

BOARD OF GOVERNORS

The material contained in this document is the Agenda for the next meeting of the Board of Governors.

Tuesday, September 29, 2009

Alan A. Borger Sr. Executive Conference Room

E1-270 Engineering Information and Technology Complex

4:00 p.m.

OPEN SESSION

Please call regrets to: 474-6165 no later than 9:00 a.m.
the day of the meeting.

OFFICE OF THE UNIVERSITY SECRETARY



UNIVERSITY
OF MANITOBA

BOARD OF GOVERNORS

Alan A. Borger Sr. Executive Conference Room
E1-270 Engineering Information and Technology Complex
Tuesday, September 29, 2009
4:00 p.m.

OPEN SESSION

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AGENDA

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MOTION TO MOVE TO CLOSED AND CONFIDENTIAL SESSION
MOTION TO ADJOURN





**Minutes of the Meeting of the Board of Governors
Open Session
June 16, 2009**

The meeting was held at 4:00 p.m. in Room 160, Extended Education Complex.

Present: T. Sargeant, Chair
J. Leclerc, Secretary

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

Assessors Present:

B. Austin-Smith J. Sealey

Officials Present:

E. Goldie T. Hay K. Inskip D. Jayas J. Keselman D. McCallum
G. Pasioka

Regrets:

E. Bowness

1. Announcements and Presentation

Mr. Sargeant welcomed Mr. Bowness, Ms. Curran, Ms. Daly, Dr. Embree, Ms. Forsen and Mr. Robertson to the Board and congratulated Mr. Dhalla, Mr. Mahé, Ms. Lederman and Ms. Sealey on their re-appointments to the Board.

Mr. Leclerc provided the Board with an overview of the Code of Conduct for Members of the Board of Governors Policy and requested that all members, including Assessors to the Board, return their signed declaration. Mr. Sargeant reminded the members to decline offers of gifts of any significant amount offered to them.

2. Approval of the Agenda

A member requested that Item 7.6 Proposal for a Bachelor of Dental Hygiene Completion Program be removed from the Unanimous Consent Agenda.

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

THAT the agenda for the June 16, 2009 Open Session be approved as amended.

CARRIED

2. Minutes

2.1 Open Minutes

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

THAT the minutes of the May 19, 2009 Open Session be approved as circulated.

CARRIED

3.2 Business Arising - none

4. Unanimous Consent Agenda

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

THAT the Board of Governors approve the re-directing of \$3 per term that graduate students currently pay into the Manitoban student newspaper into a fund to operate a University of Manitoba graduate students' magazine.

THAT the Board of Governors approve eight new offers, six amended offers, and the withdrawal of four offers, as set out in Appendix A of the Report of the Senate Committee on Awards [dated April 6, 2009].

THAT the Board of Governors approve the Report of the Senate Committee on Awards – Part B [dated April 6, 2009].

THAT the Board of Governors approve the proposal for the Master of Physical Therapy [as recommended by Senate May 13, 2009].

THAT the Board of Governors receive for information the Statement of Intent RE: Ph.D. in Environment and Geography.

CARRIED

5. Report from the President

5.1 President's Report

Dr. Barnard discussed the retreat that the President's Executive Team, Deans and senior Directors had held earlier in the month that focused on the strategic planning framework and budget realities facing the University. He also noted that the President's Executive Team had met with the UMSU Executive last week to discuss a number of upcoming projects.

5.2 Strategic Planning Framework

Dr. Barnard discussed the development of the strategic planning framework and the various groups involved in the discussions to refine the plan. He noted that the plan had been distributed widely throughout campus for comments earlier in the month to mostly affirmative responses and that Senate would consider the framework at their upcoming meeting. The intention of the document was to highlight four core areas to develop over the upcoming years: Academic Enhancement, Student Experience, Aboriginal Achievement and being an Employer of Choice.

Ms. Lederman asked how the setting of priorities within faculties and schools would tie into this framework. Dr. Barnard replied that these core areas were the overreaching priorities of the University and that units would develop their priorities based on them. Dr. Keselman added that the evolution of the academic enhancement section of the plan was based on input from the Deans and Directors, thus many of the areas within the framework already capture unit strengths.

Dr. Barnard noted that a refined version of the document, including objectives and targets, would be presented in the fall. Mr. Sargeant commented that it would be beneficial for the strategic goals of the University to be linked more closely to the business of the Board to provide added guidance to the members in making their decisions.

It was moved by Dr. Barnard and seconded by Ms. Bovey:

THAT the Board of Governors endorse the Strategic Planning Framework for the purposes of planning, subject to similar endorsement being granted by Senate.

CARRIED

6. From Audit and Risk Management Committee

6.1 Annual Financial Report

Mr. Pasioka presented the Board with a comprehensive overview of the Annual Financial Report, outlining the various funds, the structure of the funds and the detailed year-end amounts in all areas.

Mr. Tripple asked if there was any revenue generated for the University through Smartpark. Mr. Hay replied that the consolidated financial statements presented included the financial statements of Smartpark, however the revenue of Smartpark is not accrued by the University.

Ms. Lederman asked if the statements reflected all the funding coming in for research activities at the University. Mrs. McCallum replied that all the funding which flows through the University, including research funding, has been incorporated into the statements.

Mr. Dhalla asked when the decision to pull money out of short term investments was made. Mrs. McCallum replied that in early 2009 the decision was made and noted that this cash was not affiliated with the endowment fund, it was sourced from funds in the operating fund which are sometimes placed in short-term investments.

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

THAT the Board of Governors approve the Consolidated Financial Statements of the University of Manitoba for the year ended March 31, 2009.

CARRIED

7. From Senate

7.1 Proposed site for the Art Research Technology (ART) Laboratory

Mrs. McCallum summarized the project and its integral role in moving Project Domino forward. She noted that the Knowledge Infrastructure Program (KIP) funding would provide \$15 million towards the project provided that the project was substantially completed by March 2011. While other sites were considered, the best site to develop the Lab was determined to be where Alumni House is currently situated. After considering various options, including moving the Alumni House to a new location, the decision to relocate the Alumni Association to Chancellor's Hall was determined to be the best resolution. As it is anticipated that the Department of Psychology will be in Chancellor's Hall until early 2010 due to the Duff Roblin Fire, the Alumni Association will be temporary relocated.

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

THAT the Board of Governors approve the site for the proposed Art Research Technology Laboratory [subject to approval by Senate on June 24, 2009].

CARRIED

7.2 Proposal for a Ph.D. in Native Studies

Dr. Keselman noted that this program would become only the second of its kind in Canada and was in line with the University's priority of Aboriginal Achievement. Dr. Sigurdson added that

this was an extremely exciting program that allows the faculty to sharpen its focus and that the University has talented staff that will be involved with the delivery of the program.

It was moved by Dr. Sigurdson and seconded by Mr. Sabouni:

THAT the Board of Governors approve the proposal for the Ph.D. in Native Studies [as recommended by Senate May 13, 2009].

CARRIED

7.6 Proposal for a Bachelor of Dental Hygiene Degree Completion Program

Dr. Keselman noted that the establishment of this program would align the University of Manitoba with the rest of the country in having a degree completion option in Dental Hygiene.

Dr. Austin-Smith asked how the new staff position would be funded. Dr. Keselman replied that the position would be funded by the Dean's office in the Faculty of Dentistry.

It was moved by Dr. Barnard and seconded by Mr. Mahé:

THAT the Board of Governors approve the proposal for the Bachelor of Dental Hygiene Degree completion program [as recommended by Senate May 13, 2009].

CARRIED

8. **Other Business**

8.1 Conflict of Interest Policy and Procedures

Dr. Jayas noted that the need for the proposed Policy and Procedures arose from a Memorandum of Understanding (MOU) with the Tri-Council funding agencies and that the University was required to have the policy in place by the end of June in order to be in compliance with MOU.

The Board noted some concerns regarding the drafting of the policy and that it may be too broad with some of the language, specifically in regards to the phrase "personal interest". Dr. Barnard recommended that the policy be approved with the commitment that these concerns would be revisited over the summer and the Board be provided with further information at the September Board meeting. Mr. Sargeant requested that any members with additional concerns contact the University Secretary or Vice-President (Research) directly to ensure the concerns would be addressed.

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

THAT the Board of Governors approve the Conflict of Interest Policy as presented.

CARRIED

The Board of Governors received the following items for information:

11. **Reports**

11.1 Update from the UMSU President

Mr. Rashid remarked that the past month had been extremely busy with setting the direction for the upcoming year and looking at various projects including UMSU vision, student engagement and alternative social programming for Spring Break. He added that extended vision care was now available for students and that strides had been made regarding off-campus work permits for international students. Mr. Sabouni noted that the GSA had passed their budget and that planning had commenced for orientation week.

Motion to Move to Closed and Confidential Session

It was moved by Dr. Ruth and seconded by Mr. Tripple:

THAT the Board of Governors move into Closed and Confidential Session.

CARRIED

Motion to Adjourn

It was moved by Dr. Norrie:

THAT the meeting adjourn.

CARRIED

Chair

University Secretary



UNIVERSITY
OF MANITOBA

OFFICE OF THE
VICE-PRESIDENT (RESEARCH)

207 Administration Building
Winnipeg, Manitoba
Canada R3T 2N2
Telephone (204) 474-6915
Fax (204) 474-7568
www.umanitoba.ca

MEMORANDUM

TO: Mr. Jeff Leclerc, University Secretary

FROM: Digvir Jayas, Vice-President (Research)

DATE: September 21, 2009

SUBJECT: Policy and Procedures: Conflict of Interest

COPIES: Drs. Glavin and Ristock, Associate Vice Presidents (Research)

At the last Board of Governors meeting, clarification was sought regarding the definition of "Personal Interest" in the Conflict of Interest Policy. I have discussed this matter with legal counsel and provide the following clarification.

While it is understandable that there may be concern that the definition is too broad and therefore include situations that do not constitute conflicts of interest, the role of decision makers under the Policy would be to examine only those cases which do disclose a Conflict of Interest. Even with a very narrow definition, there could still be opportunity for excessive reporting. The best way to mitigate is by educating decision makers and community in general regarding Conflict of Interest.

Policies from other institutions were reviewed solely for the purpose to determine whether the term "personal interests" were used, and if so, was the term defined. Six (including our Board of Governors Code of Conduct) separate policies were reviewed. Based on this review, the University's definition is similar to the half of the other institutions. The remaining institutions policies did not provide an explicit definition; instead, the term "personal interests" was used in its undefined form. Thus, I am recommending that our definition should not be changed.

I trust this clarifies matters for the Board. Thank you.

DJ/nis

PRESIDENT'S REPORT: September 29, 2009

I. GENERAL

At the April 6, 2009 Town Hall Meeting about the International College of Manitoba (ICM), I agreed to meet with senior officials from Navitas, the corporate parent of ICM, about concerns that have been raised within the University community about ICM. Accordingly, Dr. Richard Lobdell, Vice-Provost (Programs) and I traveled to Australia in July 2009 to visit the Sydney Institute of Business and Technology, a Navitas college situated at Macquarie University, meet with senior administrators of Macquarie University about their experience, and meet with Navitas officials. Agreement was reached with Navitas that there would be a comprehensive review of ICM at the end of the fifth year of its operation at the University of Manitoba - during the autumn term of 2013/14. This review would be overseen by the Senate Committee on Academic Reviews and would be modeled on the academic program reviews approved by Senate. Unlike ordinary academic program reviews, the full review of ICM would be submitted to Senate for discussion. These developments were shared with Senate at its September 9 meeting, and Senate was also advised at that time that the Academic Advisory Council's report on ICM's operations during 2008-09 will be circulated for information to Senate at its meeting in October.

On September 17, 2009, during a luncheon address organized by the Winnipeg Chamber of Commerce, I had the opportunity to provide an update to the Winnipeg community about many of the achievements at the University of Manitoba over the past year, and to describe the main elements of the University of Manitoba Strategic Planning Framework. The framework, endorsed earlier this year by Senate and the Board of Governors for the purposes of planning, will guide major decisions over the next five years and could also form the basis for additional partnerships within the community.

The President's Executive Team and the Chair of the Board of Governors met with members of the Council on Post-Secondary Education on September 16, to review the University's estimates of operating and capital requirements for 2010/2011. Assuming status quo operations, a base grant increase of 12.9% or \$36.4M is required to sustain the 2009/10 programming levels. In addition to the requested base grant increase, an increase of \$5.5M will be requested to support the priorities incorporated in the University's new strategic planning framework.

On September 10, the majority of University of Manitoba students began their first day of classes of the fall term, in greater numbers than was the case last year. The 2009 First Day of Classes report indicates that student enrolment figures for the first day of classes at the University of Manitoba increased 4.3%, representing an increase in both undergraduate and graduate student enrolment.

II. ACADEMIC MATTERS

- Comprehensive, global searches are underway for the Deans within the faculties of Architecture, Engineering and Medicine, as well as Vice-Provost, Student Affairs. The University has engaged in the services of executive search firms to lead these searches. The Faculty of Graduate Studies Council has been asked to nominate and elect representatives for the Advisory Committee which will review Dr. Jay Doering's request of reappointment as Dean.

- Robson Hall is proud to welcome three national journals to the publications centre thanks to funding support from the Legal Research Institute (LRI), and time commitments from faculty members.

The *Canadian Legal Education Annual Review (CLEAR)* is a peer-reviewed annual publication of the Canadian Association of Law Teachers (CALT). The aim of the journal is to foster scholarly exchanges on issues related to legal education and relevant to all Canadian law professors, graduate students and those who teach law. In particular, the journal aims to encourage critical and scholarly reflections on the aspirations, goals, objectives, values and cultures of legal education and on the processes involved in law teaching.

The Canadian Journal of Women and the Law is published twice yearly in Canada in order to exchange research and analysis in the rapidly growing area of studies surrounding women and the law. The purpose of the *Canadian Journal of Women and the Law* is to establish a feminist forum for publication of discussion and debate of issues that concern women and the law. The journal aims to reflect a diversity of political, social, cultural, and economic thinking, unified by a shared interest in law reform as it affects women.

Both the *Canadian Journal of Women and the Law*, and the *Canadian Legal Education Annual Review* present opportunities for students to get involved, with the possibility of working in either official language.

As a consequence of Dean Axworthy having been elected as President of the Institute of Parliamentary and Political Law, and general editor of the *Journal of Parliamentary and Political Law*, this national journal will also be hosted at Robson Hall.

- Abba Gumel, Mathematics, was named the winner of the Dr. L.E. Nicolle Award for his paper, "*Mathematical assessment of Canada's pandemic influenza preparedness plan*". This award is given to an author who has made a significant contribution to infectious diseases and medical microbiology as demonstrated by the impact of their original research published in the *Canadian Journal of Infectious Diseases and Medical Microbiology*.
- Neil Holliday, Entomology, was awarded the Gold Medal from the Entomological Society of Canada. This is the highest honour awarded by the Society for outstanding achievements in research, teaching, and extension entomology. The award will be presented this fall.
- Muthu Bagavathiannan, graduate student in plant science, was named this year's recipient of the North American Colleges and Teachers of Agriculture's Graduate Student Teaching Award of Merit.
- Graduate students, Niranjan Venugopal and Jorge Alpuche were recipients of Young Investigator Awards at the Annual Meetings of the Canadian Organization of Medical Physicists and American Association of Physicists in Medicine.
- Seventy-eight pharmacy students participated in the MS Walk and were recognized with the Top Rookie Fundraising and Top Corporate Fundraising Team Awards, as well as Largest Corporate Team of the Year.

III. RESEARCH MATTERS

- The Canada Foundation for Innovation announced \$3,276,090 in new funding in June to support three major research projects led by Drs. Sabine Mai, Aaron Marshall and Patricia Martens. The funding is part of the Leading Edge Fund and New Initiatives Fund.
- \$2.3M in grant funding for 136 students at the University of Manitoba was announced in July by the Social Sciences and Humanities Research Council. The funding includes three Postdoctoral Fellowships (\$320,000), 10 Postgraduate Scholarships (\$593,000), 37 Alexander Graham Bell Canada Graduate Scholarships (\$1.3M), and 86 Undergraduate Student Research Awards (\$387,000).
- Eighteen researchers received funding from the University Research Grants Program for a total of \$119,795, in the March 2009 competition. In total, there were 32 applications received. The March competition is restricted to established staff. As well, six researchers (of 9 applications) received funding from the University of Manitoba/Social Sciences and Humanities Research Council Research Grants competition, totally \$37,174. Seven researchers (of 10 applications) received funding from the Travel Grants Program for a total of \$9,017.
- Twenty-two researchers were awarded contracts from a variety of agencies to perform research-related studies totalling \$1.7M. Seventeen researchers received grant funding from miscellaneous foundations and agencies totalling \$753,067. Five researchers were awarded \$1.1M in funding for projects that are being conducted as part of the National Centres for Excellence program.

