



Office of the Provost & Vice-President (Academic)

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TO: Digvir Jayas

President and Vice Chancellor

DATE: April 17, 2024

FROM: Alan Siaroff

Chair, Academic Quality Assurance Committee

RE: Bachelor of Health Sciences in Public Health Program Academic Quality Assurance

Review

In accordance with the U of L *Academic Quality Assurance Policy and Process*, the Academic Quality Assurance Committee approved the review of the Bachelor of Health Sciences in Public Health Program at its October 27, 2023 meeting.

The Self Study Committee for this review was comprised of: Silvia Koso (Program Review Coordinator), Julia Brassolotto, Cheryl Currie, Keltie Hamilton, Richard Larouche, Brenda Leung, and Nimesh Patel.

The review produced 4 documents:

- 1. Self Study Report. Written by the Self Study Committee. Received July 7, 2023.
- 2. External Review Report. Written by Dr. Brent Faught (Brock University), Dr. Phillip Bigelow (University of Waterloo), and Dr. Kelly Anthony (University of Waterloo) based on a site visit May 30 to 31, 2023. Received July 4, 2023.
- 3. Program Response. Written by the Self Study Committee. Received August 11, 2023.
- 4. Dean's Response. Written by Jon Doan, Dean of the Faculty of Health Sciences. Received October 16, 2023.

Self Study Report

The Self Study Report asked for External Reviewer feedback on several areas:

- Learning outcomes: Do you use the Public Health Agency of Canada's Core Competencies to define undergraduate learning outcomes for your Public Health programs? If not, how have you selected the learning outcomes for your undergraduate Public Health programs, and what recommendations would you have for us regarding the learning outcomes we currently use? What are the best ways for us to incorporate teaching on emerging competencies (environmental health; Indigenous health; anti-racism) into our courses and program?
- Skills training: Our students are requesting a skills-based public health course. Do you offer a similar
 course at your institutions? More generally, we would like to hear your thoughts on what you believe
 the key undergraduate-level public health skills are, and how you incorporate teaching these skills
 into your curriculum.
- Experiential learning: Beyond practicum, what ideas do you have for incorporating more hands-on learning opportunities in our program? What are your experiences providing co-ops for Public Health students? Who are the most likely community partners for co-ops for Public Health undergraduate students?
- Public Health curriculum: What recommendations do you have for our Public Health curriculum (I.e., required courses that may not be necessary and/or important courses that are missing)?
- Public Health Careers: What ways do you suggest we incorporate information on Public Health careers into our courses and program? How do you accomplish this in your Public Health programs?
- New hires: What recommendations do you have for future full-time hires? Should we target
 professor or instructor hires? Given the areas of expertise we currently have in our faculty
 complement, what areas of Public Health expertise should we seek to strengthen through new
 hires?
- Sessionals: In your opinion, what would be a reasonable proportion of courses taught by sessionals? In your programs, what proportion of courses are taught by sessional instructors (if you know this information)?
- Instructor workload: How many courses do full-time instructors teach in your Public Health programs? Is research an option in the workload breakdown for instructors with professional degrees in your Public Health department (e.g., MDs, nurses)? Is this flexibility something you would recommend for instructors in our program?

The body of the report noted several strengths of the Bachelor of Health Sciences in Public Health program:

- The Program breadth: The breadth of our public health curriculum is a key strength that fits our program objective of providing students with a solid foundation in PH. Students indicate our program teaches them to understand the full scope of PH core concepts. Based on feedback from reviewers of the 2015 Self-Study we hired faculty with expertise to fill certain gaps including health policy and environmental health. We believe our faculty now provides a well-rounded learning experience in PH, although further strength in environmental health would be an asset.
- Practicum: A strong theme in our data is that students view the one-term full time PH practicum as a huge asset that sets the PH program apart from other B.H.Sc majors at ULeth. Over the past seven

years, 121 PH students have completed this optional 15-credit hour course. Students must complete the core PH courses in our program to be eligible for the practicum. Feedback from preceptors who supervise our students indicates that our courses prepare them well to succeed in the PH work setting that the practicum provides. In their survey Public Health Academic Quality Assurance Self Study 2023 45 feedback, some preceptors have noted that our undergraduate PH students are as prepared for the practicum as graduate-level PH students who complete practicums with them from other universities in Alberta. We will continue to strengthen and build on this important program asset.

