

The following Motions and Documents were considered by the GFC Academic Planning Committee at its Wednesday, June 22, 2022 meeting:

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Agenda Title: **Proposed Suspension of the BSc Pharmacy and the Bridging Program for BSc Pharmacy Students, Faculty of Pharmacy and Pharmaceutical Sciences**

CARRIED MOTION:

THAT the GFC Academic Planning Committee recommend that the Board of Governors approve the suspension of the Bachelor of Science in Pharmacy program, for implementation July 1, 2023.

CARRIED MOTION:

THAT the GFC Programs Committee recommend that the Board of Governors approve the suspension of the Doctor of Pharmacy (Pharm D) Bridging Program for BSc in Pharmacy Students, for implementation July 1, 2023.

FINAL Item 4

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Agenda Title: **Proposal from the Faculty of Science to create the Glycomics Institute of Alberta (GIA)**

CARRIED MOTION:

THAT the GFC Academic Planning Committee approve, with delegated authority from General Faculties Council, the creation of the Glycomics Institute of Alberta, effective upon approval.

FINAL Item 6

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**Governance Executive Summary  
Action Item**

<b>Agenda Title</b>	<b>Proposed Suspension of the BSc Pharmacy and the Bridging Program for BSc Pharmacy Students, Faculty of Pharmacy and Pharmaceutical Sciences</b>
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**Motion I**

THAT the GFC Academic Planning Committee recommend that the Board of Governors approve the suspension of the Bachelor of Science in Pharmacy program, for implementation July 1, 2023.
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**Motion II**

THAT the GFC Academic Planning Committee recommend that the Board of Governors approve the suspension of the Doctor of Pharmacy (Pharm D) Bridging Program for BSc in Pharmacy Students, for implementation July 1, 2023.
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**Item**

Action Requested	<input type="checkbox"/> Approval <input checked="" type="checkbox"/> Recommendation
Proposed by	Christine Hughes, Interim Dean, Faculty of Pharmacy and Pharmaceutical Sciences
Presenter(s)	Dion Brocks, Associate Dean, Faculty of Pharmacy and Pharmaceutical Sciences

**Details**

Office of Administrative Responsibility	Provost and Vice-President (Academic)
The Purpose of the Proposal is <i>(please be specific)</i>	The proposal is before the committee because admissions to the BScPharm ceased in 2017 with a planned phased transition to the Doctor of Pharmacy (PharmD) as the entry to practice degree in pharmacy.
Executive Summary <i>(outline the specific item – and remember your audience)</i>	<p><u>BSc in Pharmacy</u></p> <p>As part of a planned transition in the entry to practice degree in pharmacy, the BScPharm program ceased enrollment in September 2018, when the first cohort of Doctor of Pharmacy (PharmD) students were admitted to the Faculty of Pharmacy and Pharmaceutical Sciences. The PharmD degree is the new standard for professional education in pharmacy, now offered at all schools of pharmacy across Canada. This program was approved by the Ministry in 2017 and implemented in Fall 2018, with the first cohort of students convocating in June 2022.</p> <p>Admissions to the BScPharm degree ceased in September 2017 (final enrolment Fall 2017). The suspension period will commence on July 1, 2023, two years after the convocation of the last remaining students in the BScPharm program (which occurred in June 2021). There are no operational risks or risks to students, as there are no students currently enrolled in the program.</p> <p>The suspension of the BScPharm program was planned to be the final step in the implementation of the PharmD program that replaces it.</p>

## Item No. 4

	<p>Following the 5-year suspension period, a formal request to terminate the program will be put forward.</p> <p><u>Pharm D Bridging Program for BSc in Pharmacy Students</u></p> <p>The PharmD for BScPharm Students (PBS) program was developed as a temporary bridge for eligible students enrolled in the BScPharm to graduate with the PharmD degree. It was available only to year three students enrolled in the four year BScPharm program at the time the PharmD was implemented. With planned direct admission of students into the PharmD beginning in Fall 2017 (actual enrollment began Fall 2018), transfer and enrollment of eligible students in the PBS program began in Spring 2017 with the last class enrolling in Spring 2020. The final few students from the PBS program will convocate in 2022.</p> <p>This was a bridging program, from the BScPharm to the approved PharmD degree. Once the last cohort of students in the BScPharm program had graduated, there were no students remaining who would be eligible for transfer into the PBS program stream. Hence, the PBS program came to a natural end.</p> <p>The suspension period will commence on July 1, 2023, following the convocation of the last remaining students in the PBS program (which occurs in June 2022). There are no operational risks or risks to students, as there will be no students enrolled in the program at that time.</p> <p>The suspension of the PBS bridging program was planned to be the final step in the implementation of the PharmD program that replaces the BScPharm degree. Following the 5-year suspension period, a formal request to terminate the program will be put forward.</p>
Supplementary Notes and context	<This section is for use by University Governance only to outline governance process.>

**Engagement and Routing (Include meeting dates)**

Consultation and Stakeholder Participation (parties who have seen the proposal and in what capacity)  <For information on the protocol see the <a href="#">Governance Resources section Student Participation Protocol</a> >	<p><u>Those who are actively <b>participating</b>:</u></p> <ul style="list-style-type: none"> <li>• GFC Program Support Team and Programs Committee</li> <li>• Faculty of Pharmacy and Pharmaceutical Sciences</li> </ul> <p><u>Those who have been <b>consulted</b>:</u></p> <ul style="list-style-type: none"> <li>• Extensive consultation was undertaken at the time that the PharmD program was proposed and approved; there has been no further consultation at this stage.</li> </ul> <p><u>Those who have been <b>informed</b>:</u></p> <ul style="list-style-type: none"> <li>•</li> </ul>
Approval Route (Governance) (including meeting dates)	<ul style="list-style-type: none"> <li>• Program Support Team (Undergraduate and Non-Credit) (PST): April 28, 2022</li> <li>• Faculty Council: [May 10, 2022]</li> <li>• GFC Programs Committee: [May 19, 2022]</li> </ul>

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	<ul style="list-style-type: none"> <li>• GFC Academic Planning Committee: [June 22, 2022]</li> <li>• GFC: [September 19, 2022]</li> <li>• Board Learning, Research and Student Experience Committee: [September 26, 2022]</li> <li>• Board of Governors: [October 14, 2022]</li> </ul>
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**Strategic Alignment**

Alignment with <i>For the Public Good</i>	<p>14. OBJECTIVE Inspire, model, and support excellence in teaching and learning          In order to produce competent and confident pharmacy graduates prepared to provide excellent patient-centred care and thus best serve the Public, Canada has taken the path of modifying the entry to practice pharmacy curriculum to a 2+4 year professional (PharmD) degree. This is now an accreditation requirement, and the Faculty has worked over the past 5 years to transition from the former BScPharm degree to the PharmD.</p> <p>21. OBJECTIVE Encourage continuous improvement in administrative, governance, planning, and stewardship systems, procedures, and policies that enable students, faculty, staff, and the institution as a whole to achieve shared strategic goals.</p>	
Alignment with Core Risk Area	Please note below the specific institutional risk(s) this proposal is addressing.	
	<input checked="" type="checkbox"/> Enrolment Management <input type="checkbox"/> Faculty and Staff <input type="checkbox"/> Funding and Resource Management <input type="checkbox"/> IT Services, Software and Hardware <input type="checkbox"/> Leadership and Change <input type="checkbox"/> Physical Infrastructure	<input type="checkbox"/> Relationship with Stakeholders <input type="checkbox"/> Reputation <input type="checkbox"/> Research Enterprise <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Student Success
Legislative Compliance and jurisdiction	<i>Post-Secondary Learning Act</i> <i>University Calendar</i> GFC Programs Committee General Faculties Council FoPPS Faculty Council	

Attachments (each to be numbered 1 - &lt;-&gt;)

1. Program Suspension, BScPharm
2. Program Suspension, PBS
3. Calendar Changes, BScPharm and PBS - Program
4. Calendar Changes, BScPharm and PBS - Courses

Prepared by: Jill Hall, Assistant Dean Professional Programs, jhall@ualberta.ca

## Proposal Template: Program Suspension and Extension of Suspension

Use this template for proposals to suspend approved programs or specializations or to propose an extension to a current suspension.

Fill in the section below that is relevant to your proposal:

- Section A: if you are proposing a suspension of a ministry-approved program or specialization;
- Section B: if you are proposing an extension to a suspension previously approved by the ministry which is still in effect for a program or specialization.

Institutions should:

- ensure that submission content is concise. Any additional information may be appended;
- indicate “not applicable” when questions are not relevant to a particular proposal; and
- ensure that applicable supporting documents are attached to the proposal.

### Basic Information (all proposals must complete this section)

<b>Institution</b>	<b>University of Alberta</b>
<b>Program Name</b>	<b>Bachelor of Science in Pharmacy</b>
<b>Specialization Name</b>	<b>N/A</b>
<b>Credential Awarded</b>	<b>Bachelor of Science in Pharmacy</b>
<b>Proposed start date of suspension</b>	<b>July 1, 2023</b>
<b>Proposed end date of suspension</b>	<b>June 30, 2028</b>

## SECTION A: PROGRAM SUSPENSION

### SECTION A: RATIONALE

<b>1. Suspension Rationale</b>
<p>a. Identify the purpose for the suspension with supporting rationale and evidence (e.g., low student demand, declining labour market demand, institutional capacity, need for program redevelopment, quality assurance review recommendation, etc.).</p> <ul style="list-style-type: none"> <li>● As part of a planned transition in the entry to practice degree in pharmacy, the BScPharm program ceased enrollment in September 2018, when the first cohort of Doctor of Pharmacy (PharmD) students were admitted to the Faculty of Pharmacy and Pharmaceutical Sciences. The PharmD degree is the new standard for professional education in pharmacy, now offered at all schools of pharmacy across Canada. This program was approved by the Ministry in 2017 and implemented in Fall 2018, with the first cohort of students convocating in June 2022.</li> </ul>
<p>b. Document enrolments (by headcount) for the most recent 5-year period, including the current academic year if available.</p>

<b>Enrolment</b>	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
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<b>Total Headcount</b>	449	294	156	7	0
● 1 <sup>st</sup> Year of Study	134	0	0	0	0
● 2 <sup>nd</sup> Year of Study	130	133	0	0	0
● 3 <sup>rd</sup> Year of Study	125	126	129	0	0
● 4 <sup>th</sup> Year of Study	60	35	27	7	0
<b>Reviewer's Comment:</b>					

- a. Indicate when admissions into program/specialization will be or were closed.
- Admissions to the BScPharm degree ceased in September 2017 (final enrolment Fall 2017).
- b. Briefly explain how the proposed end date of the suspension was determined.
- There was a phased transition of the BScPharm to the PharmD program. The standard five-year suspension period has been used.
- c. Provide specific information about which internal governance body approved the suspension, and provide the date of approval.
- Program Support Team (Undergraduate and Non-Credit) (PST): April 28, 2022
  - Faculty Council: [*tentative: May 10, 2022*]
  - GFC Programs Committee: [*tentative: May 19, 2022*]
  - GFC Academic Planning Committee: [*tentative: June 22, 2022*]
  - GFC: [*Date TBD; tentative: Fall 2022*]
  - Board Learning, Research and Student Experience Committee: [*Date TBD; tentative: Fall 2022*]
  - Board of Governors: [*Date TBD; tentative: Fall 2022*]
- d. Check the applicable box to specify the longer-term plan.
- To terminate the program.  
 To reactivate the program.

## SECTION B: ACCESS

- a. Identify potential student access considerations and risks to the Alberta Adult Learning System that the suspension of this program could pose (include both (a) information about related programs available to prospective students internally at your institution; and (b) externally at other Alberta institutions).
- There are no access concerns or risks to the Alberta Adult Learning System with the suspension of this program given it has been fully replaced by the PharmD program.
- b. If the program or specialization is unique in the province, briefly describe consultation within the Alberta Adult Learning System to investigate feasibility of program/specialization transfer.
- N/A
- c. Briefly describe the consultation process that occurred with students at your institution regarding this programming change.
- A thorough consultation process was undertaken at the time that the PharmD program was proposed and approved. There has been no need for further consultation at this stage.