IV. ADMINISTRATIVE MATTERS

- **Energy Savings** - The University saved a record setting \$5,033,000 in energy savings for 2008/09 compared to the previous record of \$4,370,000 in 2007/08. This savings are the result of a number of energy conservation measures implemented over the past ten years.
- **Knowledge Infrastructure Program (KIP) Funding** - The University received an additional allocation from the Federal Knowledge Infrastructure Program for investment in the following projects: \$6.632M Biological Sciences upgrade, \$2.374M for Buller Building laboratories and infrastructure, \$1.37M for Neil John Maclean Health Sciences Library, and \$1.6M for the Eureka Incubator projects. This was in addition to the earlier announcement of \$2.5M for Smart Park Retention Pond, \$2.519M for Basic Medical Sciences Building Regenerative Medicine expansion and, \$15M towards the new 60,000 sq. ft. ART Lab. The federal government through KIP will invest \$2 billion over the next two years to repair and expand research and educational facilities at Canadian colleges and universities.
- **Welcome Centre** - The Welcome Centre officially opened on Tuesday, September 1, 2009. The Welcome Centre is home to Parking and Shuttle Services and Security Services. The high tech CCTV monitoring system in the building will enhance security on the campus.

- **Resource Optimization and Service Enhancement Project (ROSE)** - The ROSE project will look at ways to improve service delivery and reduce costs of these functions by eliminating duplication, sharing resources, assessing appropriateness of controls, leveraging technology and application of industry best practices. Following the issuance of an RFP to which seven firms responded, the University is in the process of finalizing a contract with the firm of PricewaterhouseCoopers to conduct a thorough review of current services and make recommendations for effective and efficient strategies in order to improve service and reduce costs of support functions provided both centrally and in faculties and units.
- **Duff Roblin Fire Recovery** - An information session was held on September 14, 2009 to update faculty, staff and students affected by the fire on recovery and rebuilding efforts. University administrators and department staff were on hand to provide information and answer questions.

9408 cubic feet of potentially contaminated fire debris have been removed from the immediate fire area. The total projected damage costs are expected to exceed \$25-30M (exclusive of any code upgrades to the building). This insurance claim is estimated to be the largest single claim for a post-secondary institution in Canada.

The priority now is to collect and incorporate the design needs of each affected department as the University moves into an intense period of re-design of the West side and a rebuilding to its original state of the East side. Because the building is of 1970's vintage, code upgrades including a fire suppression system are currently being designed and installed, funded entirely by the University. The key priority in the immediate future - to return all individuals affected by the fire back to a building that is back to what it once was - a dynamic and exciting teaching and research facility.

- **Staff Golf Tournament** - The 9th Annual all staff golf tournament was held to raise money for the Student Food Bank. The event was the largest to date and over \$1,100 was raised for the food bank.
- **H1N1 Flu Virus** - A meeting of the University Pandemic Planning Committee was held on September 10, 2009. The University Pandemic Planning Committee will continue to meet biweekly for the duration of the academic year and more frequently if required. The University of Manitoba continues to work closely with Manitoba Health - Public Health Division to monitor developments in the international outbreak of H1N1 flu virus. At present all classes and activities at the University of Manitoba are operating as normal and we will monitor the H1N1 influenza situation daily. Plans are in place to open an emergency operations centre if required. H1N1 information has been circulated to University administrators and can also be found on the University's home page www.umanitoba.ca.

V. EXTERNAL MATTERS

- Total funds raised as of September 14, 2009: \$11,357,326.75

- The official opening of the Immunology Department on the 4th floor of Apotex Centre took place September 9, 2009. The Department of Immunology also hosted “New Frontiers in Immunology,” an international symposium that showcased renowned researchers and celebrated the opening. A number of government officials were on hand at the opening. Bringing greetings were Rod Bruinooge, MP for Winnipeg South, Jim Rondeau, Minister of Science Technology Energy and Mines, and Grant Nordman, Winnipeg City Councillor for St. Charles Ward. The Winnipeg Partnership Agreement provided \$1.6M in support of the Centre in February 2008. After the opening, Jim Rondeau and Rod Bruinooge toured the Regenerative Medicine and the N.J. McLean Library Knowledge Infrastructure Program projects.
- TD Bank Financial Group announced a \$50,000 commitment on June 17, 2009 to support the University of Manitoba’s efforts to improve Aboriginal education. The investment, announced at Aboriginal House, will support a study to explore challenges for Aboriginal learners and ways to improve and develop university-based programs.
- Homecoming Week: 496 people participated in 20 reunions (excluding Medicine) and attended receptions or luncheons put on by deans and directors. Nine Medicine and nine Medical Rehabilitation classes celebrated reunions with 250 of these graduates attending the Dean’s breakfast on September 12. 400 people attended the reunion dinner and 225 (a full house) attended the Marcel A. Desautels Faculty of Music Homecoming Gala Concert. 150 attended the President’s Luncheon honouring the classes of 1939 and 1949.
- Public Affairs and Bison Sports are collaborating on the “Brown and Gold Show” on Shaw TV starting in September. The show will air weekly and feature a variety of Bison athletes interviewed on campus. A university presence on Native Communications Inc. (NCI) was coordinated for units offering Aboriginal specific programming, including ABEP, AFP, ENGAP and ACCESS, and will run for 24 weeks beginning October 12th.



AGENDA ITEM: Report of the Senate Committee on Awards [dated May 19, 2009]

RECOMMENDED RESOLUTION:

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].

Action Requested: Approval Discussion/Advice Information

CONTEXT AND BACKGROUND:

The Senate Committee on Awards met on May 19, 2009, to approve nine new offers, nine amended offers, and the withdrawal of three offers.

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 June 24, 2009.



Board of Governors Submission

Routing to the Board of Governors:

<u>Reviewed</u>	<u>Recommended</u>	<u>By</u>	<u>Date</u>
X	X	Senate Committee on Awards	May 19, 2009
X	X	Senate Executive	June 10, 2009
X	X	Senate	June 24, 2009
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		
		Senate	

Submission prepared by:

Submission approved by: University Secretary

Attachments

- Report of the Senate Committee on Awards

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 May 19, 2009, the Senate Committee on Awards approved 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).

Recommendations

On behalf of Senate, the Senate Committee on Awards recommends that the Board of Governors approve approved 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). 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 May 19, 2009

1. NEW OFFERS

Bison Men's Volleyball - Dr. Dale Iwanoczko Memorial Scholarship

The Dr. Dale Iwanoczko Memorial Golf Tournament and Scholarship Committee has established an endowment fund (initial gift of \$17,000) at the University of Manitoba in memory of Dr. Dale Iwanoczko. The Manitoba Scholarship and Bursary Initiative has made a contribution to the fund. The fund will be used to support a scholarship for the returning volleyball player who best exemplifies Dale's characteristics of leadership in volleyball and scholastic accomplishment. The available annual income from the fund will be used to offer one scholarship, with a minimum value of \$1,500, to an undergraduate student who:

- (1) is a Canadian citizen or permanent resident;
- (2) is currently a member of the Bison men's volleyball team;
- (3) is in the third, fourth, or fifth year with the Bison Sports program;
- (4) is in satisfactory academic standing as determined by the University of Manitoba and is eligible to compete in CIS competition;
- (5) is registered in a minimum 80 percent of a full-course load as determined by the University and has demonstrated academic achievement based on a minimum sessional grade point average of 3.0 during the previous academic session;
- (6) has demonstrated athletic ability in volleyball and team leadership.

Preference will be given to a student who is in the fourth or fifth year in the Bison Sports program. Preference will also be given to a student who is registered in the Faculty of Medicine or, in the absence of a medicine student, to a student in any other professional program (i.e., dentistry, law, commerce etc.)

The selection committee will be named by the Athletic Director (or designate) and will include the Head Coach of the Bison Men's Varsity Volleyball Team (or designate), and a representative of the Dr. Dale Iwanoczko Memorial Golf Tournament and Scholarship Committee (or designate). More than 50 percent of the members of this committee shall be University of Manitoba staff.

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.

The terms of this award will be reviewed annually against the Canadian Interuniversity Sport (CIS) criteria governing "University Academic Scholarships with an Athletic Component", currently numbered C.5 in the CIS Operations Manual.

Farron and Martin Brotman Bursary in Medicine

Mrs. Farron Brotman (M.S.W./62, B.S.W./60, B.A./59) and Dr. Martin Brotman (M.D./62, B.Sc.(Med.)/62) have established an endowment fund at the University of Manitoba, with an initial gift of \$25,000 contributed over two years, in 2009 and 2010. 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).

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.

Allister B. Hickson Scholarship for Supply Chain Management

In memory of Dr. Allister B. Hickson, friends, family and colleagues have established an award in his name at the University of Manitoba. The purpose of the scholarship is to support students in the Department of Supply Chain Management, in the I.H. Asper School of Business. In the first two years that the scholarship is offered, contributions from family, friends and colleagues will be used to offer an annual scholarship valued at \$1,200. In the second year, if the value of the fund is less than \$1,200, Mrs. Denise Hickson will provide an additional contribution to top up the scholarship. In subsequent years, Mrs. Hickson will provide an annual contribution of \$1,200 to continue the scholarship.

One annual scholarship will be offered to an undergraduate student who:

- (1) is enrolled full-time (minimum 24 credit hours) in the I.H. Asper School of Business, in the Bachelor of Commerce (Honours) degree program;
- (2) has completed at least 24 credit hours toward a B.Comm(Hons.) degree and has declared Logistics and Supply Chain Management as his or her major;
- (3) has achieved a minimum degree grade point average of 3.0.

The selection committee will be named by the Dean of the I.H. Asper School of Business (or designate).

Martin and Elaine Kernahan Scholarship in Engineering (A Faculty of Engineering Centenary Scholarship)

Mr. Martin Kernahan [B.Sc.(M.E.)/49] and Mrs. Elaine Kernahan have established an endowment fund at the University of Manitoba, with an initial gift of \$10,000 in 2009. The purpose of the fund is to encourage engineering students to excel in their studies by providing scholarship support. The available annual interest from the fund will be used to offer one scholarship to an undergraduate student who:

- (1) is enrolled full-time or part-time in the second, third, or fourth year of study in the Faculty of Engineering;
- (2) has achieved a minimum degree grade point average of 3.5.

The selection committee will be the Scholarships, Bursaries, and Awards Committee of the Faculty of Engineering.

Dane Nordheim Memorial Award

In honour of Dane Nordheim, friends and family have established an endowment at the University of Manitoba, with an initial gift of \$10,782 in 2009. The fund will be used to offer a renewable scholarship for students pursuing graduate studies in English. Normally, the scholarship will be offered biennially. The available annual interest from the fund will be used to offer one scholarship to a graduate student who:

- (1) has successfully completed a Bachelor of Arts (Honours) degree in English at the University of Manitoba;
- (2) is enrolled full-time in the Faculty of Graduate Studies, in the first year of the M.A. in English;
- (3) has achieved a minimum degree grade point average of 3.0 based on the last 60 credit hours of study;
- (4) has demonstrated an interest in creative writing based on work completed during his or her previous degree.

The Dane Nordheim Memorial Award is renewable in the second year of the program provided that the recipient:

- (1) continues to be enrolled full-time in the Faculty of Graduate Studies in the M.A. in English;
- (2) has achieved a minimum degree grade point average of 3.0 based on the last 60 credit hours of study.

In any given year that a recipient does not qualify for the renewal, the scholarship will be offered to an entering student who meets criteria (1) through (4), as set out in the first paragraph.

The maximum number Awards one student may hold in his or her lifetime is two (2).

The Dean of the Faculty of Graduate Studies (or designate) will ask the Head of the Department of English, Film, and Theatre (or designate) to name the selection committee.

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.

Roy C. Rettinger Graduate Scholarship for Interior Design

Mr. Roy C. Rettinger (B.I.D./53) has established an endowment fund at the University of Manitoba, with an initial gift represented by the cheques described in Schedule A of the gift agreement. The fund will be used to offer scholarships to students entering the Master of Interior Design program (either the professional degree or post-professional degree). The available annual interest from the fund will be used to offer one or more scholarships, with a minimum value of \$4,000 each, to graduate students who:

- (1) hold a Baccalaureate degree and qualify for admission to the Master of Interior Design program, in the Faculty of Graduate Studies;
- (2) have registered as full-time students in the Faculty of Graduate Studies, in the first year of study in the Master of Interior Design program;
- (3) have achieved a minimum degree grade point average of 3.5 (or equivalent) in their undergraduate program.

The selection committee will have the discretion to determine the number and value of awards offered each year according to the available annual interest.

Recipients may hold the Roy C. Rettinger Graduate Scholarship for Interior Design 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 Architecture (or designate) to name 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.

Raymond S.C. Wan Architect Inc. Recruitment Award

Raymond S.C. Wan Architect Inc. offers an annual scholarship to attract top students to the graduate program in the Faculty of Architecture at the University of Manitoba. The donor has agreed to fund the bursary for a term of three years, beginning in the 2009-2010 academic session, with the right to renew the commitment at the end of the term. Each year, one entrance scholarship valued at \$5,000, 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 Architecture degree program;
- (2) has achieved a minimum degree grade point average of 3.5 (or equivalent) in the undergraduate program;
- (3) has, based on his or her portfolio, demonstrated the strongest potential to become a practitioner of architecture in his or her career.

Recipients may hold the Raymond S.C. Wan Architect Inc. Recruitment Award 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 Architecture (or designate) to name the selection committee for this award, which will include one representative of Raymond S.C. Wan Architect Inc.

Windsor Masonic Bursary

The Windsor Masonic Lodge No. 138 has established an endowment fund at the University of Manitoba in 2009. The initial gift of \$40,000 represents proceeds from the sale of a property in St. Vital. The Manitoba Scholarship and Bursary Initiative has made a contribution to the fund. The purpose of the fund, which is to offer bursaries to undergraduate students, is consistent with the Lodge's long-standing practice of providing bursaries to graduates of St. Vital high schools. 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 faculty or school;
- (2) has completed at least one year of full-time study;
- (3) has achieved a minimum degree grade point average of 2.5;
- (4) has demonstrated financial need on the standard University of Manitoba bursary application form.

The selection committee will be named by the Director of Financial Aid and Awards (or designate).

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.

Dean David Witty Urban Design Scholarship

David Witty, PhD, MRAIC, FCIP, Dean of the Faculty of Architecture (2001-2009), through a personal donation and with funds received while he was Dean, for his design charrette outreach community work, has established an endowment fund at the University of Manitoba. The Manitoba Scholarship and Bursary Initiative has made a contribution to the fund. The fund will be used to offer the Dean David Witty Urban Design Scholarship in the Department of City Planning, Faculty of Architecture. The scholarship will be awarded to a City Planning student who is completing a thesis/practicum/comprehensive urban design topic.

The available annual income from the fund will be used to offer one scholarship, with a minimum value of \$1,500, to a graduate student who:

- (1) is enrolled full-time in the Faculty of Graduate Studies, in the second year of the Master of City Planning;
- (2) has achieved a minimum degree grade point average of 3.5 on course work completed at the Master's level;
- (3) has received approval on a thesis/practicum/comprehensive topic that focuses on a City of Winnipeg urban design issue(s).

Preference will be given to a student who is Aboriginal and/or a single parent.

The Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Architecture (or designate) to name the selection committee, which will include the Head of the Department of City Planning and two other faculty members from the Department.

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

Cyril L. Anderson – Ridley Inc. Awards

At the request of the donor contact, and with the agreement of Ridley Inc. the names of the various Cyril L. Anderson – Ridley Inc. Awards were amended, as follows:

- from: *Cyril L. Anderson – Ridley Inc. Award in Animal Science – Degree* to: *Cyril L. Anderson – FeedRite Ridley Inc. Award in Animal Science – Degree*
- from: *Cyril L. Anderson – Ridley Inc. Graduate Fellowship in Animal Nutrition* to: *Cyril L. Anderson – FeedRite Ridley Inc. Graduate Fellowship in Animal Nutrition*
- from: *Cyril L. Anderson – Ridley Inc. Prize – Diploma Agriculture* to: *Cyril L. Anderson – FeedRite Ridley Inc. – Diploma Agriculture*

Agriculture Faculty Awards

A number of amendments were made to the terms of reference for the *Agriculture Faculty Awards* following a contribution to the trust fund that supports the award from the estate of Mr. Walter Williamson:

- The name of the Awards was changed to the *Agriculture Faculty – Walter Williamson Awards*.
- The following statement was added to the opening paragraph of the terms: “In 2009, a gift of \$10,000 from the estate of Mr. Walter Williamson (B.S.A./35) was added to the fund for the support of scholarships for students in agricultural programs. There shall be no encroachment on the capital of the fund.”
- The number of awards offered from the fund each year was revised from: 10 to: 8 prizes of equal value, which corresponds to the number of program, degrees, and diplomas for which the Awards are offered each year.
- A number of editorial revisions were made.

Consulting Engineers of Manitoba – Bill Evans Memorial Bursary

At the request of the donor, the terms of reference for the Consulting Engineers of Manitoba – Bill Evans Memorial Bursary were amended, as follows.

- The award was converted from a bursary to a scholarship. Following from this change, the award was renamed as the Consulting Engineers of Manitoba – Bill Evans Memorial Scholarship.
- The second paragraph, which formerly described a schedule of pledge payments to establish an endowment fund of \$10,000 over a period of five years, was modified to reflect that the donor has paid the balance of the pledge in 2009. Following from this change, the terms of reference now specify that the available annual income will be used to offer the award beginning in the 2010 – 2011 academic session, rather than the 2013-2014 academic session.
- Criterion (1) was revised to use credit hours completed to define the year of study, which varies across programs. It reads: “[who] has completed (a) between 30 and 112 credit hours toward any Bachelor of Science in Engineering (including the Industry Internship Program) or (b) between 30 and 92 credit hours toward any Bachelor of Science in Engineering (Co-operative Education Option).”
- Criterion (2) was revised to define full-time study as a minimum of 24 credit hours.
- A requirement that the recipient has demonstrated financial need was removed.

