada Part I (3)
NATV 1240 he Native Peoples of Canada Part II (3)
PHIL 2830 Business Ethics (3)
SOC 2390 Sociology of Organizations (3) Note: SOC 1200 prerequisite to be accommodated by the proposed Introduction to Social Sciences I and II.

Additional concentrations may be added in the future through normal Faculty approval processes. Similarly, departments may recommend that additional courses be added or deleted on the list of courses for the respective concentrations. Students who wish to tale courses from a second concentration may do so within their elective component. Stuclents who complete the requirements of a second concentration may submit a written request to the Dean's Office to have the second concentration recorded on their transcript

## 2. EnroIment

$\square$ What is the program's initial projected errollment? 50 students
$\square$ What is the projected enrollment for the $2^{\text {nd }}$ and $3^{\text {rd }}$ years? 100 students per year
$\square$ Describe the expected student profile.
Students will be new or returning' leamers to the institution-adult leamers with a completed certificate or diploma or degree credit courses from a post-secondary institution and a minimum of two years work experience (preferably with the same employer).

## 3. Labour Market Information

$\square$ What labour market need is the program expected to meet?
This degree will meet the labour market needs for those positions requiring that candidates hold an undergraduate degree. There are an increasing number of such positions. The Canadian Council on Learning (2006) predicts that two out of every three new/replacement jobs require completion of a post-secondary credential.
$\square$ Are there cumently jobs in Manitoba in this field?
The degree will serve, among others, working and mid-career adults with some post-secondary study who wish to complete a university degree.

An increasing number of careers require an undergraduate degree. For example, professional classifications such as Certified General Accountants (CGA) presently require a degree, while the Certified Human Resource Professionals (CHRP) Association will require an undergraduate degree by 2011 as a prerequisite to the credentialing process (CHRP examination).

Extended Education conducted focus groups and interviews with potential students and senior administrators of Manitoba Hydro, the Manitoba Lotteries Commission, the Canadian Institute of Management, the Human Resource Management Association of Manitoba, the Manitoba Liquor Control Commission, the Manitoba Public Insurance Corporation, the Govemment of Manitoba Dept of Training and Development and the City of Winnipeg. The needs assessment corroborated the demand for the proposed program. All stakeholders interviewed confirmed that a growing number of positions in their respective organizations required an undergraduate degree. Additional discussions with potential students (holding completed certificates/diplomas) reinforced the need for a degree completion option within Manitoba.
$\square$ What is the future job forecast for individuals with this education/training/credential?
Within Manitoba, an undergraduate degree is increasingly required for both entry into and mobility within the public and private sector. Adults with partial Canadian credentials and adults with partial credentials are often under-employed and have limited opportunitiés for mobility within their workplace. The Bachelor of Arts: Integrated Studies provides an opportunity for these individuals to complete an undergraduate credential while working, and to improve their opportunities within the employment market.
$\square$ How does this program fit with Manitoba's stated economic, social and other priorities?
The Bachelor of Arts: Integrated Studies provides an opportunity for the development of our most important resource; the people. A key component of a diversified and dynamic economy is a well-educated, highly skilled workforce. This degree aims to provide these individuals with the opportunity for degree completion and greater social and economic participation in the province.
$\square$ What agencies, groups, institutions will be consulted regarding development of the program?
Govermment of Manitoba (Education and Labour and Immigration), Sector Councils, universities and colleges, Manitoba employers.Is there any other information relevant to this program?
One way to increase the rate of participation in post-secondary education by adults who are currently employed is to create programs that allow them to continue to work while pursuing higher education, the "learn while you earn" model. The Bachelor of Arts: Integrated Studies, utilizing policies of transfer credit, a range of delivery options, and individualized academic planning, will play a major role in the provision of an accessible degree program for working adults. Initial consultation has shown excellent community support from all constituencies.

## 4. Financial Information

A detailed budget will accompany the full proposal.
$\square$ Projected Program Costs:
Salary
Operating
Capital
Total cost

## $\square$ Projected Program Revenue: Tuition

Other
Total revenue

## Submitted by:

## Name (print)

$\overline{\text { Position }}$

## Signature

Date


[^0]:    Mechanical and Manufacturing Engineering
    Dr.N. Bassim
    Dr. J. Cahoon

[^1]:    ${ }^{1}$ The joumal impact factor is the average number of times articles from the journal published in the past two years have been cited in the current year.

[^2]:    ${ }^{2}$ Progress in crystal growth and characterization of materials listed as being available in count above - still double checking with ER