<p>d. Briefly describe your institution's plans to assist active students, if any remain, in completing graduation requirements during the suspension period, including information about formal communication and student advising plans.</p> <ul style="list-style-type: none"> <li>• The suspension period will commence on July 1, 2023,, two years after the convocation of the last remaining students in the BScPharm program (which occurred in June 2021).</li> </ul>
<p>e. Briefly describe your institution's plans to accommodate stop-out students, if any have been identified, including information about formal communication plans.</p> <ul style="list-style-type: none"> <li>• There are no stop-out students.</li> </ul>
<p><b>Reviewer's Comment:</b></p>

**SECTION C: IMPACT**

<p>a. Identify which stakeholder groups were consulted regarding demand/need for this program:</p> <p><input type="checkbox"/> Faculty <span style="margin-left: 200px;"><input type="checkbox"/> Employers and professional associations</span></p> <p><input type="checkbox"/> Regulator and/or accreditation bodies <span style="margin-left: 100px;"><input type="checkbox"/> Advisory Committee(s)</span></p> <p><span style="margin-left: 350px;"><input type="checkbox"/> Other (please identify)</span></p>
<p>b. Briefly describe the consultation process conducted with these stakeholders and summarize the feedback received.</p> <ul style="list-style-type: none"> <li>• Extensive consultation was undertaken at the time that the PharmD program was proposed and approved; there has been no further consultation at this stage. The suspension of the BScPharm program was planned to be the final step in the implementation of the PharmD program that replaces it.</li> </ul>
<p>c. Identify financial impacts and plans for reallocation of internal resources, particularly staff and classroom and lab space.</p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<p><b>Reviewer's Comment:</b></p>

**SECTION B: SUSPENSION EXTENSION**

**SECTION A: RATIONALE**

<p>a. Briefly describe the rationale for original suspension request. (Attach ministry approval letter for the original suspension.)</p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<p>b. Briefly explain why the extension is needed and include supporting evidence (e.g., active students have not completed graduation requirements).</p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<p>c. If there are students still in the program, describe how they will be supported to complete graduation requirements while the suspension is in place.</p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<p>d. Explain how the duration of the suspension extension was determined.</p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<p><b>Reviewer's Comment:</b></p>

## SECTION B: OTHER CONSIDERATIONS

### Other considerations

- a. Are there other factors or considerations the Ministry should take into account when reviewing this proposal?
- None

**Reviewer's Comment:**

### RECOMMENDATION (FOR DEPARTMENT USE)

**Recommendation(s):**

**Rationale for Recommendation:**

**Reviewer(s):**

**Date Completed:**



## Proposal Template: Program Suspension and Extension of Suspension

Use this template for proposals to suspend approved programs or specializations or to propose an extension to a current suspension.

Fill in the section below that is relevant to your proposal:

- Section A: if you are proposing a suspension of a ministry-approved program or specialization;
- Section B: if you are proposing an extension to a suspension previously approved by the ministry which is still in effect for a program or specialization.

Institutions should:

- ensure that submission content is concise. Any additional information may be appended;
- indicate “not applicable” when questions are not relevant to a particular proposal; and
- ensure that applicable supporting documents are attached to the proposal.

### Basic Information (all proposals must complete this section)

<b>Institution</b>	<b>University of Alberta</b>
<b>Program Name</b>	<b>Doctor of Pharmacy (PharmD)</b>
<b>Specialization Name</b>	<b>Bridging Program for BSc in Pharmacy Students</b>
<b>Credential Awarded</b>	<b>Doctor of Pharmacy (PharmD)</b>
<b>Proposed start date of suspension</b>	<b>July 1, 2023</b>
<b>Proposed end date of suspension</b>	<b>June 30, 2028</b>

## SECTION A: PROGRAM SUSPENSION

### SECTION A: RATIONALE

<b>1. Suspension Rationale</b>
<p>a. Identify the purpose for the suspension with supporting rationale and evidence (e.g., low student demand, declining labour market demand, institutional capacity, need for program redevelopment, quality assurance review recommendation, etc.).</p> <ul style="list-style-type: none"> <li>● The PharmD for BScPharm Students (PBS) program was developed as a temporary bridge for eligible students enrolled in the BScPharm to graduate with the PharmD degree. It was available only to year three students enrolled in the four year BScPharm program at the time the PharmD was implemented. With planned direct admission of students into the PharmD beginning in Fall 2017 (actual enrollment began Fall 2018), transfer and enrollment of eligible students in the PBS program began in Spring 2017 with the last class enrolling in Spring 2020. The final few students from the PBS program will convocate in 2022.</li> </ul>
<p>b. Document enrolments (by headcount) for the most recent 5-year period, including the current academic year if available.</p>

Enrolment	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
<b>Total Headcount</b>	0	0	0	0	3
● 1 <sup>st</sup> Year of Study	0	0	0	0	0
● 2 <sup>nd</sup> Year of Study	0	0	0	0	0
● 3 <sup>rd</sup> Year of Study	0	0	0	0	0
● 4 <sup>th</sup> Year of Study	65	90	101	122	3
<b>Reviewer's Comment:</b>					

a. Indicate when admissions into program/specialization will be or were closed. <ul style="list-style-type: none"> <li>● The last enrollment in this program was spring 2020.</li> </ul>
b. Briefly explain how the proposed end date of the suspension was determined. <ul style="list-style-type: none"> <li>● This was a bridging program, from the BScPharm to the approved PharmD degree. Once the last cohort of students in the BScPharm program had graduated, there were no students remaining who would be eligible for transfer into the PBS program stream. Hence, the PBS program came to a natural end.</li> </ul>
c. Provide specific information about which internal governance body approved the suspension, and provide the date of approval. <ul style="list-style-type: none"> <li>● Program Support Team (Undergraduate and Non-Credit) (PST): April 28, 2022</li> <li>● Faculty Council: [tentative: May 10, 2022]</li> <li>● GFC Programs Committee: [tentative: May 19, 2022]</li> <li>● GFC Academic Planning Committee: [tentative: June 22, 2022]</li> <li>● GFC: [Date TBD; tentative: Fall 2022]</li> <li>● Board Learning, Research and Student Experience Committee: [Date TBD; tentative: Fall 2022]</li> <li>● Board of Governors: [Date TBD; tentative: Fall 2022]</li> </ul>
d. Check the applicable box to specify the longer-term plan. <input checked="" type="checkbox"/> To terminate the program. <input type="checkbox"/> To reactivate the program.

## SECTION B: ACCESS

a. Identify potential student access considerations and risks to the Alberta Adult Learning System that the suspension of this program could pose (include both (a) information about related programs available to prospective students internally at your institution; and (b) externally at other Alberta institutions). <ul style="list-style-type: none"> <li>● There are no access concerns or risks to the Alberta Adult Learning System with the suspension of this program given it has been fully replaced by the PharmD program.</li> </ul>
b. If the program or specialization is unique in the province, briefly describe consultation within the Alberta Adult Learning System to investigate feasibility of program/specialization transfer. <ul style="list-style-type: none"> <li>● N/A</li> </ul>
c. Briefly describe the consultation process that occurred with students at your institution regarding this programming change.

<ul style="list-style-type: none"> <li>● A thorough consultation process was undertaken at the time that the PharmD program was proposed and approved. There has been no need for further consultation at this stage.</li> </ul>
<p>d. Briefly describe your institution's plans to assist active students, if any remain, in completing graduation requirements during the suspension period, including information about formal communication and student advising plans.</p> <ul style="list-style-type: none"> <li>● The suspension period will commence on July 1, 2023, following the convocation of the last remaining students in the PBS program (which occurs in June 2022).</li> </ul>
<p>e. Briefly describe your institution's plans to accommodate stop-out students, if any have been identified, including information about formal communication plans.</p> <ul style="list-style-type: none"> <li>● There are no stop-out students.</li> </ul>
<p><b>Reviewer's Comment:</b></p>

**SECTION C: IMPACT**

<p>a. Identify which stakeholder groups were consulted regarding demand/need for this program:</p> <table border="0"> <tr> <td><input type="checkbox"/> Faculty</td> <td><input type="checkbox"/> Employers and professional associations</td> </tr> <tr> <td><input type="checkbox"/> Regulator and/or accreditation bodies</td> <td><input type="checkbox"/> Advisory Committee(s)</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Other (please identify)</td> </tr> </table>	<input type="checkbox"/> Faculty	<input type="checkbox"/> Employers and professional associations	<input type="checkbox"/> Regulator and/or accreditation bodies	<input type="checkbox"/> Advisory Committee(s)		<input type="checkbox"/> Other (please identify)
<input type="checkbox"/> Faculty	<input type="checkbox"/> Employers and professional associations					
<input type="checkbox"/> Regulator and/or accreditation bodies	<input type="checkbox"/> Advisory Committee(s)					
	<input type="checkbox"/> Other (please identify)					
<p>b. Briefly describe the consultation process conducted with these stakeholders and summarize the feedback received.</p> <ul style="list-style-type: none"> <li>● There has been no further consultation at this stage. The suspension of the PBS program was planned to come to a natural end alongside the BScPharm program with the implementation of the entry to practice PharmD program that replaces them.</li> </ul>						
<p>c. Identify financial impacts and plans for reallocation of internal resources, particularly staff and classroom and lab space.</p> <ul style="list-style-type: none"> <li>● N/A</li> </ul>						
<p><b>Reviewer's Comment:</b></p>						

**SECTION B: SUSPENSION EXTENSION**

**SECTION A: RATIONALE**

<p>a. Briefly describe the rationale for original suspension request. (Attach ministry approval letter for the original suspension.)</p> <ul style="list-style-type: none"> <li>● N/A</li> </ul>
<p>b. Briefly explain why the extension is needed and include supporting evidence (e.g., active students have not completed graduation requirements).</p> <ul style="list-style-type: none"> <li>● N/A</li> </ul>
<p>c. If there are students still in the program, describe how they will be supported to complete graduation requirements while the suspension is in place.</p> <ul style="list-style-type: none"> <li>● N/A</li> </ul>
<p>d. Explain how the duration of the suspension extension was determined.</p> <ul style="list-style-type: none"> <li>● N/A</li> </ul>

**Reviewer's Comment:**

**SECTION B: OTHER CONSIDERATIONS**

<b>Other considerations</b>
a. Are there other factors or considerations the Ministry should take into account when reviewing this proposal? <ul style="list-style-type: none"><li>• None</li></ul>
<b>Reviewer's Comment:</b>

<b>RECOMMENDATION (FOR DEPARTMENT USE)</b>
<b>Recommendation(s):</b>
<b>Rationale for Recommendation:</b>
<b>Reviewer(s):</b>
<b>Date Completed:</b>

## Calendar Change Request Form for Program and Regulation Changes

See the [Calendar Guide](#) for tips on how to complete this form.

Faculty (& Department or Academic Unit):	Faculty of Pharmacy and Pharmaceutical Sciences
Contact Person:	Jill Hall, Assistant Dean, Professional Programs
Level of change (choose one only) [?]	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate
Type of change request (check all that apply) [?]	<input checked="" type="checkbox"/> Program <input checked="" type="checkbox"/> Regulation
For which term is this intended to take effect?	Fall 2023
Does this proposal have corresponding course changes? (Should be submitted at the same time)	Yes

### Rationale

**Summary:** The requested changes relate to the implementation of the Doctor of Pharmacy (PharmD) degree. Two programs are no longer enrolling students: BSc Pharmacy and Doctor of Pharmacy (PharmD) for BSc Pharmacy Students.

**Rationale:** The PharmD program was approved by the Ministry in 2017 and implemented in Fall 2018. As part of a planned transition in the entry to practice degree in pharmacy, the BScPharm program ceased enrollment when the first cohort of Doctor of Pharmacy (PharmD) students were admitted to the Faculty of Pharmacy and Pharmaceutical Sciences. The first cohort of students will convocate in June 2022.

The 2020/2021 academic year saw the final cohort of students complete the BScPharm program (convocated in June 2021). The final students in the PharmD for BSc in Pharmacy will convocate in June 2022. The BSc Pharmacy and Doctor of Pharmacy (PharmD) for BSc Pharmacy Students programs will formally be suspended as of July 1, 2023 for a period of 5 years, at which point approval will be sought to terminate the programs.