Corbett Cibinel Architects Award for Sustainable Design

At the request of the donor, several amendments were made to the terms of reference for the Corbett Cibinel Architects Award for Sustainable Design, which is offered to a student in the Master of Architecture program.

- The award was renamed the Cibinel Architects Design Achievement Award.
- The opening paragraph was revised to reflect that the donor for this award has established an endowment fund of \$10,000 in 2009 to support the award. The award has been offered as an annually funded award since it was established in 2004.

- A statement was added to indicate that the Manitoba Scholarship and Bursary Initiative has made a contribution to the endowment fund.
- The first paragraph now describes the purpose of the fund, which is: "...to offer scholarships to recognize students who demonstrate passion for design, professional promise, and clarity of purpose."
- The value of the Award was amended from: \$500 to: the available annual income from the fund.
- The revised terms specify that the award is to be offered to a student who has completed the first year of the Master of Architecture program and is enrolled full-time in the second year of the program.
- Criterion (3) [formerly criterion (2)] was revised from: "[who] demonstrates creativity in the research and design of sustainable architecture," to: "[who] has demonstrated creativity in design."
- The following clause was added to the terms: "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."
- A number of editorial changes were made.

Max Kaplan Prize in Legal Aspects of Business Planning for Business Planning and Finance Law

At the request of the Faculty of Law, several revisions were made to the terms of reference for the Max Kaplan Prize in Legal Aspects of Business Planning for Business Planning and Finance Law:

- The value of the Prize was amended from: \$50 to: the available annual interest from the endowment fund.
- The Prize, which was formerly offered to the student who achieved the highest standing in the course Business Planning and Finance Law (45.386) will now be offered to a student who achieves high standing in an advanced clinical business law course.
- A number of editorial changes were made.

Christine Michalchyshyn Memorial Bursary

At the request of the Faculty of Nursing, the stipulation that the recipient of the Christine Michalchyshyn Memorial Bursary normally be selected in May and that the award be offered in July of the same year was removed from the terms of reference for the award. The change will allow the Faculty to select a recipient in the Fall term, at the same time that other bursary selections are made.

Procurity Pharmacy Services Inc. Award

At the request of the donor, the name of the Procurity Pharmacy Services Inc. Award was changed to the Procurity Inc. Award.

3. WITHDRAWALS

Carswell Prize for Highest Standing in First Year

Carswell Prize for Highest Standing in Second Year

Carswell Prize for Highest Standing in Third Year

At the request of the donor, the terms of reference for three annually funded awards for students in the Faculty of Law, the *Carswell Award for Highest Standing in First Year*, the *Carswell Prize for Highest Standing in Second Year*, and the *Carswell Prize for Highest Standing in Third Year*, were withdrawn.



AGENDA ITEM: Report of the Senate Committee on Awards [dated June 15, 2009]

RECOMMENDED RESOLUTION:

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].

Action Requested: Approval Discussion/Advice Information

CONTEXT AND BACKGROUND:

The Senate Committee on Awards met on June 15, 2009, to approve seven new offers, four amended offers, and the withdrawal of four offers.

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 September 9, 2009.



Board of Governors Submission

Routing to the Board of Governors:

<u>Reviewed</u>	<u>Recommended</u>	<u>By</u>	<u>Date</u>
X	X	Senate Committee on Awards	June 15, 2009
X	X	Senate Executive	August 26, 2009
X	X	Senate	September 9, 2009
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		
		Senate	

Submission prepared by:

Submission approved by: University Secretary

Attachments

- Report of the Senate Committee on Awards

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 June 15, 2009, the Senate Committee on Awards approved 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).

Recommendations

On behalf of Senate, the Senate Committee on Awards recommends 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). 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

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

Appendix A

MEETING OF THE SENATE COMMITTEE ON AWARDS June 15, 2009

1. NEW OFFERS

DEFT Undergraduate Theory Prize

An annual prize for students will be offered by the Department of English, Film, and Theatre at the University of Manitoba. One prize of \$250 will be awarded to a student who:

- (1) has declared a Major or Minor in English, Film, or Theatre or is enrolled in the DEFT Pre-Master's program; and
- (2) has achieved a minimum degree grade point average of 3.0; and
- (3) has submitted the paper of any length which best demonstrates excellence in explaining and/or transforming the languages and concepts of critical theory, here broadly understood to include literary and cultural theory as well as philosophical aesthetics; and
- (4) has originally submitted the paper in fulfillment of term work in a course offered by DEFT.

No particular theoretical orthodoxy is to be privileged in the awarding of this prize. The winning paper should be that which possesses the most robust, systematic, and refined metatheoretical content, and which therefore offers substantial insights into what literary theory is, has been, or might some day become.

The selection committee will be named by the Head of the Department of English, Film, and Theatre (or designate).

GEAPS Engineering Bursary

The Grain Elevator and Processing Society (GEAPS) Prairie Chapter offers an annual bursary for students in the Faculty of Engineering at the University of Manitoba. The purpose of the bursary is to promote and encourage education, knowledge, and career focus in grain handling and/or processing operations. One bursary with a value of \$2,000 will be offered to an undergraduate student who:

- (1) is enrolled full-time (minimum 80% course load) in the Faculty of Engineering in one of the following programs: B.Sc. E. (Biosystems), B.Sc.E. (Electrical), B.Sc.E. (Mechanical);
- (2) has completed at least one year of full-time study (minimum 24 credit hours) at the University;
- (3) has achieved a minimum degree grade point average of 3.0;
- (4) is actively involved in the community;
- (5) has demonstrated financial need on the standard University of Manitoba bursary application form.

Applicants for this award will be required to submit a brief statement (maximum one page) describing their community involvement to the selection committee.

The selection committee will be the Scholarships, Bursaries, and Awards Committee of the Faculty of Engineering.

International Graduate Student Bursary

The Faculty of Graduate Studies provides bursaries and scholarships for international students using funds from the international graduate student differential fee. The number of bursaries offered each year will vary based on the availability of funds. The selection committee will determine bursary values to a maximum value of the fee differential.

The bursaries will be offered to students who:

- (1) are international students (i.e., those entering Canada on study permits) enrolled full-time in a Master's or Ph.D. program in the Faculty of Graduate Studies at the University of Manitoba;
- (2) have achieved a minimum degree grade point average of 3.0 (or equivalent) based on the last 60 credit hours of study;
- (3) have demonstrated financial need on the University of Manitoba bursary application form.

The selection committee will be named by the Director of Financial Aid and Awards (or designate).

Manulife Actuarial Scholarship

Manulife Financial offers an annual scholarship for students in the Warren Centre for Actuarial Studies and Research at the University of Manitoba. The purpose of the Manulife Actuarial Scholarship is to encourage academic excellence, attract outstanding students, and enhance the University's programs related to actuarial studies. The Scholarship also recognizes students who have demonstrated the ability to balance academic studies and preparation for professional examinations while continuing to be actively involved in their community. Each year, one scholarship valued at \$3,500 will be offered to an undergraduate student who:

- (1) has completed between 48 and 72 credit hours toward either a Bachelor of Commerce (Honours) or a Bachelor of Science (Honours) program and has declared either Actuarial Mathematics or Statistics - Actuarial Mathematics as his or her major;
- (2) in the next ensuing academic session, is enrolled full-time (minimum 24 credit hours) in the I.H. Asper School of Business or the Faculty of Science;
- (3) has achieved a minimum degree grade point average of 3.5;
- (4) has successfully completed at least one professional examination set by the Society of Actuaries;
- (5) has demonstrated leadership and is actively involved in activities within the university or the community;
- (6) is committed to a career in actuarial science.

Candidates for the Scholarships must submit an application that includes: (a) a current resumé; (b) an unofficial copy of their transcript(s); (c) documentation to demonstrate that they have successfully completed an examination set by the Society of Actuaries; (d) a description of a project completed for school, work, committees, etc. that they are particularly proud of, and why; including details of their personal involvement in the project, any problems that they faced and how they overcame them; (e) a list and brief description of any other projects that they have been involved with, particularly those of a technical nature; (f) a summary of their experience in working with a team, group, club, etc.; (g) a description of their short-term academic and career goals and long term aspirations, including a description of what appeals to them about a career in actuarial science.

The Manulife Actuarial Scholarship continues in the amount of \$3,500* in the next ensuing academic session at the University, provided the recipient:

- (1) has completed between 72 and 102 credit hours toward either a Bachelor of Commerce (Honours) or a Bachelor of Science (Honours) program and has declared either Actuarial Mathematics or Statistics - Actuarial Mathematics as his or her major;
- (2) continues to be enrolled full-time (minimum 24 credit hours) in either the I.H. Asper School of Business or the Faculty of Science;
- (3) has achieved a minimum degree grade-point average of 3.5.

Recipients of the Manulife Actuarial Scholarship may not hold the Scholarship concurrently with any other University of Manitoba award of equal or greater value.

In any given year that a recipient does not qualify to have his or her Scholarship renewed, a one-time, non-renewable scholarship, valued at \$3,500, will be offered to the student identified as an alternate candidate for the previous academic year.

*In the event that Manulife Financial decides not to renew its annual donation of \$7,000 for the Manulife Actuarial Scholarship, the donor agrees to provide the necessary funds to complete the payment for any renewable scholarships offered to students.

The selection committee will be named by the Dean of the I.H. Asper School of Business (or designate) and will include the Director of the Warren Centre for Actuarial Studies. The selection committee will meet to shortlist and to decide on a recipient of the award. The short list of candidates will be sent to Manulife representatives for review and priority ranking. The selection committee will make its final decision after consideration of Manulife's priority ranking.

Alison Scott Bursary

In memory of Alison Scott, her family and friends have established an endowment fund at the University of Manitoba to provide bursaries for students in the Department of Landscape Architecture. The Manitoba Scholarship and Bursary Initiative has made a contribution to the fund. In 2008, Alison Scott graduated from the University with a Master of Landscape Architecture degree and received the Landscape Architecture Thesis Award for her practicum, *Full Bloom*. The available annual income from the fund will be used to offer one bursary to a student who:

- (1) is enrolled full-time in the Faculty of Graduate Studies, in either the pre-Master's or the Master of Landscape Architecture degree program;
- (2) has achieved a minimum degree grade point average of 3.0;
- (3) has demonstrated talent for creativity and innovation through work completed prior to or in the program;
- (4) from among those candidates who also meet criteria (1) through (3), has demonstrated the greatest financial need on the standard University of Manitoba bursary application form.

The selection committee will be named by the Head of the Department of Landscape Architecture (or designate).

University of Manitoba Hungarian Exchange Program Scholarship

The University of Manitoba Hungarian Exchange Program Fund has been established at the University of Manitoba, with an initial contribution of \$300,000, in 2008, from the President's Fund. The fund will be used to support an exchange program between the University of Manitoba and

universities in Hungary, beginning with the University of Szeged, Budapest, Hungary. The available annual income from the endowment fund will be used to support the Hungarian Exchange Program Conference, Hungarian language instruction at the University of Manitoba, and the University of Manitoba Hungarian Exchange Program Scholarship.

The selection committee will have the discretion to determine the number and value of scholarships offered each year based on the available funds. Each year, one or more scholarships will be offered to undergraduate or graduate students who:

- (1) have completed at least one year of full-time university study;
- (2) are registered full-time, in any participating Faculty or School, at either the University of Manitoba or a Hungarian university participating in the University of Manitoba Hungarian Exchange Program;
- (3) (i) as an undergraduate student, has achieved a minimum degree grade point average of 3.0 (or equivalent); or
(ii) as a graduate student, has achieved a minimum degree grade point average of 3.0 (or equivalent) based on the last 60 credit hours of study;
- (4) qualify for the University of Manitoba Hungarian Exchange Program.

Selection criteria will be based on a combination of suitable preparation for the proposed course of study, the potential to put the experience to good use, and academic standing among all eligible students at the time of the scholarship offer, as determined by the selection committee. Consideration will be given to keeping the exchange between other universities participating in the exchange program and the University of Manitoba balanced in terms of numbers of students sent/received in any given year.

Recipients may hold the University of Manitoba Hungarian Exchange Program Scholarship concurrently with any other awards consistent with policies at their home institution.

The selection committee will be chaired by the Executive Director, Office of International Relations, who will name the committee members in consultation with the Dean of the Faculty of Arts and one other dean.

ZSA – National Post / Richard Leipsic Prize

In honour of Richard Leipsic, who was named ZSA – National Post Canadian General Counsel of the Year for 2008, ZSA Legal Recruitment has established an endowment fund at the University of Manitoba, with a contribution of \$25,000. The available annual income from the fund will be used to offer one prize to a student who:

- (1) has successfully completed the second or third year of full-time study in the Bachelor of Laws program in the Faculty of Law;
- (2) has achieved a minimum degree grade point average of 3.0;
- (3) has completed a minimum of 9 credit hours of, and who has excelled in, corporate law courses including: Debtors' and Creditors' Rights (currently numbered LAW 2530), Commercial Law (currently numbered LAW 3050), Securities Law (currently numbered LAW 3390), International Business Law (currently numbered LAW 3980, T01), and/or Corporations II (currently numbered LAW 3980, T04).

A recipient of the ZSA – National Post / Richard Leipsic Prize may hold the award only once.

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

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

Major G.E.H. Barrett-Hamilton Memorial Scholarship

A number of amendments were made to the terms of reference for the *Major G.E.H. Barrett-Hamilton Memorial Scholarship*:

- The second paragraph was amended to clarify that the annual contribution from the donor, up to a maximum of \$12,500, will be matched by the Edward Eric Hildebrand and Ann Palmer Hildebrand Memorial Scholarship Fund, for a period of ten years beginning in 2005 and continuing through 2014.
- As the Department of Zoology has been closed, criterion (1) was amended to clarify that the award will be offered to a student who is registered full-time, in the Faculty of Graduate Studies, in the first or second year of an M.Sc. or Ph.D. in biological sciences, in the area of animal biology.
- Criterion (2) was amended to clarify that the degree grade point average is used when assessing candidates for this scholarship.
- Membership on the selection committee was changed from: the Zoology Graduate Awards Committee to: The Dean of the Faculty of Graduate Studies (or designate) will ask the Head of the Department of Biological Sciences (or designate) to name the selection committee for this award.
- A number of editorial revisions were made.

Enterprise Rent-A-Car Foundation Scholarship

At the request of the donor, several amendments have been made to the terms of reference for the *Enterprise Rent-A-Car Foundation Scholarship*, which is offered to undergraduate students in the I.H. Asper School of Business:

- The pool of candidates for the scholarship will no longer be restricted to Aboriginal students.
- The scholarship will now be open to students who have completed at least 51 credit hours toward the Bachelor of Commerce program, with a declared Major in Marketing [criterion (2)]. Previously the award was open to students who had completed at least one year of study in the I.H. Asper School of Business.
- For the purpose of this scholarship, full-time enrolment is defined as a minimum 60% course load [criterion (1)].
- To be considered for the award, candidates will now be required to have demonstrated leadership in activities in the community [criterion (4)].
- The membership of the selection committee has been revised to include a representative of Enterprise Rent-A-Car. The Winnipeg Chamber of Commerce will no longer have a representative on the committee.

E.H. Price Faculty of Architecture Recruitment Award

The terms of reference for the *E.H. Price Faculty of Architecture Recruitment Award* were revised at the request of the Faculty of Architecture. In particular, criteria (1) and (3) were amended to open the award to second degree students who qualify for admission to, and subsequently enrol as full-time students in the Architecture Masters Preparation Program. The award will continue to be open to full-time students registered in the pre-Masters Qualifying Program, as well.

Dr. Victor Turek Scholarship for Polish Studies

At the request of the donor, the following amendments have been made to the terms of reference for the *Dr. Victor Turek Scholarship for Polish Studies*:

- The opening paragraph has been revised to clarify that the award is offered by the Dr. Victor Turek Student Aid Association rather than the Department of German and Slavic Studies.
- The scholarship has been converted to a prize with the removal of the registration requirement.
- It follows that the name of the award has been changed to: the *Dr. Victor Turek Prize for Polish Studies*;
- and candidates will be required to have successfully completed, rather than be registered in, any three eligible courses and to have declared a minor in Polish.
- The following courses have been added to the list of eligible courses: *Advanced Polish* (currently numbered POL 3890), *Polish Civilization* (POL 2530), *Polish Language and Culture* (currently numbered POL 2690).

3. WITHDRAWALS

Canadian Dental Association President's Award

At the request of the donor, the terms of reference for an annually funded convocation prize for students in the Faculty of Dentistry, the *Canadian Dental Association President's Award*, were withdrawn.

David Jenkins Memorial Award

At the request of the donor, the terms of reference for an annually funded prize for students in the Faculty of Architecture, the *David Jenkins Memorial Award*, were withdrawn.

Magda Hulsbosch Sketch Camp Award

At the request of the donor, the terms of reference for an annually funded scholarship for students in the Environmental Design Program in the Faculty of Architecture, the *Magda Hulsbosch Sketch Camp Award*, were withdrawn.

Wyeth Award of Excellence

At the request of the donor, the terms of reference for an annually funded convocation prize for students in the Faculty of Pharmacy, the *Wyeth Award of Excellence*, were withdrawn.



