# UTQAP Cyclical Review: Final Assessment Report and Implementation Plan

# 1 Review Summary

| Program(s) Reviewed:              | <ul> <li>Undergraduate programs (offered in association with the Faculty of Arts &amp; Science):</li> <li>Nutritional Sciences, HBSc: Major</li> <li>Graduate programs:</li> <li>Nutritional Sciences, MSc, PhD</li> </ul>  |
|-----------------------------------|---|
| Unit Reviewed:                    | Department of Nutritional Sciences  |
| Commissioning Officer:            | Dean, Temerty Faculty of Medicine   |
| Reviewers (Name,<br>Affiliation): | <ul> <li>Prof. Robert Bertolo, Department of Biochemistry, Memorial<br/>University of Newfoundland</li> <li>Prof. Sharon Donovan, Department of Food Science and Human<br/>Nutrition, University of Illinois at Urbana-Champaign</li> <li>Prof. James House, Department of Food and Human Nutritional<br/>Sciences, University of Manitoba</li> </ul> |
| Date of Review Visit:             | February 7-8, 2022 (conducted remotely)   |
| Date Reported to AP&P:            | April 13, 2023  |

## **Previous UTQAP Review**

Date: February 26 - 27, 2014

# **Summary of Findings and Recommendations**

#### **Significant Program Strengths**

- World-renowned reputation of programs and Department
- Undergraduate students are very well-prepared for graduate studies and professional careers
- "Stunning" graduate student scientific productivity, combined with successful decrease in time to completion
- Departmental researchers are leaders in the nutrition field, defining future directions
- Great demand for provision of teaching of nutrition across the University
- Many opportunities for joint appointments to aid in expanding Departmental mandate
- Strong faculty, student and staff morale and dedication to departmental mission and success

#### **Opportunities for Program Enhancement**

- Resolving urgent space and infrastructure issues
- Enhancing the undergraduate programs through the nutrition component of the undergraduate medical education curriculum and preparation of students for careers as dieticians
- Focusing on nutrition, food and public policy areas as a path to successful knowledge translation research over the long term
- Examining how best to meet demands for teaching of nutrition across the University in a coordinated manner
- Continuing to build a sense of community among all stakeholders

# **Current Review: Documentation and Consultation**

## **Documentation Provided to Reviewers**

Confirmation/agreement Letter; terms of reference; self-study report; faculty CVs; course descriptions; schedule; previous review report (2013-14), the joint decanal and Chair's responses, and FAR-IP; Dean's Report 2021; Temerty Faculty of Medicine's Strategic Plan (2018-2023); University of Toronto Towards 2030; University of Toronto Quality Assurance Process.

# **Consultation Process**

The external reviewers met remotely with the following:

#### Temerty Faculty of Medicine

- 1. Dean, Temerty Faculty of Medicine and Vice Provost, Relations with Health Care Institutions
- 2. Vice Dean, Research & Health Science Education
- 3. Vice Dean, Strategy & Operations
- 4. Director of Strategic Initiatives, Office of Advancement
- 5. Chair, Dept. of Laboratory Medicine & Pathobiology
- 6. Chair, Dept. of Medical Biophysics
- 7. Chair, Dept. of Paediatrics
- 8. Chair, Dept. of Physiology

#### **Department of Nutritional Sciences**

- 9. Chair
- 10. Associate Chairs
- 11. Program Coordinators
- 12. Director, NSERC Program in Food Safety, Nutrition and Regulatory Affairs (PFSNRA)
- 13. Faculty
- 14. Graduate Students
- 15. Fellows
- 16. Research Associates
- 17. Administrative Staff
- 18. Alumni

#### Faculty of Arts & Science

- 19. Acting Vice Dean, Academic Planning
- 20. Associate Dean, Teaching & Learning
- 21. Undergraduate Students

#### **University of Toronto**

- 22. Dean, Faculty of Kinesiology & Physical Education
- 23. Program Director, Master of Public Health in Nutrition & Dietetics, Dalla Lana School of Public Health

#### **Industry Members & Collaborators**

- 24. Executive Director, Canadian Nutrition Society
- 25. Executive Director, Institute for Advancement of Food and Nutrition Sciences, Washington DC.
- 26. Health Canada Representative (Formerly Director of the Bureau of Nutritional Sciences, Food Directorate)
- 27. Dean of Agriculture, University of British Columbia

# **Current Review: Findings and Recommendations**

## 1. Undergraduate Program(s)

Unless otherwise noted, all bulleted comments apply to all programs reviewed.