### Calendar Copy #1

URL in current Calendar (or leave blank if it is a new page):

<https://calendar.ualberta.ca/content.php?catoid=36&navoid=11183>

Current	Proposed
<b>Programs of study</b> College of Health Sciences ..... <b>Faculty of Pharmacy and Pharmaceutical Sciences</b> <del>BSc (Pharmacy) (one preprofessional year plus) 4</del> Doctor of Pharmacy (PharmD) (2 preprofessional years plus) 4 Doctor of Pharmacy (PharmD) for Practicing Pharmacists (PharmD) (BSc in Pharmacy Plus) 1-5	<b>Programs of study</b> College of Health Sciences ..... Faculty of Pharmacy and Pharmaceutical Sciences Doctor of Pharmacy (PharmD) (2 preprofessional years plus) 4 Doctor of Pharmacy (PharmD) for Practicing Pharmacists (PharmD) (BSc in Pharmacy Plus) 1-5

## Calendar Copy #2

URL in current Calendar (or leave blank if it is a new page):  
<https://calendar.ualberta.ca/content.php?catoid=36&navoid=11384>

<b>Current</b>	<b>Proposed</b>
<p><b>Undergraduate Application Process and Deadlines</b> ..... <b>Program-specific Deposits on Confirmation of Admission</b> Upon notification of admission, successful applicants ....</p> <p>Doctor of Dental Surgery (DDS) DDS Advanced Placement Diploma in Dental Hygiene Juris Doctor (JD) Doctor of Medicine (MD) Doctor of Pharmacy (PharmD) Doctor of Pharmacy (PharmD) for Practicing Pharmacists Bachelor of Science in Medical Laboratory Science <del>Bachelor of Science in Pharmacy</del> Bachelor of Science in Radiation Therapy</p>	<p><b>Undergraduate Application Process and Deadlines</b> ..... <b>Program-specific Deposits on Confirmation of Admission</b> Upon notification of admission, successful applicants ...</p> <p>Doctor of Dental Surgery (DDS) DDS Advanced Placement Diploma in Dental Hygiene Juris Doctor (JD) Doctor of Medicine (MD) Doctor of Pharmacy (PharmD) Doctor of Pharmacy (PharmD) for Practicing Pharmacists Bachelor of Science in Medical Laboratory Science Bachelor of Science in Radiation Therapy</p>

## Calendar Copy #3

URL in current Calendar (or leave blank if it is a new page):

<https://calendar.ualberta.ca/content.php?catoid=36&navoid=11263#admission>

<b>Current</b>	<b>Proposed</b>
<p><b>Practicum Intervention Policy</b> The Dean, or Supervisor acting on behalf.....</p> <p><b>Practicum Policies and Requirements</b> 1..... 2..... 3 <b>CPR and First Aid Certification:</b> Students in the Faculty must obtain certification in cardiopulmonary resuscitation (CPR) Level C and a certificate in First Aid (Standard or Emergency First Aid) by the end of March (last business day) of first year for the <b>BScPharm program</b> or Doctor of Pharmacy(PharmD) program or prior to clinical placements for the Doctor of Pharmacy (PharmD) for Practicing Pharmacists program. Please note that CPR Level C with First Aid meets the requirements for providing injections. All fees and other costs for CPR/First Aid certification are the responsibility of the student. Students must maintain valid certification for both CPR Level C and First Aid until they graduate</p>	<p><b>Practicum Intervention Policy</b> The Dean, or Supervisor acting on behalf.....</p> <p><b>Practicum Policies and Requirements</b> 1..... 2..... 3 <b>CPR and First Aid Certification:</b> Students in the Faculty must obtain certification in cardiopulmonary resuscitation (CPR) Level C and a certificate in First Aid (Standard or Emergency First Aid) by the end of March (last business day) of first year for the Doctor of Pharmacy(PharmD) program or prior to clinical placements for the Doctor of Pharmacy (PharmD) for Practicing Pharmacists program. Please note that CPR Level C with First Aid meets the requirements for providing injections. All fees and other costs for CPR/First Aid certification are the responsibility of the student. Students must maintain valid certification for both CPR Level C and First Aid until they graduate</p>

## Calendar Copy #4

URL in current Calendar (or leave blank if it is a new page):

<https://calendar.ualberta.ca/content.php?catoid=36&navoid=11263#admission>

### Current

#### Faculty of Pharmacy and Pharmaceutical Sciences Regulations

##### Admission

See Programs of Study and General Undergraduate Admission Requirements for general admission requirements to the University. Specific admission information for the **Bachelor of Science in Pharmacy and Doctor of Pharmacy (PharmD) programs** is set out in Faculty of Pharmacy and Pharmaceutical Sciences.

#### Professional Standards Expectations for Students and Applicants in the Faculty of Pharmacy and Pharmaceutical Sciences

The University Code of Student Behaviour describes a.....

#### Academic Standing

### **BSc in Pharmacy**

#### 1. Grades

a. The means of assessing a student's progress and determining a student's grades may vary from one course to another, according to the nature of the course. Factors other than examination results may be used to a variable extent by instructors in determining grades. Students are informed at the beginning of each course how grades are to be determined.

b. Students must satisfactorily complete all components of all courses.

#### 2. Reexaminations: See Reexaminations

a. Students are advised that it is not possible to make a ruling regarding remediation or reexamination until all grades for a year are received and recorded.

b. The reexamination mark will replace the original final exam mark. Reexamination results do not alter the student's class standing.

c. Any student who, after reexamination and/or evaluation, fails to meet promotion/graduation requirements, is deemed to have failed the year.

### Proposed

#### Faculty of Pharmacy and Pharmaceutical Sciences Regulations

##### Admission

See Programs of Study and General Undergraduate Admission Requirements for general admission requirements to the University. Specific admission information for the Doctor of Pharmacy (PharmD) programs is set out in **the** Faculty of Pharmacy and Pharmaceutical Sciences.

#### Professional Standards Expectations for Students and Applicants in the Faculty of Pharmacy and Pharmaceutical Sciences

The University Code of Student Behaviour describes a.....

#### Academic Standing

### **Delete BSc in Pharmacy Program**



d. A student who does not take a reexamination within the time period prescribed by the Faculty will not be allowed to continue in the program.

e. Reexamination procedure:

i. The Associate Dean Academic and Student Services will specify by course the reexamination required of a failed student for the purposes of meeting promotion/graduation requirements.

ii. All students will take the reexamination as scheduled by June 30.

### 3. Promotion and/or Continuation

a. Progression in the program is year by year and not by courses completed. Accordingly, all students in a particular year of the program normally should be registered in the same courses in each term (Bachelor of Science in Pharmacy). Students will not normally register in any core (i.e., non-elective) courses from a particular year of the program until they have satisfactorily completed core courses from the previous year of the program.

Students accepted into the MBA/BSc in Pharmacy Combined Degrees program will be permitted to delay entrance into the fourth year by one year with no loss in standing. The duration of the total MBA/BSc in Pharmacy Combined Degrees program must not exceed six consecutive calendar years from the time of admission to the Pharmacy program.

b. Academic standing is assessed on the basis of

i. the pass or failure of individual courses and

ii. the GPA attained in a given year of the program (including courses taken in Spring Term). In computing the GPA, grades of W and GR/NC, and grades in courses accepted for transfer credit are not included.

Each student's academic standing will normally be assessed at the end of the regular academic year, but in Years 1 and 2 of the program, such assessment will be delayed until grades are available for the practicums completed in Spring Term. Students who are on Academic Warning will be assessed at the end of each term. See Academic Warning.

c. A student who is awarded First Class Standing or Satisfactory Standing, as defined below, will normally qualify for promotion:

**First Class Standing:** Awarded to an

undergraduate student who obtains a GPA of 3.5 or above and passes all courses while enrolled in the full normal academic course load in that year. See Bachelor of Science in Pharmacy. **Note:** First-Class Standing is not awarded in Year 4 given the limited number of graded units taken in that year.

**Satisfactory Standing:** Awarded to a student who achieves a GPA of 2.1 or above for each year outlined in Bachelor of Science in Pharmacy and if no course is failed.

**d. Conditional Standing:** Assigned to a student who achieves a GPA of 2.1 or above for each year outlined in Bachelor of Science in Pharmacy but has failed one or more courses.

A student who is assigned Conditional Standing will be placed on Academic Warning and must retake and pass all failed courses. Other courses are to be taken, up to a normal course load, as scheduling permits and as approved by the Faculty.

Students on Academic Warning as a result of acquiring Conditional Standing will clear their Academic Warning upon passing the repeated courses and will qualify for promotion if they achieve Satisfactory Standing on the basis of all courses taken during Fall, Winter, and Spring Terms. Students who fail a course a second time will be required to withdraw from the program.

**e. Required to Withdraw:** Any student failing to obtain a minimum GPA of 2.1 in any academic year is Required to Withdraw from the program. Such students are not normally readmitted to the program. Students who fail to provide satisfactory criminal record checks in connection with any practicum placement, or who fail to complete their degree requirements within the five calendar years, may be required to withdraw from the program.

**f. Probation:** Students who have been required to withdraw and who have successfully appealed that decision will be placed on Probation and required to repeat the program year.

To clear probation and qualify for promotion, the student must achieve Satisfactory Standing in the probationary year. Students who fail to do so will be required to withdraw. Any student in a probationary year who fails a course in Fall Term will be required to withdraw immediately and subsequent registration will be cancelled. Only one year of probation is allowed while

registered in the Faculty of Pharmacy and Pharmaceutical Sciences.

**4. Appeals and Grievances:** Decisions on academic standing are made by the Faculty Council. Appeals may be made to the Academic Appeals Committee. Certain academic standing decisions made by the Faculty Academic Appeals Committee may be appealed to the General Faculties Council Academic Appeals Committee. Enquiries concerning standing in individual courses should be made to the professor in charge of the course. If the issue is still not resolved, the student may report the matter to the Office of the Dean for enquiry. See Appeals and Grievances for further information.

The Faculty's regulations governing academic appeals and grade appeals may be obtained in the Dean's Office.

**5. Leave of Absence:** Unless enrolled in a combined degree program, students must register in the pharmacy program on a continuous basis to ensure a place in the program. The Faculty does, however, recognize that important life events do occur that may prompt a student to request a Leave of Absence. Students who desire a temporary discontinuation of their program must obtain prior approval for a Leave of Absence by submitting a request to the Student Services Office. A Leave of Absence will not be granted automatically and will be considered only for acceptable reasons (e.g. incapacitating illness, severe domestic affliction). Discontinuance without permission requires the student to seek readmission to the program, which is not guaranteed.

Normally, a Leave of Absence is granted only if all the following conditions are met:

- a. A minimum of one full term must be completed within the degree program before a Leave of Absence is considered
- b. The student has a cumulative GPA of 2.1 in the pharmacy program
- c. The reasons for the absence are considered by the Faculty to be acceptable
- d. No transferable courses are being completed at another institution during the Leave of Absence period
- e. The leave of absence does not by itself extend the duration of the program beyond the normal limit for

## completion of the program

**Note:** An approved Leave of Absence will be granted for a maximum 12-month period of time, and will be granted only once in a student's academic career within the Faculty.

## Graduation

### 1. Time Limit for Completion of Degree:

Normally, all students must complete their degree requirements within five calendar years from the time of their initial admission. This time limit includes all time during which a student is not in attendance, either for personal reasons [see Leave of Absence] or as a result of suspension or requirement to withdraw. Students should be aware of the need to provide a criminal record check for placement in the Experiential courses that are required for completion of the degree in pharmacy. Failure to provide a clean check can lead to delays or even the inability to fulfill these course requirements. This may lead to an inability to complete the program within the specified five-year period. Any failure or inability to complete the program within five years may be cause for Requirement to Withdraw from the program.

### 2. Academic Performance for Graduation

Students must achieve Satisfactory Academic Standing in their final year of the program; present credit (CR or a minimum University of Alberta grade of D or equivalent) in all program requirements; and present a graduation average of at least 2.1. The graduation average is a cumulative measure of a student's grade points obtained while registered in the Faculty in all years and terms, including Spring/Summer. It is the quotient of (a) the total number of grade points earned by a student in courses credited to the degree and (b) the total weight of those courses.

### 3. Degree With Distinction

Degrees with Distinction shall be awarded to students who achieve a GPA of 3.5 or higher on the last 64.5 units of course weight that are taken in, or are approved specialization electives of, the Faculty and are included in the calculation of GPA.

**Doctor of Pharmacy (PharmD)**

These Faculty regulations also apply to the Doctor of Pharmacy (PharmD) for BSc in Pharmacy Students program.

**1. Grades**

The means of assessing a student's progress and ....

**Doctor of Pharmacy (PharmD)****1. Grades**

The means of assessing a student's progress and .....

## Calendar Copy #5

URL in current Calendar (or leave blank if it is a new page):

[https://calendar.ualberta.ca/preview\\_program.php?catoid=36&poid=43061](https://calendar.ualberta.ca/preview_program.php?catoid=36&poid=43061)

### Current

#### Doctor of Pharmacy

The Doctor of Pharmacy (PharmD) is a clinical doctorate leading to the PharmD degree. There are ~~three~~ routes to the degree (1) direct entry to the program, ~~(2) students currently in the BSc in Pharmacy program,~~ and (3) practicing pharmacists. Students should visit our website at [www.ualberta.ca/pharmacy](http://www.ualberta.ca/pharmacy).

#### (1) Doctor of Pharmacy (PharmD)

.....

