FOR INFORMATION   **PUBLIC**   **OPEN SESSION**

TO:	Academic Affairs Committee
SPONSOR: **CONTACT INFO:**	Angela Lange, Acting Vice-Principal Academic and Dean 905-828-3719, vpdean.utm@utoronto.ca
PRESENTER: **CONTACT INFO:**	Andrew Petersen, Acting Vice-Dean, Teaching & Learning (905) 569-4768, vdteachlearn.utm@utoronto.ca
DATE:	November 5, 2018 for November 12, 2018
AGENDA ITEM:	6

ITEM IDENTIFICATION:

Reviews of Academic Programs and Units

JURISDICTIONAL INFORMATION:

Section 5.6 of our Terms of Reference states that the Academic Affairs Committee shall receive for information and discussion reviews of academic programs and/or units, consistent with the protocol outlined in the University of Toronto Quality Assurance Process.

GOVERNANCE PATH:

1. Agenda Committee of the Academic Board [For Information] (November 1, 2018)
2. **Academic Affairs Committee [For Information] (November 12, 2018)**
3. Academic Board [For Information] (November 22, 2018)
4. Executive Committee of the Governing Council [For Information] (December 4, 2018)
5. Governing Council [For Information] (December 13, 2018)

PREVIOUS ACTION TAKEN:

No previous action was taken on this proposal.

HIGHLIGHTS:

For the external review of the Department of Anthropology, the reviewers met with the Vice-Principal Academic & Dean; Vice-Dean, Academic Experience; Interim Chair of the Department of Anthropology, UTM; Graduate Chair of the Department of Anthropology; Forensic Science Program Director; Reviewers from the Forensic Science External Review; senior and junior tenure-stream faculty members; sessional instructors; undergraduate and graduate students; departmental administrative staff; and teaching lab technician. The departments' strengths, areas of concern and recommendations of the review are outlined in the attached summary reports and

in the administrative response documents.

For the external review of the Forensic Science Program, the reviewers met with Vice-Principal Academic & Dean; Vice-Dean, Teaching and Learning; Forensic Science Program Director; Interim Chair of the Department of Anthropology, UTM; Reviewers from the Anthropology External Review; teaching and tenure-stream faculty members; sessional instructors; adjunct faculty; undergraduate students; departmental administrative staff; and teaching lab technicians.

For the external review of the Institute of Communication, Culture, Information and Technology, the reviwers met with the Vice-Principal Academic & Dean; the Vice-Dean Teaching & Learning; the Director of the Institute of Communication, Culture, Information and Technology; the Dean, Faculty of Information; the Dean, Faculty of Animation, Arts & Design at Sheridan College; the Associate Dean, Faculty of Animation, Arts & Design at Sheridan College; junior and senior research stream faculty members; teaching stream faculty members; sessional instructors; undergraduate and graduate students; and departmental administrative staff (including the instructional technologist).

FINANCIAL IMPLICATIONS:

There are no net implications for the campus' operating budget.

RECOMMENDATION:

This item is presented for information.

DOCUMENTATION PROVIDED:

Presentation on External Reviews;
Review Summary and Administrative Response: Institute of Communication, Culture, Information and Technology (2017)
Review Summary and Administrative Response: Department of Anthropology (2018);
Review Summary and Administrative Response: Department of Forensic Science (2018);

Annual Report: External Reviews of Departments and Programs 2017-18

Andrew Petersen, Acting Vice-Dean, Teaching & Learning
Academic Affairs Committee

November 12, 2018

External Review Process

- An internal self-study, using a standardized template, is prepared by the program director or departmental chair in context of widespread consultation with faculty, staff, cognate units and students.

- The self-study addresses the programs, research, teaching, governance and plans for the future to be discussed.

- External reviewers visit the campus for two days and prepare their report for the Dean. Their report provides detailed evaluation of programs and curriculum.

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External Reviewers

- Chosen on the basis of administrative experience and wide-respect within their fields. We typically choose one Canadian and one U.S. reviewer.

- Assist in determining the quality of the program or department, make recommendations for improvement, and raise any significant areas of concern.

Response to External Reviewer Report

- Department chair or program director checks external reviewer report for any inaccuracies.

- The external reviewer report is forwarded to the Provost's office. The Provost provides a summary and writes a request for decanal response. Dean consults with program director/chair in preparing response.

- Review summary and decanal response shared with:
    – Academic Affairs
    – Campus Councils
    – Committee on Academic Policy & Programs (AP&P)
    – Academic Board

2017-18 Reviews

- Institute of Communication, Culture, Information and Technology
- Department of Anthropology
- Forensic Science Programs

Institute for Communication, Culture, Information and Technology

- April 6-7, 2017
- Review Team from
  - University of South California, Annenberg
  - University of Alberta
- Director: Anthony Wensley

Major Findings - Positive Elements

Reputation

- One of the most innovative and most recognized units in the country

Curriculum

- "Admirably"-built program with a wide range of areas in its majors; Sheridan partnership for CCIT and DEM teaches students "hands-on" information technology skills

Personnel

- Faculty are collegial and productive; deeply invested in their programs and students

Recommendations of the Reviewers and Opportunities for Enhancement

Curriculum

- Map each program's competencies and ensure courses, learning activities, and faculty resources are in place to support them in an integrated way

Partnerships

- Implement a more integrated approach to Sheridan partnership to avoid silos between technical skills and theoretical learning
- Rethink collaboration with the Faculty of Information with respect to combined degree programs

Research

- Develop a plan to support UTM-based research and enhance ICCIT's research profile, including possible graduate programs

Response to Review

Curriculum

- Identify Program Co-ordinators and establish Curriculum Planning committees to create curriculum maps for undergraduate programs
- Increased staff support from the Experiential Education Unit to assist with experiential learning opportunities and internship courses

Partnerships

- Develop a new Memorandum of Agreement between UTM and Sheridan

Research

- Develop a CCIT concentration in existing Faculty of Information PhD and an MA in Digital Humanities with other units
- Designate a Research Co-ordinator and develop a research strategy to enhance and support the research culture of ICCIT

Department of Anthropology

- February 22 - 23, 2018
- Review Team from
  - University of British Columbia
  - University of Arizona
- Interim Chair: Gary Crawford

Major Findings - Positive Elements

Personnel

- "World-class" faculty with a strong culture of collegiality
- Lively undergraduate student association

Curriculum

- "Remarkably comprehensive" courses that expose students to a breadth of approaches within its four disciplinary fields
- Detailed curriculum maps and regular reviews of syllabi ensure that courses are oriented towards shared program goals

Partnerships

- Range of student-centered active and experiential learning opportunities, particularly within BSc programs
- Commitment to improving Indigenous engagement

Recommendations of the Reviewers and Opportunities for Enhancement

Personnel

- Expand expertise in Anthropology and Health through a hire in Indigenous health and medicine

- Strengthen communications staff to enhance student recruitment, community engagement, and alumni outreach

Curriculum

- Introduce new courses to enhance foundational and research skills Develop a strategy to integrate Indigenous perspectives into all courses

Partnerships

- Increase collaboration with cognate units, including Historical Studies

- Fundraise for experiential learning and student research opportunities

Response to Review

Personnel

- Develop presence in the area of Environmental Anthropology
- Assess complement needs with an emphasis on Indigenous scholarship, Anthropology of Health, and Cultural Resource Management
- Look for opportunities to alleviate strain on existing staff

Curriculum

- Address curriculum needs by introducing new courses (i.e., 200-level Statistics, 400-level Anthropology of Health, etc.)
- Collaborate with RGASC to support students in writing-intensive courses

Partnerships

- Work with Mississaugas of the New Credit First Nation to develop course on "Anthropology and Indigenous Peoples of Turtle Island" and co-host (with Department of Geography) symposium on Indigenous Education

Forensic Science Program

- February 21-22, 2018
- Review Team from
  - University of Technology, Australia
  - Université de Lausanne, Switzerland
- Director: Tracy Rogers

Major Findings - Positive Elements

Personnel

- Highly competent and committed faculty and staff; high quality consultants; experienced professionals and technician

Curriculum

- Richness in program and course options available to students
- Innovative program delivery through experiential learning in field schools, laboratories, and the crime scene house

Partnerships

- Outstanding outreach and communication to youth and high schools in the local community contributes to high program recruitment
- Strong connection with professional stakeholders provides many opportunities for learning beyond the classroom and applied research

Recommendations of the Reviewers and Opportunities for Enhancement

Structure

- Urgent creation of an adequately resourced and formalized structure, such as an EDU-A, with an accompanying vision and strategy for the program that addresses organization and resource challenges

Personnel

- Expand much needed resources/faculty while augmenting technical and administrative support to manage program growth

Curriculum

- Build a global forensic science identity to address student issues such as scheduling, lab access, and overlap in curriculum between programs
- Develop a strong, international forensic science vision through enhanced faculty and student research

Response to Review

Structure

- Establish the program as an EDU-B with the intention of building resources (faculty, space, etc.) towards an EDU-A in the long-term

Personnel

- Request a research-stream Forensic Psychology position for hiring in 2019-20 and prioritize future hiring in three areas: Forensic Psychology, Forensic Microbiology, and Forensic Epistemology/Ontology
- Increase Lab Technician to 100% FTE; hire a Program Outreach Officer

Curriculum

- Continue curriculum mapping process to review and redefine degree learning expectations and program learning outcomes
- Implement significant curriculum revisions, including new required and optional courses, to reduce scheduling issues and overlapping content