AGENDA ITEM: Report of the Senate Committee on Awards [dated July 31, 2009]

RECOMMENDED RESOLUTION:

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

Action Requested: Approval Discussion/Advice Information

CONTEXT AND BACKGROUND:

The Senate Committee on Awards reviewed the application for one new award offer, the "Victoria and J. Stuart Downey Entrance Scholarship in Medicine" that appears to be discriminatory according to the Policy for Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships. Letters of support was received from Dean Sandham, Faculty of Medicine, and Ms. Kali Storm, Director, Aboriginal Student Centre.

RESOURCE REQUIREMENTS:

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

IMPLICATIONS:

N/A

ALTERNATIVES:

N/A

CONSULTATION: *[delete if not applicable]*

The establishment of this award was approved by Senate on September 9, 2009



Board of Governors Submission

Routing to the Board of Governors:

<u>Reviewed</u>	<u>Recommended</u>	<u>By</u>	<u>Date</u>
x	x	Senate Committee on Awards	July 31, 2009
x	x	Senate Executive	August 26, 2009
x	x	Senate	September 9, 2009
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		
		Senate	

Submission prepared by:

Submission approved by: University Secretary

Attachments

- Report of the Senate Committee on Awards

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)

Observation

In an electronic poll conducted between July 13 and July 31, 2009, the Senate Committee on Awards reviewed one new offer that appears to be discriminatory according to the *Policy for Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships*.

Recommendation

The Senate Committee on Awards recommends that Senate and the Board of Governors approve one new offer, as set out in Appendix A of the *Report of the Senate Committee on Awards* (dated July 31, 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 July 31, 2009

1. NEW OFFER

Victoria and J. Stuart Downey Entrance Scholarship in Medicine

Dr. John Downey has established an endowment fund (\$25,000 initially) at the University of Manitoba, in memory of his parents, Victoria and J. Stuart Downey. The fund will be used to offer scholarships for Aboriginal students entering the Faculty of Medicine. Seventy-five percent of the available annual income on the fund will be used to offer one entrance scholarship to an undergraduate student who:

- (1) is Aboriginal (Status, Non-Status, Métis, Inuit);
- (2) has been admitted to the first year of the Undergraduate Medical Education Program in the Faculty of Medicine;
- (3) has ranked high on the Admission Composite Score.

Preference will be given to Aboriginal students from Saskatchewan, Alberta, or Manitoba.

A second instalment of the scholarship, equivalent to twenty-five percent of the available annual income from the fund will be disbursed to the recipient of the Victoria and J. Stuart Downey Entrance Scholarship in Medicine provided that he or she:

- (1) subsequently enrolls in the Bachelor of Science in Medicine program, in the Faculty of Medicine, in the summer months immediately following the first year of study in the Undergraduate Medical Education Program;
- (2) is in good academic standing in the Undergraduate Medical Education Program.

If no Aboriginal student qualifies for the award in a given year, the available interest will be added to the capital of the fund.

The selection committee will be appointed by the Dean of the Faculty of Medicine and may include the Assistant Dean, Admissions for the Faculty of Medicine. The Dean of the Faculty of Medicine is authorized to recommend to the Senate Committee on Awards, for approval, amendments to the financial and other terms of the scholarship as changing circumstances may require.

(Attachments I and II)



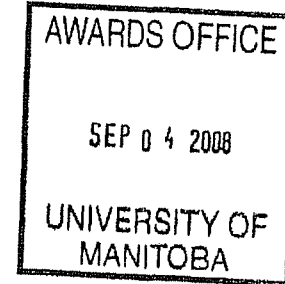
UNIVERSITY
OF MANITOBA

Faculty of Medicine

August 28, 2008

Dr. Rick Baydack
Chair, Senate Committee on Awards
c/o Shannon Coyston, Awards Establishment Coordinator
Financial Aid and Awards Office
422 University Centre
Winnipeg, MB R3T 2N2

Office of the Dean
Room 260 Brodie
727 McDermot Avenue
Winnipeg, Manitoba
Canada R3E 3P5
Telephone (204) 789-3557
Fax (204) 789-3928



Dear Dr. Baydack and members of the Senate Committee on Awards:

Re: Victoria & J. Stuart Downey Entrance Scholarship in Medicine

The Faculty of Medicine at the University of Manitoba is committed to growth in Aboriginal education. Consistent with this priority, I am writing in support of the Victoria & J. Stuart Downey Entrance Scholarship in Medicine.

The Aboriginal population in Manitoba makes up 11.7% (approximately 150,045) of the total population of Manitoba. According to the Senate-approved General Terms and Conditions for Student Awards at the University of Manitoba, we can allow and encourage the establishment of discriminatory awards for designated groups such as Aboriginal students as long as the proportion of Aboriginal students to the total student population falls below 80 percent of the proportion of Aboriginal people within the total provincial population. Eighty percent of 11.7% is 9.36%, and the population of Aboriginal students on campus is still a long way from 9.36% of the total student population.

In 2007-2008, the student population in the Undergraduate Medical Education (UGME) Program at the Faculty of Medicine was 388. At 9.36% of this total student population, we would hope to have a population of at least 36 Aboriginal students. The actual number of self-declared Aboriginal students was 13, or 3.35% of the undergraduate population. First-year admission numbers are below:

	2008	2007	2006	2005	2004	2003
# of students admitted to first year UGME	110	100	101	94	87	89
Aboriginal students admitted to first year UGME program	6	6	3	2	3	2
Aboriginal student population in the first year UGME program by %	5.5	6.0	3.0	2.1	3.4	2.2

...continued

Clearly, Aboriginal students are a highly under-represented group within the Undergraduate Medical Education Program at the Faculty of Medicine. The Victoria & J. Stuart Downey Entrance Scholarship in Medicine will provide support to Aboriginal students enrolled in the first year of the Undergraduate Medical Education Program, who are also in the top ranking ten percent of Aboriginal applicants. I strongly support the establishment of the Victoria & J. Stuart Downey Entrance Scholarship in Medicine.

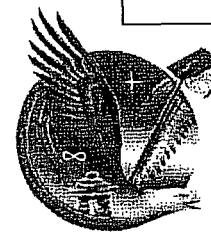
Sincerely,

A handwritten signature in black ink, appearing to read "J. Sandham", written over a horizontal line.

J. Dean Sandham, MD, FRCPC, FACP
Dean



UNIVERSITY
OF MANITOBA



Aboriginal Student Centre
537 University Centre
Winnipeg, Manitoba R3T 2N2
Phone (204) 474-8850
Fax (204) 275-3142
Email: asc@umanitoba.ca

February 26, 2008

Dr. Rick Baydack
Chair of the Senate Committee on Awards
C/o Ms. Shannon Coyston, Awards Establishment Coordinator
417 University Centre

Dear Dr. Baydack & Senate Committee:

Please accept this letter as formal support for the Victoria and J. Stuart Downey Entrance Scholarship in Medicine designed to assist a deserving Aboriginal student entering the Faculty of Medicine.

As the Director of the Aboriginal Student Centre, I can verify that financial strain is the leading cause for Aboriginal students leaving school before graduation. It is common knowledge that many Aboriginal peoples live in poverty and whereas a university education can help rectify this, most cannot afford to do so. It is only reasonable that the University of Manitoba would want to assist in rectifying this situation with or without the declared commitments made in the Strategic Plan.

The number of Aboriginal students attending the University of Manitoba continues to increase and, I believe, is partially due to the financial assistance made available through community members, programs and faculties. The Victoria and J. Stuart Downey Entrance Scholarship in Medicine will be offered to an Aboriginal student admitted to the first year of the undergraduate Medical Education Program, with preference given to an Aboriginal student from the prairies.

I trust that the Senate committee will approve this scholarship and others like it, in the hopes of increasing the recruitment and retention of Aboriginal students, especially in the under-represented faculties such as Medicine.

In education, miigwetch!

Kali Storm, Director
Aboriginal Student Centre

A few related statistics:

- Aboriginal people comprise 15% of Manitoba's population.
- Winnipeg has the largest Aboriginal population with 68,380, or 10% of the city's population.
- There are currently 1648 Aboriginal students who self-declared at University of Manitoba, or 6.6% of the undergraduate population. There are only 14 self-declared Aboriginal students registered in the Faculty of Medicine, or 0.8% of the Faculty student population.
- 2.9% of the Aboriginal population in Manitoba has completed university vs. 12.6% of the non-Aboriginal population.

* Statistics are from the Government of Canada 'Aboriginal People in Manitoba' (2002), Aboriginal Census Highlights (2008), and from Institutional Analysis 'A Profile of Canadian Aboriginal Students at The University of Manitoba' (2005).



AGENDA ITEM: Proposal to Establish a Professorship in Spinal Cord Research

RECOMMENDED RESOLUTION:

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

Action Requested: Approval Discussion/Advice Information

CONTEXT AND BACKGROUND:

The proposal is for a five year contingent position to engage in a research program complementary to research at the Spinal Cord Research Centre.

Recent successes in fundraising have allowed the Manitoba Paraplegia Foundation to approach the Director of the Spinal Cord Research Centre on behalf of the Will to Win Golf Tournament with an offer to establish this professorship.

RESOURCE REQUIREMENTS:

Funding will be provided by the Manitoba Paraplegia Foundation on behalf of the Will to Win Golf Tournament to establish a five year contingent professorship. Laboratory space will be provided within the Department of Physiology and resources (including microscopes, histology facilities, etc) will be provided through the Spinal Cord Research Centre.

The term of the appointment will be for five years.

IMPLICATIONS:

The establishment of the professorship will be an asset to the Department of Physiology and the Faculty of Medicine and will enhance the endeavours of the Faculty to advance research and increase research capacity.

CONSULTATION:

In accordance with the University's policy on Chairs and Professorships, this proposal has been endorsed by the Vice-President (Academic) and Provost and the Senate Committee on University Research.

This proposal was considered and endorsed by Senate on June 24, 2009.



Board of Governors Submission

Routing to the Board of Governors:

<u>Reviewed</u>	<u>Recommended</u>	<u>By</u>	<u>Date</u>
X	X	Vice-President (Academic) & Provost	March 26, 2009
X	X	Senate Committee on University Research	June 2, 2009
X	X	Senate Executive	June 10, 2009
X	X	Senate	June 24, 2009
<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>		
		Senate	

Submission prepared by:

Submission approved by:

University Secretary

Attachments

- Proposal to Establish a Professorship in Spinal Cord Research

Proposal to Establish a Professorship in Spinal Cord Research in
the Department of Physiology, Faculty of Medicine

Preamble:

Over the past 25 years the Will to Win Classic charity golf tournament has contributed significantly to the Winnipeg Spinal Cord Research Centre raising over \$900,000.00 for spinal cord research. These funds are administered by the Manitoba Paraplegia Foundation which provides charitable receipts and oversight of applications for the use of these monies.

Recent successes in fundraising have allowed the Manitoba Paraplegia Foundation to approach the Director of the Spinal Cord Research Centre (SCRC) on behalf of The Will to Win Golf Tournament with an offer to establish a contingent professorship in the Faculty of Medicine.

Purpose:

The Professorship will be used to recruit and support an Assistant Professor in the Department of Physiology engaged in a research program complimentary to research at the Spinal Cord Research Centre. The successful applicant will develop an independent laboratory housed in the Department of Physiology, secure external research funding and train and supervise graduate students in their area of specialty.

It is expected that this faculty member would participate fully as regular member of the Department of Physiology with appropriate teaching, administration and research duties assigned by the Department Head. The faculty member appointed under this Professorship would be eligible to apply for a tenure track appointment if available.

Recruitment.

Advertising in national and international publications will be used to attract applicants. A Faculty of Medicine selection committee will be struck to guide the search and selection for this position. The committee will adhere to University and Faculty procedures for conducting such a search.

The successful applicant will have an M.D. or Ph.D degree or similar qualifications in a field related to spinal cord research and a period of postdoctoral training. Selection will be based on the potential for developing an independent research program and contributing to the academic environment at the University of Manitoba. Expertise in the area of human and animal motor and sensory integration is strongly preferred.

Term of Appointment

The term of the appointment will be for 5 years.

Annual salary and benefits up to \$100,000 will be provided by Will to Win through the Manitoba Paraplegia Foundation for 5 years. The Professorship is contingent on funding being available.

Research Facilities

Independent research laboratory space will be provided within the Department of Physiology in the Basic Medical Sciences Building in proximity to other laboratories in the Spinal Cord Research Centre.

The full shared resources of the SCRC including microscopes, histology facilities, shared technical support and equipment will be made available to the new recruit as an equal member of the SCRC.

Additional funds, up to \$100,000, will be provided by Will to Win through the Manitoba Paraplegia Foundation for establishment, outfitting and initial operation of the laboratory.

Other sources of start up funds will include \$50,000 from the Dean of Medicine and \$25,000 from the Department of Physiology.

Moving expenses and interview expenses will be borne by the University.

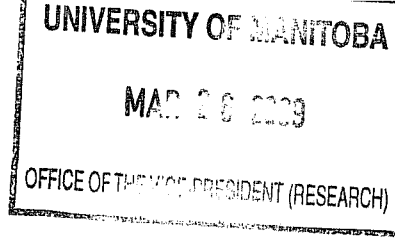
Other Provisions

1. The selection and appointment of an individual to the proposed Professorship shall be conducted in accordance with the University Policy on Chairs and Professorships.
2. The duties and responsibilities of the individual appointed to the proposed Professorship will be in accordance with the University Policy on Chairs and Professorships. The holder of the Professorship will develop a well-defined program of research; secure external research funding; teach graduate courses; and supervise graduate students in their area of specialty. Additional responsibilities will include contributing to the Department of Physiology and may include some teaching of undergraduate students.
3. Annual reporting requirements shall also be in accordance with University Policy on Chairs and Professorships.
4. In accordance with University Policy on Chairs and Professorships, the performance of the Professorship holder shall be reviewed annually in the same manner as other faculty members.



UNIVERSITY
OF MANITOBA

Office of the
Vice-President (Academic) & Provost



4.3

208 Administration Building
Winnipeg, Manitoba
Canada R3T 2N2
Telephone (204) 480-1408
Fax (204) 275-1160

March 26, 2009

To: Digvir Jayas, Acting Vice-President (Research)
From: Joanne C. Keselman, Interim Vice-President (Academic) and Provost
Re: Professorship in Spinal Cord Research

Dr. J. Dean Sandham, Dean of the Faculty of Medicine, has provided a letter of support for the proposal to establish a professorship in spinal cord research in the Department of Physiology.

The policy on Chairs and Professorships specifies that:

- (1) the professorship be established consistent with the academic goals and objectives of the University;
- (2) the professorship be fully funded from external sources, rather than University operating funds, and that the funds be sufficient to cover the salary and benefits of the incumbent and provide for an appropriate level of unrestricted research/scholarly support;
- (3) the funds for the professorship be provided by way of an endowment or through a schedule of annual expendable gifts for a defined period of not less than five years, or by an appropriate combination of endowment and annual expendable gifts;
- (4) the professorship shall be attached to a department, faculty, school, college, centre or institute of the University, and have goals consistent with the unit to which it is attached;
- (5) the establishment of the professorship is not tied to the appointment of a particular individual;
- (6) individuals appointed to the professorship normally shall have the academic qualifications commensurate with an appointment at the rank of Professor; and
- (7) the initial term of the appointment of the professorship shall be 3-5 years, and if renewal is permitted, such renewal shall be subject to a successful performance review and the availability of funds.

The proposed professorship in spinal cord research satisfies all of the above requirements, with the exception of (6) above. Whereas the policy specifies that the rank normally shall be at the Professor level, the proposal from Medicine indicates the rank shall be at the Assistant Professor level.

Notwithstanding this exception to the University policy, I am in support of the proposal from Medicine, and request that you present it to the Senate Committee on University Research for consideration and recommendation to Senate and then to the Board of Governors.

If you have any questions or concerns, I would be pleased to meet with you.

/encl.

- c. Dr. J. Dean Sandham, Dean, Faculty of Medicine
Dr. Janice Dodd, Head, Department of Physiology



UNIVERSITY
OF MANITOBA | Faculty of Medicine

Office of the Dean
Room 260 Brodie
727 McDermot Avenue
Winnipeg, Manitoba
Canada R3E 3P5
Telephone (204) 789-3557
Fax (204) 789-3928

March 11, 2009

Dr. Joanne Keselman
Interim Vice President (Academic) & Provost
208 Administration Building
University of Manitoba

Dear Dr. Keselman:

Re: Professorship in Spinal Cord Research

On behalf of the Faculty of Medicine, I am writing this letter of support for the attached proposal to establish a Professorship in Spinal Cord Research in the Department of Physiology, Faculty of Medicine.

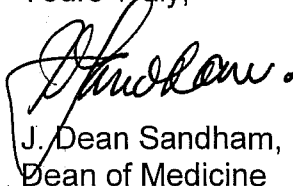
The proposal for the Professorship was presented at Medicine's Faculty Executive Council (FEC) today, March 11, 2009 by Dr. Dave McCrea, Department of Physiology, on behalf of Department Head, Dr. Janice Dodd. FEC members voted unanimously to support this initiative.

The establishment of the Professorship will be an asset to the Department and the Faculty and will enhance our endeavours to advance research and increase research capacity.