#### ~~(2) Doctor of Pharmacy (PharmD) for BSc in Pharmacy Students~~

~~Doctor of Pharmacy (PharmD) for students currently enrolled in the BSc in Pharmacy program consists of coursework (14 units) and practice experience (32 units) following the completion of Year 3 in the University of Alberta BSc in Pharmacy program:~~

#### ~~Year 4 (48 units)~~

~~Year 4 consists of three terms over 12 months:~~

~~Coursework will be completed on campus in Spring/Summer term. Students will be off campus in two terms: Fall and Winter.~~

~~PHARM 426 – Advanced Pharmacy Practice Experience Part 1~~

~~PHARM 428 – Advanced Pharmacy Practice Experience Part 2~~

~~PHARM 531 – Critical Analysis of Evidence~~

~~PHARM 532 – Patient Assessment~~

~~PHARM 536 – Advanced Pharmacy Practice Experience Part 3~~

~~PHARM 537 – Advanced Pharmacy Practice Experience Part 4~~

~~PHARM 538 – PharmD Seminars~~

~~PHARM 539 – PharmD Seminars~~

~~PHARM 547 – Advanced Therapeutics, Collaboration and Professional Learning~~

~~\*Elective (3 units)~~

~~Note:~~

~~\*A list of approved electives will be provided by the Faculty~~

### Proposed

#### Doctor of Pharmacy

The Doctor of Pharmacy (PharmD) is a clinical doctorate leading to the PharmD degree. There are ~~two~~ routes to the degree (1) direct entry to the program and ~~(2)~~ practicing pharmacists. Students should visit our website at [www.ualberta.ca/pharmacy](http://www.ualberta.ca/pharmacy).

#### (1) Doctor of Pharmacy (PharmD)

.....

#### Delete PharmD for BSc in Pharmacy Students Program

office. The elective must be taken during year three or four of the program or with permission of the Faculty. Transfer credit is not accepted for the elective

~~(3)~~ Doctor of Pharmacy (PharmD) for Practicing Pharmacists

(2) Doctor of Pharmacy (PharmD) for Practicing Pharmacists

## Calendar Copy #6

URL in current Calendar (or leave blank if it is a new page):

<https://calendar.ualberta.ca/content.php?catoid=36&navoid=11303>

Current	Proposed
<p><b>Faculty of Pharmacy and Pharmaceutical Sciences Admission Requirements</b></p> <ul style="list-style-type: none"><li>• Doctor of Pharmacy (PharmD)</li><li>• Indigenous Applicants</li><li>• <del>Doctor of Pharmacy (PharmD) for BScPharm Students</del></li><li>• Doctor of Pharmacy (PharmD) for Practicing Pharmacists</li></ul> <p><b>Doctor of Pharmacy (PharmD)</b> .....</p> <p><del><b>Doctor of Pharmacy (PharmD) for BScPharm Students</b></del> Students completing Year 3 of the BScPharm program may be eligible for admission to the PharmD for BScPharm Students program. Contact the Faculty for further information.</p> <p><b>Doctor of Pharmacy (PharmD) for Practicing Pharmacists</b> .....</p>	<p><b>Faculty of Pharmacy and Pharmaceutical Sciences Admission Requirements</b></p> <ul style="list-style-type: none"><li>• Doctor of Pharmacy (PharmD)</li><li>• Indigenous Applicants</li><li>• Doctor of Pharmacy (PharmD) for Practicing Pharmacists</li></ul> <p><b>Doctor of Pharmacy (PharmD)</b> .....</p> <p><b>Doctor of Pharmacy (PharmD) for Practicing Pharmacists</b> .....</p>

## Reviewed/Approved by:

Faculty Council: [tentative: May 10, 2022]

Program Support Team (Undergraduate and Non-Credit) (PST): April 28, 2022

GFC Programs Committee: [tentative: May 19, 2022]

GFC Academic Planning Committee: [tentative: June 22, 2022]

GFC: [Date TBD; tentative: Fall 2022]

Board Learning, Research and Student Experience Committee: [Date TBD; tentative: Fall 2022]

Board of Governors: [Date TBD; tentative: Fall 2022]



## Calendar Change Request Form for Course Changes

See the [Calendar Guide](#) for tips on how to complete this form.

Faculty (& Department or Academic Unit):	Faculty of Pharmacy and Pharmaceutical Sciences
Contact Person:	Jill Hall, Assistant Dean, Professional Programs
Level of change (choose one only) [?]	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate
For which term will this change take effect?	Fall 2023

### Rationale

Course Changes to accompany the Program Change

**Summary:** The requested course deletions relate to the implementation of the Doctor of Pharmacy (PharmD) degree. Two programs are no longer enrolling students: BSc Pharmacy and Doctor of Pharmacy (PharmD) for BSc Pharmacy Students, thus the courses are no longer required.

**Rationale:** The PharmD program was approved by the Ministry in 2017 and implemented in Fall 2018. As part of a planned transition in the entry to practice degree in pharmacy, the BScPharm program ceased enrollment when the first cohort of Doctor of Pharmacy (PharmD) students were admitted to the Faculty of Pharmacy and Pharmaceutical Sciences. The first cohort of students will convocate in June 2022.

The 2020/2021 academic year saw the final cohort of students complete the BScPharm program (convocated in June 2021). The final students in the PharmD for BSc in Pharmacy will convocate in June 2022. The BSc Pharmacy and Doctor of Pharmacy (PharmD) for BSc Pharmacy Students programs will formally be suspended as of July 1, 2023 for a period of 5 years, at which point approval will be sought to terminate the programs.

URL in current Calendar (or leave blank if it is a new page):  
<https://calendar.ualberta.ca/content.php?catoid=36&navoid=11383>

### Course Template

Current	Proposed
<del>PHARM 426 – Advanced Pharmacy Practice Experience Part 1</del> <del>Course Career Undergraduate</del> <del>Units 8</del> <del>Approved Hours 320 HOURS</del> <del>Fee index 16</del> <del>Faculty Pharmacy &amp; Pharmaceutical Sci</del> <del>Department Pharmacy &amp; Pharmaceutical Se</del> <del>Typically Offered either term or Spring/Summer</del> <del>Description</del> <del>This structured practical learning experience will allow students to apply and integrate knowledge and skills in community practice settings. Students will develop practical knowledge necessary for the professional role of pharmacists as care providers, communicators, scholars, advocates, managers and collaborators.</del>	Delete all courses

Students are expected to step into the role of a pharmacist under the guidance of a pharmacist preceptor. Prerequisite: PHARM 316. (Restricted to Pharmacy students);

### **PHARM 428 – Advanced Pharmacy Practice Experience Part 2**

Course Career Undergraduate

Units 8

Approved Hours 320 HOURS

Fee index 16

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Se

Typically Offered either term or Spring/Summer

Description

This structured practical learning experience will allow students to apply and integrate knowledge and skills in acute care/inpatient hospital practice settings. Students will develop practical knowledge necessary for the professional role of pharmacists as care providers, communicators, scholars, advocates, managers and collaborators. Students are expected to step into the role of a pharmacist under the guidance of a pharmacist preceptor.

Prerequisite: PHARM 316. (Restricted to Pharmacy students);

### **PHARM 455 – Specialty Pharmacy Rotation**

Course Career Undergraduate

Units 3

Approved Hours 120 HOURS

Fee index 6

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Se

Typically Offered either term or Spring/Summer

Description

Consists of 120 hours in a practice area, on a full-time or part-time basis. Students are required to prepare a proposal for the placement with desired objectives, activities and an evaluation mechanism. The proposal is to be agreed to by the Course Coordinator and the Rotation Supervisor. The placement will be conducted under the coordination of the Rotation Supervisor at the practice site. The student is also required to prepare a report on the outcomes of the placement in the form of a portfolio. Travel and accommodation costs are the responsibility of the student.

Prerequisites: Dependent on specialty and consent of Faculty. This course may be taken during the Spring/Summer Term by special arrangement. This course may be repeated once. (Restricted to Pharmacy students.)

### **PHARM 531 – Critical Analysis of Evidence**

Course Career Undergraduate

Units 3

Approved Hours VARIABLE

Fee index 6

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Sci

Typically Offered variable

Description

This course focuses on the application of evidence from various sources to address complex issues in pharmacy practice. It will build on students' prior knowledge of study design, evidence-based clinical practice, and critical appraisal. (Restricted to PharmD for BScPharm Students.)

### **PHARM 532 – Patient Assessment**

Course Career Undergraduate

Units 3

Approved Hours VARIABLE

Fee index 6

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Sci

Typically Offered variable

Description

This course focuses on assessment within the pharmacy patient care process. It incorporates lab-based simulations and assignments to provide students with the opportunity to acquire the knowledge and skills essential to contemporary practice. (Restricted to PharmD for BScPharm Students.)

### **PHARM 547 – Advanced Therapeutics, Collaboration and Professional Learning**

Course Career Undergraduate

Units 3

Approved Hours VARIABLE

Fee index 6

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Sci

Typically Offered variable

Description

This course provides an opportunity for students to direct their own learning to strengthen the process of care and increase their depth of knowledge using selected pharmacotherapy topics, group learning and collaboration. Students will focus on using evidence, decision-making, monitoring outcomes of drug therapy, and adjusting therapy. (Restricted to PharmD for BScPharm Students.)

### **PHARM 536 – Advanced Pharmacy Practice Experience Part 3**

Course Career Undergraduate

Units 8

Approved Hours 320 HOURS

Fee index 16

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Sci

Typically Offered variable

Description

Students will be expected to demonstrate professional

competencies in the provision of direct patient care in this 8-week practice experience in any care setting. Prerequisite: PHARM 316. (Restricted to PharmD for BScPharm Students);

**PHARM 537 – Advanced Pharmacy Practice Experience Part 4**

Course Career Undergraduate

Units 8

Approved Hours 320 HOURS

Fee index 16

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Se

Typically Offered variable

Description

This course provides an opportunity for students to develop a learning plan for this 8-week practice experience in any professional setting. Prerequisite: PHARM 316. (Restricted to PharmD for BScPharm Students);

**PHARM 538 – PharmD Seminars**

Course Career Undergraduate

Units 1

Approved Hours VARIABLE

Fee index 2

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Se

Typically Offered variable

Description

This seminar course integrates practice experiences with ongoing professional learning. (Restricted to PharmD for BScPharm Students.) Corequisites: One of PHARM 426, 428, 536 or 537.

**PHARM 539 – PharmD Seminars**

Course Career Undergraduate

Units 1

Approved Hours VARIABLE

Fee index 2

Faculty Pharmacy & Pharmaceutical Sci

Department Pharmacy & Pharmaceutical Se

Typically Offered variable

Description

This seminar course integrates practice experiences with ongoing professional learning. (Restricted to PharmD for BScPharm Students.) Corequisites: One of PHARM 426, 428, 536 or 537.

**Reviewed/Approved by:**

REQUIRED: Faculty Council: [tentative: May 10, 2022]

Program Support Team (Undergraduate and Non-Credit) (PST): April 28, 2022  
GFC Programs Committee: [tentative: May 19, 2022]

GFC Academic Planning Committee: [*tentative: June 22, 2022*]

GFC: [Date TBD; *tentative: Fall 2022*]

Board Learning, Research and Student Experience Committee: [Date TBD; *tentative: Fall 2022*]

Board of Governors: [Date TBD; *tentative: Fall 2022*]

FINAL Item No. 6

**Governance Executive Summary**  
**Action Item**

<b>Agenda Title</b>	<b>Proposal from the Faculty of Science to create the Glycomics Institute of Alberta (GIA)</b>
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**Motion**

THAT the GFC Academic Planning Committee approve, with delegated authority from General Faculties Council, the creation of the Glycomics Institute of Alberta, effective upon approval.
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**Item**

Proposed by	Walter Dixon, Associate Vice-President (Research and Priority Initiatives) and Chair, Centres and Institutes Committee (CIC)
Presenter(s)	Dr Lara Mahal, Canada Excellence Research Chair (CERC) in Glycomics, Department of Chemistry