- Class sizes: Students appreciate our small to moderate class sizes, and state it as one of our
 program strengths. Most PH courses are capped at 40 students, and none exceed 90 students.
 However, since the pandemic more PH courses have been moved to a 60 or 90-student cap and
 there is pressure to continue this trend. We are concerned about the impact this will have on
 student experiences, including the interactive nature of many of our courses. We are also concerned
 about the impact that increasing class sizes will have on faculty burnout and turnover.
- The Faculty member cohesiveness: Another important strength, repeatedly mentioned in annual student surveys, but also very clearly felt among us as faculty, is our cohesiveness, transparency and collegiality as a PH faculty team. This is crucial in maintaining the quality and complexity of our program. It has been a key goal of our team to foster an environment that is conducive to learning and growth not only for our students, but also for each other, in keeping with our program objectives.
- One of our program's great strengths is our team's transparency in course design and delivery. We share course outlines, assignment descriptions, lecture slides and course Moodle pages with each other. This contributes to the standardized approach, much discussion between us on the best ways to teach various topics, a reduction in content duplication across classes. Overall, this openness to share course material strengthens both the quality of our courses and collegiality between our team.
- Our program is achieving 6 of 7 targeted PH learning outcomes, which we have defined using the Public Health Agency of Canada's Core Competencies.
- The ability of Public Health professors to compete for Research Chairs. All 4 held Research Chairs during this Self Study period.

The following weaknesses and challenges were mentioned in the body of the report:

- An 8 course/year workload for instructors, and a 4 course/year workload for professors (representing 80% and 40% of our workloads, respectively) makes it difficult to retain existing faculty and is unattractive for new faculty, particularly instructors.
- Students would like our curriculum to place a stronger focus on teaching Public Health skills.
- Students would like to learn more about Public Health careers/graduate school options during their time with us.
- Students report that the availability of academic advising is not meeting their needs.
- Work is needed on 1 Public Health program learning outcome: Learning how to partner, collaborate and advocate.

Recommendations from the body of the report:

• Program enrollment: We will continue to encourage increased student enrollment, as training more students to work in the Public Health field is valued by us and in keeping with our vision to

- strengthen Public Health capacity. Enrollment growth is also an important way we can build our faculty complement in key areas such as environmental health, and thus offer an even stronger curriculum to our students in keeping with our program objective of continuous improvement.
- New hires: We will continue to advocate for new professor or instructor positions as our program grows, rather than sessional teaching. Over the years we have found it difficult to recruit qualified Public Health sessionals for our courses in southern Alberta as the compensation they would receive is low. Most with strong Public Health qualifications and skills in our region are employed full-time in well-paid positions in government. These individuals do not find the sessional opportunities in Public Health at ULeth attractive. Sessionals are also not compensated for attending our curriculum meetings or engaging in teaching development. This presents challenges in standardizing course content and delivery and in ensuring high quality teaching.
- Professor research chairs: Over the years, growth in the Public Health faculty complement has been possible for two reasons: (1) through growing student enrollments in the Public Health program, and (2) through the success of our Public Health professors in competing for Research Chairs that either fully or partially cover their salary/benefits costs. All four professors in the Public Health program have been successful in competing for multi-year Research Chairs between 2014 and 2020, which is an important achievement that speaks to the quality of their research programs. Over the years, the salary costs saved through these research awards have freed up funding to hire more instructors to teach in the Public Health program. The coverage of salary costs for one of the four Research Chairs in the Public Health program is perpetual through a university endowment. However, funding for three Research Chairs have ended or will soon end, and the university will resume paying their salaries. This may impact the university's ability to use the funds saved through these awards for the salaries of new Public Health instructors.
- Student access issues: Public Health students who complete our annual surveys are expressing increasing frustration with their ability to get into some required Public Health courses, as well as problems accessing an academic advisor. More needs to be done to keep up with the increasing number of students in Public Health by, for example, increasing the number of times high demand courses are taught per year and increasing the number of academic advisors.
- Instructors: Public Health instructors have strongly expressed that an 8-course workload per year is not manageable or sustainable. Most faculties at ULeth require an 80% teaching workload for instructors, but not all count a course as 10% of that time. Thus, some programs at the university require a lower course workload for this group. Our program will continue to advocate with the new Dean, as well as through the ULeth Faculty Association (ULFA) for a more manageable teaching workload for instructors in the Public Health program.
 - Public Health Instructors do not have sufficient time for professional development to promote excellence in teaching in keeping with our program objective of continuous improvement. Based on the latest collective agreement, the ULFA and ULeth management have jointly developed a framework for establishing the Public Health Academic Quality Assurance Self Study 2023 46 teaching professoriate, which would recognize excellence in teaching for instructors.
 - The workload of Public Health instructors does not include a percentage of time for research. A number of universities provide instructors with professional degrees (e.g., MDs, nurses) with time in their assigned workload to conduct research if they desire to. This flexibility would not only help us to keep the highly qualified Public Health instructors we already have; it would benefit students through new research assistant opportunities. We

- will continue to advocate for a portion of an instructors' workload to include research for those who would like this opportunity.
- Public Health skills training & experiential learning: Students have expressed the need for
 coursework that teaches skills in Public Health and more experiential learning opportunities during
 their studies. There is also a need to strengthen our learning goal of ensuring students learn to
 partner, collaborate, and advocate. As a team, we are looking for ways to strengthen these areas of
 our program over the next seven years (by making the ULeth co-op course an elective in addition to
 the practicum for example).