The reviewers observed the following **strengths**:

- Objectives
  - Undergraduate program objectives are consistent with the mission of the University and with the academic plans for both the Temerty Faculty of Medicine and the Department
- Admissions requirements
  - Minimum grade requirements in required biology and chemistry courses ensure a qualified pool of applicants positioned for success
- Curriculum and program delivery
  - Curriculum review successfully identified gaps in subject areas and identified key skills
  - ► Curriculum reflects the current state of the nutritional sciences discipline
  - ► Reviewers note benefits of increased offering of remote courses during the pandemic, including increased enrollments and revenue
- Assessment of learning
  - Major writing assignments included in almost all courses provide opportunities to enhance students' written communication skills
- Student engagement, experience and program support services
  - ▶ New awards and a well-structured undergraduate research course indicate a clear commitment to advancing the research success of undergraduate students
  - ▶ BSc is viewed by faculty and students as a pathway to further training
  - Undergraduate student survey results indicate high levels of satisfaction with courses; student responses regarding the Department were more mixed but still positive
  - Successful undergraduate research projects program enhances award success for prospective graduate students
  - Nutritional Sciences Student Association (NSSA) provides an important vehicle for enhancing the quality of undergraduate students' experiences

The reviewers identified the following areas of concern:

- Objectives
  - While broad program objectives are included in the Academic Calendar, specific program learning outcomes and degree level expectations are not clearly articulated within the Calendar or the Department's Undergraduate Education webpage
  - Program learning outcomes do not appear to have been translated into existing course syllabi, which include only specific course-based objectives

- Curriculum and program delivery
  - ► Little progress since previous review in addressing concerns regarding the lack of food/dietetics courses in the program
  - ► Reviewers note the possibility that students could feasibly select nutrition courses that do not achieve key skills as identified in the curriculum review
  - Pre-medicine students indicated that they would like greater exposure to clinical nutrition courses and research opportunities with MD faculty
  - ▶ Undergraduate students raised the need for a minor program in nutrition
  - Students voiced a desire for clearer pathways to MPH programs and registration in dietetics programs
  - Lack of an accredited Dietetics program identified a major issue for undergraduates; they note that BSc program graduates are not eligible to apply to the University's MPH program (a major collaboration with the Department at the graduate level)
  - ► Reviewers noted the absence of hands-on laboratories within undergraduate program courses, and heard related concerns from graduate students seeking TA positions that provide experiential opportunities
  - ► Students noted a desire for more variety in course options, e.g., social science aspects of nutrition, community/international nutrition, food policy; etc.
  - ▶ Students commented that the current statistics course is inadequate
  - ► Limited use of case studies noted as surprising given the strong clinical connections inherent within the program
- Accessibility and diversity
  - Reviewers note that it is not clear how the Department has committed to Indigenous reconciliation, commenting that "There is limited evidence that students graduate from the program with a perspective of how the harms of the past must be addressed"
- Student engagement, experience and program support services
  - ► Reviewers note student comments that undergraduate advising is inadequate when choosing nutrition as a major
  - ► Students raised concerns regarding the clarity of departmental communications about the absence of a Dietetics stream; reviewers note that "Despite messaging to this effect on the website, there is a clear communication gap with these students"
  - ▶ Undergraduate students commented that more should be done to promote nonresearch, non-dietetic career choices

#### The reviewers made the following **recommendations**:

- Objectives
  - ► Consider articulating and communicating more specific program learning outcomes
  - ► Consider emphasizing program-level objectives within course syllabi
- Curriculum and program delivery
  - ➤ To meet student demand, develop strategies to assist students who wish to complete the requirements for registration in dietetics; options could include exploration of formal articulation agreements with other institutions offering accredited undergraduate programs in dietetics