**Details**

Office of Administrative Responsibility	Vice-President (Research and Innovation)
The Purpose of the Proposal is <i>(please be specific)</i>	To bring forward the proposal from the Faculty of Science to create the Glycomics Institute of Alberta (GIA) for discussion and approval by APC under the authority of the UAPPOL Academic Centres and Institutes Establishment <a href="#">Procedure</a> .
Executive Summary <i>(outline the specific item – and remember your audience)</i>	<p>The attached proposal outlining the creation of the GIA as an academic institute has been generated in the Department of Chemistry. It has been reviewed by the Acting Dean in the Faculty of Science and the Centres and Institutes Committee, and the proposal is being forwarded to APC with the CIC's recommendation that the Institute be approved.</p> <p>The University of Alberta has a long history of excellence in teaching and research related to glycomics. Building on the pioneering work of Dr Ray Lemieux, the Alberta Glycomics Centre, and the GlycoNet Network of Centres of Excellence (NCE), Dr Lara Mahal was recruited as a Canada Excellence Research Chair in Glycomics in 2019. The GIA proposal will extend the work of the CERC in three key areas: education, communication and collaboration. A major objective of the GIA is to provide a united presence in glycomics within the University, promoting the research and strength of glycosylation research at U of A and enhancing the institution's reputation as a world leader in translational glycoscience.</p> <p>The Glycomics Institute of Alberta is designed to be a conduit for training and collaboration among faculty members who carry out glyco-related research, and to introduce the exciting potential of glycomics to a wider range of health-related researchers. The presence of GIA will strengthen the historical presence of glycosylation research at the University of Alberta and increase the institution's visibility as a world leader in this emerging field.</p>
Supplementary Notes and context	<This section is for use by University Governance only to outline governance process.>

**Engagement and Routing** (Include proposed plan)

Consultation and Stakeholder Participation	<ul style="list-style-type: none"> <li>• Acting Dean, Faculty of Science</li> <li>• Centres and Institutes Committee</li> <li>• GFC Academic Planning Committee (APC)</li> </ul>
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**Strategic Alignment**

Alignment with <i>For the Public Good</i>	<p>Goal: EXCEL</p> <p>Objective 11 - Advance the University of Alberta's reputation for research excellence by pursuing fundamental and original questions and ideas, pushing the frontiers of knowledge, inspiring creative experimentation, driving innovation, and advancing society.</p>		
Alignment with Core Risk Area	<p>Please note below the specific institutional risk(s) this proposal is addressing.</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Enrolment Management  <input checked="" type="checkbox"/> Faculty and Staff  <input type="checkbox"/> Funding and Resource Management  <input type="checkbox"/> IT Services, Software and Hardware  <input type="checkbox"/> Leadership and Change  <input type="checkbox"/> Physical Infrastructure                 </td> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Relationship with Stakeholders  <input checked="" type="checkbox"/> Reputation  <input checked="" type="checkbox"/> Research Enterprise  <input type="checkbox"/> Safety  <input type="checkbox"/> Student Success                 </td> </tr> </table>	<input type="checkbox"/> Enrolment Management <input checked="" type="checkbox"/> Faculty and Staff <input type="checkbox"/> Funding and Resource Management <input type="checkbox"/> IT Services, Software and Hardware <input type="checkbox"/> Leadership and Change <input type="checkbox"/> Physical Infrastructure	<input checked="" type="checkbox"/> Relationship with Stakeholders <input checked="" type="checkbox"/> Reputation <input checked="" type="checkbox"/> Research Enterprise <input type="checkbox"/> Safety <input type="checkbox"/> Student Success
<input type="checkbox"/> Enrolment Management <input checked="" type="checkbox"/> Faculty and Staff <input type="checkbox"/> Funding and Resource Management <input type="checkbox"/> IT Services, Software and Hardware <input type="checkbox"/> Leadership and Change <input type="checkbox"/> Physical Infrastructure	<input checked="" type="checkbox"/> Relationship with Stakeholders <input checked="" type="checkbox"/> Reputation <input checked="" type="checkbox"/> Research Enterprise <input type="checkbox"/> Safety <input type="checkbox"/> Student Success		
Legislative Compliance and Jurisdiction	<p>Post-Secondary Learning Act (PSLA)                  UAPPOL Centres and Institutes Policy                  UAPPOL Academic Centres and Institutes Establishment Procedure                  UAPPOL Academic Centres and Institutes Operation Procedure                  GFC Academic Planning Committee Terms of Reference</p>		

1. Attachment 1 (pages 1-22) – Proposal to Create the Glycomics Institute of Alberta (GIA) as an Academic Institute at the University of Alberta; and eight support letters

Prepared by: Katharine Moore, Office of the Vice-President (Research and Innovation),  
[katharine.moore@ualberta.ca](mailto:katharine.moore@ualberta.ca)


# University of Alberta Template for Proposals to Establish New Academic Centres and Institutes

Proposers will complete and submit this template to the Office of the Provost for approval in accordance with UAPPOL Policy. This template may be used in two ways:

- 1) As a cover document attached to a completed proposal which has already been approved by the University for submission for external funding. In this case, the template must present the academic arguments for establishing an academic centre or institute, and provide required information that is absent from the original proposal.
- 2) As an expandable template to be completed. In this case, the completed template may be up to 8 to 10 pages in length (not including letters of support or other appendices relevant to the proposal).

Before developing a proposal and completing this template, please contact the Office of the Provost to discuss the scope of the proposed initiative and to discuss steps for review under the UAPPOL Centres and Institutes Policy, as well as associated procedures for academic centres and institutes – [www.uappol.ualberta.ca](http://www.uappol.ualberta.ca).

Name and Faculty of Reporting Dean: Dr. Frederick West, Dean of Faculty of Science

Signature: 	Date: May 05, 2022
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## 1. Name and Detailed Purpose of the Proposed Centre or Institute:

### Glycomics Institute of Alberta (GIA)

#### Vision & Purpose:

The Glycomics Institute of Alberta (GIA) will be a unique Institute focused on education, communication, and collaboration centered around translational glycoscience. The importance of glycans to human and animal health is clear, however understanding of the sugar code and incorporation of this knowledge has lagged. GIA provides an extraordinary opportunity to address this gap in a comprehensive manner across faculties. This will lead to measurable improvements in patient outcomes by leveraging this underexplored facet of health and disease.

#### How GIA fills an important need:



Historically, glycosylation research has been an essential part of the scientific portfolio at UAlberta. However, there is currently no centre or institute that brings researchers working in glycosylation at the University together as a greater group. Prior to 2018, UAlberta was home to the Alberta Glycomics Centre (AGC). Founded by Dr. David Bundle, the AGC was funded by the Province of Alberta to support glycoscience research. In 2018, the AGC was dissolved as an entity and no longer exists. In 2015, UAlberta became host to the Canadian Glycomics Network (GlycoNet), a National Centre of Excellence (NCE). The mission of this centre is to support glycoscience research throughout the country of Canada. The NCE program was discontinued in 2020 and GlycoNet is in its final year of funding as an NCE. Although efforts are being made to continue this initiative, the future of this program is currently unknown. GlycoNet has brought increased presence in the area of glycomics to UAlberta. However, it should be noted that it is not a university centre or institute but rather a national network. In general, GlycoNet does not serve the same role as GIA. GlycoNet is a network that acts as a funding body, directly funding research, facilitating intellectual property development, and providing resources such as glycan synthesis to the scientific community. In general, its strongest role has been to facilitate entrepreneurship across Canada in the glycomics space. It also has training workshops at the national level, through the Canadian Glycomics Symposia and online workshops. Currently GlycoNet is seeking to continue its activities through application to the CFI-MSI Program, which would fund facilities for glycomic analysis, synthesis, and other technologies, and via the Strategic Science Fund, which is focused on glycomics in biotechnology and entrepreneurship and training in that realm. If GlycoNet is successful in continued funding, GIA will be synergistic with GlycoNet. We will leverage the resources of this federal initiative to provide increased local presence and incorporated glycomics and glycosylation research into University of Alberta Research. We will help awareness at University of Alberta of GlycoNet resources. Our synergy will be maintained through inclusion of the Director of GlycoNet on the Executive Board of the Institute (*see supporting letter from GlycoNet*). There is a significant chance, however, that GlycoNet may not be successful in continued funding. In that event, GIA will fill the gap, providing an enhanced underpinning for glycosylation research here at UAlberta. GIA centers around *local* education, facilitating new *local* collaborations, supporting submissions of large collaborative grants featuring UAlberta researchers, and bringing attention to the research being conducted at this University. Although glycomics is a major strength of the University, the lack of a local institute diminishes our presence on the local, national and global stages. At the local level, many do not realize the strength of UAlberta's glycosylation research, despite the presence of GlycoNet for the past 5 years. GIA would bridge the gap left by the AGC and would leverage the resources available from GlycoNet to create a new, more robust local network to bring additional visibility and resources to investigators at UAlberta.

#### **How GIA builds on existing strengths in glycomics:**

The University of Alberta has been an international leader in glycomics research for more than 50 years. The field was seeded at UAlberta in 1961 by the legendary Professor Raymond U. Lemieux. Professor Lemieux was a pioneer in carbohydrate chemistry and biochemistry, and he continues to be honored in both the University and the world for his contributions, which include the synthesis of sucrose and the blood groups that define our blood types. Over the past 50 years, UAlberta has been at the forefront of glycoscience. Recent innovations from UAlberta include new technologies to facilitate organ transplants, new approaches to vaccines, improved diagnostics for bacterial diseases including tuberculosis, and new methods

to identify high-affinity ligands for carbohydrate binding proteins. At least 6 start-up companies have emerged from our strengths in this field. Among these startups is the Edmonton-based Raylo Chemicals, which was founded by Lemieux and is now a part of Gilead Sciences, an internationally known pharmaceutical company that develops lifesaving anti-infective drugs, particularly antivirals. A more recent startup, 48 Hour Discovery, enables rapid identification of lead molecules that bind any protein of interest. In addition, issued patents on vaccine design, diagnostics, and fluorescent sensors have resulted in licensing deals for as much as \$40M in milestone payments and royalties. Our strength in this field led to the creation of a Canada Excellence Research Chair in Glycomics for UAlberta, bringing \$20.5M in research funding from the Federal and Provincial Governments. Due to the importance of this field to UAlberta, it has been included as a Signature area in the 2019-2022 Comprehensive Institutional Plan (<https://www.ualberta.ca/provost/media-library/cip/cip2019.pdf>). The current plan has not yet been released, but glycomics is anticipated to be a Signature area in that plan as well.

Many UAlberta faculty members are currently engaged in glycosylation-related research and many more are incorporating glycosylation into their research. Current faculty involved in GIA-related research include members in the Faculty of Science (Lara Mahal, John Klassen, Ratmir Derda, Christopher Cairo, Frederick West, Jillian Buriak, Dennis Hall, Matthew Macauley, Warren Wakarchuk, Lisa Willis), Faculty of Medicine (Simonetta Sipione, Joanne Lemieux, Frank Wuest, Lori West, Tom Hobman, Chris Power), Faculty of Engineering (Ravin Narain), and the Faculty of Agriculture, Life and Environmental Sciences (Leluo Guan, Richard Uwiera). In the past 15 years, these principal investigators (PIs) have published more than 600 research papers and mentored more than 450 trainees. UAlberta glycomics researchers include 8 past or present CRC Chairs (Buriak, Campbell, Hall, Hubbard, Lemieux, Lowary, Sipione, LJ West) and the current Canada Excellence Research Chair in Glycomics (Mahal). In addition to these faculty, it is expected that additional faculty will want to interact with GIA to learn about glycomics, explore this facet of biology within their own research programs, and enable new research partnerships.

GIA will provide a conduit for training and interactions among faculty engaged in glyco-related research. Interactions between GIA and other institutes, such as the Cancer Research Institute of Northern Alberta (CRINA), the Neuroscience and Mental Health Institute (NMHI) and the Li Ka Shing Institute of Virology, will help enrich programs throughout the University by bringing access and education on glycomics and glycosylation research to spur new partnerships. GIA will also bridge the Faculties. In addition, it will provide a united presence in glycomics to the outside world, promoting the reach and strength of glycosylation research at UAlberta and enhancing our visibility as a world leader. Given the strength of glycosylation research already at the University, GIA will be on par with world renowned centres such as the Complex Carbohydrate Research Center at the University of Georgia and the Institute for Glycomics at Griffith University.

- 2. Provide a statement of the priority of the proposed centre or institute within the overall priorities of the Faculty and/or the University of Alberta. Include a statement of benefits**

**the University of Alberta could expect to receive through creation of the proposed centre or institute, including benefits to students.**

### **Statement of benefits:**

Glycans, also known as carbohydrates, oligosaccharides, or sugars, are now understood to be pivotal in nearly all biological processes and could be part of novel solutions to many health problems including cancer, infectious disease and neurodegeneration. For example, the ABO blood group system is based on different glycan structures and impacts the compatibility of blood transfusions, transplants, and even COVID-19 susceptibility. Glycomics is a core area of the University's Strategic Plan, and GIA's vision is to provide an organized platform from which to advance research in Glycomics at the University of Alberta and in the province. GIA will create opportunities to address the often diverse and complex health issues Albertans face from a glycomic perspective, and increase the visibility of UAlberta as a global leader in glycosylation research. GIA will focus on three key areas: education, communication, and collaboration, as outlined below.