External Review Report

The External Review Report contained fifteen (15) recommendations for improving the Bachelor of Health Sciences in Public Health program.

Recommendations from the body of the report:

- We recommend a robust public health biostatistics course in year two be developed and taught
 by an instructor within the PH program who has a background in public health biostatistics. The
 PH program faculty should be responsible for this new course to ensure it is suitable for their
 B.H.Sc-PH students.
- Move the course HLSC 3260 (Research in the Health Sciences) from third to second year of the B.H.Sc- PH program to accelerate learning of the research process and complement material taught in a second-year biostatistics course.
- Have the program evaluation course taught by a PH faculty member.
- There is no course in qualitative methods in the curriculum although this content is offered across several courses. A review of the qualitative methods content in the various courses should be reviewed to ensure there is sufficient coverage.
- Develop and deliver a 4th year undergraduate thesis course restricted
- Continued growth in enrollment will require more faculty and support staff to manage the
 teaching load. It is excellent that 1.0 FTE equivalent instructor has been approved. This position
 is split between the two campuses and there is justification for a 1.0 FTE instructor in Calgary
 and a 1.0 FTE instructor at the Lethbridge campus. Given the growing concerns in public health
 about the environment, including climate change, there is a need to increase teaching capacity
 in this domain. Given the need for this position, we recommend the next B.H.Sc-PH hire be
 directed towards a full-time faculty member to support scholarly research, not a teaching faculty
 member.
- The PH program has lost a notable number of mostly women faculty within the past five years. We recommend that this pattern of attrition among women be evaluated and addressed from an equity perspective at the Faculty and University level.
- Support staff often serve the PH program along with other academic units in the facility. Some functions, such as student advising, need more capacity and may benefit from having dedicated personnel within the PH program.
- Faculty should continue their efforts in teaching public health skills and enhance their communication with students so that they are being taught practical skills in PH.

- The number of students taking a practicum or being enrolled in co-op should be increased. The PH curriculum committee should consider where they should place their efforts in enhancing experiential learning; it may be appropriate to focus on improving practicum opportunities. Given the desire of the B.H.Sc-PH and PD programs to build student skills in partnership, collaboration and advocacy and request for more firsthand experiences, ULeth should work more purposefully with the co-op office to ensure co-op employers include those in public health.
- ULeth has the capability for 'flex learning'. Flex learning should be embraced to increase the opportunity for course delivery to both B.H.Sc-PH and PD students. This type of flex learning format may also allow international students the ability to qualify for a post-graduate work permit. Furthermore, PD students expressed significant interest in more opportunities for online courses.
- Given ULeth's reputation in public health undergraduate education in Western Canada, their next natural progression should be the development of a Master of Public Health (MPH). A combination of undergraduate and graduate education in public health would position ULeth as one of the most recognized institutions in Canada. The B.H.Sc-PH and PD programs could function as feeder degrees into a course-based MPH program.
- Competing interests in Indigenous students with the growing B.H.Sc-PH and struggling Aboriginal Health degree program as well as complementary courses within both degrees could be used by combining human resources into the B.H.Sc-PH program that could house an Aboriginal Health stream. For example, the academic advisor for Aboriginal Health could assist the B.H.Sc-PH program, which needs more academic advising resources.
- ULeth should invest in either EMBASE or Scopus library databases to support the needs of students and faculty members affiliated with the B.H.Sc-PH and PD programs. These resources will also benefit students and faculty in the entire Faculty of Health Sciences.
- Finally, we recommend the PH faculty and staff hold a retreat in 2023 to assess the state of this unit in response to this report, and their collective vision moving forward.