UTQAP Review Summary

Programs(s) Reviewed:	Communication, Culture, Information, and Technology, B.A., Hon., (Major) Digital Enterprise Management, B.A., Hon., (Specialist) Interactive Digital Media, B.A., Hon., (Specialist) Professional Writing and Communication, B.A., Hon., (Major, Minor) Combined Degree Program: Communication, Culture, Information, and Technology, B.A. (Major)/Master of Information (M.I.) Combined Degree Program: Digital Enterprise Management, B.A., Hon., (Specialist)/Master of Information (M.I.) Combined Degree Program: Interactive Digital Media, B.A., Hon., (Specialist)/Master of Information (M.I.)
Division/Unit Reviewed OR Division/Unit Offering Program(s):	Institute of Communication, Culture, Information and Technology, University of Toronto Mississauga
Commissioning Officer:	Vice-Principal Academic & Dean, UTM
Reviewers (Name, Affiliation):	1. Professor Sarah Banet-Weiser, Director, School of Communication at University of Southern California, Annenberg 2. Professor Geoffrey Rockwell, Philosophy and Humanities Computing, University of Alberta
Date of Review Visit:	April 6-7, 2017

Previous Review
Institute of Communication and Culture

Date: October 16-17, 2008

Summary of Findings and Recommendations:

Undergraduate Programs

Biomedical Communications: BA: Spec, Maj, Min; Art and Art History, BA: Spec, Maj; Digital Enterprise Management (DEM) BA: Spec; Visual Culture and Communication BA: Spec (with CCIT); Art and Art History, BA: Spec, Maj (joint program with Sheridan College); Art History BA: Spec (joint program with Sheridan College); Communication, Culture and Information Technology, BA: Maj; Human Communication and Technology BSc: Spec; Health Sciences Communication BSc: Spec, Maj; Professional Writing and Communication BA: Maj, Min

The reviewers observed the following **strengths**:
- Student satisfaction is "generally high"
- Students have a good relationship with faculty members and receive quality advising

The reviewers identified the following **areas of concern**:
- Limited sense of academic community among students related to their specific program
- Concerns regarding course offerings
- Unfulfilled interdisciplinary mission of the programs
- Concerns over the balance between theory and practice
- "Technical problems of compatibility" between UTM and Sheridan alongside curricular and administrative barriers

The reviewers made the following **recommendations**:
- Helpful to establish "tracks" within the degree programs so that students could pursue program depth
- Professional Writing and Communication should be enhanced; should be a "coordinated approach to writing instruction across units"
- Review jointly offered programs with Sheridan with the aim of introducing formal lines of communication, co-ordination and governance

Faculty/Research

The reviewers observed the following **strengths**:
- "Quite impressive record" of publications by full-time faculty members

The reviewers identified the following **areas of concern**:
- Too much reliance on a few individuals to provide administration, teaching and sense of purpose
- Lack of full time faculty in CCIT
- Concerns about quality of instruction in advanced courses
- Low overall total research funding

The reviewers made the following **recommendations:**
- The reviewers presented detailed recommendations regarding hiring of teaching staff for the programs

Administration
The reviewers observed the following **strengths**:
- Generally high faculty, staff, and student satisfaction with facilities and equipment
- CCIT building is well-equipped and able to meet the needs of technology-based teaching
- High level of morale and commitment among the administrative staff
- UTM's relationship with Sheridan conforms to the overall mission of the University of Toronto and its tri-campus plan

The reviewers identified the following **areas of concern**:
- Reviewers identified several problems with the inter-institutional relationship

Current Review: Documentation and Consultation

Documentation Provided to Reviewers
The reviewers were provided with:
- Terms of Reference
- Institute of Communication, Culture, Information and Technology Self-Study, 2017
- Previous Review Report and Administrative Responses
- UTM Degree Level Expectations, 2016
- UofT Facts & Figures, 2015
- UTM Divisional Academic Plan, 2012
- UTM Vision Statement, 2017
- UTM Academic Calendar, 2016-2017
- UTM Viewbook, 2017-2018
- UofT Domestic Viewbook, 2017-2018
- Tri-Campus Framework

Consultation Process

The reviewers met with:
- Vice-Principal Academic & Dean; and Vice-Dean Teaching & Learning
- Director of the Institute of Communication, Culture, Information and Technology
- Representatives from cognate departments/Faculties: Dean, Faculty of Information; Dean, Faculty of Animation, Arts & Design at Sheridan College; Associate Dean, Faculty of Animation, Arts & Design at Sheridan College
- Faculty members: junior and senior research stream faculty members; teaching stream faculty members; and sessional instructors
- Undergraduate and graduate student representatives
- Administrative staff, and the instructional technologist

Current Review: Findings and Recommendations

List of Acronyms:
- CCIT: Communication, Culture, Information, and Technology HBA (Major)
- DEM: Digital Enterprise Management HBA (Specialist)
- IDM: Interactive Digital Media HBA (Specialist)
- PWC: Professional Writing and Communication HBA (Major, Minor)
- CDP: Combined Degree Program

1. Undergraduate Program

The reviewers observed the following **strengths:**
- Overall quality
    - Vital and strong
    - Wide range of areas within the Institute majors: media, digital culture, strategic communication, professional writing
- Objectives
    - CCIT and DEM:
        - appropriate objectives
        - interdisciplinary approach is attractive to prospective students
        - draws on the best traditions of the liberal arts and incorporates digital technologies
    - PWC:
        - appropriate objectives
        - focus on professional writing nicely connects program to CCIT and DEM; the focus on professional writing distinguishes it "nicely" from the many creative writing programs available
- Admissions requirements
    - CCIT and DEM: reasonable
    - PWC: appropriate

- - CDPs: appropriate
- Curriculum and program delivery
  Overall:
  - "Admirably" built program that is both theoretical and experiential in nature; teaches both critical thinking and creative technological skills
  - Key programs have a positive profile on campus among the student body
  - Internationalized and diversified curriculum
  - Emphasis on civic engagement
  - The unit serves as an "incubator" for interdisciplinary inquiry and forward-thinking approaches that influence other departments
  - CCIT and DEM:
    - innovative
    - combine courses that emphasize technology with courses that emphasize the communicative, cultural, and critical
    - Sheridan partnership: students learn "hands-on" information technology skills; students felt some courses were excellent
  - PWC:
    - strong writing program
    - reports of high quality learning experience
    - students felt the program provided them useful skills to complement the more theoretical skills taught in other courses
    - class sizes allow for effective teaching of writing and communication
- Quality indicators
  - CCIT, DEM, PWC and CDPs: high quality
- Assessment of learning
  - CCIT, DEM, PWC and CDPs: forms of assessment are varied and appropriate
- Enrolment
  - Annual increase in majors
- Faculty resources
  - Provide "stellar" interdisciplinary, experiential education
- Students
  - Students are enthusiastic about their experience in the Institute

The reviewers identified the following **areas of concern**:
- Overall quality
  - Current configuration is overtaxed and over stressed
- Objectives
  - CDPs: objectives are not clear; current design does not distinguish itself sufficiently to be worth the administration
- Curriculum and program delivery
  - CCIT and DEM:

- technical skills and critical competencies get "sequestered and don't reinforce each other"
- Sheridan college partnership: faculty and students had mixed feelings; students felt some Sheridan courses were excellent while other were weaker than UTM offerings; while impressed with the Sheridan facilities, students felt it was "awkward" to shift campuses
- risk of siloing theoretical and technical components, with technical skills taught at Sheridan and theory taught at UTM, and "associate danger in how each component is valued"
- Enrolment
  - CDPs: few students enrolled
- Faculty resources
  - PWC: current staffing does not provide program management support, grant expertise, or stability

The reviewers made the following **recommendations**:
- Objectives
  - CDPs: redesign with a clear objective in mind or close
- Admissions requirements
  - CCIT and DEM: consider creating direct entry programs if numbers grow
- Curriculum and program delivery
  - The unit should develop its own vision of experiential learning
  - CCIT and DEM:
    - identify and map the technical, cultural, communicative, managerial and other competencies they want students to acquire in the different programs
    - weave the appropriate integration of competencies through the programs at both UTM and Sheridan campuses
    - organize a capstone seminar for all fourth year students
  - All programs, but especially PWC and DEM: Revise curriculum to allow for a more even distribution of core teaching responsibilities
  - Sheridan College Partnership: Re-think a more integrated relationship to avoid siloes between technical skills and theoretical learning
- Student funding
  - Provide support for undergraduate summer research fellowships and graduate research assistantships as part of developing a UTM-based research culture
- Program Development
  - CDPs: consider creating Combined BA and MI that can be completed in 5 years
  - Develop a CCIT Concentration in the iSchool PhD to allow ICCIT to better develop its own "brand" in terms of research, and to support ICCIT

faculty decision-making over admissions and curriculum development, as well as enhanced research collaborations with doctoral students

- Develop an MA in Digital Humanities with other units at UTM to provide a local graduate program that could feed a PhD, and build the interdisciplinary connections that distinguish the Institute

2. Faculty/Research

The reviewers observed the following **strengths**:
- Research
  - Reviewers "envy the energy and richness" of CCIT's research
- Faculty
  - Collegial and productive; deeply invested in programs and students
  - Highly regarded nationally
  - Strengths in humanistic, social scientific, and science and technology traditions
  - Efforts to diversify the faculty
  - New hires cover an array of sub-disciplines
  - Junior faculty members represent "bright future"; "energetic, productive, committed" to research and students, enjoy teaching
  - Junior faculty feel well respected and relatively well-mentored by senior colleagues

The reviewers identified the following **areas of concern**:
- Overall quality
  - "Overextended" faculty
- Research
  - Currently dependent on the iSchool for graduate students
  - Limited participation in funded research, attributed to high proportion of junior faculty
- Faculty
  - Few senior faculty with program management experience or grant experience
  - Few tenure-stream faculty with expertise related to DEM or PWC