Please advise if you have any questions.

Thank you.

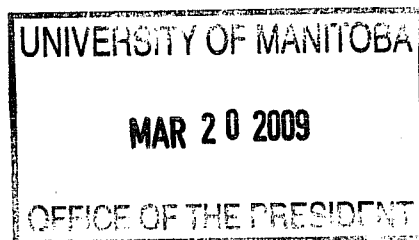
Yours Truly,



J. Dean Sandham, MD, FRCPC, FACP
Dean of Medicine

Attach.

c.c. Dr. D. Jayas, Acting V.P. Research
Mr. Jeff LeClerc, University Secretary
Dr. Janice Dodd
Dr. Dave McCrea
Ms. Barbara Becker



JDS/kh



AGENDA ITEM: Proposal for a Bachelor of Science (Major) and a Major Co-op Biotechnology

RECOMMENDED RESOLUTION:

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].

Action Requested: Approval Discussion/Advice Information

CONTEXT AND BACKGROUND:

All new programs require approval of the Board of Governors prior to being submitted to the Council on Post-Secondary Education (COPSE).

The Faculty of Science has offered a B.Sc. (Honours) degree in Biotechnology for over twenty years. Studying for an honours degree requires students to be enrolled on a full time basis only. In addition, an honours program requires a high level of academic achievement to continue in the program. The proposed major would enable students to pursue this subject on a part time basis and will also enable students who do not meet the academic standards of an honours program the option of continuing to pursue a degree in biotechnology at the major level. Students currently in this latter situation must transfer to a major program in another department often resulting in adding another year to their studies.

RESOURCE REQUIREMENTS:

There are no new resources required to implement this program. The program would use existing instructional resources including instructors, computers and other laboratory equipment to deliver the program.

IMPLICATIONS:

This proposal will provide undergraduate students with more options to study in the biotechnology field.

CONSULTATION:

This proposal is forwarded to the Board of Governors by Senate after consideration by the Faculty of Science, SPPC, SCCCC, and Senate Executive.



Board of Governors Submission

Routing to the Board of Governors:

<u>Reviewed</u>	<u>Recommended</u>	<u>By</u>	<u>Date</u>
x	x	SPPC	April 27, 2009
x	x	Senate Committee on Curriculum and Course Changes	November 4, 2008
x	x	Senate Executive	June 10, 2009
x	x	Senate	June 24, 2009

Submission prepared by: Senate

Submission approved by: University Secretary.

Attachments

- Report of the Senate Planning and Priorities Committee [dated April 27, 2009]
- Report of the Senate Committee on Curriculum and Course Changes [dated November 4, 2008]
- Program Proposal

Report of the Senate Planning and Priorities Committee on the proposal to introduce a Bachelor of Science (Major) and Co-op Major in Biotechnology

Preamble

1. The terms of reference of the Senate Planning and Priorities Committee (SPPC) are found on the website at:
http://www.umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/508.htm, wherein SPPC is charged with making recommendations to Senate regarding proposed academic programs.
2. The Faculty of Science has approved its proposed Bachelor of Science (Major) Major and Co-op Major in Biotechnology and it recommends that Senate approve these new degree majors.

Observations

1. The proposed program will provide students with a strong basic science background and specialization in their choice of analytical, environmental/biosystems or molecular biotechnology. This proposed four year major in biotechnology provides a new option for students who do not wish or are unable to take full-time study and for those who either must exit or choose to exit the Honours Biotechnology Program. These proposed majors would bring Biotechnology in line with related programs such as Microbiology and Biochemistry which have both Honours and Major Programs. In addition, the committee noted that this program will assist in meeting the growing demand in the Province of Manitoba and other parts of Canada for biotechnicians.
2. The committee noted that the proposal indicated that there are no new resources required to implement this program. The program would use existing instructional resources including instructors, computers and other laboratory equipment to deliver the program.
3. The committee also noted that the program would require no new classroom, laboratory or student study space.
4. The Director of Libraries has indicated that the current library resources are adequate to meet the needs of the proposed new majors in biotechnology.
5. Further, the committee noted that the current cooperative agreements that the University of Manitoba has with other institutions and organizations throughout the world will provide a wide range of learning opportunities for students who would enroll in the proposed Co-op major.
6. The committee noted that there was strong evidence of support for these proposed majors as indicated by the letters of support from many faculties, departments and research facilities including the Faculties of Arts, Agricultural and Food Sciences, the Clayton H. Riddell Faculty of the Environment, Earth, Resources, and Cangene Canada which were included in the proposal.

Recommendations:

The SPPC recommends that:

Senate approve and recommend to the Board of Governors that it approve the proposed Bachelor of Science (Major) and Co-op Major in Biotechnology.

Respectfully submitted,

Norman R. Hunter, Chair
Senate Planning and Priorities Committee

November 4, 2008

Report of the Senate Committee on Curriculum and Course Changes on a Proposal to Introduce a Bachelor of Science (Major) and Co-op Major Degree in Biotechnology

Preamble

1. The terms of reference for the Senate Committee on Curriculum and Course Changes (SCCCC) are found on the website at:
http://www.umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/497.htm.
2. The Senate Committee on Curriculum and Course Changes considered a proposal to introduce a Bachelor of Science (Major) and Co-op Major Degree in Biotechnology at its meeting on November 4, 2008.

Observations

1. The Faculty of Science has offered a Bachelor of Science (Honours) in Biotechnology for over 20 years. At present, students who do not meet academic requirements for the Honours Biotechnology program but wish to remain in a 4 year program must choose to enter a Major program in Microbiology, Chemistry or Biochemistry. In most cases students in this situation must take several additional courses to meet the requirements of the major. In addition, the Honours program is not available to students on a part-time basis.
2. The introduction of a Major program will allow students to pursue part-time study and will also allow those who do not satisfy the academic requirements of the Honours program to obtain a 4 year B.Sc. in this discipline.
3. The proposed Major is a modification of the existing Honours program. Students with a B.Sc. (Major) will be eligible to apply to graduate studies.

Recommendation

The Senate Committee on Curriculum and Course Changes recommends THAT:

Senate approve and recommend to the Board of Governors, the proposal to introduce a Bachelor of Bachelor of Science (Major) and Co-op Major Degree in Biotechnology

Respectfully submitted,

Professor H. Frankel, Chair
Senate Committee on Curriculum and Course Changes

/mb

**Faculty of Science
University of Manitoba**

Microbiology-Chemistry Joint Bachelor of Science (4 year Major) in Biotechnology

SECTION I: Program Description

1.1 Description of the program as it would appear in a catalogue:

Biotechnology is the application of the principles of chemistry, biochemistry and microbiology to the development of new technologies. The Biotechnology Major Program is a modification of the existing Honours program such that students wishing to pursue part-time study or those who do not satisfy the academic requirements of the Honours program will be able to obtain a 4 year B.Sc. in this discipline.

1.2 Program educational objectives and learning outcomes:

The Bachelor of Science (Major) in Biotechnology will provide students with a strong basic science background and specialization in their choice of Analytical, Environmental/Biosystems or Molecular Biotechnology. Students will receive broad exposure to theoretical concepts and practical training in many areas of applied science. All students will have to complete a Common Core of required courses plus required Stream Specific courses. Students will be required to complete a 'stream' composed of 15 credit hours of related courses, of which at least 12 credit hours are at the 3000 or 4000 level. Students will also be encouraged to select a Minor in a complementary area, such as, but not limited to: Management (I.H. Asper School of Business), Animal Systems (Faculty of Agricultural and Food Sciences), Food Science (Faculty of Agricultural and Food Sciences), Plant Biotechnology (Faculty of Agricultural and Food Sciences) or Human Nutrition and Metabolism (Faculty of Human Ecology). They will have enough free electives to cover the 18 credit hours required for a Minor. The remaining courses can be selected from the list of Recommended Electives. Although courses from the Faculty of Science make up the bulk of the program, courses from the Faculty of Agricultural and Food Sciences and the Faculty of Engineering are required and courses from the Faculty of Arts, Clayton H. Riddell Faculty of the Environment, Earth, and Resources, Faculty of Human Ecology, Faculty of Medicine, and the I. H. Asper School of Business are included in the list of recommended electives.

1.3 Program Requirements

1.3.1 Admission requirements

Students must meet the Faculty of Science requirements for entry into a Major Program; a Degree GPA (DGPA) of 2.0 on all courses completed at the end of Year 1 (minimum 24 credit hours). Also students must have a minimum grade of C+ in BIOL 1030 and CHEM 1310 and a minimum grade of C in BIOL 1020, CHEM 1300, MATH 1500, PHYS 1020 or PHYS 1050 and STAT 1000. Existing university repeat rules will be followed.

Courses required for Admission:

<u>Courses required for Admission:</u>	<u>Credit Hours</u>
BIOL 1020 Biology 1: Principles and Themes	3
BIOL 1030 Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1300 Chemistry: Structure and Modeling	3
CHEM 1310 Chemistry: Introduction to Physical Chemistry	3
MATH 1500 Introduction to Calculus	3
PHYS 1020 or 1050 General Physics 1 or Physics 1: Mechanics	3

STAT 1000 Basic Statistical Analysis 1	3
6 cr. hr Arts course(s) including W course	6

 30

1.3.2 Continuation and Graduation Requirements:

Once accepted, Faculty of Science Academic Regulations for Majors Programs will apply. Students will have to complete a Common Core of required courses plus one Stream S 'stream' composed of 15 credit hours of related courses, of which at least 12 credit hours are at the 3000 or 4000 level. Although not required, students are encouraged to complete one of the recommended Minors or any other relevant Minor. Students must maintain a CGPA ≥ 2.0 and a minimum grade of "C+" on all Common Core Courses and minimum grade of "C" on all Stream Specific Courses, in all terms. There is no term registration load requirement. No more than 18 credit hours of F's can be accumulated, regardless of whether any course has been repeated and a higher grade achieved. A Degree GPA ≥ 2.0 on a minimum of 120 credit hours is required for graduation. Students who do not meet these minimum requirements will be required to withdraw from the program and will normally be eligible to enter the 3 Year General B. Sc. Program.

Required Common Core Courses for all Streams:

		<u>Credit Hours</u>
BIOL 2500	Genetics 1	3
BIOL 2520	Cell Biology	3
BIOL 4610	The Business of Biotechnology	3
BIOL 4560	Microtechnique	3
CHEM 2210	Organic Chemistry I: Structure and Function	3
CHEM 2220	Organic Chemistry II: Reactivity and Synthesis	3
CHEM/MBIO 2360	Biochemistry 1: Biomolecules and Metabolic Energy	3
CHEM/MBIO 2370	Biochemistry 2: Catabolism, Synthesis and Pathways	3
CHEM 2470	Analytical Chemistry	3
CHEM 3590	Instrumental Analysis	3
CHEM 4630	Biochemistry of Proteins	3
MBIO 2100	General Microbiology A	3
MBIO 3410	Molecular Biology	3
MBIO 3000	Applied Biological Safety	3
MBIO 4510	Industrial Microbiology	3
PLNT 2530	Plant Biotechnology	3
PLNT 4610	Bioinformatics	3

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Analytical Biotechnology Stream Required Courses

MATH 1700	Calculus 2	3
CHEM 4370	Glycobiology and Protein Activation	3
CHEM 4590	Bioanalytical Methods	3
CHEM 4670	Drug Design and Discovery	3
CHEM 4700	Advanced Biochemistry Laboratory	3
Recommended Electives (to complete degree)		27

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Environmental (Biosystems) Biotechnology Stream Required Courses

MATH 1700	Calculus 2	3
BIOE 3530	Engineering Fundamentals	3
BIOE 3200	Environmental Engineering for Non-Engineers	3
BIOE 4510	Agricultural Waste Management	3
MBIO 4672	Applied Molecular Biology	3
Recommended Electives (to complete degree)		27

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Molecular Biotechnology Stream Required Courses

MBIO 2110	General Microbiology B	3
MBIO 4672	Applied Molecular Biology	3
MBIO 4600	Molecular Genetics of Prokaryotes	3
MBIO 4610	Molecular Genetics of Eukaryotes	3
BIOL 4550	Molecular Biology for Plants and Fungi	3
Recommended Electives (to complete degree)		27

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Recommended Minors (Minors require 18 cr. hrs of prescribed courses):

Animal Systems (Faculty of Agricultural and Food Sciences)

Food Science (Faculty of Agricultural and Food Sciences)

Plant Biotechnology (Faculty of Agricultural and Food Sciences)

Human Nutrition and Metabolism (Faculty of Human Ecology)

Management (I.H. Asper School of Business)

Other recognized Minors will be approved by the signing authority.

Recommended Electives:

All courses in above described Minors. Appropriate pre-requisites must be taken for all Electives.

BIOE 3200	Environmental Engineering for Non-Engineers
BIOE 3530	Engineering Fundamentals
BIOE 4510	Agricultural Waste Management
BIOL 1300	Economic Plants
BIOL 2240	The Non-Flowering Plants
BIOL 2180	Introductory Toxicology
BIOL 2260	Biology of Fungi and Lichens
BIOL 2300	Principles of Ecology
BIOL 2540	Developmental Biology
BIOL 4540	Developmental Molecular Biology
BIOL 3290	Medicinal and Hallucinogenic Plants
BIOL 3500	Genetics 2
BIOL 3540	Advanced Cell and Developmental Biology
BIOL 3550	Plant Anatomy
BIOL 4500	Molecular Genetics of Plant Development
BIOL 4550	Molecular Biology for Plants and Fungi
CHEM 4360	Signaling and Regulation of Gene Expression
CHEM 4370	Glycobiology and Protein Activation
CHEM 4590	Bioanalytical Methods

CHEM 4620	Biochemistry of Nucleic Acids
CHEM 4670	Drug Design and Drug Delivery
CHEM 4700	Advanced Biochemistry Laboratory
COMP 1010	Introductory Computer Science 1
COMP 1020	Introductory Computer Science 2
COMP 1260	Introductory Computer Usage 1
COMP 1270	Introductory Computer Usage 2
ENG 1420	Engineering Processes for Non-Engineering Students
ENTR 2020	Starting a New Business
MATH 1700	Calculus 2
MBIO 2110	General Microbiology B
MBIO 2280	Microbial Ecology
MBIO 3010	Mechanisms of Microbial Disease
MBIO 3430	Molecular Evolution
MBIO 3440	Microbial Physiology
MBIO 3450	Regulation of Biochemical Processes
MBIO 3460	Membrane and Cellular Biochemistry
MBIO 3470	Microbial Systematics
MBIO 3480	Microbial Diversity
MBIO 4010/4020	Immunology
MBIO 4410	Virology
MBIO 4470	Fermentations
MBIO 4540	Biological Energy Transductions
MBIO 4600	Molecular Genetics of Prokaryotes
MBIO 4610	Molecular Genetics of Eukaryotes
MBIO 4670/4672	Applied Molecular Biology
PHAC 4030	Drugs in Human Disease I
PHAC 4040	Drugs in Human Disease II
PHIL 2740	Ethics in Biomedicine
PHIL 2830	Business Ethics
PLNT 3140	Introductory Cytogenetics
PLNT 3500	Plant Physiology
PLNT 3520	Principles of Plant Improvement
PLNT 3570	Fundamentals of Plant Pathology
PLNT 4330	Intermediate Plant Genetics
PLNT 4540	Plant Genomics
PLNT 4550	Developmental Plant Biology
PLNT 4560	Secondary Plant Metabolism
PLNT 4570	Research Methods in Plant Pathology
PLNT 4580	Molecular Plant-Microbe Interactions
PLNT 4590	Physiology of Crop Plants
PLNT 4600	Issues in Agricultural Biotechnology
STAT 2000	Basic Statistical Analysis 2

FOUR YEAR MAJOR in BIOTECHNOLOGY
Proposed Program
2008-2009

Microbiology - Chemistry Joint Program in Biotechnology, Department Code: 060T

UNIVERSITY 1	YEAR 2	YEAR 3	YEAR 4
JOINT FOUR YEAR MAJOR 120 CREDIT (comprising courses listed in chart below, and electives)			
BIOL 1020 (C), BIOL 1030 (C+), CHEM 1300 (C), CHEM 1310 (C+), PHYS 1020 OR 1050 (C), MATH 1500 (C), STAT 1000 (C)	CHEM 2210, CHEM 2220, MBIO/CHEM 2360, MBIO/CHEM 2370, MBIO 2100, CHEM 2470, BIOL 2500, BIOL 2520	CHEM 3590, MBIO 3410, PLNT 2530, MBIO 3000	MBIO 4510, CHEM 4630, BIOL 4560, BIOL 4610, PLNT 4610
Plus 6 credit hours from the Faculty of Arts which should include the required "W" course. Plus sufficient credit hours of electives to total 30 hours.	PLUS PROGRAM STREAM COURSES. Plus sufficient credit hours of electives to total 30 hours.	PLUS PROGRAM STREAM COURSES. Plus sufficient credit hours of electives to total 30 hours.	PLUS PROGRAM STREAM COURSES. Plus sufficient credit hours of electives to total 30 hours.
30 Hours	30 Hours	30 Hours	30 Hours

NOTE:

MATH 1510, 1520 or 1530 may be used in place of MATH 1500; MATH 1710 may be used in place of MATH 1700.