Challenges discussed in the report:

- Clearly the faculty and staff in the Public Health faculty are doing excellent work with relatively tight resources. The program has grown 10-fold since its inception, but resources and faculty hires have not kept pace. COVID and the resulting lockdowns have certainly changed the way we work, but both faculty and students would benefit from more in-person access to staff, especially in the form of drop-in access for students. Limited resources may hinder students' progress in terms of gaining timely access to required classes; having easily accessible and in-person staff support is critical.
- Although the review team was impressed with the program regarding its impacts on the university's strategic directions and goals, the program does face challenges. One critical factor is the faculty and staff who are key to the program's success. The review team felt that overall, the program is exceptional but that both faculty and staff are stretched thin, and impacts are being felt by students. In the meeting with students, they were very supportive of faculty and staff but were concerned with the time it took to see an academic advisor. They mentioned that in other faculties and departments, access to advising is much timelier. This is in concordance with student evaluation data regarding the availability of academic advisors at both the Lethbridge and Calgary campuses. In discussions with faculty and staff, it appears that there are insufficient personnel resources currently

- available. As advising has implications for the strategic directions of inspiring and supporting student potential as well as building internal relationships, this will be important to address.
- It appears that the PH program has lost a concerning number of faculty over the past five or so years, and almost all have been women. This was clear to the external reviewers, who felt that faculty morale and cohesion were negatively impacted. The relatively high teaching loads (8 for lecturers and 4 for regular faculty) have been expressed as the reason for such high attrition. This pattern of attrition will impact the quality and consistency of instruction and students' ability to get the academic support needed. This attrition issue among women may require further evaluation from an equity perspective at the university level.
- There is some risk of growing the Calgary campus by spreading already lean resources even more thin. Calgary clearly needs its own full-time staff on site to be able to help students plan their academic progress. Additional staff should be considered to support further growth at this campus.

Opportunities discussed in the report:

- As a whole, all seven faculty bring their research and/or community engagement experiences into the classroom. Nevertheless, future hires should be targeted to a research faculty member who would contribute to scholarly activities that support B.H.Sc-PH students, as outlined in their program vision, to strengthen public health capacity and advance public health science.
- The potential exists for the development of a fourth-year undergraduate thesis course that would allow higher caliber students who desire research experience to gain course credits with not much more investment in faculty time than is already being devoted. This experiential learning opportunity would further promote scholarly research within the ULeth academy as well as better prepare students for post-graduate research opportunities.
- It was noted that formal strategic planning at the faculty level has not been conducted for a number
 of years, though PH faculty have been active on their own through their Curriculum Committee and
 meetings.

Program Response

In their Program Response, the Self Study Committee addressed the recommendations from the External Review Report:

 We recommend a robust public health biostatistics course in year two be developed and taught by an instructor within the PH program who has a background in public health biostatistics. The PH program faculty should be responsible for this new course to ensure it is suitable for their B.H.Sc-PH students. We strongly agree that the biostatistics course should be taught by a PH faculty member. HLSC 3450 can still be offered for other programs, but a specific public health biostatistics course should be developed. Biostatistics is one of the core sciences and competencies in public health, and thus should be taught by a faculty member with expertise in biostatistics application in public health. With the new leadership in FoHS, and two new part-time faculty hired in PH program, we see the opportunity for the program to advocate for this solution. The program has the capacity to implement this change in the future. We will bring this recommendation to the Dean's office and explore the potential of developing a PUBH-specific course in biostatistics.

2. Move the course HLSC 3260
(Research in the Health Sciences)
from third to second year of the
B.H.Sc- PH program to accelerate
learning of the research process and
complement material taught in a
second-year biostatistics course.

As discussed with external reviewers during their visit, we have considered this change on a program level, and have decided to propose motions to the FoHS and university level. The curriculum change process, of course, takes its due processes and time, but we are keen to provide our students with entry-level research skills earlier in the program.

3. Have the program evaluation course taught by a PH faculty member.

Our sentiment here is like our response for Recommendation 1. While this change may not be required as urgently as the one for a course in biostatistics, we believe that the program has the internal capacity to teach this course. We will start exploring this possibility with the new leadership.

4. There is no course in qualitative methods in the curriculum although this content is offered across several courses. A review of the qualitative methods content in the various courses should be reviewed to ensure there is sufficient coverage. As we expressed in our discussions with the external reviewers, we do not believe there is a need for a specific qualitative methods course at undergraduate level. However, within the program, during our regular curriculum reviews, we will ensure that the $HLSC\ 3260$ (typically taught by a PH faculty) has sufficient information dedicated to introductory-level qualitative research skills. We will also, as recommended, review how qualitative research and assessment skills are addressed throughout the PUBH courses.

5. Develop and deliver a 4th year undergraduate thesis course restricted

We understand that a thesis course is an option in the undergraduate public health programs at other universities and we see the value of this proposal. However, the U of L Public Health program had a 4th year undergraduate thesis course when it was launched in 2009. There was little student interest and the demand on instructor time for students who chose this option was not feasible. Thus, this option was removed approximately 8 years ago. Currently, adding a new course for a very small number of potential students would be a significant challenge to our teaching capacity in Public Health. Our plan is to first implement Recommendations 1 to 4. Once these curriculum changes have been made, we may consider reinstating an undergraduate thesis course. Before doing so, we will ask our students about their interest in such a course in our annual survey, which we will next circulate in Spring 2024.