The reviewers made the following **recommendations**:
- Research
  - Develop a research plan that is supported by the administration, and that establishes a research culture based at UTM
  - Provide support to enhance research culture (e.g., a "Grant Assist Program" to provide extra support for interested faculty to get research grants; support for visiting speakers)
  - Create a PhD program to increase reputation, national prominence, and ability to recruit/retain stellar faculty, housed in the iSchool but falling

more under the control of the Institute, to allow Institute faculty some autonomy in recruiting and advising PhD students

- Faculty
    - CCIT and DEM: prioritize future hiring based on the competencies identified as important, including hires that can support technical competencies
    - PWC: hire a teaching-stream faculty to provide ongoing leadership, as well as additional teaching-stream faculty over time
    - DEM: hire tenure-track faculty to provide a core of researchers
    - Clearly define core areas of concentration, to focus new hires and program development

3. Administration

The reviewers observed the following **strengths**:
- Relationships
    - Director has provided strong leadership and developed an "extremely collegial atmosphere" in the Institute
    - High faculty morale
    - Innovative relationship with Sheridan College
- Organizational and financial structure
    - Students impressed by Sheridan facilities
- Reputation / Profile
    - Director has raised the reputation of the Institute to that of being one of the most innovative and most recognized units in the country

The reviewers identified the following **areas of concern**:
- Relationships
    - The need to renew relationship with Sheridan to ensure that it thrives and provides appropriate support to the programs
    - Regarding the relationship between ICCIT and the iSchool on St. George campus, the reviewers noted:
        - ICCIT faculty feel that not having an autonomous PhD program is a missing factor in their continued growth as an internationally known research institute
        - ICCIT faculty have little involvement in the decision-making (e.g., admissions, curriculum)
        - ICCIT is more of a peripheral component of the iSchool's PhD program, which doesn't allow for the program to be associated strongly with ICCIT, leading to recruitment difficulties, problems with faculty conducting research with graduate students, etc.
- Organizational and financial structure
    - "Woefully understaffed" advising

          o   Lack of access to computer labs for instruction

The reviewers made the following **recommendations**:
- Relationships
  - Reconsider the terms of relationships with each of Sheridan College and the iSchool at St. George campus and renew them so that it serves the students
  - Work with Sheridan to ensure support for integrated competencies
  - Provide support for the unit to lead a regional association of those universities and colleges developing similar programs
- Organizational and financial structure
  - Provide more administrative staff support for experiential learning and advising
  - Provide space to support a UTM-based research community
  - Provide better access to computer labs
  - Consider developing a laptop program so that all students have access on which to learn IT

March 19, 2018

Professor Sioban Nelson
Vice-Provost, Academic Programs
Simcoe Hall
University of Toronto

Dear Sioban,

I am writing to provide an administrative response to the External Review of UTM's Institute of Communication, Culture, Information and Technology, which was held in April of 2017. The following undergraduate programs were reviewed: Communication, Culture, Information, and Technology, B.A., Hon., (Major); Digital Enterprise Management, B.A., Hon., (Specialist); Interactive Digital Media, B.A., Hon., (Specialist); Professional Writing and Communication, B.A., Hon., (Major, Minor). Three combined degree programs were also reviewed: Combined Degree Program in Communication, Culture, Information, and Technology, B.A. (Major)/Master of Information (M.I.); Combined Degree Program in Digital Enterprise Management, B.A., Hon., (Specialist)/Master of Information (M.I.); and Combined Degree Program in Interactive Digital Media, B.A., Hon., (Specialist)/Master of Information (M.I.).

I am pleased with the highly positive review, which emphasizes the innovative quality of the programs, including the combination of theoretical and experiential instruction as well as the collaborative relationship with Sheridan College. The reviewers also commented favourably on the energy and richness of the research conducted by the highly-regarded faculty members in the Institute, and commended the Director on encouraging collegiality and supporting high faculty morale.

Given this strong base, I expect that the Institute will fulfill the promise seen by the reviewers, especially with their plans to enhance and expand their outstanding programs. An implementation plan with timelines can be found at the end of this letter.

Curriculum and Program Delivery

The reviewers underscored the importance of mapping each program's competencies, and ensuring that courses (including possible capstone courses), learning activities (including experiential learning), and faculty resources are in place to support these in an integrated way; they emphasized that the needs identified through the mapping process could inform decisions about new faculty hires at UTM and at Sheridan.

In 2016, ICCIT began the process of creating curriculum maps for its programs, engaging in a detailed review of learning outcomes, evaluation methods, and competence requirements for its three programs at both the programmatic and the course level. Summaries of this data were included in the Appendix of the Self Study, but the source documents were far too extensive to include.

Within the next year, the Director of ICCIT will oversee the completion of this study. Simultaneously, the Director will work with the individual program directors to link this study to the overall objectives of the programs. The results of these studies will be integrated with ICCIT's complement plan and budgeting process. The Director will also consult with other relevant units at the University of Toronto, as well as external stakeholders representing key employers, other academic institutions, and government, to ensure that students are provided with appropriate knowledge and competences.

The reviewers highlighted the partnership with Sheridan College and urged a more integrated approach to the partnership to avoid siloes between technical skills and theoretical learning.

The ICCIT Director recently met with the new Associate Dean for the Department of Film, Television and Journalism in the Faculty of Animation, Art and Design at Sheridan, to discuss a variety of co-ordination and planning issues with respect to ICCIT/Sheridan programs.

In the short term the Director will bring together Sheridan and ICCIT faculty to discuss the overall objectives of the Digital Enterprise Management (DEM) and Communication, Culture, Information, and Technology (CCIT) programs. The group will identify challenges with respect to the integration of the programs, identify future areas for development and enhancement, review the available resources and identify emerging resource needs. In the medium term, the Director, along with the Sheridan Associate Dean, will constitute a joint ICCIT/CCIT Co-ordination Committee that will meet on a regular basis to oversee the running and development of the DEM and CCIT programs.

Additionally, in the short term UTM and Sheridan will be developing a new Memorandum of Agreement that will formalize the nature of the program outcomes and program support. Particular emphasis will be placed on ensuring the consistency of student experience across the two institutions and enhancing the co-operation between the Institute and the relevant units at Sheridan.

The reviewers encouraged a re-thinking of the collaboration with the Faculty of Information, with respect to:
- *the combined degree programs, starting with identifying the objectives these offerings are intended to achieve; and*
- *exploring graduate program ideas.*

ICCIT and the Faculty of Information, with the support of the Provost's Office, developed a joint undergraduate program and a combined HBA/MI program (three versions):
- Interactive Digital Media, B.A., Hon., (Specialist);
- Combined Degree Program in Communication, Culture, Information, and Technology, B.A. (Major)/Master of Information (M.I.);
- Combined Degree Program in Digital Enterprise Management, B.A., Hon., (Specialist)/ Master of Information (M.I.); and
- Combined Degree Program in Interactive Digital Media, B.A., Hon., (Specialist)/Master of Information (M.I.)

Unfortunately, in spite of very considerable effort, these programs have failed to attract a sufficient number of students. As a result, ICCIT plans to work with the Dean's Office to submit a proposal to formally close all four of these programs, which are currently in suspension and not enrolling students. This will allow ICCIT to focus on its core undergraduate programs and utilize resources to develop new undergraduate courses and a major program more in line with the overall educational objectives of ICCIT, such as the proposed new program in Social Coding under development.

ICCIT intends to maintain its relationship with the Faculty of Information and is actively seeking to provide a concentration within the existing Faculty of Information PhD program. Presently, all but one of the ICCIT faculty have their graduate home in the Faculty of Information. In the past, this has resulted in ICCIT playing a significant part in supervising PhD and Master's students, teaching graduate courses, and serving on Faculty of Information committees. At the present time, the Faculty of Information graduate faculty are reviewing a proposal for a new major concentration within the PhD tentatively titled "Media, Technology and Culture" that would heavily engage the faculty based at ICCIT. Discussions are also underway about involving ICCIT-based faculty in the Faculty of Information graduate program governance structures.

Faculty

The reviewers made several suggestions to support more engagement in research by ICCIT faculty and students, and encouraged ICCIT to develop a plan that would support UTM-based research activities and enhance ICCIT's research profile.

In the short term, the Director will work with existing ICCIT faculty to develop an ICCIT research strategy that speaks to the new UTM Academic Plan. This research strategy will provide detailed input into complement planning, program planning and the budgetary process. The Institute intends to explore possible ways of funding post-doctoral positions and visiting scholar positions to enhance both the research and teaching missions of the Institute.

In addition, the Director will designate one faculty member as a Research Co-ordinator in the near future. The Director plans to investigate providing the Research Co-ordinator with a stipend or possibly a 0.5 FTE administrative course release, as deemed appropriate for the workload level of the position (other UTM departments have similar positions at various levels). In the medium term, the Director will support the Research Co-ordinator in developing research collaborations, seminars and workshops, as well as supporting the identification of grant opportunities, the development of grant proposals, and the monitoring and management of projects. This position would also need to be involved with discussions about research space, software and hardware for faculty, graduate student and undergraduate student research.

The Institute is currently recruiting faculty in data analytics and big data which will clearly require more extensive software and hardware resources for faculty and graduate student research. ICCIT will work with the UTM Office of the Vice-Principal Research and the UTM IT Research group on their data initiatives, as well as on advising faculty on applying for potential funding for such projects, individually or as a group. The increasing emphasis on research utilizing emerging technologies drives a need for both more technology such as powerful

computing hardware and software, and augmented and virtual hardware and software. Such computing groups will also need additional laboratory space and technical support.