Program Stream courses:

Analytical Biotechnology

MATH 1700, CHEM 4370, CHEM 4590, CHEM 4670, CHEM 4700

Environmental Biotechnology

MATH 1700, BIOE 3530, BIOE 4510, BIOE 3200, MBIO 4672

Molecular Biotechnology

MBIO 2110, BIOL 4550, MBIO 4600, MBIO 4610, MBIO 4672

Recommended Minors:

Management (I.H. Asper School of Business)

Animal Systems (Faculty of Agricultural and Food Sciences)

Food Science (Faculty of Agricultural and Food Sciences)

Plant Biotechnology (Faculty of Agricultural and Food Sciences)

Human Nutrition and Metabolism (Faculty of Human Ecology)

Recommended Elective courses:

All courses in above Minors. All prerequisites as required.

Biological Sciences: BIOL 1300, BIOL 2240, BIOL 2180, BIOL 2260, BIOL 2300, BIOL 2540, BIOL 3540, BIOL 3550, BIOL 3290, BIOL 3500, BIOL 4500, BIOL 4540, BIOL 4550

Chemistry: CHEM 4360, CHEM 4370, CHEM 4590, CHEM 4620, CHEM 4670, CHEM 4700

Computer Science: COMP 1010, COMP 1020, COMP 1260, COMP 1270

Engineering: ENG 1420, BIOE 3530, BIOE 4510, BIOE 3200

Management: ENTR 2020

Mathematics: MATH 1700

Microbiology: MBIO 2110, MBIO 2280, MBIO 3010, MBIO 3430, MBIO 3440, MBIO 3450, MBIO 3460, MBIO 3470, MBIO 3480, MBIO 4010/4020, MBIO 4410, MBIO 4470, MBIO 4540, MBIO 4600, MBIO 4610, MBIO 4670/4672

Pharmacology: PHAC 4030, PHAC 4040

Philosophy: PHIL 2740, PHIL 2830

Plant Science: PLNT 3140, PLNT 3500, PLNT 3520, PLNT 3570, PLNT 4330, PLNT 4540, PLNT 4550, PLNT 4560, PLNT 4570, PLNT 4580, PLNT 4590, PLNT 4600

Statistics: STAT 2000

1.3.3 Course Descriptions

a. Existing Courses:

Courses Required for Admissions:

BIOL 1020 Biology 1: Principles and Themes Cr.Hrs.3 (Lab Required) A laboratory-based course in unifying principles of biology including cell biology, bioenergetics, cell division, genetics and evolution. This course is intended for major and honours students in the biological sciences. Not to be held with BIOL 1000 or BIOL 1001 (or 071.100), BIOE 2590 (or 034.259), or the former 071.125, 071.123 or 071.201. *Prerequisite:* Biology 40S (or equivalent) or BIOL 1000 (C); and any grade 12 Mathematics course (or equivalent) (50%). Students who complete BIOL 1000 as the prerequisite for BIOL 1020 will not be allowed to use both BIOL 1000 and BIOL 1020 towards their degree program as the two courses may not be held for credit with one another.

BIOL 1030 Biology 2: Biological Diversity, Function and Interactions Cr.Hrs.3 (Lab Required) A laboratory-based course introducing biological diversity including prokaryotes, protists, fungi, plants and animals; the form and function of plants and animals and basic concepts of ecology. This course is intended for major and honours students in the biological sciences. Not to be held with BIOL 1010 or BIOL 1011 (or 071.101), BIOE 2590 (or 034.259), or the former 071.125, 071.123 or 071.201. *Prerequisite:* BIOL 1020 (C).

CHEM 1300 University 1 Chemistry: Structure and Modelling in Chemistry Cr.Hrs.3 (Lab Required) (Formerly 002.130) Atomic and molecular models and their applications to chemistry, including a discussion of solid, liquid, and gaseous states, and of mixtures. Not to be held with CHEM 1301. *Prerequisites:* Applied Mathematics 40S or Pre-calculus Mathematics 40S, or the former Mathematics 40S (300); and Chemistry 40S (or equivalent) or CHEM 0900 (or 002.090) (P), or a minimum grade of "B" in CHEM 1000 or CHEM 1001 (or 002.100).

CHEM 1310 University 1 Chemistry: An Introduction to Physical Chemistry Cr.Hrs.3 (Lab Required) (Formerly 002.131) Thermochemistry, chemical thermodynamics, and chemical kinetics. *Prerequisite:* CHEM 1300 or CHEM 1301 (or 002.130) (C).

MATH 1500 Introduction to Calculus Cr.Hrs.3 (Lab Required) (Formerly 136.150) Differentiation and integration of elementary functions, with applications to maxima and minima, rates of change, area, and volume. Not to be held with MATH 1501, MATH 1510 (or 136.151), MATH 1520 (or 136.152), the former or 136.153, the former MATH 1680 (or 136.168), MATH

1690 (or 136.169). *Prerequisite:* a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or a grade of 60% or better in the Mathematical Skills course taught by Extended Education.

PHYS 1020 General Physics 1 Cr.Hrs.3 (Lab Required) (Formerly 016.102) A non-calculus survey course in Physics covering topics in mechanics and thermodynamics, with illustrations drawn from the life and physical sciences. This course, together with the sequel PHYS 1030 (or 016.103), is recommended for students seeking either a single, comprehensive course in Physics or entry into health science programs. It may also be used for entry into the Honours Physics program ("B+" or better) or the Major Physics program ("B" or better). Not to be held with PHYS 1050 or PHYS 1051 (or 016.105), PHYS 1410 (or 016.141) or PHYS 1420 (or 016.142) (or the former 016.127). *Prerequisites:* Either Physics 40S, PHYS 0900 (or 016.090) (with a Pass), or equivalent; and either Pre-calculus Mathematics 40S, Applied Mathematics 40S (with 70% or better), or equivalent. It is strongly recommended that students attain a minimum of 70% as the average of their marks in Physics 40S and Pre-calculus Mathematics 40S.

PHYS 1050 Physics 1: Mechanics Cr.Hrs.3 (Lab Required) (Formerly 016.105) A calculus-based introduction to classical mechanics which includes vectors, translational kinematics and dynamics, work and energy, linear momentum and collisions, rotational kinematics and dynamics, and oscillatory motion. This course is intended for students considering a program of study in engineering or the physical sciences. Not to be held with PHYS 1020 or PHYS 1021 (or 016.102), PHYS 1410 (or 016.141) or PHYS 1420 (or 016.142) (or the former 016.118, 016.120 or 016.127). *Prerequisites:* Pre-calculus Mathematics 40S (300) (or equivalent) and Physics 40S (300) (or equivalent) or PHYS 0900 (or 016.090) (with a grade of "Pass"). It is strongly recommended that students attain a minimum of 80 per cent as the average of their marks in Physics 40S (300) and Pre-calculus Mathematics 40S (300). *Prerequisite or concurrent requirement:* One of MATH 1500 or MATH 1501, MATH 1510, MATH 1520, the former 136.153 or MATH 1690.

STAT 1000 Basic Statistical Analysis I Cr.Hrs.3 (Formerly 005.100) An introduction to the basic principles of statistics and procedures used for data analysis. Topics to be covered include: gathering data, displaying and summarizing data, examining relationships between variables, sampling distributions, estimation and significance tests, inference for means. Not to be held with STAT 1001, STAT 2220 (or the former 005.222). *Prerequisite:* Any grade 12 or 40S Mathematics, or equivalent.

Required Common Core Courses for All Streams:

BIOL 2500 Genetics 1 Cr.Hrs.3 (Lab Required) (Formerly 001.246) Principles of heredity, gametogenesis and the cytological basis of inheritance in plants and animals. The concepts of dominance and genetic interaction, sex and inheritance, linkage, chromosomal variations, quantitative and population genetics, the genetic code. Not to be held with BOTN 2461 or PLNT 2520 (or 039.252). *Prerequisite:* BIOL 1030 or BIOL 1031 (or the former 071.125) (C).

BIOL 2520 Cell Biology Cr.Hrs.3 (Formerly 022.228) The microscopic and submicroscopic aspects of cellular structure and function are considered with emphasis on the living cell as a dynamic system. *Prerequisite:* BIOL 1030 or BIOL 1031 (or the former 071.125) (C).

BIOL 4560 Microtechnique Cr.Hrs.3 (Lab Required) (Formerly 022.414) This course deals with a spectrum of animal tissue preparation techniques and microscopy. These span a survey of all types of microscopes, live cell and tissue methods, fixation and tissue processing for paraffin and plastic tissue embedding, histo- and immunocyto-chemistry, electron microscopy, video and image

processing microscopy. This is a practical course with a major emphasis on the laboratory portion.
Prerequisite: BIOL 1030 or BIOL 1031 (or the former 071.125) (C).

CHEM 2210 Introductory Organic Chemistry 1: Structure and Function Cr.Hrs.3 (Lab Required) (Formerly 002.221) An introduction to the concepts of organic reactivity and bonding in organic molecules. Preparation and properties of functionalized organic molecules. Not to be held with CHEM 1320 (or 002.132) or CHEM 2211. *Prerequisite:* CHEM 1310 or CHEM 1311 (or 002.131) (C).

CHEM 2220 Introductory Organic Chemistry 2: Reactivity and Synthesis Cr.Hrs.3 (Lab Required) (Formerly 002.222) An introduction to the reactivity of organic compounds and organic spectroscopy. The application of functional group interconversions to syntheses. *Prerequisite:* CHEM 2210 or CHEM 2211 (or 002.221) (C).

CHEM 2360 Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy Cr.Hrs.3 (Lab Required) (Formerly 002.236) An introductory course dealing with kinds of molecules encountered in biochemistry, and the concept of metabolic energy as a product of catabolism and a requirement for biosynthesis. This course is also given in Microbiology as MBIO 2360. Not to be held with CHEM 2361 or CHEM 2770 (or 002.277), or MBIO 2360 or MBIO 2361 (or 060.236), or MBIO 2770 (or 060.277). *Prerequisites:* CHEM 1310 or CHEM 1311 (or 002.131) and BIOL 1030 or BIOL 1031 or the former 071.125, both courses with a minimum grade of (C).

CHEM 2370 Biochemistry 2: Catabolism, Synthesis, and Information Pathways Cr.Hrs.3 (Lab Required) (Formerly 002.237) An introductory course dealing with the basic metabolic processes that occur in living cells, including the production and use of metabolic energy, the breakdown and synthesis of biomolecules; the synthesis of DNA, RNA and proteins; and the regulation of these processes. This course is also given in Microbiology as MBIO 2370. Not to be held with CHEM 2780 (or 002.278), or MBIO 2370 or MBIO 2371 (or 060.237), or MBIO 2780 (or 060.278). *Prerequisites:* CHEM 2360 or CHEM 2361 (or 002.236) or MBIO 2360 or MBIO 2361 (or 060.236); and CHEM 2210 or CHEM 2211 (or 002.221), both courses with a minimum grade of (C).

CHEM 2470 Introductory Analytical Chemistry Cr.Hrs.3 (Lab Required) (Formerly 002.247) An introduction to common laboratory techniques of chemical analysis including gravimetric, volumetric and selected instrumental methods. *Prerequisites:* CHEM 1310 or CHEM 1311 (or 002.131) (C) and three credit hours of mathematics with the exception of MATH 1000, MATH 1010, MATH 1190, MATH 1191 or MATH 1020.

CHEM 3590 Instrumental Analysis Cr.Hrs.3 (Lab Required) A course dealing with the theory and use of standard instruments used for chemical and biochemical analyses. An introduction to the interpretation of data obtained from such analyses. This course is designed to follow a classical analytical chemistry course. Not to be held with ENVR 3550 (or 128.355) or the former 002.347 or the former 002.355. *Prerequisite:* CHEM 2470 (or 002.247) (C).

CHEM 4630 Biochemistry of Proteins Cr.Hrs.3 (Formerly 002.463) The structure and function of proteins, their physical and chemical properties and methods for studying them. *Prerequisite:* CHEM 2370 or CHEM 2371 (or 002.237) or MBIO 2370 or MBIO 2371 (or 060.237) or 002.235 or 060.235) (C).

MBIO 2100 General Microbiology A Cr.Hrs.3 (Lab Required) (Formerly 060.210) Fundamental principles of and methods used in microbiology. An introduction to the major groups of microorganisms, their structure and function, growth, metabolism, physiology and regulatory systems.

Prerequisite: BIOL 1030 or BIOL 1031 (or the former 071.125) (C); and CHEM 1310 or CHEM 1311 (or 002.131) (C), or CHEM 1320 (or 002.132) (C).

MBIO 3000 Applied Biological Safety Cr.Hrs.3 A comprehensive overview of (i) applied biological safety in research and industrial environments and (ii) the disease-causing features of relevant infectious agents and considerations for their containment. The course consists of lectures and demonstration components. *Prerequisite:* MBIO 2100 (or MBIO 2101 or the former 060.210) (C) or permission of instructor. Check with department for availability.

MBIO 3410 Molecular Biology Cr.Hrs.3 (Formerly 060.341) A rigorous treatment of the foundations of modern day molecular biology as it pertains to molecular disease, gene and cell manipulation, and cellular controls. *Prerequisites:* MBIO 2370 or MBIO 2371 (or 060.237) or CHEM 2370 or CHEM 2371 (or 002.237) or MBIO 2780 or CHEM 2780 (or 060.278 or 002.278) (C); and one of MBIO 2110 or MBIO 2111 (or 060.211) (C), ZOOL 2280 or ZOOL 2281 (or 002.228) (C) or BOTN 2460 or BOTN 2461 (or 001.246).

MBIO 4510 Industrial Microbiology Cr.Hrs.3 (Lab Required) (Formerly 060.451) A survey of microbial reactions used in industry. Fermentations, such as the production of amino acids and antibiotics, will be discussed. *Prerequisites:* MBIO 2110 or MBIO 2111 (or 060.211) (C) and MBIO 2370 or MBIO 2371 (or 060.237) or CHEM 2370 or CHEM 2371 (or 002.237) (C).

PLNT 2530 Plant Biotechnology Cr.Hrs.3(Formerly 039.253) An introduction to current biotechnological techniques, including recombinant DNA, plant tissue culture, plant transformation and regeneration. A background to the techniques as well as a discussion of their applications in current biology and crop production will be examined. A laboratory will provide first-hand experience with many of the techniques. Not to be held with the former 039.450. *Prerequisites:* CHEM 2770 (or 002.277) and PLNT 2520 (or 039.252) or BOTN 2460 (or 001.246).

Stream Specific Courses

Analytical Biotechnology Stream:

MATH 1700 Calculus 2 Cr.Hrs.3 (Lab Required) (Formerly 136.170) Theory and techniques of integration, curve sketching, volume, arc length, surface area and partial derivatives. Not to be held with MATH 1690 (or 136.169), MATH 1710 (or 136.171), the former 136.173) or 006.126, 013.149, or 013.159. *Prerequisite:* MATH 1500, MATH 1501 (or 136.150) (C), MATH 1510 (or 136.151) (C), MATH 1520 (or 136.152) (C), the former 136.153 (C) or the former MATH 1680 (or 136.168) (C).

CHEM 4370 Glycobiology and Protein Activation Cr.Hrs.3 (Formerly 002.437) The role of carbohydrate containing biomolecules in biochemistry and their importance for understanding some genetic diseases. The importance of limited proteolysis in activation of biomolecules. Not to be held with the former 002.449. *Prerequisite:* CHEM 2370 or CHEM 2371 (or 002.237) or MBIO 2370 or MBIO 2371 (or 060.237) or 002.235 or 060.235) (C).

CHEM 4590 Bioanalytical Methods Cr.Hrs.3 (Lab Required) This course introduces different methods used currently for the analysis of biological materials. Qualitative and quantitative aspects are explored. Instrumentation is described and practical methods are designed. Not to be held with the former 002.347. *Prerequisite:* a grade of "C" in CHEM 3590 or ENVR 3550 (or 128.355) or the former 002.355.

CHEM 4670 Drug Design and Drug Discovery Cr.Hrs.3 An understanding of the design,

synthesis and interactions of drug molecules. Emphasis will be on novel drug-like molecules in the early stages of drug discovery with special focus on brain diseases and infectious diseases.

Prerequisites: CHEM 2220 (C); and one of CHEM 2360 (C) or CHEM 2860 (C).

CHEM 4700 Advanced Biochemistry Laboratory Cr.Hrs.3 (Formerly 002.470) (Lab required)

A laboratory and workshop consisting of lectures, problem solving, and advanced instrumental techniques such as magnetic resonance spectroscopy, mass spectrometry, circular dichroism, x-ray crystallography, fluorescence spectroscopy and computer analysis of protein sequences. This course is required for all final year Honours students in Biochemistry. *Prerequisite or concurrent requirement:* CHEM 4620 (or CHEM 4621) and CHEM 4630 (or CHEM 4631).

Environmental (Biosystems) Biotechnology Stream:

MATH 1700 Calculus 2 Cr.Hrs.3 (Lab Required) (Formerly 136.170) Theory and techniques of integration, curve sketching, volume, arc length, surface area and partial derivatives. Not to be held with MATH 1690 (or 136.169), MATH 1710 (or 136.171), the former 136.173) or 006.126, 013.149, or 013.159. *Prerequisite:* MATH 1500, MATH 1501 (or 136.150) (C), MATH 1510 (or 136.151) (C), MATH 1520 (or 136.152) (C), the former 136.153 (C) or the former MATH 1680 (or 136.168) (C).