Continued growth in enrollment will require more faculty and support staff to manage the teaching load. It is excellent that 1.0 FTE equivalent instructor has been approved. This position is split between the two campuses and there is justification for a 1.0 FTE instructor in Calgary and a 1.0 FTE instructor at the Lethbridge campus. Given the growing concerns in public health about the environment, including climate change, there is a need to increase teaching capacity in this domain. Given the need for this position, we recommend the next B.H.Sc-PH hire be directed towards a full-time faculty member to support scholarly research, not a teaching faculty member.

We wholeheartedly agree that the program needs, at least, a full 1.0 FTE instructor in Calgary; and one more research professor position, particularly one with an environmental public health focus. As a program, we will continue to provide evidence for this need, and advocate for making current positions long term, increasing the FTEs, and increasing the number of positions. This is our main priority. Without more instructors and professors trained in public health working in our program, we will not be able to continue to grow our program.

7. The PH program has lost a notable number of mostly women faculty within the past five years. We recommend that this pattern of attrition among women be evaluated and addressed from an equity perspective at the Faculty and University level. We appreciate that the external reviewers have noticed this. The reviewers have also emphasized, in several spots in the report, that the teaching load for both instructors and professors (8 and 4) at the FoHS is higher than in other universities (typically 7 and 3). We will continue to advocate for a more equitable workload within our university.

 Support staff often serve the PH program along with other academic units in the facility. Some functions, such as student advising, need more capacity and may benefit from We strongly agree that waiting several weeks for an advising appointment is unacceptable to students, and that advising capacity, including increasing the number of academic advisors is needed at the FoHS level. We will continue to advocate for our students in this respect. Ideally, we will support academic advising specific to public health students.

having dedicated personnel within the PH program.

 Faculty should continue their efforts in teaching public health skills and enhance their communication with students so that they are being taught practical skills in PH. Responding to students' request for "teaching more practical skills" was one of our questions to the external reviewers. We appreciate the suggestions they provided during their visit and in the report. We will begin considering how to implement these suggestions immediately – as well as making more visible the ways in which we already teach practical public health skills.

10. The number of students taking a practicum or being enrolled in co-op should be increased. The PH curriculum committee should consider where they should place their efforts in enhancing experiential learning; it may be appropriate to focus on improving practicum opportunities. Given the desire of the B.H.Sc-PH and PD programs to build student skills in partnership, collaboration and advocacy and request for more firsthand experiences, ULeth should work more purposefully with the coop office to ensure co-op employers include those in public health.

The program staff, with strong support of the internship specialist, continues to identify new opportunities for practicum students. While we certainly want the practicum to be available to all the students that want to take it, it will, for the time being remain an elective and not mandatory. We have had conversations with the Co-op Office regarding increasing co-op opportunities for PH students. The Co-op Office has previously expressed difficulties in finding appropriate placements in PH, or PH-related fields. With the new staff now in the Co-op Office, we plan to have more discussions about opportunities. However, we will focus our efforts on identifying additional practicum opportunities through our PH program internally. If we start to see 12 students or more per term in the practicum course, we will need more resources to support practicum students.

11. ULeth has the capability for 'flex learning'. Flex learning should be embraced to increase the opportunity for course delivery to both B.H.Sc-PH and PD students. This type of flex learning format may also allow international students the ability to qualify for a post-graduate work permit. Furthermore, PD students expressed significant interest in more opportunities for online courses.

The flex-classroom (video link between the Lethbridge and Calgary campuses) is currently a pilot. It is primarily undertaken by the Dhillon School of Business. There are only a couple of these classrooms on the Calgary campus, and only one on the Lethbridge campus. While the Dhillon School of Business has graciously offered to make it available to FoHS when they are not using it, the adoption of this model on a larger scale requires a more systemic effort at the university level as a whole, as resources available to our program are currently insufficient. While we will consider this opportunity in the future, it is not an immediate priority for us.

12. Given ULeth's reputation in public health undergraduate education in Western Canada, their next natural progression should be the development of a Master of Public Health (MPH). A combination of undergraduate and graduate education in public health would position ULeth as one of the most recognized institutions in Canada. The B.H.Sc-PH and PD programs could function as feeder degrees into a course-based MPH program.