Program Resources

Given the growth of the programs and the focus on experiential learning, the reviewers suggested providing more advising and internship staff support, as well as ensuring sufficient faculty hiring to support program management and stability across the full suite of ICCIT programs, including Professional Writing and Communication, and Digital Enterprise Management.

In the near future, the Director will identify faculty who will act as Program Co-ordinators for the three existing undergraduate programs within ICCIT: Communication, Culture, Information, and Technology (CCIT) major and minor; Digital Enterprise Management (DEM) major; and Professional Writing and Communication (PWC) major and minor. In addition, Curriculum Planning committees will be established to review, revise and manage each program. These committees will comprise both faculty and staff.

In recognition of the significant teaching staff difficulties in the Institute, the Dean has already given the Institute permission to hire two faculty members to support primarily the CCIT program (one tenure-stream and one teaching-stream), one tenure-stream faculty member to support primarily the PWC program, and one tenure-stream faculty member jointly with Management (51% ICCIT) to support primarily the DEM program. All four of these positions are currently being searched in 2017-18. The Dean has also provided for the immediate creation of three 75% contract limited faculty positions for the PWC program for January to December 2018, as a short-term measure to address the serious needs within that program until more permanent hires can be made. The Institute will continue to work with the Dean's Office on faculty needs to support their programs and courses, as these evolve with the planned Program and Curriculum evaluations discussed above. In building faculty, ICCIT has suggested that a combination of teaching-stream and tenure-stream faculty be utilized, and that a balance in terms of rank needs to be considered between the three different programs.

ICCIT has also begun to reflect on the appropriate mixture of responsibilities and appointment categories to provide staff support for their programs, courses, and unit operation. Student counseling and program delivery support has been highlighted, although these problems will be reduced in some aspects by the improved involvement of faculty in curriculum planning and delivery, as noted above. With the expected needs for research and teaching software and hardware, ICCIT will be examining their need for enhanced technical and laboratory support staff. Finally, ICCIT is currently in the process of piloting the UTM approach to paid internship programs as well as wider experiential learning initiatives, and will be receiving increased staff support from the Experiential Education office for the Institute as part of the UTM Academic Plan commitment and the provincial program for increased programs associated with work-integrated learning.

Reviewers also suggested ways to ensure sufficient access to computer labs for instruction, given the nature of several ICCIT programs.

The need for increased access to computer laboratories with the ability to deliver the types of software needed for ICCIT's programs has already been noted at UTM. In addition to staff and equipment resources, as noted above, such laboratories will require (at least in part) increased space resources. Meetings with be scheduled with representatives from UTM Facilities Management and Planning, ICCIT, and the Dean's Office, to assess these needs and plan for the future, especially with any changes resulting from changes in the programs to be delivered as a result of the planned program assessments and curriculum mapping, as well as creation of new programs.

Implementation Plan - Institute of Communication, Culture, Information and Technology, UTM

The Institute and the UTM Office of the Dean, in consultation, will undertake the following approaches to enact positive changes:

Immediate Term (6 months)

Curriculum and Program Delivery
- Curriculum mapping of all three programs continued from 2016, including review of learning outcomes, evaluation methods and competence objectives; project underway, will take six months to a year to complete, then requires continual review and updating; *Institute with assistance from UTM Dean's Office if desired (Associate Dean Undergraduate)*
- Alteration of course or program components through Curriculum revision process, as appropriate, as a result of curriculum study and assessment of program needs; development of new program in Social Coding planned; *Institute with assistance of Dean's Office (Program and Curriculum Officer)*
- ICCIT Director to consult with internal and external stakeholders to ensure that students are provided with appropriate knowledge and competences; *Institute, with assistance from UTM Dean's Office if desired*
- Meeting of Sheridan and ICCIT faculty to discuss the overall objectives of the DEM and CCIT programs, identify challenges with the integration of the programs, identify future areas for development and enhancement, review the available resources and identify emerging resource needs; *Institute and Sheridan College counterparts*
- Development of new Memorandum of Agreement between UTM and Sheridan for ICCIT programs; *UTM Dean's Office and appropriate Sheridan Deans, in consultation with the Institute and Sheridan counterpart, U of T Provost's Office, and other stakeholders*
- Assessment of potential for ICCIT-focused concentration within Faculty of Information PhD program; *Institute and Faculty of Information, with assistance of UTM Dean's Office (Associate Dean Graduate), U of T Provost's Office, and School of Graduate Studies*

Faculty
- Development of ICCIT research strategy for existing faculty, complement and program planning, and investigation of possible funding for post-doctoral or visiting scholar positions; *Institute, with assistance of UTM Vice-Principal Research Office and UTM Dean's Office as desired*

- Creation of ICCIT Research Co-ordinator (faculty) administrative position; *Institute, with assistance of and funding from UTM Dean's Office*

Program Resources
- Search for a total of four new faculty members (one joint with Management); short-term hire of three 75% contract limited faculty positions for the PWC program; *Department with funding from the Dean's Office*
- Creation of Program Co-ordinators (faculty members) for the three existing undergraduate programs within ICCIT: CCIT (major and minor), DEM (major), and PWC (major and minor); *Institute with funding support from UTM Dean's Office*
- Creation of Curriculum Planning committees comprised of both faculty and staff to review, revise and manage all three undergraduate programs; *Institute*
- Provision of increased staff support from the Experiential Education office for the experiential learning/work-integrated learning programs in ICCIT; *Institute with assistance of Dean's Office (Experiential Education Unit)*
- Assessment of additional staff needs; *Institute with assistance of Dean's Office and UTM HR*

Medium Term (1-2 years)

Curriculum and Program Delivery
- Continue new work on and revisions to Curriculum Maps
- Alteration of course or program components through Curriculum revision process, as appropriate, as a result of curriculum study and assessment of program needs; creation and implementation of new program in Social Coding planned; *Institute with assistance of Dean's Office (Program and Curriculum Officer)*
- Termination of suspended undergraduate degree programs; *Institute with assistance of Dean's Office (Program and Curriculum Officer)*
- Creation of a joint ICCIT/CCIT Co-ordination Committee, to meet on a regular basis to oversee the running and development of the DEM and CCIT programs; *Institute and Sheridan College counterparts*
- Implementation of new Memorandum of Agreement between UTM and Sheridan for ICCIT programs; *UTM Dean's Office and Sheridan Deans, in consultation with the Institute and Sheridan counterpart, U of T Provost's Office, and other stakeholders*
- Possible development of ICCIT-focused concentration within Faculty of Information PhD program; *Institute with assistance of UTM Dean's Office (Associate Dean Graduate, Program and Curriculum Officer), U of T Provost's Office, and School of Graduate Studies*

Faculty
- Continued development of ICCIT research strategy, including sources of funding for new faculty research relating to data analytics and big data; *Institute, with assistance of UTM Vice-Principal Research Office, UTM IT Research Group, & UTM Dean's Office as desired*
- Further development of ICCIT Research Co-ordinator (faculty) administrative position, to include research collaborations, workshops, identification of grant opportunities and development of proposals, management of projects and assessment of resource needs; *Institute, with assistance of UTM Vice-Principal Research Office and UTM Dean's Office as desired*

Program Resources
- Research for some of the four new faculty members (some searches have not been successful, due to alternate offers); continued assessment of faculty complement needs, especially positions for the PWC and DEM programs; *Department with funding from the Dean's Office*
- Continued operation of Program Co-ordinators and Curriculum Planning committees to review, revise and manage the undergraduate programs; *Institute*
- Implementation of assessment of staff needs; *Institute with assistance of Dean's Office and UTM HR*

Long Term (3-5 years)

Curriculum and Program Delivery
- Continue alteration of course or program components through Curriculum revision process, as appropriate, as a result of curriculum study and assessment of program needs; *Institute with assistance of Dean's Office (Program and Curriculum Officer)*
- Continued assessment and communication between UTM and Sheridan for ICCIT programs; *UTM Dean's Office and Sheridan Deans, in consultation with Institute and Sheridan counterpart, other stakeholders*
- Possible implementation of ICCIT-focused concentration within Faculty of Information PhD program; *Institute with assistance of UTM Dean's Office (Associate Dean Graduate, Program and Curriculum Officer)*

Faculty
- Continued development of ICCIT research strategy, including sources of funding for new faculty research relating to data analytics and big data; *Institute, with assistance of UTM Vice-Principal Research Office, UTM IT Research Group, & UTM Dean's Office as desired*
- Further development of programs under ICCIT Research Co-ordinator (faculty); *Institute, with assistance of UTM Vice-Principal Research Office*

Program Resources
- Annual assessment of faculty complement needs; *Institute with funding from Dean's Office*
- Continued operation of Program Co-ordinators and Curriculum Planning committees to review, revise and manage the undergraduate programs; *Institute*

Please let me know if you have any questions about this response.

Sincerely,

Amrita Daniere
Vice-Principal, Academic & Dean

Heather M.-L. Miller
Vice-Dean, Teaching & Learning

UTQAP Review Summary

Programs Reviewed:	Anthropology, BA (Hons): Specialist, Major, and Minor Anthropology, BSc (Hons): Specialist and Major
Division/Unit Reviewed:	Department of Anthropology, UTM
Commissioning Officer:	Dean and Vice Principal Academic, UTM
Reviewers:	1. Professor John Barker, Department of Anthropology, University of British Columbia 2. Professor Barbara J. Mills, School of Anthropology, University of Arizona
Date of Review Visit:	February 22 – 23, 2018

Previous Review

Date: November 3 – 4, 2009

Summary of Findings and Recommendations

1.   Undergraduate Programs
The reviewers observed the following strengths:
- Students have "high praise for the faculty and for the courses they teach."