### **Education:**

GIA's primary objectives in the area of education are focused on bringing glycosylation into the educations of both early STEM students and more mature biomedical researchers. Unlike DNA, RNA, and proteins, glycans are an understudied biopolymer. They are only cursorily discussed in most textbooks and classes at the high school, undergraduate, and graduate levels. As a result of the historical lack of education in this area, there is a dearth of knowledge of their importance in the health arena by most biomedical researchers. This gap is what GIA intends to address. At the early STEM level, GIA will partner with WISEST (Women in Scholarship, Engineering, Science, and Technology) to incorporate glycosylation research opportunities into summer programs and reach out to younger students (grades 10-12). GIA will work to further develop programming for grade 7-12 students including teacher training and short online modules. At the undergraduate level, GIA will seek to establish a class on Glycosylation in Health to expand knowledge at UAlberta in the glycan area. This course would ideally be listed across the College of Natural and Applied Sciences and add to our modern undergraduate curricula. GIA will also promote incorporation of glycosylation knowledge into basic undergraduate education through interfacing with Biochemistry teachers and providing teaching resources. At the more advanced educational levels, GIA will create a series of workshops (both online and in person when possible) to help train biomedical researchers in glycosylation science. GIA will apply for NSERC CREATE grants and other training grant opportunities to provide funding for training in glycosciences. In addition, GIA will work with other institutes (CRINA, Li Ka Shing Institute of Virology, NMHI, WCHRI) to incorporate glycosylation into the research symposia and education provided by them. GIA will also provide a guide to resources in glycosylation research and training on campus stratified by level, i.e., information for the public, educators, and researchers, through a series of webpages to be hosted on our website. If GlycoNet is successful, we will leverage resources from the network for our training initiatives. To ensure that we meet these goals and facilitate incorporation of best practices, GIA will establish a Training Committee consisting of 3 internal members and 1 member of UAlberta Faculty who is outside of GIA. The "external" member will help ensure best practices and training in diverse communities.

**Communication:**

GIA's primary objectives in the area of communication center on promoting the strength and breadth of research at UAlberta in glycosylation, and encouraging the incorporation of glycosylation into health-related research on a worldwide scale. To promote UAlberta research in glycosylation, we will create an online presence via a dedicated website, Twitter account, and other social media handles. We will identify all glycosylation-related activities (courses, lectures, seminars, workshops, etc.) occurring across campus and promote this to the UAlberta community via this online presence and newsletters. We will also support glycosylation-related seminars across campus by providing matching funding to invite speakers in the established seminar series at UAlberta (Immunet, CRINA, NMHI, departmental seminars) who incorporate glycosylation into their research. These seminars will be promoted across campus to GIA members. We will work with the communications department at the Faculty of Science and partner with GlycoNet to promote the glycosylation research and successes of GIA members more broadly through news releases and other publicity measures. We will also work with the Office of Advancement to promote GIA and glycoscience research and attract private funding and support. Overall, GIA will communicate the quality of UAlberta's glycosylation research portfolio.

**Collaboration:**

GIA's primary objectives in the area of collaboration center on connecting people and assets focused on glycosylation research in health (both human and veterinary). GIA will provide a guide to resources in glycosylation research and training on campus, including core services, and research and funding opportunities offered through GlycoNet and elsewhere. We will establish a bi-monthly Trainee Meeting to bring together trainees from multiple groups whose work touches on glycosylation across UAlberta to discuss research. To promote engagement, we will seek to include participation in this meeting as a Professional Development opportunity with certification. We will also create a bi-monthly meeting for faculty to share and disseminate research findings in a more informal setting. To engage with the larger public and promote glycosylation research across campus, GIA will host a Yearly Symposia at UAlberta. This symposia will feature an external Keynote speaker, internal talks from faculty, staff and postdoctoral trainees, and graduate/postdoctoral poster sessions. The symposia will facilitate discussion of research across campus to help forge new connections. GIA will partner with the Faculty of Science, other institutes and GlycoNet to provide resources for developing large-scale collaborative proposals, such as NSERC CREATE programs that incorporate glycosylation and increase funding competitiveness centered around glycosylation-related research.

**Overall,** GIA will strengthen the historical presence of glycosylation research at UAlberta and increase our visibility as a world leader in this important and emerging field.

- 3. Provide a description of the proposed centre/institute governance structure/reporting lines. Include a diagram of organizational structure.**

**Reporting Structure:**

In accordance with the UAlberta Institute Policy, the Director of GIA will report directly on behalf of the Institute to the Dean of Science. Acting Dean of Science, Fred West, has already agreed to be the reporting Dean. The Reporting Dean will be the final adjudicator of any disputes arising in GIA.

**Governance structure:****Advisory Council:**

The Advisory Council will provide key guidance on institutional directions and strategy. Roles and responsibilities of this council are outlined below:

- Provide advice on strategy and guidance to the GIA Director.
- Provide fiscal oversight.
- Aid in the identification of fund-raising opportunities.
- Identify new collaborative interactions with other stakeholders.
- Provide guidance to align GIA's priorities with the strategic initiatives and plans of the University, member colleges, faculties and departments.
- Advocate for the institute as appropriate.

The Oversight Board will meet twice per annum. Quorum will be a majority of members (>50%). Decisions will be made on a majority basis.

*Proposed Membership of Committee (Membership Term: 3 years)*

- Director of GlycoNet
- Vice-President of Research and Innovation or representative.
- Deans of participating faculties and Colleges (Agriculture, Medicine, Science, and the College of Applied and Natural Science) or representatives
- Director of GIA (ex officio)
- Associate Director of GIA (ex officio)

**Membership Terms:** Individuals will be invited to join the Advisory Council by the Director of GIA for a term of 3 years. Council membership will be renewable. The Director and Associate Director will be ex officio members. These will be non-paid, volunteer positions.

**Management Committee:**

The Management Committee of GIA will advise Institute Directors in the overall management of GIA. Responsibilities will include:

- Developing and guiding the Strategic Plan. This plan will set priorities and goals and delineate actions required for successful achievement of goals.
- Approve Annual Program and fiscal plan.
- Improve collaborative research by fostering partnerships and identifying research gaps that require support.
- Identify fund-raising strategies and partnerships.
- Provide advice on issues brought forward by the membership.
- Promote GIA to the wider university and community.

*Proposed Membership of Committee (Membership Term: 3 years)*

- Director of GIA (ex officio)
- Associate Director (ex officio)
- Training and Education Committee Director (ex officio)
- Dean of Science or representative
- 2-3 representatives from the membership across faculties, one must be a trainee.

Meetings will be monthly from September to June.

**Membership Terms:** Individuals will be invited to join the Management Committee by the Director of GIA for a term of 3 years. Membership will be renewable. The Director and Associate Director will be ex officio members. These will be non-paid, volunteer positions.

### **Training and Education Committee:**

The Training and Education Committee will help steer the educational goals of GIA.

Responsibilities will include:

- Coordinating with seminar series throughout the University to incorporate glycosylation-related talks.
- Facilitate engagement with the general public and researchers regarding educational strategies.
- Identify educational needs of stakeholders at varying levels (high school, undergraduates, graduate students, biomedical researchers) and provide action items to address.
- Select speakers and presenters for annual symposia.

#### *Proposed Membership of Committee (Membership Term: 3 years)*

- Director of GIA (ex officio)
- Associate Director (ex officio)
- 2-3 members of GIA from at least 2 faculties, one must be a trainee.
- Representative from outside GIA, but within the University of Alberta, who will provide a focus on EDI (Jessica Kolopnuk, with the Faculty of Native Studies, has tentatively agreed to serve).

Meetings will be monthly from September to June.

**Membership Terms:** Individuals will be invited to join the Management Committee by the Director of GIA for a term of 3 years. Membership will be renewable. The Director and Associate Director will be ex officio members. These will be non-paid, volunteer positions.

### **Scientific Advisory Board:**

The Scientific Advisory Board of GIA will provide insight into GIA's strategic initiatives from a scientific perspective. We will recruit 4 members from outside of the University of Alberta who are known in the glycoscience community. At least 1 member will be from Alberta, 2 will be from Canada, and 1 from the international community. Meetings will be annual for the first 2 years and biannual after that. Advisors will be asked to serve a term of 4 years. These

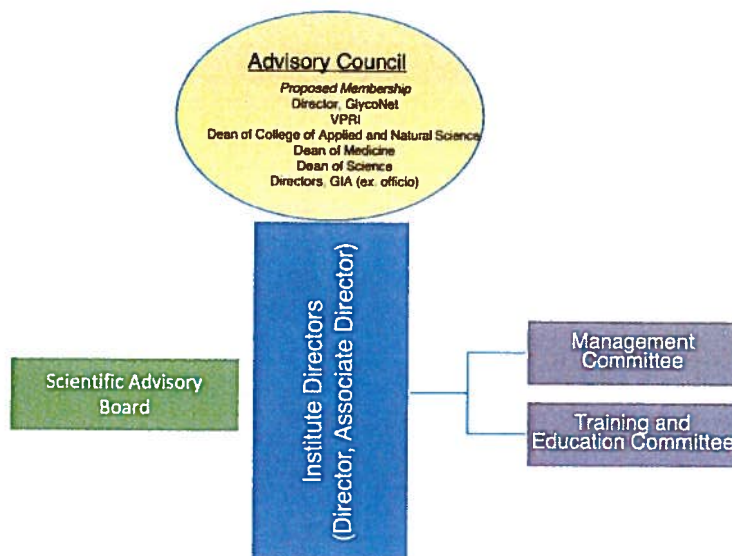
will be non-paid, volunteer positions. For in-person meetings, travel will be covered by GIA as needed.

**Terms of Reference for Advisory Boards and Committees:** Terms of Reference for the Advisory Boards and Committees will be written in consultation during the first 6-months post-establishment of GIA.

### Administrative Unit:

The Administrative unit will consist of the Administrator/Director of Communications. Responsibilities will include preparing written material for GIA's website and publicity, assisting to coordinate group events for the institute (workshops, visits from prospective staff, and visits from other group partners and stakeholders), providing support at Committee and Board Meetings, among other duties.

The following diagram shows the GIA governance relationships:



4. **Provide a statement of the role and qualifications of the centre/institute lead of the proposed centre or institute.**

### GIA Institute Director, Dr. Lara Mahal:

Dr. Lara Mahal is the Canada Excellence Research Chair (CERC) in Glycomics at the University of Alberta. She is a Professor of Chemistry in the Faculty of Science. She is well-known for her pioneering work in developing lectin microarray technology, as well as her work in understanding glycan regulation and function through systems-based approaches. She is an internationally recognized leader in the field of glycomics. She has won numerous awards in her field including the Goldstein Lectureship in Glycobiology (2021), the Horace Isbell Award

for Carbohydrate Chemistry (2017), Sloan Foundation Fellowship (2008), and the Arnold and Mabel Beckman Foundation Fellowship (2004). She has held leadership positions at multiple levels. At the University of Alberta, which she joined in 2019, she is the Chair of the Chemical Biology Division in the Department of Chemistry (2021-present, elected), is on the Chemistry Chair Selection Committee (elected), and is a current member of the President's Advisory Committee on Senior Academic Appointments. At New York University, she served on the Executive Committee of the Department of Chemistry as an elected member for 8 years. She also chaired 4 faculty search committees and was the Co-Chair of the University Nominations and Elections Committee. Beyond academic responsibilities, she was the Associate Director of Clinical Partnerships for GlycoNet from 2020 to 2021. In this role, she created the GlycoNet Webinar Series (2020-2021), opened new collaborations with the American Chemical Society Carbohydrate Division, helped to network with new clinical partners, and raised awareness of glycosylation research in the clinical biomedical community. She is currently the Chair of the Canadian Glycomics Symposia Committee. She has also been on the Scientific Advisory Board for the Programs of Excellence in Glycoscience (2011-2018) and was Chair of the External Advisory Committee for the UC San Diego Program for Career Development in Glycosciences (2021). Her responsibilities as the Institute Director of GIA will be to manage the affairs of the institute, guide its strategic development, and to be the formal channel of communication between the institute and its stakeholders. She brings the expertise needed to fulfill this role.