- ► Consider re-implementing the minor program in nutrition
- Develop strategies to facilitate students' progression into the MPH program after completing the BSc program
- ► Review course offerings to determine if unique experiential opportunities can be integrated within the existing course designs
- Consider strategic expansion of remote course offerings
- Review existing 4th year course offerings to determine which are suitable to be "co-listed" as graduate courses
- Curriculum mapping should ensure that, regardless of the courses chosen, key learning objectives and degree level expectations are met for every student
- ► Consider extending self-reflection exercises and journaling to additional courses within the program
- ▶ Include food science-related courses in the curriculum
- Consider improving statistics course offerings
- Pursue discussions with partners so that the undergraduate program can serve as a springboard for registration in dietetics
- Student engagement, experience and program support services
  - ► Improve advising and communication with students, particularly around the absence of an accredited program in dietetics
  - ► Improve communications and consider creating experiential learning opportunities related to non-research, non-dietetic career options
  - ► Increase communications and advising regarding career opportunities available to Nutrition Majors to attract additional program applicants

# 2. Graduate Program(s)

Unless otherwise noted, all bulleted comments apply to all programs reviewed.

The reviewers observed the following **strengths**:

- Overall quality
  - Reviewers note the high quality and productivity of the graduate program
- Objectives
  - Graduate program objectives are consistent with the mission of the University and with the academic plans for both the Temerty Faculty of Medicine and the Department
- Curriculum and program delivery
  - MSc curriculum viewed as varied and in general very well taught
  - ▶ PhD students commented that the program is rigorous and provides both technical and soft skills for professional development
  - ► Department offers a breadth of graduate courses; students commented that most are rewarding and important to their degree

- Assessment of learning
  - Graduate course syllabi provide evidence of level-appropriate assessment practices, including the use of journal clubs, grant applications, case studies, and major written assignments
  - Required graduate seminar courses ensure that students have the opportunity to be assessed by their peers during individual oral presentations
- Student engagement, experience and program support services
  - ▶ MSc program is viewed by faculty and students as a pathway to further training
  - MSc students commented that the weekly departmental seminars provided an exposure to the breadth of the ongoing research in the Department, as well as an opportunity for networking
  - ► MSc students appreciate the collaborative atmosphere in the Department
  - MSc Students felt the program was well organized and ensured they developed key skills, such as oral and writing skills.
  - Strengths identified by doctoral students include exposure to a wide variety of nutrition research, departmental collegiality, and faculty collaboration
  - ► PhD students feel supported by the graduate coordinator and the Nutritional Sciences Graduate Students' Association
  - ▶ PhD students complimented the collegiality, program flexibility, diverse expertise, and the overall helpful culture in the department
  - ► Meetings with both MSc and PhD students emphasized the fact that students had a very positive attitude towards the Department, its staff and the program itself
  - ► MSc and PhD students praised the program as rigorous, diverse, and flexible, offering a collegial environment and excellent support from the Graduate Administrative Support Staff
  - ▶ Both MSc and PhD students noted that programs have clear milestones to support achievement of student goals
  - ► Reviewers note the importance of the Graduate Education Management System's formalized advising process offered via the Office of Graduate and Life Sciences Education
- Quality indicators graduate students
  - ▶ Graduate success rates are very impressive and above par for nutrition departments
  - ▶ DNS graduate programs are highly ranked internationally and attract exceptional students, evident through the number of major scholarships held by graduate students from highly competitive programs
  - ► Commendable time-to-completion rates for MSc students
  - ► PhD students' time-to-completion rates are "likely higher than the Department wishes, but not necessarily inconsistent with experiences at other Canadian universities offering a nutritional sciences program"
  - ► All PhD students between 2015-2020 produced at least one publication from their thesis, and a significant majority of MSc students published their research results
- Student funding
  - Funding levels for graduate students are higher than most other programs across Canada and reflect the cost of living in Toronto

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

- Curriculum and program delivery
  - Students suggested that the program curriculum has not adequately evolved over time and commented that new courses could be added
  - Reviewers note that many of the graduate level course syllabi available for review were outdated
  - ► Reviewers note PhD student comments that there are "not enough courses," offered each year, presenting challenges particularly for students who undertake both the MSc and PhD programs within the Department
  - Courses that are specific to a PI or particular lab may have limited appeal, resulting in low enrolment
  - ► Students enjoy taking some of their courses in other departments but this presents challenges and should not be relied upon by the Department