The reviewers identified the following areas of concern:
- Issues related to availability of courses, the complexity of the program design and the nature of requirements, and a need for greater links between subfields

The reviewers made the following recommendations:
- Give thorough and systematic attention to the curriculum and its rationale

2.   Graduate Programs (n/a)

Faculty/Research
The reviewers observed the following strengths:
- Active research is impressive given the department's growth over the past five years

The reviewers made the following recommendations:
- Develop a "research community", where senior faculty can mentor junior faculty and an environment is created to support and foster research activity

Administration
The reviewers observed the following strengths:
- Collegial environment

The reviewers identified the following areas of concern:
- Physical space is a challenge

The reviewers made the following recommendations:
- Improve the relationship between UTM Anthropology and the graduate Department of Anthropology
- Reconsider the staffing arrangement in the Department
- Rethink governance structure to increase participation in governance and decision making

Last OCGS review(s) date(s):   n/a

Current Review: Documentation and Consultation

Documentation Provided to Reviewers

Terms of Reference; Department of Anthropology Self-Study, 2018; Previous Review Report and Administrative Responses; UTM Degree Level Expectations, 2016; U of T Facts & Figures, 2016; UTM Academic Plan, 2017; UTM Vision Statement, 2017; UTM Academic Calendar, 2017-2018; UTM Viewbook, 2017-2018; U of T Domestic Viewbook, 2017-2018; Tri-Campus Framework.

Consultation Process

The reviewers met with the Vice-Principal Academic & Dean; Vice-Dean, Academic Experience; Interim Chair of the Department of Anthropology, UTM; Graduate Chair of the Department of Anthropology; Forensic Science Program Director; Reviewers from Forensic Science External review; senior and junior tenure-stream faculty members; sessional instructors; undergraduate and graduate students; departmental administrative staff; teaching lab technician.

Current Review: Findings and Recommendations

1. Undergraduate Program

The reviewers observed the following **strengths:**

- Overall quality
  - o Robust programs that represent the best of a four-field Anthropology department
- Objectives
  - o Courses align well with stated learning outcomes; impressive Learning Outcomes Curriculum Map
  - o Highly aligned with the UTM Vision Statement, mission, and academic plan goals
  - o Learning Outcomes in the BA programs are achieved largely through in-class assignments and presentations
- Curriculum and program delivery
  - o BA and BSc programs allow a wide variety of students with different skills and career goals to be anthropology majors
  - o BSc programs in biological and archaeological anthropology offer rich opportunities for practical experience through labs and field schools
  - o Emphasis on learning inside and outside the classroom, research excellence, community collaborations, and the promotion of diversity and inclusion
  - o Curriculum not only reflects the state of the discipline, but is on the cutting edge with its breadth and balance

- o Course offerings are remarkably comprehensive and expose students to a breadth of geographical, methodological, and theoretical approaches
  - o Especially strong in biological anthropology
  - o Structure, curriculum, length and delivery are appropriate and effective
  - o Incorporation of Indigenous content and themes in several courses with the assistance of the UTM Aboriginal Indigenous Elder, notably introductory anthropology biology and archaeology courses
  - o Archaeology and biological anthropology have many more courses and cover more than many Anthropology departments, especially at the undergraduate level
- Quality indicators – students
  - o Equal quality between BSc and BA students
  - o Significant student growth since the 2010 review, especially in the BSc program
  - o Lively undergraduate student association that holds regular social events, a careers night, and a well-attended annual full-day research conference
- Student engagement, experience and program support services
  - o Commendable regular career advising

The reviewers identified the following **areas of concern**:

- Objectives
  - o Curriculum maps reveal that some courses may be too lecture dependent
- Curriculum and program delivery
  - o Potential curriculum gaps in cultural resource management
  - o Programs are flexible in principle, but it's unclear how often that happens in practice
  - o Practical training and research opportunities offered to anthropology students may not meet the requirements of the Province's new experiential learning policy
- Student engagement, experience and program support services
  - o Faculty are concerned about students' basic reading and writing skills, particularly those of English language learners
- Student funding
  - o Only one competitive scholarship currently offered

The reviewers made the following **recommendations**:

- Objectives
  - o Complete the Curriculum Maps for courses not taught during 2017-18
- Curriculum and program delivery
  - o Require a course in statistics for the BSc programs
  - o Offer more senior undergraduate courses that address topics that blend methodologies and theoretical approaches from the subdisciplines
  - o Create a thesis option for fourth year students

- Review undergraduate advising procedures and resources
- Encourage a rotation of instructors, particularly tenure-stream faculty, to teach the introductory courses
- Offer more courses in applied and collaborative health and environmental studies to prepare students to work with diverse communities, including Indigenous and diasporic communities
- Explore opportunities to carry out ethnographic research projects either individually or as groups, providing BA students work more opportunities for experiential learning
- Include more information on careers in courses, particularly with a BA, in the 100 and 200 level courses
- Seek clarification of exactly what the experiential learning policy requires
- Student funding
  - Find ways to provide students with more research and travel funds
- Student engagement, experience and program support services
  - Review advising and support offered to students, and formalize faculty mentorship of students; designate a faculty member to work with the undergraduate advisor
  - Add a faculty member to the undergraduate admissions advising team to help with program visibility
  - Do more to assist students lacking basic academic skills
  - Coordinate career advising with alumni outreach
- Outreach/promotion
  - Offer more online information, especially about research opportunities

2. Graduate Program (n/a)

3. Faculty/Research

The reviewers observed the following **strengths**:

- Overall quality
  - World class faculty with expertise in a wide range of areas
- Research
  - Impressive research productivity
  - Faculty enjoy high publication rankings
- Faculty
  - Remarkable curricular and research breadth with the addition of new faculty
  - Particular strengths in molecular anthropology, medical anthropology, political/legal anthropology, primatology, paleoanthropology, linguistic anthropology, and archaeology
  - CLTAs are satisfied with the support they receive from the department

The reviewers identified the following **areas of concern**:

- Research
    - The nature of Anthropology research takes people away from campus
- Faculty
    - Recent growth has meant an increase in expectations of service by some senior faculty members to UTM

The reviewers made the following **recommendations**:

- Faculty
    - Create an additional position in medical anthropology within the next few years
        - With a new hire in this area, capitalize on strengths in biological anthropology and forensic sciences to create programs in medical anthropology
        - Use this hire for coverage while others are away
    - Explore faculty hires in environmental anthropology and cultural resource management to enhance the offerings in areas of job growth
    - Fill one or more of these positions with an Indigenous scholar

4.   Administration

The reviewers observed the following **strengths**:

- Relationships
    - Impressive comradery and enthusiasm for the department from faculty, staff, and students
    - Faculty members engage in interdisciplinary teaching and research as well as outreach events across the tri-campus system
    - Faculty praise the mapping and GIS facility at the library
    - Faculty are involved in a diverse range of research activities nationally and internationally and collaborate with other universities and research centres
- Organizational and financial structure
    - Excellent, effective departmental leadership
    - Upgraded faculty laboratory facilities since the move to the Health Sciences building
    - Department has handled all of the recent changes remarkably well
- Planning/vision
    - Department takes systematic, collaborative, and creative approaches to identify and address current and future challenges

The reviewers identified the following **areas of concern**:

- Organizational and financial structure

- o Housing Forensic Sciences in the department creates administrative/staffing burden, though there are several shared courses
  - o Department is understaffed relative to recent growth
- Planning/vision
  - o Commitment to—but not a clear strategy for—incorporating Indigenous ideas in the department

The reviewers made the following **recommendations**:

- Relationships
  - o Explore fundraising possibilities, beginning with outreach to alumni
  - o Explore the possibility of joint activities with cognate disciplines, such as cross-listed courses or interdisciplinary team-teaching, particularly in sociocultural anthropology
  - o Reach out to the recently-hired classical archaeologist in Historical Studies to explore possible collaborations
  - o Foster ties to the city of Mississauga as the Anthropology programs expand opportunities for experiential learning
- Organizational and financial structure
  - o Department should be relieved of administrative responsibility for the Forensic Sciences programs
  - o Increase and stabilize staffing
    - Finalize the department manager position
    - Create a new website and communications position to help make opportunities for students clear and increase fundraising outreach
- Planning/vision
  - o Explore all avenues—teaching, research projects, and recruitment of students and faculty—to expand upon respectful and collaborative relationships with Indigenous peoples, particularly in the local community
  - o Strike a working group to review syllabi and coordinate Indigenous focused curriculum development
  - o Plan for growth in space allocations

Administrative response—appended

October 5, 2018

Professor Susan McCahan
Vice-Provost, Academic Programs
Simcoe Hall
University of Toronto

Dear Professor McCahan,

I am writing to provide an administrative response to the External Review of UTM's Department of Anthropology, which was held in February 2018. The Anthropology, Hons. B.A. (Specialist, Major) and Anthropology, Hons. B.Sc. (Specialist, Major, Minor) programs were reviewed. The reviewers noted that the curriculum balanced breadth and depth effectively and praised the detailed learning outcomes and curriculum map. The reviewers also cited the interdisciplinary environment cultivated in the department and the high morale of faculty, staff, and students. The Department is well positioned to adjust to changes in the discipline and, with support, will continue to provide outstanding programs. An implementation plan with timelines can be found at the end of this letter.

Curriculum

The reviewers recommended reviewing undergraduate advising procedures and resources and to consider adding a faculty member to the advising team.