**GIA Associate Director, Dr. Simonetta Sipione:**

Dr. Simonetta Sipione is a Professor of Pharmacology in the Faculty of Medicine and Dentistry at the University of Alberta. She is known for her work studying the role of glycolipids in neurodegenerative diseases. She is a member of the scientific advisory board of Zulia Inc. (US), a biotech company devoted to the development of glycolipid therapies for Huntington's disease and other neurodegenerative disorders, and serves/has served as *ad hoc* expert consultant for other international biotech companies, including Innomedica Inc. and TRB Chemedica Inc (Switzerland), and Integrated Micro-Chromatography Systems Inc. (IMCS, US) Dr. Sipione has participated in many initiative to promote Neuroscience research in Alberta and in Canada. She is currently a member of the NMHI Operating Committee and, in the past, she served as a member of the NMHI Implementation Committee (2020-2021), Seminar Series Committee (2017-2021), Steering Committee (2014-2019) At a provincial level, she was a member of the Campus Alberta Neuroscience Steering Committee (2014-2019); at a national level, she serves as a member of the Brain Canada Future Leaders in Brain Science Review Committee (2019-present) and the Canadian Association for Neuroscience Nomination Committee. She has also covered many administrative roles within the Faculty of Medicine and Dentistry, as a member of the Faculty Research Council (2014-2016), the FoMD MedSar Award Committee (2010-2021), the Animal Users Advisory Committee (2014-2018), and as a chair of the W. MacKenzie Visiting Speaker fund Review Committee. Her responsibilities as the Associate Director will include advising and aiding the Director in the strategic development of the Institute.

**5. Employees**

- a. Provide a statement of the employment status of employees (i.e., are they University of Alberta employees?)
- b. Specific source(s) of any "University funding" must be identified



- c. Personnel expenditures must include adequate provisions for benefit costs, salary settlements, and other escalating factors.

GIA consists of researchers at the University of Alberta and an Administrative Unit. The researchers involved with GIA are academic employees of the university and are paid through standard operational and base funding sources from a multitude of university departments and faculties (e.g., Departments of Biochemistry, Chemistry, etc.). The Administrative Unit consists of one staff member, the Administrator/Communications Director, and their employment status and responsibility is as follows:

Name	Role	Employment Status	FTE with GIA	Source of UA Funds
Tabea Adam	Administrator/Communications Director	Dept of Chemistry, FoS	1.0 FTE	Operations budget

Please refer to the detailed budget in the next section for personnel expenditures.

## 6. Financial Plan

- a. Include key sources of operating funds, and include revenue sources and expenditures for [ideally] 5 years projected.
- b. State specific source(s) of any “University funding”
- c. Provide a plan for the sustainable funding of the operation of the centre or institute (salaries, equipment and maintenance, IT support [data management, web design, etc.]
- d. Escalation factors must be built into expenditure projections (i.e. escalation due to inflation, future salary settlements, etc.)
- e. If in-kind support is identified, the specifics of that support must be listed separately.

Unlike previous centers and initiatives that were highly dependent upon large-scale funding, GIA will be centered around networking, training and communication. The funding needs of the institute will revolve around seminar speakers, workshop costs, networking events, and some administrative and communications staff. The proposed fundraising and budget for the Institute is shown in **Table 1**. The budget itself is tuned only to the secured operating funds. Additional funds would be used to increase budget allocations in line with the Strategic Plan agreed upon for the Institute and in consultation with the Oversight Board and Management Committee. The 5-year budget contains the following assumptions:

- The CERC will contribute \$600,000 over the course of 5 years (2022-2027) to the institute. The final year budget will be in the pre-approved overage year for the CERC funding. This commitment was built into the CERC and the creation of the institute is part of the mandate of the CERC.
- In 2022-2023, the Institute will apply to GlycoNet for additional funds to bring in sponsored speakers to the University of Alberta. This takes advantage of an existing and underutilized program at GlycoNet.
- The institute will help researchers apply for training grants, such as NSERC-CREATE and similar programs, that would dovetail with the mission of GIA, with anticipated funding in 2025 and beyond.
- GIA will create a philanthropic campaign, in collaboration with Advancement, to fund an endowment and identify donors to support seminars and workshops. The University’s

standard Statement of Trust will be used to create endowment funds, which will provide the University with the right to use the endowment principal or income for other purposes related to glycomics should its original purpose to fund GIA be discontinued.

- GIA will reach out to Alberta Innovates for potential future funding of the institute and its educational and research goals.

**Table 1**

GIA Budget	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
<b>Revenue/Income</b>					
<i>CERC</i>	\$150,000.00	\$150,000.00	\$150,000.00	\$150,000.00	\$150,000.00*
<i>GlycoNet**</i>	\$10,000.00				
<i>Philanthropy-local donors and corporations</i>			\$10,000.00	\$10,000.00	\$10,000.00
<i>Grant Funding</i>				\$30,000.00	\$30,000.00
<i>Philanthropy-Endowment</i>					(\$1,000,000.00)
<b>Total</b>	\$160,000.00	\$150,000.00	\$160,000.00	\$190,000.00	(\$960,000.00)
<i>Proposed Budget based on known income</i>					
<b>Personnel</b>					
<i>Admin</i>	\$55,000.00	\$58,000.00	\$61,000.00	\$64,000.00	\$67,000.00
<b>Yearly Symposia</b>					
<i>Keynote Speaker (s)</i>	\$35,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00
<i>Promotions/Advertising</i>	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
<i>Space/Refreshments</i>	\$10,000.00	\$12,000.00	\$10,000.00	\$10,000.00	\$10,000.00
<b>Website &amp; Social Media</b>	\$5,000.00	\$5,000.00	\$2,000.00	\$2,000.00	\$2,000.00
<b>Workshops &amp; Meetings</b>	\$12,000.00	\$12,000.00	\$12,000.00	\$11,000.00	\$10,000.00
<b>Seminar Funds</b>	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$13,000.00
<b>Grant Writing</b>	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
<b>Community Engagement</b>	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
<b>Total</b>	\$150,000.00	\$150,000.00	\$148,000.00	\$150,000.00	\$150,000.00

**Sustainability Beyond 5-year Plan:**

In the 5-year timeframe, GIA will lay the foundation for future financial stability. It is anticipated that future funding will come from a variety of sources including: 1. Philanthropic Endowment, 2. Provincial Funding, 3. Grant Funding for Training Initiatives via Training and Other Grants, and 4. Corporate Sponsorship of Seminars and Workshops.

**7. Space Requirements**

Space required?    Yes     No

If "No" selected, where is current space? \_\_\_\_\_

If "Yes" selected, complete the following:

- On-site at the University of Alberta
- Awaiting allocation
- Rent/lease required

If rent/lease is required, has this been budgeted for? Yes  No

Is funding required? Yes  No  Reasons: Space would be provided for Administrative Support by the Department of Chemistry.

Address the following questions:

- a. If rent/lease or license is required, what is the University of Alberta's commitment?
- b. If new space or modifications to existing space are required, has Facilities and Operations been contacted and has this been included in the budget?

Space is required for the Administrative Unit and will be retained in the Gunning/Lemieux Chemistry Centre. No additional space is required. Space for the yearly glycomics symposium hosted by GIA will be rented, as outlined in the detailed financial budget, and will be funded through grants and endowments after the CERC funding period ends.

#### **8. Potential Risks to the University of Alberta**

- a) State any reputational, financial, and/or operational risks to the University of Alberta.
- b) Outline plans to mitigate/manage those risks.
- c) Risk Management Services may be consulted.

The risks GIA poses are consistent with usual university teaching and research activities. The main risk to GIA would be a failure to achieve financial sustainability. However, GIA's funding and sustainability strategy will be actively pursued and monitored, and its governance structure will safeguard lines of reporting and ensure accountability. These actions, as supported by GIA's Management Committee and Advisory Board, will serve to minimize this risk. GIA will abide by all UAlberta policies, procedures, and ethical codes with regard to research.

#### **9. Annual Reporting and Strategic Review: In accordance with UAPPOL Policy**

- a) State a provision for annual reporting to the Reporting Dean
- b) State a provision for annual reporting to the Office of the Provost
- c) State a provision for strategic and operational review by the Reporting Dean (or delegate) at no less frequency than every five years.

GIA will submit annual reports to both FoS and the Provost's Office containing the following elements:

1. Progress towards the goals and objectives of GIA
2. The activities undertaken in the previous year
3. GIA's financial report for the fiscal year

The Director, with the aid of the Associate Director and Administrative Unit, will be responsible for the Annual Report. The FoS will perform a strategic and operational review at year 3 and year 5 following institute establishment. GIA will need to have made a demonstrated contribution to

UAlberta's mission and be financially sustainable by Year 5. GIA will also revisit its strategic plan to develop future strategies and operational goals at year 5.

#### **10. Intellectual Property (IP) and Copyright**

- a) Will any copyright or patentable IP be created, and if so, how will it be handled?
- b) How will ownership and commercialization of IP be handled?

Pursuant to the University's Copyright Regulations, material meant for use in GIA's online educational resources and/or in person workshops will be owned by the academics that created it in the course of their employment. All other copyright or patentable IP created by GIA will be handled according to the Commercialization of Patentable Intellectual Property Procedure of UAPPOL.

#### **11. Termination Plan/Provisions**

- a) Exigency plan for termination: If physical and/or financial resources will remain upon termination, a plan for consultation with donors or agencies associated with the centre or institute must be included in the dissolution plan.

#### **Staff:**

Current UAlberta staff would remain with the UofA as per their individual appointments. Administrative positions that are on contract would be terminated or reassigned with adequate notice.

#### **Facilities & Equipment:**

Facilities and equipment designated to GIA would be returned to FoS for redistribution at the discretion of the Office of the Dean.

#### **Financial:**

All financial encumbrances and contractual obligations would become the responsibility of the FoS for resolution, fulfillment or termination through the Office of the Dean. Donor agreements will be honored provided that the gift can continue to be aligned with donor intent. Grants and sponsored research remain the responsibility of the PI under which they are held and will be managed appropriately with input/guidance from the Office of the Dean and FoS.

#### **12. Letters of Support:** Attach letters from relevant on- and off-campus sources

##### **Letters of support from:**

1. UAlberta Faculty Deans
  - i. Dr. Matina Kalcounis-Rueppell, Dean, College of Natural & Applied Sciences
  - ii. Dr. Brenda Hemmelgarn, Dean, Faculty of Medicine & Dentistry
  - iii. Dr. Hanne Ostergaard, Head of CRINA and Assoc Dean Rsch/Grad Program, Department of Medical Microbiology & Immunology, Faculty of Medicine & Dentistry
  - iv. Dr. Fred West, Dean, Faculty of Science
2. Dr. Simonetta Sipione, Professor, Department of Pharmacology and Incoming Associate Director of GIA
3. Dr. Warren Wakarchuk, Head, GlycoNet
4. Dr. Ravin Narain, Professor, Faculty of Engineering
5. Dr. Tom Hobman, Professor, Faculty of Medicine & Dentistry



**UNIVERSITY  
OF ALBERTA**

5 April 2022

Office of the Vice President Research and Innovation  
University of Alberta

Re: Support for the Glycomics Institute of Alberta

Dear Dr. Dixon:

I am writing this letter in strong support of the application being put forward by Professor Lara Mahal, the Canada Excellence Research Chair in Glycomics for the development of the Glycomics Institute of Alberta (GIA).

As you know, the University of Alberta has had a rich history in Glycomics that has spanned over half a century. We have invested in the study of glycans in many ways that have included strategic investments both for operations and faculty hires that have spanned decades. This investment and support have been foundational for the Alberta Glycomics Center, the twice funded National Center for Excellence Glyconet, and most recently a Canada Excellence Research Chair in Glycomics. We all want to see the University of Alberta not only continue to be an international leader in this field but also have increased visibility for its research leadership and increased capacity for glycomics research and its translation.

We are extremely fortunate to have recruited Dr. Mahal as the CERC in Glycomics to the University of Alberta. I know that she is deeply committed to advancing the impact of glycomics research and the profile of that research at our institution. As you will have read from her proposal, she is suggesting that GIA would be a mechanism to extend the impact of the work currently being done both through Glyconet and the CERC through education, communication, and facilitation of collaboration.

All aspects of this plan dovetail with the University of Alberta's "For the Public Good" and "EDI" strategic plans. The education component will be aimed at two important groups, grade 7-12 science students and established researchers at the University of Alberta. The importance of glycans as biopolymers is not engrained in our secondary education system and Dr. Mahal will have the capacity and ability to have an impact through GIA on this aspect of education. The silos across faculties at the University of Alberta can also be surprising and GIA will help to build bridges for researchers across the institution who intersect with glycomics but may not be leveraging all our institutional, provincial, and federal investments. As we think about the benefits of UAT I see the potential that is described in Dr. Mahal's GIA proposal realized and as Dean of CNAS I will work to facilitate the success of GIA.

GIA will be a logical extension of the CERC to sustainably support education and communication about, collaboration on, and work in glycomics research at the University of Alberta.

Sincerely,

A handwritten signature in black ink, appearing to read "Matina Kalcounis-Rueppell".