#### Innovation

- ► Reviewers note that there was no discussion of particularly innovative/creative approaches to team learning, acknowledging that "COVID-19 has disrupted many aspects of course delivery"
- Accessibility and diversity
  - Reviewers note that there was no discussion of initiatives taken to enhance the accessibility of graduate programs
- Student engagement, experience and program support services
  - ► MSc students indicated that they would like to be exposed to non-academic career options such as public health, food industry or government
  - ▶ Students desired more experiential learning opportunities for career development
  - Students voiced some frustration with course scheduling conflicts within the Department, as well as getting into courses outside the Department
  - PhD students commented on the need for statistics courses taught within the Department
  - Graduate students commented that TA opportunities, while abundant, do not provide any worthwhile career skills such as lab instruction/demonstration and teaching opportunities
  - ▶ Graduate students commented on the need for additional mental health resources

#### Student funding

- Reviewers note concern that students without major scholarships must be funded from supervisors' grant funds, commenting that "This represents an issue as funding levels from the Tri-Council agencies are not positioned at a level that would allow the support of many students on a grant"
- ▶ Minimum stipend rates mandated by the Faculty of Medicine are a barrier to expanding the graduate program; reviewers note as well that "there seems to be little transparency on how decisions are made with these funds at the department level"

#### The reviewers made the following **recommendations**:

- Objectives
  - Consider expanding the Academic Calendar's description of broad program objectives into more specific learning outcomes for the program, and articulate these within the Calendar or the Department's Graduate Program webpage
- Curriculum and program delivery
  - ► MSc students would like to have more courses in clinical nutrition, food science and wet lab research techniques
  - Consider offering shorter (modular) courses as a way to increase the variety of courses offered without adding too much additional faculty burden
  - Update graduate level course syllabi posted online
  - Consider ways to address challenges related to the number of required courses, particularly for students who complete both the MSc and PhD programs within the Department
  - ► Consider adapting 4th year courses as "co-listed" graduate/undergraduate courses
  - ► Consider developing a list of potential courses that can be taken outside of the Department, and work with cognate units to reduce barriers to entry
- Student engagement, experience and program support services
  - Consider incorporating a TA system with experiential learning objectives that include teaching of tutorials or classroom lectures to enhance those skills among graduate students
  - Students and advisors are encouraged to take full advantage of the formal advising process offered by the Office of Graduate and Life Sciences Education, to ensure that there are open lines of communication and a full understanding of expectations related to funding, timelines and research goals
  - Work with the Temerty Faculty of Medicine and the University to ensure that all students are aware of available mental health and wellness resources
- Quality indicators graduate students
  - ► Explore strategies to reduce PhD students' time-to-completion rates
  - Reviewers praise the Department's exceptional track record of publications per thesis, but comment that this "likely contributes to the longer time to completion"; they note that publication expectations could be tempered to help lower times to completion
- Student funding
  - ► Consider strategies, including with alumni and donor relations, to develop greater internal supports for graduate student stipends
  - ► Reviewers encourage discussion with the Faculty of Medicine regarding the distribution of advancement funds for graduate student support

### 3. Faculty/Research

The reviewers observed the following **strengths**:

- Overall quality
  - ► Faculty garner national and international awards and recognitions, and are successful in competing for extramural funding
  - Faculty participate in and lead key initiatives and centers of excellence at the University
  - ▶ Departmental faculty should be commended on creating a collegial environment that benefits both students and faculty
  - Recent faculty hires present an exciting opportunity to strategize the direction of the Department
  - Well-established mid-career and senior faculty are recognized globally for their contributions in the areas of precision nutrition, chronic disease prevention, healthy human development, and nutrition, food and public policy
  - ► Early career researchers (ECRs) show promise to be highly productive and to maintain the stature of the program
- Research
  - ► Funding at the tri-council level is very good overall; reviewers note very good recent efforts to collaboratively enhance funding success rates, especially among ECRs
  - ▶ Research staff appreciate the quality of the training they receive, and appreciate the recent efforts to incorporate them more formally in the Department
- Faculty
  - ► Since the 2014 review, all vacated positions due to retirements have been filled with five tenure-stream faculty, and a new research line has been approved
  - Status-only faculty are important to the graduate programs; reviewers note that half of students are supervised by these faculty and some serve on student thesis and dissertation committees

The reviewers identified the following areas of concern:

- Overall quality
  - Many ECRs have had difficulty starting their labs, securing materials, engaging prospective students and generating collaborations within and beyond the Department; reviewers note that "While granting agencies allow for COVID interruption explanations, it is still particularly challenging when your lab cannot even be established"
- Research
  - Department has identified core research priorities but these appear to reflect only current research, rather than pans for future capacity
- Faculty
  - ▶ Based on current course syllabi, reviewers note that "it is not entirely clear the extent to which full-time faculty within DNS are engaged in undergraduate teaching"
  - ► Recent moves involving faculty lab space present significant challenges