The Department has already made a number of changes to address this recommendation, including the creation of an Associate Chair position with responsibility for undergraduate advising, the creation of online resources, and the establishment of drop-in advising hours. The advising teams are making use of recently introduced *program plans* that provide an overview of academic, co-curricular and academic opportunities available to UTM students. Program plans are available for both the Anthropology HBA and HBSc programs. Going forward, further improvements will be coordinated by the Associate Chair, assisted by a recently approved 50% Communications and Outreach Officer.

The reviewers supported the prioritization of Indigenous course content and emphasized developing a strategy that aligns with this commitment; the reviewers suggested a working group might be helpful to coordinate course content and syllabi.

The Department is committed to incorporating Indigenous perspectives and content into courses, and will seek to emphasize Indigenous scholarship in future hires. Over the last few years, the Department has already begun delivering courses with indigenous content and experience, several of which were not captured in the self-study (ANT101H5, ANT340H5, ANT368H5, and ANT463H5). In addition, three members of the Anthropology Department (two faculty and one graduate student) are members of UTM's Indigenous Action Group and are leading efforts to

obtain SSHRC and LEAF grants to support the creation of equitable partnerships between the Mississaugas of the New Credit First Nation (MNCFN) and UTM.

The reviewers highlighted a curriculum gap in area of cultural resource management, and a shortage of courses in collaborative health and environmental studies.

The Dean has recently approved a new tenure-stream Sociocultural Anthropology position focused on Environmental Anthropology. We expect that the new hire will join the Department in the summer of 2019. The new hire will develop courses focused on the environment that will complement existing courses. Going forward, the Department will assess faculty complement needs annually and will look for opportunities to add expertise in the Anthropology of Health and in Archaeology with a focus on Cultural Resource Management.

The reviewers suggested increasing the rotation of faculty teaching introductory courses, and increasing the visibility and appeal of first year courses.

Enrollments in the first-year undergraduate courses (ANT101H5 and ANT102H5), as well as other introductory service courses (ANT210H5, ANT211H5 and ANT214H5) are very healthy and have grown over the past five years. The Department will implement a rotation of faculty in ANT102H5 and will continue to monitor both enrollments and learning outcomes in the introductory courses.

The reviewers listed several recommendations for the curriculum: introducing a statistics course required for B.Sc. students and recommended for B.A. students; creating a common 4th year course for B.A. and B.Sc. students; and introducing a 4th year thesis option.

The Department recently introduced an optional, fourth year statistics course for B.Sc. students (ANT407H5 - Quantitative Methods in Archaeology and Biological Anthropology). Both faculty and students have indicated interest in the introduction of a required introductory statistics course, and the Department will investigate implementation of such a course in conjunction with broader efforts at UTM, driven by UTM's Academic Plan, to support the development of foundational numeracy skills.

The Department will explore opportunities for introducing a common course for 4th year B.A. and B.Sc. students. The newly created Anthropology of Health focus would be a natural area for this course. The Department already has two advanced optional courses for undergraduates to carry out independent reading and research (ANT498H5 and ANT499H5, respectively). Adding a full-year thesis option to these offerings is not currently of interest.

The reviewers suggested expanding experiential learning opportunities for B.A. students and ensuring all experiential opportunities reflect current provincial principles, while also cautioning that "departments have to maintain a careful balance between such activities, which tend to be far more demanding of faculty time and resources than lecture and seminar courses." The reviewers added that it would be beneficial to provide students with career related information earlier in the program.

As discussed in their self-study, the Department already offers a broad range of courses including experiential learning opportunities in the B.Sc. program, and a number of B.A. courses also incorporate experiential learning opportunities (ANT241H5, ANT335H5, and ANT364H5). The Department will explore ways to expand available activities in the B.A. program.

Faculty

The reviewers suggested expanding the expertise in the Anthropology of Health area and to consider if this would be an opportunity hire an expert in Indigenous health and medicine.

The Anthropology of Health is a priority area for the Department in terms of faculty complement. Adding faculty in this area would complement the research of existing faculty, could emphasize Indigenous scholarship, and would enable an expansion of undergraduate course offerings in Anthropology Health Stream, potentially including a joint B.A. and B.Sc. fourth-year offering. The Department will look for opportunities through the normal faculty complement process to add expertise in this area.

Students

The reviewers noted that faculty expressed concerns with students' basic reading and writing skills.

UTM has committed, in its Academic Plan, to supporting the development of students' foundational writing and numeracy skills. The Department is participating in these efforts and, in addition, is actively seeking to better support students as they develop reading and writing skills in Anthropology courses. Some examples include:

- In collaboration with the English Language Learners (ELL) specialist at the Robert Gillespie Academic Skills Center (RGASC), implementing six workshops for ELL in ANT101H5 during the Winter 2019 term.
- Introducing support, in class and in tutorials, for an essay assignment in ANT204H5.
- Including course-specific writing workshops, jointly taught by the instructor and experts from the RGASC, to ANT313H5 and ANT402H5.

The Department commits to continuing to encourage these efforts and to look for other opportunities to provide writing instruction, for example by introducing tutorials to ANT102H5 to provide time and space for activities that enhance reading and writing skills.

Relationships

The reviewers encouraged the Department to expand collaborative relationships, through teaching, research, student and faculty recruitment, with Indigenous peoples and the local community.

The Department is currently working with the MNCFN to support a symposium on *"The Importance of Indigenous Education in Ontario Classrooms"* to be held at UTM in December

2018 and to develop a course on "Anthropology and Indigenous Peoples of Turtle Island." The Department is committed to building a relationship with Indigenous peoples and the local community and will actively seek future opportunities for collaboration.

The reviewers suggested increasing collaborations with cognate units, including Historical Studies.

The Department of Anthropology is already involved in numerous collaborations with cognate units. A detailed description of past collaborations was provided in the "Internal and External Relationships" section of the self-study. More recently, Department faculty have become involved in the recently created Centre for Urban Environments, been awarded "XSeed: Expanding Our Research Impact Through Inter-Disciplinary Collaboration" funding for collaboration with faculty in Civil Engineering and Geography, and are collaborating with faculty from Geography, Sociology, and OISE to support the MNCFN symposium, "*The Importance of Indigenous Education in Ontario Classrooms.*" The Department will continue to engage in future opportunities for collaboration, in particular with the Department of Historical Studies.

Administration

The reviewers made some recommendations around staffing levels to respond to Departmental growth.

The Office of the Dean has recently approved two staff positions for the Department: a Department Manager to be shared with the Forensic Science Program and a 50% Communications and Outreach Officer.

The reviewers recommended removing the administrative responsibility for the Forensic Science programs from the Department.

The Department fully supports the Forensic Science program's plan to apply for EDU-B status in the near term and for EDU-A status once the program is fully capable of supporting itself. The Department also supports the relevant changes in the appointment status of faculty hired for the Forensic Science Program that will be required to create the proposed EDU.

Implementation Plan - Department of Anthropology, UTM

The Department and the Office of the Dean, in consultation, will undertake the following approaches to enact positive changes:

<u>Immediate Term (6 months)</u>

Curriculum
- Improve career advising support by adding online resources, incorporating career advice into first- and second-year courses, and establishing drop-in advising hours with the Associate Chair and other faculty. *[Department]*
- Support a symposium on *"The Importance of Indigenous Education in Ontario Classrooms"* initiated by the Mississaugas of the New Credit First Nation (MNCFN), to be held at UTM on December 7, 2018. *[Departments of Anthropology and Geography with funding from the Dean's Office]*

Students
- Collaborate with the Robert Gillespie Academic Skills Centre (RGASC) to support writing instruction in ANT101H5, ANT204H5, ANT313H5, ANT402H5, and other writing-intensive courses. *[Department with support from the Dean's Office]*

Administration
- Hire the recently approved Department Manager and Communications and Outreach Officer positions. *[Department with funding from the Dean's Office]*

<u>Medium Term (1-2 years)</u>

Curriculum
- The Associate Chair and a new Communications and Outreach Officer to collaborate with faculty and UTMAS (the Department's student society) to continue improving career advising resources and to make career and graduate studies workshops available. *[Department]*
- Implement a rotation of faculty in ANT102H5 and other introductory courses. *[Department]*
- Assess curriculum needs and opportunities annually, including: *[Department]*
    o Offering a new course on "Anthropology and Indigenous Peoples of Turtle Island" in collaboration with the MNCFN.
    o Developing or adopting an introductory course in statistics for Anthropology in conjunction with a broader UTM effort to improve foundational numeracy skills.
    o Creating a shared course for 4th year B.A. and B.Sc. students in the area of Anthropology of Health.
    o Including additional experiential learning opportunities into B.A. courses.

Faculty
- Hire a new tenure-stream Sociocultural Anthropologist in the area of Environmental Anthropology. *[Department with funding from the Dean's Office]*
- Assess faculty complement needs annually, including an emphasis on Indigenous scholarship and in the areas of the Anthropology of Health and Cultural Resource Management. *[Department with funding from the Dean's Office]*

Students
- Identify additional opportunities to provide reading and writing support in writing-intensive courses, including introducing tutorials to ANT102H5. *[Department with support from the Dean's Office]*

Administration
- Support the Forensic Science Program's efforts to create an EDU-B in order to begin to separate the administrative responsibilities of the Anthropology and Forensic Science programs. *[Department with support from the Dean's Office]*

Long Term (3-5 years)

Curriculum
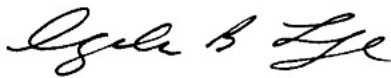- See medium term goals above.

Faculty
- See medium term goals above.

Administration
- With the Forensic Science Program, explore the feasibility of creating EDU-A in order to fully separate the administrative responsibilities of the Anthropology and Forensic Science programs. *[Department with support from the Dean's Office]*

Please let me know if you have any questions about this response.