Matina Kalcounis-Rueppell

September 3, 2020

Dr. Lara K. Mahal  
Professor, Department of Chemistry  
W3-39B Chemistry Centre – West  
University of Alberta

2-13 Heritage Medical Research Centre  
University of Alberta  
Edmonton Alberta Canada T6G 2S2  
Telephone: (780) 492-9723  
Fax: (780) 492-7303  
[www.ualberta.ca/medicine](http://www.ualberta.ca/medicine)

Dear Lara:

**Re: Proposed Alberta Glycomics Institute**

I am responding to your email of August 24, 2020 to Dean Hemmelgarn in which you requested support from the Faculty of Medicine & Dentistry (FoMD) for the establishment of an Alberta Glycomics Institute (GIA) in the Faculty of Science at the University of Alberta (UA).

On behalf of FoMD I would like to offer our strong support to establish the GIA. We recognize the importance of research institutes in promoting interdisciplinary research programs on campus and those occurring between faculties in particular. Interdisciplinary research is becoming increasingly important in our scientific endeavours and is often a requirement for major grant applications to CIHR, NSERC and other funding organizations.

We have a number of our faculty members active in glycomics research who are also members of GlycoNet. Indeed, the mission statement of Glyconet is to develop solutions to unmet health needs through the study of glycomics and I noted that human health is the primary focus for the GIA as well. Thus, FoMD looks forward to a productive relationship with the GIA and the exciting and productive collaborations which will be encouraged by this institute.

I noted that the documentation that you provided to Dean Hemmelgarn included a strong emphasis on education and training. We agree with this focus and will be looking for opportunities to collaborate with you in such activities. It has been our experience that research institutes offer an enhanced learning environment for our trainees.

Please do not hesitate to contact me if you require anything further. We look forward to future updates on the GIA

Yours sincerely,



Richard Lehner, PhD  
Vice-Dean, Research (Basic)

C: Dr. Brenda Hemmelgarn, Dean, FoMD  
Dr. Declan Ali, Associate Dean Research, Faculty of Science  
Dr. Lawrence Richer, Vice-Dean, Research, FoMD

March 11, 2022

Dr. Lara Mahal  
Department of Chemistry  
University of Alberta

Dear Dr. Mahal,

As the Director of the Cancer Research Institute of Northern Alberta (CRINA), I am writing to provide my enthusiastic support for your proposed *Glycomics Institute of Alberta* (GIA). The University of Alberta has long been recognized for its excellence in glycomics research and this institute will build on internationally recognized strength in the area. Glycobiology is highly relevant to cancer research; some of the earliest diagnostic antibodies were based on aberrant glycosylation of cancer cells and there are many additional linkages between cancer and glycosylation. CRINA has a number of active members who work on glycosylation in the context of cancer. With the establishment of the Glycomics Institute of Alberta, I see many opportunities for facilitating and fostering interdisciplinary research collaboration between the two institutes.

Your proposal for the GIA mentions opportunities for education and training. We are in the process of generating our strategic plan and based on our consultations, there is strong support for CRINA to play a larger role in preparing both undergraduate and graduate students for careers in cancer research. I look forward working with GIA to support your education and training goals. I envision, at a minimum, a workshop on glycomics and cancer at our annual Research Day, as well as interdisciplinary training.

I wish you the best as you navigate the process of establishing GIA and welcome the opportunity to work with you on facilitating collaborations between CRINA and GIA.

Sincerely,



Hanne L. Ostergaard, PhD  
Professor  
Director, Cancer Research Institute of Northern Alberta

# Leading with Purpose.



April 11, 2022

Walter Dixon  
Office of the Vice President (Research and Innovation)  
University of Alberta

Dear Dr. Dixon:

I am writing this letter on behalf of the Faculty of Science in strong support of the application being put forward by Professor Lara Mahal, the Canada Excellence Research Chair in Glycomics, for the development of the **Glycomics Institute of Alberta (GIA)**.

As you know, the Faculty of Science at the University of Alberta has a rich history in glycomics—one that has spanned over half a century dating back to the recruitment of Professor Raymond Lemieux. We have invested in the study of glycans in many ways, including strategic investments both for operations and faculty hires that have spanned decades. This investment and support has been foundational for the Alberta Glycomics Center, the twice funded NCE GlycoNet, and most recently a Canada Excellence Research Chair in Glycomics. We are committed the continued support for glycomics research and want to see the University of Alberta not only continue to be an international leader in this field but also have increased visibility for its research leadership and increased capacity for glycomics research and its translation. Glycomics is an identified area of excellence in our Faculty of Science strategic plan "UAlberta Science Ahead" and GIA intersects will many of its pillars and priorities.

We are delighted and extremely fortunate to have recruited Dr. Mahal as the CERC in Glycomics to the University of Alberta. She is deeply committed to advancing the impact of glycomics research and the profile of that research at our institution. As you will have read from her proposal she is suggesting that GIA would be a mechanism to extend the impact of the work currently being done both through GlycoNet and the CERC through *education, communication, and facilitation of collaboration*.

All aspects of this plan dovetail with our Faculty of Science strategic plan, which aligns with the University of Alberta's "For the Public Good" plan. The education component will be aimed at two important groups: (1) grade 7-12 science students, and (2) established researchers at the University of Alberta. It is astonishing that the importance of glycans as biopolymers has not yet become embedded in our secondary education system, and Dr. Mahal will have the capacity and ability to have an impact through GIA on this aspect of education. The Faculty of Science will support her through engagement channels that we have with the K-12. The silos across faculties at the University of Alberta can also be surprising and GIA will help to build bridges for researchers (for example in FoMD, ALES, Engineering, SPH) whose work intersects with glycomics, but who may not be leveraging all of our institutional, provincial and federal investments. On the communications side, the Faculty of Science is well positioned to assist GIA. We have already worked closely with Dr. Mahal on feature stories that appear in multiple outlets and media and we will continue to work together to promote glycomics for internal to international audiences. Lastly,



we have access to the engagement, event, and communications expertise/networks to help GIA facilitate the collaboration aspects of the proposal using the partners assigned to Science and CNAS.

I am a strong proponent of strategic investments to grow existing strengths, and glycomics at the Faculty of Science is an absolute strength that has potential to further grow in capacity, impact, and translation. I see clear potential in Dr. Mahal's GIA proposal to leverage this strength and raise up other units across the University as we do so. Science is excited to work closely with Dr. Mahal to achieve success for GIA.

To summarize, the Faculty of Science fully supports Dr. Mahal in her development of GIA and agrees that GIA will provide the logical next step in the extension of the CERC to sustainably support education and communication about, and collaboration on work in, glycomics research at the University of Alberta.

Sincerely,



Frederick West  
Acting Dean of Science

FW/rb

September 10, 2020

Dr. Lara K. Mahal  
Professor, Department of Chemistry  
W3-39B Chemistry Centre – West  
University of Alberta

Simonetta Sipione  
Professor  
Neuroscience and Mental Health Institute  
9-21 Medical Sciences Building  
University of Alberta  
Edmonton, AB, Canada T6G 2H7

**Re: Glycomics Institute of Alberta**

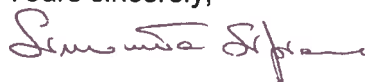
Dear Lara,

I am writing to express my enthusiasm and support for the proposed Glycomics Institute of Alberta (GIA) and my willingness to serve as an Associate Director. I am truly excited about your vision of developing a world-class cross-disciplinary research Institute that will build on the tradition of excellence in glycoscience at the University of Alberta and focus on glycans and their involvement in health and disease.

As an investigator whose research on the role of glycolipids in brain health and disease is at the crossroad of neuroscience and biochemistry, and involves both fundamental discoveries and translational efforts, I strongly believe that interdisciplinary collaborations are crucial to any translational research effort, and that the support of dedicated Institutes is crucial to ensure that our research at the University of Alberta remains competitive at a National and international levels. I look forward to the synergies and opportunities that GIA will offer.

As you know, I am a member of the Neuroscience and Mental Health Institute (NMHI) – where, over the years, I have served in the Steering Committee, the Education Committee and, more recently, the Operating Committee and the Implementation Plan Committee. Glycans are increasingly recognized as important player in brain health and disease. I will be happy to work with you and with the NMHI and Faculty of Medicine and Dentistry (FoMD) leadership to promote new collaborations and synergies between GIA and the community of researchers and clinicians at the NMHI and FoMD.

Yours sincerely,



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April 11, 2022

**Re: Glycomics Institute of Alberta (GIA)**

Dear Lara,

I am writing this letter to indicate GlycoNet's enthusiastic endorsement of your proposal for the "Glycomics Institute for Alberta". As the scientific director of the Canadian Glycomics Network, GlycoNet, the timing of your proposal coincides with our internal discussions of what we want GlycoNet's legacy to be when the National Centres of Excellence funding ends in 2024. As you and I have discussed the evolution of GlycoNet from an NCE to a stronger pan-Canadian research organization is underway with major funding applications having been submitted in 2022. As part of this evolution the critical mass of glycoscientists at Alberta institutions, especially the University of Alberta is a major asset to the growth Glycoscience within Canada.

The formation of the GIA is an important step for the growth of translational glycoscience at the University of Alberta which will be able to leverage and extend GlycoNet's previously developed educational, research materials and network of contacts. The expertise from the University of Alberta GlycoNet researchers and administrators can be directed for the development of GIA. The visibility of GIA will also be important for attracting non-GlycoNet researchers on the University of Alberta campus to further the growth of translational glycoscience.

The presence of a unifying body, the GIA, is something that will ensure the continued growth and outreach of glycoscience from a position of great strength at the University of Alberta. I am personally looking forward to working with you to make sure GIA's mission will be successful.

Regards,



Dr. Warren Wakarchuk  
Scientific Director  
Canadian Glycomics Network (GlycoNet)  
Department of Biological Sciences  
Office CCIS 5-185

DONAEDO Innovation Centre for Engineering,  
9107 – 116<sup>th</sup> Street  
Edmonton, Alberta, Canada, T6G 2V4  
Tel: 780.492.1736  
Fax: 780.492.2881  
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September 18, 2020

**Supporting letter for the Glycomics Institute of Alberta**

I am pleased to write this letter in support for the creation of the Glycomics Institute of Alberta. The mandate of this institute will focus on education, awareness and collaborations in the field of glycoscience, an interdisciplinary field that is receiving significant attention in the last decades. As a researcher myself in the field of glycoscience and glycoengineering, the formation of the glycomics institute will undoubtedly strengthen the position of the University of Alberta in this rapidly evolving field and increase our visibility.

The institute will help in fostering collaboration among researchers across the university, educate researchers at different levels through organized meetings and workshops and hence can further promote research in this field. Due to complexity of the glycans (a carbohydrate biopolymer), the field has remained somewhat unexplored and hence there is still a huge potential for more advanced research and developments.

I strongly support the creation of the Glycomics Institute of Alberta as this will further enhance the position of the university, increase collaboration, education and innovation in the field of glycoscience and glycoengineering.

Sincerely,



*Ravin Narain, PhD, P.Eng, FRSC*

*Professor*

*Section Editor, Comprehensive Glycoscience, Second Edition*

*Associate Editor, Frontiers in Chemistry, Polymer Chemistry Section*

*Distinguished Scientist, CSIRO, Clayton, Australia (2018-2019)*

*Editor - Polymer Science and Nanotechnology (Elsevier)*

*Editorial Board Member - Polymer Chemistry (RSC), Polymers (MDPI)*



September 4, 2020

Lara K. Mahal, Ph.D.  
Canada Excellence Research Chair in Glycomics  
Professor, Department of Chemistry  
University of Alberta

***Re: Glycomics Institute of Alberta***

Dear Lara:

This letter is to provide my unreserved enthusiasm and support for your efforts toward creating the Glycomics Institute of Alberta (GIA). The University of Alberta has a long and distinguished history in this research sector and the future looks even brighter. This is a tremendous opportunity to leverage and synergize the collective expertise of researchers in the Faculties of Science, Medicine & Dentistry and others whose research programs focus on different aspects of glycobiology and glycomics.

In light of the ongoing pandemic, it is ever more important to continue to investigate how glycans on host cells and viral proteins influence the infection and disease processes. Indeed, as recently shown by your group through the study of influenza virus infection of lung tissue and our collaborative project on SARS-CoV-2, the causative agent of COVID-19, understanding the host glycomic response to viral infection may have prognostic value as well as revealing novel targets for therapeutic intervention.

I look forward to our continued collaboration and am excited about the prospect of being part of a formal research structure that will serve as fertile ground for new collaborations, funding opportunities and training the next generation of scientists.

Please let me know if I can be of help in any way to move this critical initiative forward.

Sincerely,

Tom C. Hobman, PhD  
Professor of Cell Biology