We appreciate that eventual development of an MPH program would be a natural evolution for us, and another income generating activity for the university. Existing MPH programs in the province reject more students than they admit annually, so there is certainly a market for the U of L to create such a program, particularly given we are the only university in Alberta with an undergraduate PH program. However, we first must focus on addressing the faculty and staff gaps to satisfy current program needs (see 6 above). We would need a well thought out strategy and several new instructors/professors to be able to teach approximately 13 graduate courses, plus supervise a capstone project or thesis. We would need to know that we have support for multiple new positions if we decide to take on developing a new MPH.

13. Competing interests in Indigenous students with the growing B.H.Sc-PH and struggling Aboriginal Health degree program as well as complementary courses within both degrees could be used by combining human resources into the B.H.Sc-PH program that could house an

We appreciate this note from the reviewers. We have already had and continue to have discussions with our colleagues from the Aboriginal Health Program about this. While Aboriginal Health as a stream within PH program is a possibility; we prefer to let our colleagues in Aboriginal Health Program first define the identity and content of their program, before we begin discussions about how to avoid overlap in content and "competing" for students.

Aboriginal Health stream. For example, the academic advisor for Aboriginal Health could assist the B.H.Sc-PH program, which needs more academic advising resources.

14. ULeth should invest in either EMBASE or Scopus library databases to support the needs of students and faculty members affiliated with the B.H.Sc-PH and PD programs. These resources will also benefit students and faculty in the entire Faculty of Health Sciences.

We agree with this suggestion. As one of the many programs served by our Library, that is, as noted in the external reviewers' report, operating with diminished human and financial resources; we can certainly convey this recommendation to our colleagues.

15. Finally, we recommend the PH faculty and staff hold a retreat in 2023 to assess the state of this unit in response to this report, and their collective vision moving forward.

We are grateful for this suggestion. We have certainly considered this opportunity even before we received the external reviewer's report. The QAR process has been invaluable in identifying strengths of the program we want to keep honing, and challenges we want to address. We also have good experiences from the curriculum review and QAR preparation mini retreat held in August 2022. While we will start prioritizing and strategizing how to implement the QAR Recommendations already in our August program meeting, we would certainly benefit of a longer, focused retreat. Given the amount of work that awaits each of us individually and collectively as a program, we cannot commit that the retreat will happen in 2023. But we are certainly considering it for 2024.

Dean's Response

The Dean of the Faculty of Health Sciences responded to the fifteen (15) recommendations from the External Review Report:

 We recommend a robust public health biostatistics course in year two be developed and taught by an instructor within the PH program who has a background in public health biostatistics. The PH program faculty should be responsible for this new course to ensure it is suitable for their B.H.Sc-PH students. The specific statistical learning (both content and practice) necessary for public health education and outcomes is clearly identified by internal and external reviews here. As an initial step, a review of current HLSC 3450 learning outcomes and course content is required to identify the true nature of the gap here (content not planned to be delivered versus content not successfully delivered versus content lost or minimized due to time considerations) plus to determine the potential relevance and scope of

the biostatistics information across FoHS undergraduate programs. If the gap is determined to be not closable and/or the PH-pertinent information would not be germane for other disciplines, the program team will be encouraged to develop course content and a sequencing plan, plus consider delivery modes and staffing to provide a PH-specific undergraduate stats course. Creativity would be encouraged here, including possibilities for undergraduate-graduate split offerings and blended or

hybrid delivery. Specific concerns about the current HLSC 3450 delivery identified here will be investigated further separately.

Move the course HLSC 3260
(Research in the Health Sciences)
from third to second year of the
B.H.Sc- PH program to accelerate
learning of the research process
and complement material taught
in a second-year biostatistics

A proposal on this move would be welcome, and upcoming program retreat would be excellent place to

flesh out this proposal. Inter-faculty student registration opportunities might exist here, with discussion of possibilities for tuition revenue sharing.

3. Have the program evaluation course taught by a PH faculty member.

This course assignment may be possible. The PH program planning committee (largely a committee of the whole) are encouraged to map this out for 2024/2025 and beyond. As a faculty, we can investigate cross-program, team teaching, and two campus opportunities that could make this most widely beneficial.

4. There is no course in qualitative methods in the curriculum although this content is offered across several courses. A review of the qualitative methods content in the various courses should be reviewed to ensure there is sufficient coverage.

PH program group committed to making a cross-course examination of qualitative research content. Again, proposed 2023 retreat might be a good spot to initiate this discussion and plan information gathering. Gaps identified here could be addressed in HLSC 3260 (Research in Health Sciences) or in a PH-specific version of HLSC 3450 (Statistics) if that offering was broadly reimagined as research methods, possibly with some self-directed learning amongst students towards quantitative or qualitative methods and analyses.