Sincerely,

Angela Lange
Acting Vice-Principal, Academic & Dean

UTQAP Review Summary

Programs Reviewed:	• Forensic Science, B.Sc. (Hons.): Major, Minor • Forensic Science – Anthropology, B.Sc. (Hons.): Specialist • Forensic Science – Biology, B.Sc. (Hons.): Specialist • Forensic Science – Chemistry, B.Sc. (Hons.): Specialist • Forensic Science – Psychology, B.Sc. (Hons.): Specialist
Division/Unit Offering Programs:	Department of Anthropology, UTM
Commissioning Officer:	Vice-Principal Academic & Dean, UTM
Reviewers:	1. Professor Shari Forbes, PhD, School of Mathematical and Physical Sciences, University of Technology Sydney 2. Professor Oliver Ribaux, PhD, School of Criminal Sciences, University of Lausanne
Date of Review Visit:	February 21 – 22, 2018

Previous Review

Date: December 2 - 3, 2009

Summary of Findings and Recommendations

1.   Undergraduate Programs

The reviewers observed the following strengths:
- High media profile and strong enrolments
- Good post-graduation employment

The reviewers identified the following areas of concern:
- Historical mix of courses patched onto a science curriculum with no singular goal in mind; deficient in many areas required for accreditation

The reviewers made the following recommendations:
- Eliminate forensic psychology and forensic anthropology tracks
- Align curriculum to accreditation and restructure curriculum to emphasize the core forensic disciplines of biology, to include forensic DNA analysis, and forensic chemistry
- Provide discipline-specific course advising and career placement
- Redesign website for internal and external audiences
- Contact alumni and use them to improve and enhance the program

2.   Graduate Programs (n/a)

Faculty/Research

The reviewers identified the following areas of concern:
- Nature of the faculty complement does not contribute to a strong and coherent program
- Heavy reliance on sessional instructors

The reviewers made the following recommendations:
- Add faculty and staff
- Develop a direct formal measure of teaching quality
- Assign sessional instructors to specific courses on a regular basis

Administration

The reviewers observed the following strengths:
- Program Director is dedicated and has the correct vision, requisite experience and leadership skills to direct the program successfully

The reviewers identified the following areas of concern:
- Program Director does not have the necessary administrative authority or control over the program to effectively improve it
- The program has no real infrastructure, sharing laboratory space with other departments

The reviewers made the following recommendations:
- Establish as a separate department or a department-like structure
- Pursue accreditation

Last OCGS review(s) date(s): **n/a**

Current Review: Documentation and Consultation

Documentation Provided to Reviewers

Terms of Reference; Program of Forensic Science Self-Study, 2018; Previous Review Report and Administrative Responses; UTM Degree Level Expectations, 2016; U of T Facts & Figures, 2016; UTM Academic Plan, 2017; UTM Vision Statement, 2017; UTM Academic Calendar, 2017-2018; UTM Viewbook, 2017-2018; U of T Domestic Viewbook, 2017-2018; Tri-Campus Framework.

Consultation Process

The reviewers met with the Vice-Principal Academic & Dean; Vice-Dean, Teaching and Learning; Forensic Science Program Director; Interim Chair of the Department of Anthropology, UTM; Reviewers from the Anthropology External Review; teaching and tenure-stream faculty members; sessional instructors; adjunct faculty; undergraduate students; departmental administrative staff; teaching lab technicians.

Current Review: Findings and Recommendations

1. Undergraduate Program

The reviewers observed the following **strengths:**

- Overall quality
    - Programs are successful and growing, with future growth expected
- Objectives
    - Programs reviewed align with the University's mission
- Admissions requirements
    - High quality students admitted selected due to high demand and limited spaces in the specialist programs
- Curriculum and program delivery

- o Innovative, experiential-based program delivery—in field schools, laboratories, and the crime scene house—is well suited to forensic science given its focus on case studies and real-world examples
  - o Good coverage of cognate disciplines
  - o Curriculum is similar to other forensic chemistry and forensic biology programs in Canada
  - o Complex structure of the programs provides rich options for students
  - o Specialist programs includes the research internship project, which offers an opportunity to work with experts in the field and provides an opportunity to publish the results in peer-review journals
  - o Major and minor programs offer a high level of exposure to external stakeholders through guest lectures and sessional instructors
  - o 3D crime scene visualisation course is unique in Canada
- Assessment of learning
  - o Rigorous internship evaluation process
  - o Final year students do well in a professional environment, demonstrating that the learning outcomes from prior years are acquired and integrated
- Quality indicators – students
  - o Program demand is high, ensuring selection of high quality students with high GPAs
  - o Student are engaged and mostly positive about their learning experiences
  - o Completion rates and time to completion are appropriate
  - o Reported that a significant proportion of students go into a forensic and investigative career and/or continue into other academic paths
- Program development
  - o Development of strategic, new specialist programs such as digital forensic science, forensic linguistics, and environmental forensics, guided by the market and the input of professional stakeholders
- Outreach/promotion
  - o Outstanding outreach and communication with youth and high schools in the local community contributes to the programs' popularity
- Physical resources
  - o Program has access to shared new or refurbished laboratory spaces, a crime scene house, and two collaborative learning rooms

The reviewers identified the following **areas of concern**:

- Overall quality
  - o Unclear how the programs align with the Department of Anthropology's vision due to their unusual location within the Department
- Curriculum and program delivery
  - o Forensic anthropology and forensic psychology programs have different foci and needs from an external stakeholder perspective

- o Complex structure causes difficulties in scheduling, lab use, overlap in material, and instructors meeting all degree level expectations due to students with different background knowledge
  - o Lacking a global overview of the content of the six different programs, causing conflict in schedules and overlap in material covered—particularly true for sessional instructors
- Quality indicators – students
  - o Students have reported difficulty completing in four years due to the programs' highly structured nature and limited elective courses
  - o Limited data about post-graduation outcomes; alumni are not well tracked due to lack of administrative support
  - o Programs are understaffed relative to growth, posing a concern for meeting the learning outcomes of the programs
- Physical resources
  - o While impressive instrumentation is available in spacious laboratories, the ratio of students to instruments does not allow for sufficient hands-on experience, making it impossible to accommodate the students of the forensic major program in this activity

The reviewers made the following **recommendations**:

- Curriculum and program delivery
  - o Consider developing courses in modern transversal dimensions in forensic science, some of which represent key learning outcomes for future forensic scientists and would meet the expectations of a wider range of stakeholders
  - o Ensure input from everyone (faculty, sessional instructors, students) in the development of new courses, programs, the structure of the forensic science unit, and activities surrounding the review of undergraduate and graduate programs
  - o Focus on the development of a graduate program with a broader base rather than introducing further complexity through new undergraduate specialist programs
- Quality indicators
  - o Collect post-graduation outcomes data, which will valuable to elaborate the future vision of the forensic science programs

2. Graduate Program (n/a)

3. Faculty/Research

The reviewers observed the following **strengths**:

- Overall quality

- - Programs implemented by highly competent and committed faculty and staff, as well as high quality consultants, experienced professionals and a half-time technician
  - Research
    - Majority of research in forensic science is carried out through the internship course, allowing students to undertake a dedicated research project and potentially publish results in peer-reviewed journals
  - Faculty
    - New hire in forensic biology (tenure stream) will be dedicated to forensic science

The reviewers identified the following **areas of concern**:

- Research
  - Difficult to determine the scope, quality and relevance of faculty research activities since the majority of research in forensic science is carried out by individuals belonging to other departments
  - Lack of tenure-stream faculty in forensic science is neither appropriate nor effective for conducting nationally or internationally competitive research in forensic science
  - Director conducts research with graduate students but her research is recognised through her appointment in the Department of Anthropology and is not specifically attributed to the forensic science program
  - Student research is not sufficiently validated in the forensic science world
- Faculty
  - Unit lacks full-time tenure-stream faculty dedicated to forensic science research and mentoring/graduate supervision
  - Only full-time faculty member dedicated to the forensic science program is a teaching stream appointment in forensic chemistry demonstrating the lack of core forensic science research that can be carried out

The reviewers made the following **recommendations**:

- Faculty
  - Gradually increase the number of full-time, tenure-stream faculty up to four in the short- to mid-term
  - Integrate the sessional instructors into the faculty team to ensure a global view of all the disparate programs

4. Administration

The reviewers observed the following **strengths**:

- Relationships
  - Strengthened the partnerships with external stakeholders since the last review

- o Faculty and staff are committed, engaged, and focused on the future
- o Cooperative core team and collegiality with the Department of Anthropology
- o Strong partnerships with primary stakeholders such as the Centre of Forensic Sciences and numerous police agencies
- o Very strong and commendable links with the community and youth through outreach with schools, crime scene camp, etc.
- o University benefits from the positive image generated by the forensic science program
- Organizational and financial structure
  - o Structural complexity requires a high degree of collegiality with other units
- Planning/vision
  - o Forensic Science Education Programs Accreditation Commission (FEPAC) provides a good framework for discussion and situating the program according to current standards

The reviewers identified the following **areas of concern**:

- Relationships
  - o Some units not as collegial in terms of cross-appointing tenure-stream forensic science faculty members
  - o Forensic science programs often considered last for lab scheduling
  - o Crime scene camp is the only method for generating revenue
- Organizational and financial structure
  - o Current organizational and financial structure is neither appropriate nor effective
    - Depends on the commitment of the small number of personnel— particularly the Director and sole full-time administrator who alone holds the corporate knowledge of the program—given the number of programs and students within these programs
    - Not viable for future growth, due to limited physical and human resources and a lack of independence from the Department of Anthropology
    - Typically the last to be considered in terms of resource allocation, including space and infrastructure support as well as course scheduling
    - Office space is lacking and people are disseminated across different buildings resulting in a lack of core identity
    - No dedicated laboratory space allowing for the distinctly different methods of teaching required (e.g., bloodstain pattern analysis)
- Planning/vision
  - o FEPAC structure is rigid and not directly applicable to the Canadian system; could be a mid/long-term focus once the other priorities are addressed