BIOE 3530 Engineering Fundamentals Cr.Hrs.3 (Formerly 034.353) Principles of heat transfer, steam, psychometrics, fluid mechanics, material balances, electricity and refrigeration. Cannot be held for credit in the Faculty of Engineering. Not to be held with the former 034.329. *Prerequisite:* MATH 1680(136.168M) or the former 013.129 or 013.128.

BIOE 4510 Agricultural Waste Management Cr.Hrs.3 (Formerly 034.451) Characteristics of waste, design of systems for collection, storage and land application, alternate treatment/conversion systems, impacts on air, soil and water quality. *Prerequisite:* ANSC 3530 (035.353) or consent of instructor.

MBIO 4672 Applied Molecular Biology Cr.Hrs.3 The overall objective of this course is to introduce and describe the current molecular techniques and their application to biological problems. These include, but are not limited to, basic gene cloning, mutagenesis and over-expression. Not to be held with the former MBIO 4580 (or 060.458) or MBIO 4670 (or the former MBIO 4570 or 060.457). *Prerequisite:* MBIO 3410 or MBIO 3411 (or the former 060.341) (C).

Molecular Biotechnology Stream:

MBIO 2110 General Microbiology B Cr.Hrs.3 (Lab Required) (Formerly 060.211) Microbial synthesis of nucleic acids and proteins, introductions to bacterial and animal viruses, mutation, and bacterial genetics. *Prerequisite:* MBIO 2100 or MBIO 2101 (or 060.210) (C).

BIOL 4550 Molecular Biology for Plants and Fungi Cr.Hrs.3 (Lab Required) Basic molecular biology techniques for the collection, preservation, and analysis of DNA and RNA in a wide variety of organisms with an emphasis on plants and fungi. Extraction, amplification, diagnostic, recombinant DNA theory, bioinformatics, and interpretation of biological data focusing on troubleshooting and hands-on experience in the laboratory. Not to be held with BOTN 7460 (001.742 or 001.746). Restricted to Honours students or with permission of the instructor.

MBIO 4672 Applied Molecular Biology Cr.Hrs.3 The overall objective of this course is to introduce and describe the current molecular techniques and their application to biological problems. These include, but are not limited to, basic gene cloning, mutagenesis and over-expression. Not to be

held with the former MBIO 4580 (or 060.458) or MBIO 4670 (or the former MBIO 4570 or 060.457). *Prerequisite*: MBIO 3410 or MBIO 3411 (or the former 060.341) (C).

MBIO 4600 Molecular Genetics of Prokaryotes Cr.Hrs.3 (Lab Required) (Formerly 060.460) A detailed examination of replication, expression, mutability, repair and transposition of DNA in bacteria and their viruses. Priority will be given to Science Honours students. Not to be held with the former 060.452 or 060.456. *Prerequisites*: MBIO 2110 or MBIO 2111 (or 060.211) (C) and MBIO 2370 or MBIO 2371 (or 060.237) or CHEM 2370 or CHEM 2371 (or 002.237) (C). BOTN 2460 (or 001.246) is recommended.

MBIO 4610 Molecular Genetics of Eukaryotes Cr.Hrs.3 (Lab Required) (Formerly 060.461) A comprehensive study dealing with replication and expression of DNA, genome structure, and the involvement of genes in AIDS and cancer. Check with the department for availability. Not to be held with the former 060.452 or 060.455. *Prerequisites*: MBIO 2110 or MBIO 2111 (or 060.211) (C) and MBIO 2370 or MBIO 2371 (or 060.237) or CHEM 2370 or CHEM 2371 (or 002.237) (C). BOTN 2460 (or 001.246) is recommended.

b. Newly Developed Courses:

BIOE 3200 Environmental Engineering for Non-Engineers Cr.Hrs. 3 This course will introduce students to the engineering approach to providing solutions to environmental problems such as air, water, and soil pollution, with an emphasis on the use of biotechnology. The course will consist of four modules that will discuss air pollution and odor control, remediation of contaminated soil and ground water, waste-water and solid waste treatment, and the role of microbes in these processes. *Prerequisites*: Permission of Instructor. (Course proposed through the Faculty of Engineering)

BIOL 4610 The Business of Biotechnology Cr.Hrs. 3 A critical examination of Biotechnology development and marketing. Lectures, tutorials and workshops providing in-depth study of topics including the legal, business, marketing, industrial and governmental, and scientific and ethical aspects of the biotechnology industry and, “for profit” science. *Prerequisites*: PLNT 2530 (C+) and MBIO 3000 (C+). BOTN 2460 (or 001.246), ZOOL 2280 (or 022.228) and CHEM 3590 (or 002.359) are highly recommended.

PLNT 4610 Bioinformatics Cr. Hrs. 3 (Lab required) An introduction to the theory, strategies, and practice of data management and analysis in molecular biology. Topics include DNA and protein analysis, biological databases, genomic mapping, and analysis of gene expression data. (Course proposed through the Faculty of Agricultural and Food Sciences)

1.4 Program fit with institutional mission and planning priorities:

1.4.1 University of Manitoba Priorities:

In accordance to the 2003 University of Manitoba Strategic Academic Plan: Building for a Bright Future, the proposed B.Sc. 4 yr Major in Biotechnology ‘provides access to an exceptional education’ and aims to ‘attract and retain the best’. Presently part-time students cannot enroll in the B.Sc. Honours Biotechnology program. In addition, students in the Honours program do not have a Majors program to enter if they do choose for whatever reason, academic or personal, to enter a Major program. These students can enter another Major program, such as Biochemistry, Chemistry or Microbiology and may have to take extra courses to satisfy these program requirements. The

proposed program will provide a new option for students who do not wish to pursue full-time study. The rigor and course requirements of the existing Honours Program have been retained and co-operative opportunities will be equally accessible. In many cases the 'best' students do not wish to enroll in Honours programs, hence the more flexible Majors program will de facto provide access and attract and retain the best students.

1.4.2 Faculty of Science Priorities:

Strategic Priorities, as listed in the 2008 Faculty of Science Plan: Science for Many Futures includes the delivery of modern, innovative undergraduate programs which improve the quality of the undergraduate experience, and motivate and support student success. The proposed B.Sc. 4 year Major in Biotechnology satisfies this priority by opening up access to a degree in Biotechnology. In addition, the proposed program is interdisciplinary, drawing from expertise throughout the Faculty of Science and from the Faculties of Agricultural and Food Sciences, Engineering, Medicine, Human Ecology and the Clayton H. Riddell Faculty of Environmental, Earth and Resources, thus satisfying the priority to 'build stronger ties with the community, both internal and external'. The co-operative program will also build ties with the biotechnology sector in Manitoba and abroad.

1.5 Comparison to existing programs:

Many of the major universities in Canada have programs containing a Biotechnology component, including Brandon University, University of Winnipeg, and Red River Community College. At the University of Manitoba, the Biotechnology Honours B. Sc. Program has been in place for over 20 years. At present, students not meeting academic requirements for the Honours Biotechnology program but wishing to remain in a 4 year program must choose to enter a Major program in Microbiology, Chemistry or Biochemistry. Students in this situation in most cases must take several additional courses to meet the requirements of their elected Major. A Four Year Major in Biotechnology provides a new option for students who do not wish to take full-time study and for those who either must exit or choose to exit the Honours Biotechnology Program. This also brings Biotechnology in line with related programs such as Microbiology and Biochemistry which have both Honours and Majors Programs.

SECTION II: Market Need and Market Demand for the Program

2.1 Local or provincial market needs for graduates:

The Biotechnology Sector has become very prominent in Manitoba and across Canada. Students with the proposed Major degree will have obtained high quality, relevant training to secure a variety of positions in local pharmaceutical/biotechnology companies (e.g. Cangene, Apotex, Biovail), any lab where analytical and quality control expertise is required (e.g. Enviro-Test Laboratories, Vita Health, Maple Leaf Pork), the National Microbiology Laboratory and the National Research Council Institute for Biodiagnostics. Graduates will be desirable employees as technicians/technologists in research laboratories. Graduates will also be employable in similar industries, agencies and laboratories across Canada.

2.2 Probable employment destinations:

As described above, the biotechnology sector is expanding across Canada and includes facets such as quality control, biosystems processing, production, research and development in pharmaceutical, agricultural, environmental areas. All biotechnology and related companies in Manitoba and across the country are continuously hiring the equivalent to graduates from the proposed program.

2.3 Consultation with relevant groups/agencies:

The proposed program was developed by an interdisciplinary group including faculty members from the Faculty of Science Departments of Biological Sciences, Chemistry and Microbiology, the Faculty of Agricultural and Food Sciences Department of Plant Science, and the Faculty of Engineering Department of Biosystems Engineering. The proposal has also received support from the Clayton H. Riddell Faculty of the Environment, Earth, and Resources, Faculty of Agricultural and Food Sciences and the Faculty of Arts. In addition, Dr. John Langstaff, President and CEO of Cangene Corp., one of the largest biotechnology companies in Winnipeg, has given his support for this program.

2.4 Fit with provincial economic, social and cultural priorities:

The existing B. Sc. Honours in Biotechnology and the newly proposed Majors programs fit with many of the priorities outlined in the 2008 Provincial Budget (Moving Forward: Manitoba's Priorities for the Future). Students graduating from these programs will be able to enter the work force in a variety of biotechnology industries including the pharmaceutical industry and biosystems sectors. They will be involved in research and developments leading to improved health care and cleaner energy and environments. The Majors Program will provide more accessibility to a high quality education to those who choose to or cannot for whatever reason pursue full time study. This falls directly under the provincial priority to 'improve education and training opportunities for young people here at home.' Along with obtaining a strong science training, students will also receive business training and be encouraged to pursue minors in relevant areas as management, food science, and plant biotechnology.

2.5 Potential for job creation and research and development:

Graduates from the proposed program will be well poised to either pursue jobs in the research and development branches of any given biotechnology company. Entrepreneurial students who have opted for a minor in management will be well placed to develop new companies and foster job creation for graduates from this and related programs.

SECTION III: Student Demand for the Program

3.1 Students the program will serve:

The program is targeted to undergraduate students who are interested in pursuing a highly rigorous interdisciplinary biotechnology degree however either cannot, due to financial or personal reasons, or chose not to follow full-time study.

3.2 Existing program offerings in Manitoba:

No equivalent programs exist within the province.

3.3 Evidence of student interest and demand for the program:

To date students wishing to pursue a career in the biotechnology sector are required to enroll in the Honours program. No equivalent part-time program exists. Although there is no statistical data, Faculty of Science Student Advisors have 20 years of anecdotal evidence of students inquiring about and expressing interest in a Majors Biotechnology Program. Development of a Majors program will put biotechnological training in line with the majority of other programs offered by the Faculty of Science which have both Honours and Majors options for their students.

3.4 Projected enrolments:

We anticipate between 20 students will enter this program each year.

3.5 Existing programs projected to lose enrolment to this program:

Presently and historically, students who wanted a biotechnology-like Majors program opted for the Microbiology or Biochemistry Major programs. It is conceivable that both of these programs will lose students to a new Biotechnology Majors program. The ideal situation is that students registered in the 3 Yr. General B. Sc. Program will be the major draw. This scenario is a win-win situation in that students in the General program will be attracted into a highly rigorous, relevant advanced degree and the university will retain motivated students for an extra academic year.

3.6 Proposed growth limits and minimum enrolments:

None. All interested students will be accommodated as required.

3.7 Projected number of students for the first 3 to 5 years:

Approximately 20 students will graduate from the program each year. Estimating that 20 students will enter program each year, after three years this will result in 60 students per year at various stages in the program.

3.8 Participation and success by under-represented groups:

The very nature of a Majors program, whereby students have the option to pursue full-time or part-time study, gives the flexibility and accessibility most often requested by under-represented groups. Students will be able to work, raise families, care for elderly, etc. and still succeed in receiving an advanced degree.

3.9 Availability to part-time learners:

Yes, the proposed program will readily accommodate part-time learners.

SECTION IV: Faculty Requirements

4.1 Current Faculty who will teach in the program:

	Department	Classification
Piercey-Normore Michele	Biological Sciences	Assistant Professor
Weihrauch Dirk	Biological Sciences	Assistant Professor
Huebner Erwin	Biological Sciences	Professor
Graham Lane	Biological Sciences	Associate Professor
Hiebert Colin	Biological Sciences	Sessional
Sereda Karen	Biological Sciences	Sessional
Shaw Michael	Biological Sciences	Senior Instructor
Sparling Richard	Biological Sciences	Associate Professor
Sumner Michael	Biological Sciences	Associate Professor
Whyard Steven	Biological Sciences	Assistant Professor
Worley Anne	Biological Sciences	Assistant Professor
	Biosystems	
Cenkowski Stefan	Engineering	Professor
	Biosystems	
Cicek Nazim	Engineering	Associate Professor

Cullen John	Chemistry	Associate Professor
Duckworth Harry	Chemistry	Professor
Freund Michael	Chemistry	Associate Professor
Gauvin Francois	Chemistry	Instructor
Hegmann Torsten	Chemistry	Assistant Professor
Hultin Philip	Chemistry	Professor
Hunter Norman	Chemistry	Professor
Koczanski Krystyna	Chemistry	Instructor
Kroeker Scott	Chemistry	Associate Professor
O'Neil Joseph	Chemistry	Professor
Perreault Helene	Chemistry	Professor
Schweizer Frank	Chemistry	Assistant Professor
Smirnova Elena	Chemistry	Senior Instructor
Sorensen John	Chemistry	Assistant Professor
Spearman Maureen	Chemistry	Sessional
Stetefeld Joerg	Chemistry	Assistant Professor
Thorne-Tjomsland Gro	Chemistry	Sessional
Wang Feiyue	Chemistry	Associate Professor
Gupta Chander	Mathematics	Professor
Kalajdzievski Sasho	Mathematics	Senior Instructor
Korytowski William	Mathematics	Sessional Instructor
Penner Peter	Mathematics	Senior Instructor
Platt Craig	Mathematics	Professor
Shivakumar Pappur	Mathematics	Professor
Sichler Jiri	Mathematics	Professor
Thomas Robert	Mathematics	Professor
Zhang Yong	Mathematics	Associate Professor
Butler Michael	Microbiology	Professor
Cameron Linda	Microbiology	Instructor
Cardona Silvia	Microbiology	Assistant Professor
Dibrov Pavel	Microbiology	Associate Professor
Hausner Georg	Microbiology	Associate Professor
Loewen Peter	Microbiology	Professor
Mark Brian	Microbiology	Assistant Professor
Oresnik Ivan	Microbiology	Associate Professor
Spearman Maureen	Microbiology	Sessional
Theriault Steven	Microbiology	Sessional
Thorne-Tjomsland Gro	Microbiology	Sessional
Cadogan John	Physics	Professor
Gericke Michael	Physics	Assistant Professor
Hu Canming	Physics	Associate Professor
Mathur Maya	Physics	Instructor
Page John	Physics	Professor
Sharma Kumar	Physics	Professor

Williams Gwyn	Physics	Professor
Zetner Peter	Physics	Professor
Ballance George	Plant Science	Professor
Abarin Taraneh	Statistics	Sessional
Harrigan Thomas	Statistics	Sessional
Holens Gordon	Statistics	Senior Scholar
Johnson Bradford	Statistics	Assistant Professor
Li Xuan	Statistics	Sessional
Loewen David	Statistics	Instructor
Mateo Zenaída	Statistics	Instructor
Morris Andrew	Statistics	Sessional
Paquette Carrie	Statistics	Sessional
Sheocharan Amelia	Statistics	Sessional

4.2 Additional Faculty and Staff requirements:

None required.

SECTION V: Cooperative Arrangements

5.1 Cooperative agreements with other institutions/organizations:

The University of Manitoba has many formal Student Exchange agreements with universities world-wide. Students with an interest to study abroad will be encouraged to do so and will be assisted in selecting course which will be readily transferred into their program.

5.2 Transfer Credit:

Block and transfer will be readily accepted from other institutions in Manitoba, Canada and abroad following assessment using existing processes.

5.3 Internship/Practicum components:

Students will be encouraged to register in the Co-operative Option, following guidelines and procedures in place for existing Faculty of Science Co-operative programs. All Co-operative Option students will spend at least 12 months (three – four month terms) in employment terms with a department-approved employer. Co-operative Option work placements are coordinated through the Faculty of Science Co-operative Program Office.

5.4 Provisions for prior experiential learning:

Transfer credit arrangements with other post-secondary institutions will be assessed on a case by case basis following standard processes.

SECTION VI: Learning Technologies

6.1 Use of modern learning technologies:

The method of instruction will be at the discretion of individual course instructors. A variety of technologies such as PowerPoint, video, internet and audience response units (iClickers) are presently used. Laboratories in the Faculty of Science are undergoing renewal such that students will have state-of-the-art facilities available in the near future.

SECTION VII: Resource Requirements

7.1 Library Resources:

There are currently sufficient library resources to support the proposed program. (see attached Library Support Statement)

7.2 Computer Facilities:

There are currently sufficient computer facilities to support the existing Honours Biochemistry Program. The proposed Majors Program will require no additional support.

7.3 Use of existing infrastructure and equipment:

Existing lecture and laboratory facilities and equipment will be sufficient. No additional resources will be required.