5. Develop and deliver a 4th year undergraduate thesis course restricted

This opportunity was previously available in the PH program but removed due to low uptake. Alternative models could be considered, possibly individual special case honours theses offerings rather than a regularly offered course. This approach might generate some of the research outcomes that help address S5 (compete for research chairs), T5 (research chair funding transition), W2 (place strong focus on public health skills), and W3 (provide information on public health careers). A creative approach here might connect with Recommendation ERE in this document. For example, it might be possible to generate three alternative 4th year streams – practicum plus UG thesis (ideally related to practicum), practicum plus advanced practicum (co-op), practicum plus course work. Some of these approaches might also help address W5 (deliver outcome learning, how to partner, collaborate, and advocate).

Continued growth in enrollment will require more faculty and support staff to manage the teaching load. It is excellent that 1.0 FTE equivalent instructor has been approved. This position is split between the two campuses and there is justification for a 1.0 FTE instructor in Calgary and a 1.0 FTE instructor at the Lethbridge campus. Given the growing concerns in public health about the environment, including climate change, there is a need to increase teaching capacity in this domain. Given the need for this position, we recommend the next B.H.Sc-PH hire be directed towards a full-time faculty member to support scholarly research, not a teaching faculty member.

This is a very logical direction for expansion, and developing expertise and opportunities in this area should feature into upcoming staffing and strategic plans. This would be a good place to get thoughtful about inter-faculty positions, as environmental science and social geography would have strong interest in environmental health teaching and research. These conversations have already started with current chair of Geography.

7. The PH program has lost a notable number of mostly women faculty within the past five years. We recommend that this pattern of attrition among women be evaluated and addressed from an equity perspective at the Faculty and University level.

Details on retention challenges are not included in self-study, but that omission makes sense wrt/relative confidentiality plus quality of evidence there. We can commit to making an internal document that looks at faculty complement numbers since inception, and pair that document with information from U of L's EDI office examining the diversity of the PH faculty team as compared to ULeth students, PH students (possibly – unclear if data are this granular), and ULeth faculty in general. That information should provide foundation information, and with follow-up and support from EDI office hiring and retention practices that support EDI-seeking candidates can be developed and/or emphasized.

 Support staff often serve the PH program along with other academic units in the facility.
 Some functions, such as student advising, need more capacity and may benefit from having dedicated personnel within the PH program. We are currently hiring in two admin support positions, namely an academic advisor and an Indigenous student facilitator. These positions should provide some relief here, particularly as we reorganize across the admin team.

9. Faculty should continue their efforts in teaching public health skills and enhance their communication with students so that they are being taught practical skills in PH.

This was a direct question from self-study to externals, and clear suggestions were provided on both how to teach content and how to emphasise value of current content. The faculty seem committed to working this content into curriculum, and upcoming retreat might be good planning point. Commendable that program faculty have incorporated learning objectives from two professional practice associations – it is important to understand these structures and embed them to fully support relevant student outcomes and opportunities.

10. The number of students taking a practicum or being enrolled in coop should be increased. The PH curriculum committee should consider where they should place their efforts in enhancing experiential learning; it may be appropriate to focus on improving practicum opportunities. Given the desire of the B.H.Sc-PH and PD programs to build student skills in partnership, collaboration and advocacy and request for more firsthand experiences, ULeth should work more purposefully with the co-op office to ensure coop employers include those in public health.

Both internal and external review have identified co-op placements as an underrealised opportunity in this program (and in this faculty in general). We will generate specific meeting(s) with co-op program administrators to discuss ideas on opportunities from both ends. When this scope is a little more defined, some administrators will be invited to a FoHS faculty meeting to discuss the co-op program and health sciences specific opportunities.

11. ULeth has the capability for 'flex learning'. Flex learning should be embraced to increase the opportunity for course delivery to both B.H.Sc-PH and PD students. This type of flex learning format may also allow international students the ability to qualify for a post-graduate work permit. Furthermore, PD students expressed significant interest in more opportunities for online courses.

At the institutional level, ULeth is currently defining 'flex' learning types, terms (synchronous, asynchronous, blended, hybrid, hyflex), and technologies. Hopefully this full landscape will be clarified by Student Services and Teaching Centre by 2024. At that point, existing courses plus new and evolved course offerings developed through this review should be considered against these opportunities, with a distinct focus on resources for delivery, student access, pedagogical best practices, and desired learning outcomes.

12. Given ULeth's reputation in public health undergraduate education in Western Canada, their next natural progression should be the development of a Master of Public Health (MPH). A combination of undergraduate and graduate education in public health would position ULeth as one of the most recognized institutions in Canada.