The reviewers made the following **recommendations**:

- Relationships
    - Engage in more frequent conference attendance and establish broader national and international academic partnerships to foster research and creative professional activities
- Organizational and financial structure
    - Develop a structure, such as an EDU:A, to house the programs
        - Ensure that a new structure is resourced appropriately with a complement of tenure-stream and non-tenure stream faculty and adequate administrative support
        - To support growth and student demand, add a 1.0 outreach and communications position; increase the finance officer role; and augment technical staff
        - Commit office and laboratory space dedicated to the forensic science unit, rather than sharing with larger programs who typically have priority
    - Find other sources of revenue, such as casework funds that are reinvested into research or research grants with national and international collaborators
- Planning/vision
    - Develop a strong, international forensic science vision
        - Develop a graduate program, instead of focusing on the development of specialist programs
        - Anticipate changes and open opportunities for students to broaden the scope of graduate employment opportunities and adapt to new situations
        - Ensure that the University is invested in this vision and is willing to enhance the leadership and reputation of the program
    - Develop a succession plan for management and leadership so that the programs are not dependent on individuals
- Reputation/profile
    - Facilitate networking with the forensic science community internationally and strengthen the UTM forensic science reputation on a global scale

Administrative response—appended

October 9, 2018

Professor Susan McCahan
Vice-Provost, Academic Programs
Simcoe Hall
University of Toronto

Dear Professor McCahan,

I am writing to provide an administrative response to the External Review of UTM's Forensic Science Program, which was held in February 2018. The Forensic Anthropology, Hons., B.Sc. (Specialist); Forensic Biology, Hons., B.Sc. (Specialist); Forensic Chemistry, Hons., B.Sc. (Specialist); Forensic Psychology, Hons., B.Sc. (Specialist); and Forensic Science, Hons., B.Sc. (Major, Minor) were reviewed. The reviewers were positive about the experiential foundation of the Program but expressed concerns about its "institutional fragility". The Forensic Science Program is valued at UTM, and the Office of the Dean is committed to working with faculty associated with the Program to develop the stability necessary for continued excellence. An implementation plan with timelines can be found at the end of this letter.

Faculty

The reviewers indicated that it was difficult to assess research activity of faculty given the lack of tenure-stream faculty and that the current complement is "neither appropriate nor effective for conducting nationally or internationally competitive research in forensic science".

The Program, with the support of the Dean's Office, began addressing the issue of faculty complement in 2016. Two faculty hires have already been made: a teaching-stream Forensic Chemist with a scholarly interest in disciplinary pedagogy hired in 2017 and a research-stream Forensic Geneticist with a research program in Massively Parallel Sequencing hired in 2018. An additional search is currently in progress, for a teaching-stream Forensic Behavioural Toxicologist. This new faculty member will contribute to both content-specific and pedagogical research, to keep pace with the technological, legal, and theoretical advances that characterize Forensic Science.

The Program has identified three priority areas for future faculty hiring: Forensic Psychology; Forensic Microbiology, with a focus on terrorism and/or health to compliment the work of the Forensic Geneticist and Behavioural Toxicologist; and Forensic Epistemology/Ontology, a newly developing specialty that is needed to provide vision, to strengthen methodologies, and to formulate a theoretical framework for the discipline.

The Program will request a research-stream Forensic Psychology position in the next faculty complement planning cycle, aiming to perform a search in 2019-20. The Program will look for

additional opportunities through the normal faculty complement process to add expertise in the other two areas.

Curriculum

The reviewers identified issues attributed to program complexity: difficulties with class scheduling and lab access; varying levels of student preparation in each class; and overlap in curriculum between programs.

The Program began a curriculum mapping process in 2017 to address the varying levels of student preparation and overlap in curriculum. In the past year, degree learning expectations and learning outcomes have been reviewed and defined, and some deficiencies and overlap in programming have been identified. As a result, with input from the new faculty in Forensic Chemistry and Forensic Genetics and a CLTA in Forensic Psychology/Philosophy, the Program has undertaken a significant curriculum revision (submitted for the 2019-20 calendar) that reduces overlapping content and enhances complimentary linkages between courses.

The recently submitted program revisions will improve the class scheduling issues because greater flexibility in required courses has been added to make it simpler to fulfill program requirements. Lab access will continue to vary from course to course, as the Program does not yet have dedicated teaching or research labs, but a new Science Building is being envisioned that will provide an opportunity for the Program to request multipurpose teaching and research space.

The reviewers recommended engaging in a curriculum coordination exercise to identify curricular overlap and the interdisciplinary of the programs. The reviewers encouraged that all faculty and sessional instructors be involved in curriculum renewal and review.

The curriculum mapping process initiated in 2017 has engaged all members of the Program, including faculty and sessional instructors, and the Program is committed to continuing to involve teaching staff in curriculum review and renewal.

Given the existing complexities within the undergraduate programs, the reviewers did not support introducing additional disciplinary specialties and instead suggested focusing on developing a graduate program.

The Program will not develop additional undergraduate programs at this time, focusing instead on streamlining the existing undergraduate programs and investigating and drafting a professional graduate program.

Students

The reviewers were concerned that staffing levels were affecting support for learning outcomes and student access to technical and administrative support.

The Office of the Dean has recently approved increasing the existing 50% Lab Technician position to 100%, which will allow the program to develop more program-specific courses and

provide students with additional hands-on experience in the lab. The Office of the Dean has also approved a Department Manager position, joint with the Department of Anthropology, and a Program Outreach Officer position. These new positions should decrease the administrative burden on the Undergraduate Program Advisor, allowing more access to advising support for students.

The reviewers commented that the ratio of students to instruments does not allow sufficient hands on experience.

With the additional support provided by a 100% Lab Technician position, labs can be designed to rotate smaller groups of students through various instruments and lab exercises, providing more hands-on experience.

Administration

While the reviewers were complimentary, they commented that overall the program is "institutionally fragile," and faces challenges with the current organizational and financial structure of the programs and relationship to the Department of Anthropology. The reviewers recommended developing a strong vision for the program and a strategy for long-term organization stability that can support this.

The Program was created 22 years ago, before the existence of Extra-Departmental Units (EDUs). As the Program grew and evolved, it began to operate in a manner similar to an EDU-B, but its status was not formalized. As an immediate step, the Program intends to establish itself as an EDU-B in order to formally administer the existing Forensic Science degree programs and to separate financial and planning responsibilities from the Department of Anthropology. The Program's long-term goal, once a sufficient faculty complement is established, is to organize itself as an EDU-A in order to hold primary faculty appointments.

The Department of Anthropology has expressed full support for the Program's plan to apply for EDU-B status in the near term and for EDU-A status once the Program is fully capable of supporting itself. The Department also supports the relevant changes in the appointment status of faculty hired for the Forensic Science Program that will be required to create the proposed EDU.

The reviewers commented on the lack of office and dedicated forensic science lab space, and that faculty and staff reside in different buildings.

A new Science Building is being envisioned at UTM that will provide the Program with an opportunity to request multipurpose teaching and research lab space and a cluster of offices for faculty and an office to support to Forensic Program.

The reviewers noted that the outreach coordinator has limited hours and is not able to meet the demand and interest from the community and local schools.

The Office of the Dean has approved a Program Outreach Officer position to support recruitment, public education and other outreach initiatives.

Implementation Plan – Forensic Science Program, UTM

The Program and the Office of the Dean, in consultation, will undertake the following approaches to enact positive changes:

<u>Immediate Term (6 months)</u>

Faculty
- Complete search for a new teaching-stream Forensic Behavioural Toxicologist. *[Program with funding from the Dean's Office]*

Curriculum
- Finalize the minor program revisions identified by the initial curriculum mapping work for the 2019-20 Calendar. *[Program]*

Students
- Increase the current 50% Lab Technician position to 100%. *[Program with funding from the Dean's Office]*

Administration
- Hire a Program Outreach Officer and, with the Department of Anthropology, a shared Department Manager. *[Program with funding from the Dean's Office]*

<u>Medium Term (1-2 years)</u>

Faculty
- Hire a new research-stream Forensic Psychologist. *[Program with funding from the Dean's Office]*

Curriculum
- Continue the curriculum mapping process by mapping course expectations and outcomes. *[Program]*

Administration
- Organize as an EDU-B to formally administer existing programs. *[Program with support from the Dean's Office]*

<u>Long Term (3-5 years)</u>

Faculty
- Assess faculty complement needs annually, including an emphasis on Forensic Microbiology and Forensic Epistemology/Ontology. *[Program with funding from the Dean's Office]*
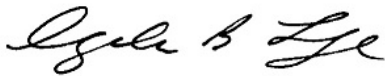
Curriculum
- Continue to monitor and revise the curriculum map. *[Program]*
- Develop and propose a Professional Masters Program in Forensic Science. *[Program]*

Administration
- In conjunction with planning for a Science Building, identify appropriate teaching and research laboratory space and office space. *[Program with support from the Dean's Office]*
- With the Department of Anthropology, explore the feasibility of creating EDU-A in order to increase organizational stability for the program. *[Program with support from the Dean's Office]*

Please let me know if you have any questions about this response.

Sincerely,

Angela Lange
Acting Vice-Principal, Academic & Dean