7.4 Additional facilities and equipment required:

None.

SECTION VIII: Financial Considerations

8.1 New resources required:

Nil

8.2 Reallocation of existing funds/new funds required:

Nil.

8.3 Program costs accrued through tuition fees:

No new costs are associated with the proposed program.

8.4 Enrolment impact on overall tuition fees:

The proposed program should attract students to the university resulting in an increase in tuition collected.

8.5 Program funding if enrolment decreases:

There are no additional resources required to implement the program hence a decrease in enrolment will not have a financial impact.

SECTION IX: Program Consultations and Evaluations:

9.1 Consultations:

The proposed program was developed by an interdisciplinary group including faculty members from the Faculty of Science Departments of Biological Sciences, Chemistry and Microbiology, the Faculty of Agricultural and Food Sciences Department of Plant Science, and the Faculty of Engineering Department of Biosystems Engineering. The proposal has also received support from the Clayton H. Riddell Faculty of the Environment, Earth, and Resources, Faculty of Agricultural and Food Sciences and the Faculty of Arts. In addition, Dr. John Langstaff, President and CEO of Cangene Corp., one of the largest biotechnology companies in Winnipeg, has given his support for this program.

9.2 Evaluation of proposed program:

As described above. The proposed program was reviewed by the Joint Chemistry Microbiology Committee on Biochemistry and Biotechnology Programs, Chemistry and

Microbiology Departmental Councils, Faculty of Science Committee on Courses and programs, Executive and Faculty Council, Senate Curriculum and Course Change Committee, Senate Executive and Senate. Given that the proposed program is an extension of the existing Honours program it was not deemed necessary to seek outside evaluation.

9.3 Procedures for institutional evaluation:

Procedures for evaluation during implementation are as described in 9.2. Subsequent to implementation, the program will be evaluated yearly by the Joint Chemistry and Microbiology Committee on Biochemistry and Biotechnology Programs.

LIBRARY SUPPORT STATEMENT FOR PROPOSED COURSE CHANGES

The signatures below endorse the findings of the bibliographer whose comments are attached. They do not necessarily indicate that the library has the resources to support the course change as outlined in the departmental submission.

NAME OF PROGRAM

Faculty: Science

Department:

Course no. and names: Biotechnology (Revised Program)

SUPPORT STATEMENT

PREPARED BY: Marie Speare (Bibliographer)

APPROVED BY: *Jan Homer*
Coordinator, Collections Management

[Signature]
Director of Libraries

DATE: 20 May 2008

UNIVERSITY OF MANITOBA LIBRARIES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: June 20, 2008

TO: Dr. Elizabeth Worobec, Associate Dean, Faculty of Science

FROM: Marie Speare, Bibliographer for Microbiology, Sciences and Technology Library *MS*

RE: **Library Support for the Bachelor of Science (Honours) in Biotechnology (Revised Program)**

The proposed Bachelor of Science (Honours) in Biotechnology (Revised Program) consists of existing courses, four new courses (BIOL 4XXX The Business of Biotechnology, BTEC 4XXX Research Project in Biotechnology, PLNT 4XXX Bioinformatics and BIOE 4XXX Environmental Engineering for Non-Engineers) and an expanded list of elective courses.

The library support statements for all the new courses indicate that sufficient library resources are available. Support statements for the new courses are attached.

The other existing courses offered in the program are from several different departments in the Faculty of Science, the Biosystems Engineering Department in the Faculty of Engineering and the Plant Science Department in the Faculty of Agricultural and Food Sciences. These courses are currently being supported by the Libraries.

Therefore, there are adequate resources to support the revised program in biotechnology. Any new courses that might be developed in the future for the revised program will need to be evaluated as they are introduced.

cc: J. Horner, Coordinator, Collections Management
J. Harper, Head, Sciences and Technology Library
G. Sobie, Faculty of Science General Office
N. Godavari, Donald W. Craik Engineering Library
M. Gregg, William R. Newman Library



AGENDA ITEM: Election of the Chancellor – Committee of Election

RECOMMENDED RESOLUTION:

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 (the 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.

Action Requested:



Approval



Discussion/Advice



Information

CONTEXT AND BACKGROUND:

As Dr. William Norrie's term as Chancellor of the University of Manitoba nears its end, it is therefore necessary to convene a meeting of the Committee of Election at a future date in 2010 to elect a Chancellor for a three year term.

In accordance with *The University of Manitoba Act* (the "Act"), the Committee of Election consists of the members of the Board of Governors and the members of the Senate meeting in joint session. The Chair of the Board of Governors is the Chair of the Committee of Election, while the University Secretary, as Secretary of Senate, is designated as Secretary of the Committee of Election. A copy of the relevant provisions of the Act is attached as Appendix "A".

In the past, the Board of Governors and the Senate have jointly established an *ad hoc* Committee to oversee the procedures for nomination and election of a Chancellor, including setting the date of the election. In the past, the Chair of the Board of Governors and the Vice Chair of the Board of Governors have served as the Board's appointees to the *ad hoc* Committee, with the Chair of the Board serving as the *ad hoc* Committee's Chair.

The procedures for nominating, electing and announcing the Chancellor which was followed in 2001 is attached as Appendix "B".

A similar recommendation will be considered by Senate at its' September 9, 2009 meeting.

RESOURCE REQUIREMENTS:

None.

CONNECTION TO THE UNIVERSITY PLANNING FRAMEWORK:

N/A

IMPLICATIONS:

Starting the election process in the fall of 2009 will facilitate an election in early 2010 and permit a smooth transition to the next Chancellor.

ALTERNATIVES:

None



Board of Governors Submission

Routing to the Board of Governors:

<u>Reviewed</u>	<u>Recommended</u>	<u>By</u>	<u>Date</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Jeff Leclerc</u>	<u>31 August 2009</u>
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

Jeff Leclerc

Submission prepared by:

Submission approved by: August 31, 2009

Attachments

- A – Excerpts from the University of Manitoba Act
- B - 2001 Committee of Election Procedures

COMMITTEE OF ELECTION

Committee continued

46 The Committee of Election is continued.

Membership of committee

47 The Committee of Election shall be composed of

(a) the members of the board; and

(b) the members of the senate.

Presiding officer

48(1) The chairman of the board shall be the presiding officer at all meetings of The Committee of Election.

Secretary

48(2) The secretary of the senate shall be the secretary of The Committee of Election.

Meetings of committee

49 The Committee of Election shall meet at such times and places and on such notice as may be fixed by it by regulations in that behalf, and also when convened by the chairman of the board.

Duty of committee

50 The sole duty of The Committee of Election shall be to elect a chancellor of the university.

THE CHANCELLOR AND VICE-CHANCELLOR

Duties of chancellor

51 The chancellor shall be the titular head of the university and, in addition to all other duties to be performed by him, shall confer all degrees.

Term of office

52 The term of office of the chancellor is three years, commencing June 1 of the year in which he is elected; and he shall hold office until his successor is elected and is eligible for re-election.

Vacancy in office

53 Where a vacancy in the office of chancellor occurs from any cause, the vacancy shall be filled by The Committee of Election; and the successor so elected shall hold office for the remainder of the term of his predecessor.

Disqualification

54 No person who is a member of the academic or administrative staff of any university or of any college or of the governing body of any university other than The University of Manitoba or of any college is eligible to be chancellor.

Vice-chancellor

55 The president is the vice-chancellor of the university; and, in case of the absence or disability of the chancellor, or of there being a vacancy in the office of chancellor, the vice-chancellor possesses all the powers and shall perform all the duties pertaining to the office of chancellor.

Election of a Chancellor for the Term June 1, 2001 to May 31, 2004

BACKGROUND:

The Chancellor is the titular head of the University and confers all degrees. The Chancellor is also a member of the Board of Governors and the Senate.

The Chancellor is elected by the Committee of Elections and serves for a three-year term. There is no limit on the number of terms a person may serve as Chancellor. Chancellor Mauro's term expires on May 31, 2001.

The Committee of Election is comprised of the members of the Board and the members of Senate. The Chair of the Board is the presiding officer. The University Secretary is the Secretary. The sole duty of The Committee of Election is to elect a Chancellor.

Prior to the expiration of the Chancellor's term of office, the Board and the Senate establish an ad hoc Committee of Election to oversee the procedures for election of the Chancellor.

PROCEDURES:

The procedures for nominating, electing and announcing the Chancellor (*as recommended by the ad hoc Committee of the Committee of Election in January, 1998 and subsequently approved by the Board of Governors and Senate*) are as follows:

1. Nominations:

- 1.1 Nominations for the Office of Chancellor are requested from the following constituencies within the University of Manitoba:
 - (a) members and assessors of the Board of Governors and of the Senate;
 - (b) students;
 - (c) academic staff;
 - (d) support staff; and
 - (e) alumni
- 1.2 Nomination forms must be signed by any five persons eligible to nominate and the nomination forms must be received in the Office of the University Secretary no later than 4:00 p.m., Wednesday, February 21, 2001.
- 1.3 Nomination forms are available in the Office of the University Secretary, Room 312 Administration Building. Copies of the nomination form may also be requested by phone (474-8174), by fax (474-7511) or by e-mail bev_sawicki@umanitoba.ca.
- 1.4 Nomination forms must be accompanied by the curriculum vitae of the person nominated as well as a short biographical sketch of the nominee which will be provided to the ad hoc Committee of Election.
- 1.5 Nominations from the floor on the date of the meeting of the Committee of Election shall not be permitted.

2. Number of Nominations by One Person

2.1 Nominators are permitted to nominate no more than one candidate each.

3. Eligibility:

3.1 No person who is a member of the academic or administrative staff of any University or college, or of the governing body of any University other than the University of Manitoba or of any college, is eligible to be Chancellor.

4. Names of Candidates:

4.1 The names of all candidates whose nominations have been properly endorsed and whose names have been placed in nomination on or before February 21, 2001, will be included on the ballot.

4.2 The names of the candidates shall remain confidential; curricula vitae shall be circulated at the meeting on the day of the election with the exception that eligible members of the Committee of Election may peruse the documentation in the Office of the University Secretary on the day prior to the election. Similar arrangements will be made for the Bannatyne campus. Notice of this opportunity shall be included in the notice of meeting of the Committee of Election along with a cautionary note regarding the confidentiality of the documentation and the names of the candidates.

5. Method of Election:

5.1 The election shall be held in a closed and confidential meeting of the Committee of Election (members of the Board of Governors and of Senate) with the understanding that assessors to the Board and the Senate may be present but may not vote.

5.2 The number of candidates to be eliminated at each stage of balloting is determined by the ad hoc Committee of the Committee of Election following the close of nominations on the deadline date specified.

5.3 Election will be by non-transferrable secret ballot. The Chair of the Committee of Election shall cast a sealed ballot to be opened in the event of a tie.

5.4 The balloting shall continue until the candidate receiving the highest number of votes receives a simple majority of the votes cast.

5.5 The Staff of the Office of the University Secretary shall be the scrutineers for the election.

6. Date of Election:

The meeting of the Committee of Election will be held at 1:00 p.m. on Wednesday, April 4, 2001 in the Senate Chamber, Room 245 Engineering Building.

7. Announcement:

- 7.1 A Call for Nominations for Chancellor shall be placed in the University ***Bulletin*** and ***The Manitoban*** and shall be distributed to the Alumni Association and to the media in January 2001.
- 7.2 A publicity release shall be prepared by the Director of Public Relations in consultation with the University Secretary, approved by the Chair of the ad hoc Committee, and distributed to the Alumni Association and to the media.
- 7.3 Upon the election of the Chancellor, the Chair of the Committee of Election is authorized to make that information available to the public.

TASKS TO BE COMPLETED:

The tasks to be completed in the election of the Chancellor for the term from June 1, 2001 to May 31, 2004, are set out as follows:

TASKS	TARGET/COMPLETED
<p>University Secretary informs Board and Senate that the establishment of an ad hoc Committee of Elections is required. Membership consists of 2 members of the Board of Governors (normally the Chair and Vice-Chair) and 2 members from Senate.</p>	<p>Approved by: Board of Governors September 26, 2000 Senate November 1, 2000 Members of the ad hoc Committee are: Mr. Paul Soubry, Mr. Wayne Anderson, Dean Michael Cox and Professor John Page</p>
<p>University Secretary calls a meeting(s) of the ad hoc Committee to review the Call for Nominations for Chancellor and the Nomination Form and set deadline date for receipt of nominations as well as recommend date of meeting for the Committee of Election.</p>	<p>Meeting held December 8, 2000</p>
<p>Ad hoc Committee reports to the Board of Governors and the Senate as follows:</p> <ul style="list-style-type: none"> a) advises on Call for Nominations for the Chancellor, nomination form, and deadline for receipt of nominations; and b) recommends on the date of the meeting for the Committee of Election. <p>Note: Call for Nominations is placed in <i>The Manitoban</i> and <i>The Bulletin</i> soliciting nominations. The Nomination advertisement reflects the duties of the Chancellor. The nomination form will require the submission of a curriculum vitae as well as a brief biographical summary for submission to the Committee of Election. Nominations for the office of Chancellor are requested from members and assessors of the Board of Governors, Senate, faculty members, students, support staff, and alumni. Nominations forms will be available in the Office of the University Secretary.</p>	<p>Board of Governors - January 23, 2001 Senate, January 3, 2001</p> <p>January, 2001</p>
<p>Ad hoc Committee meets to determine the number of candidates to be eliminated at each stage of balloting.</p>	<p>Following the close of nominations February 26, 2001</p>
<p>The Committee of Election meets to consider the nominations (usually in the Senate Chambers, 245 Engineering).</p>	<p>April 4, 2001</p>

RECOMMENDATION:

1. That the report of the ad hoc Committee of the Committee of Election dated December 8, 2000 be approved.

FOR INFORMATION ONLY



UNIVERSITY
OF MANITOBA

Board of Governors Submission

AGENDA ITEM: *Duff Roblin Building Fire*

RECOMMENDED RESOLUTION:

N/A

Action Requested: Approval Discussion/Advice Information

CONTEXT AND BACKGROUND:

On Saturday, March 28th, 2009 the University of Manitoba experienced the most destructive fire in its history. An electrical fire on the fourth floor of the Duff Roblin Building scorched a significant portion of the west side and there was extensive water and soot damage throughout the building. All occupants of the building were evacuated safely and no injuries reported. Over 290 faculty, graduate students administrative staff and technicians were directly impacted by the fire. A full detailed report has been prepared on the extent of the damage to the building and the impact on faculty, staff and students, as well as an outline of strategies in place to move forward with the recovery and re-occupancy process.

To read the full report, please visit the University of Manitoba web site home page, and follow the link to the Duff Roblin Fire Report.

RESOURCE REQUIREMENTS:

An Emergency Operations Centre (EOC) was opened on the same day of the fire and an Emergency Steering Committee was formed to address the urgent needs of departments affected including Psychology, Anthropology, Biological Sciences, Human Nutritional Sciences and Textile Sciences. A general information session was held on Monday, March 30th for the benefit of all faculty, students and staff who were impacted by the fire. CURIE (Canadian Universities Reciprocal Insurance Exchange) will provide the bulk of the funding to restore the building to its original condition in addition to most of the expenditures incurred. But the University of Manitoba will pay for a sprinkler system estimated at \$2M and will share the cost of purchasing and installing a new elevator with CURIE (estimated at \$90,000).

CONNECTION TO THE UNIVERSITY PLANNING FRAMEWORK:

There is extensive design and restoration work being conducted to return this critical academic teaching and research facility to the Departments, while at the same time ensuring that the work of academics and students affected by the fire can continue. The widespread effects of this fire impact research and teaching and it is the first priority of the University to ensure that students, researchers, professors and staff impacted continue

their work with as little interruption and inconvenience as possible. This is an ongoing and evolving strategic process. The key priority in the immediate future – to return all individuals affected by the fire back to a fully restored building that will be safer than it was before the fire.

IMPLICATIONS:

In order to fund initial recovery expenditures the University received \$1.5M from CURIE (Canadian Universities Reciprocal Insurance Exchange). This was increased to an additional advance of \$800,000 which was used for the emergency purchase of computers, research equipment, teaching and research materials and other expenses. To date \$8M net of deductible has been recommended to Insurers of which \$5.85M has been received. The total projected damage costs are expected to range from \$25-30M (exclusive of any code upgrades to the building). The insurance claim is estimated to be the largest single claim for a post-secondary insured by CURIE.

ALTERNATIVES:

There are no alternatives to the CURIE insurance coverage for loss.

CONSULTATION: *[delete if not applicable]*

Many people were consulted in the preparation of this report through committee meetings, web postings, and town hall meetings. Throughout the recovery process, a number of key stakeholders were consulted who have provided extensive input into the recovery and re-occupancy process. There were also private-sector consultants and service providers engaged in the recovery process who provided invaluable advice and assistance.



Board of Governors Submission

Routing to the Board of Governors:

<u>Reviewed</u>	<u>Recommended</u>	<u>By</u>	<u>Date</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Deborah McCall</u>	<u>Sept 7/09</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>David SA</u>	<u>Sept 7, 2009</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>FAHR Ctm</u>	<u>15 Sept 09</u>
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

Submission prepared by: _____

Submission approved by: *This must be the President, a Vice-President, or the University Secretary.*

Attachments

Please list any related material attached. Ideally attachments for any given submission will not exceed ten (10) pages.