Program response here is a thoughtful examination of this suggestion. The move to a dedicated graduate program (MPH) could require resourcing that is not readily available right now. Any move in this direction would also require a thorough environmental scan. Prior to any movement here, the faculty needs to develop a strategic plan, particularly (for this suggestion) a consistent and cohesive vision for graduate courses, graduate research, and graduate outcomes.

The B.H.Sc-PH and PD programs could function as feeder degrees into a course-based MPH program. 13. Competing interests in Indigenous As noted, there has been some discussion on these opportunities. PH should be students with the growing B.H.Sccommended for their inclusion of ABHL 1000 (Introduction to Aboriginal Health) as PH and struggling Aboriginal a major requirement in the undergraduate program. AH is currently in the process Health degree program as well as of reimagining the program, plus conducting their own QAR, all within a distinct complementary courses within reimagining of Indigenous education and navigation at ULeth in general. I thank the both degrees could be used by PH group for their collegial support and interaction with AH colleagues and look combining human resources into forward to thoughtful collaboration here after AH specific developments. the B.H.Sc-PH program that could house an Aboriginal Health stream. For example, the academic advisor for Aboriginal Health could assist the B.H.Sc-PH program, which needs more academic advising resources. 14. ULeth should invest in either Topic to be discussed at upcoming FoHS faculty meeting to identify faculty-wide EMBASE or Scopus library interest, with follow-up invites for expressions of interest from other relevant faculties and departments on campus (also preliminary identified at that meeting). databases to support the needs of Once the full potential user group has been identified, conversation to be had with students and faculty members affiliated with the B.H.Sc-PH and University Librarian and FoHS subject librarian. PD programs. These resources will also benefit students and faculty in the entire Faculty of Health Sciences. 15. Finally, we recommend the PH Plans are underway for this activity, possibly as soon as November 2023. Program faculty and staff hold a retreat in faculty are planning the event, and dean's office can commit \$2000 to support. 2023 to assess the state of this unit in response to this report, and their collective vision moving forward.

While the External Reviewers' Report contained fifteen (15) recommendations for improving the Bachelor of Health Sciences in Public Health program, the area, Dean Doan, and the Academic Quality Assurance Committee each felt that the recommendations were too narrow in focus and were better presented as broad goals to be met before the next review. The committee modified and consolidated most of the fifteen (15) recommendations into the following nine (9) recommendations:

- 1. The B.H.Sc. Public Health program will hold a retreat for all faculty and staff in 2024 to assess the state of this unit in response to this review, and their collective vision moving forward.
- 2. The B.H.Sc. Public Health program will evaluate its curriculum, and will consider:
 - a. Developing a robust public health biostatistics course in year two taught by an instructor within the PH program who has a background in public health biostatistics, or through coordination with other biostatistics expertise on campus.
 - b. Moving HLSC 3260 (Research in the Health Sciences) from third to second year of the B.H.Sc.- PH program to accelerate learning of the research process and complement material taught in a second-year biostatistics course.
 - c. Having a PH faculty member teach the program evaluation course.
 - d. A review of the qualitative methods content in the various courses to ensure there is

sufficient coverage of this content.

- e. Further enhancing efforts to teach practical public health skills in individual courses.
- 3. The B.H.Sc. Public Health program will consider its next hire be a full-time faculty member in environment and public health.
- 4. The Faculty of Health Sciences will collaborate with the Vice-Provost, Equity, Diversity and Inclusion to assess the pattern of attrition among women from the B.H.Sc. Public Health program and seek to address it from an equity perspective at the Faculty and University level.
- 5. The Faculty of Health Sciences will endeavour to improve student advising for Public Health.
- 6. The B.H.Sc. Public Health program will consider where they should place their efforts in enhancing experiential learning; it may be appropriate to focus on improving practicum opportunities. The Faculty of Health Sciences should work more purposefully with the co-op office to ensure co-op employers include those in public health.
- 7. The B.H.Sc. Public Health program will consider further use of flex learning, while still maintaining a commitment to the in-person programming mandate of the University of Lethbridge.
- 8. The Faculty of Health Sciences will reflect on the relationship between the B.H.Sc. Public Health program and the B.H.Sc. Aboriginal Health program.
- 9. The B.H.Sc. Public Health program will consult with the library about EMBASE or Scopus library databases to support the needs of their students and faculty members.

The Academic Quality Assurance Committee is satisfied that the Bachelor of Health Sciences in Public Health academic quality assurance review has followed the U of L's academic quality assurance process appropriately, and acknowledges the successful completion of the review.

Sincerely,

Dr. Alan Siaroff

alan Siaroff

Chair, Academic Quality Assurance Committee Professor, Department of Political Science

cc Michelle Helstein, PhD.
Provost & Vice-President (Academic)