The reviewers made the following **recommendations**:

- Overall quality
  - Reviewers encourage focused attention on ensuring the success of the key cohort of ECRs
- Research
  - ▶ Consider strategic research priorities, and target hiring towards specific core areas
  - Reviewers note that industry funding seems to be underrepresented, and recommend increasing efforts toward establishing "MITACS and Alliance type funding," especially for ECRs
  - ► Consider ways to provide more Research staff with more opportunities for nonresearch training, including opportunities to teach courses and a formalized training portfolio to help develop job applications
- Faculty
  - ► Reviewers support the Department's intention to use the 2021-2026 Strategic plan to guide faculty complement planning process
  - ► Ensure that ECRs make a smooth transition to their faculty positions after returning from COVID restrictions
  - Reflect on the totality of engagement of all tenure-stream faculty within the BSc program, to ensure that their expertise is being integrated in the achievement of the overall program objectives
  - ► Explore ways to make better use of status-only faculty, including strategically incorporating them into course instruction, or leading workshops and discussions on their research or practice
  - In light of moves affecting physical lab space, explore ways to assist ECRs including making accommodations for these faculty in the form of discretionary funding for pilot research or student support

#### 4. Administration

Note: Issues that are addressed through specific University processes and therefore considered out of scope for UTQAP reviews (e.g., individual Human Resources issues, specific health and safety concerns) are routed to proper University offices to be addressed, and are therefore not included in the Review Summary component of the Final Assessment Report and Implementation Plan.

The reviewers observed the following **strengths**:

- Relationships
  - Department has broadened its collaborations and appointed status-only faculty at other institutions and programs, including The Hospital for Sick Children and the Dalla Lana School of Public Health
  - Administrative staff appreciate recent changes in offices and personnel, including the latitude to develop their own systems internally; collegial environment helped

- Departmental staff to navigate pandemic-related challenges and develop new options for hybrid work
- Very impressive and engaged DNS alumni group provides invaluable services to students, especially regarding career mentoring
- ► High degree of collegiality among faculty and students noted as a key Departmental strength
- Department chair is viewed as an effective and attentive leader
- ► Collaborations with government parties noted as a key Departmental strength
- Organizational and financial structure
  - Departmental administrative structure seems appropriate for a unit of its size and overall budget
  - ► Growing undergraduate program provides an important source of funding through the teaching of undergraduate courses
  - ► Faculty appreciate improvements to clinical research infrastructure
  - ► Process of having course faculty serve equally on recently-formed committees was cited by faculty as a major improvement in administration within the Department
  - Active Research committee has focused on helping ECR faculty in particular
  - ► Having Associate Chairs specifically allocated to responsibilities for Undergraduate Education, Graduate Education, and Research is important, and will play an important role in achieving the goals of the Department's strategic plan
  - ► Graduate students specifically commented on the extremely helpful role that the Graduate Administrator has played in their programs
  - ► The Department benefits from stable and balanced budgets, with resources to ensure that commitments to teaching, research and outreach can be maintained
  - ► Space allocation within DNS has improved substantially since the last review, with access to new office and laboratory space
- Long-range planning and overall assessment
  - ► Reviewers note that the Nutrition in Medicine programming is excellent, a leader in developing nutrition education in medical schools in North America
  - ► The Program in Food Safety, Nutrition and Regulatory Affairs (PFSNRA) "has been a success story in DNS for decades"
  - ► Increased online enrolment has provided additional resources for DNS; the Department has expressed an interest in pursuing additional opportunities with other University divisions to increase offerings
  - ▶ New committee structure for Graduate, Undergraduate, and Research areas will distribute leadership responsibilities and will support the departmental capacity to address strategic planning and emerging opportunities
- International comparators
  - ▶ DNS is recognized globally as one of the top nutrition programs for research and graduate training; reviewers note that in terms of citation metrics the Department is "in the top 1-2 in North America"

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

- Relationships
  - Changes in how the Advancement office relates with the alumni group has added work to these volunteers, potentially affecting their activities and ability to recruit additional volunteers
- Organizational and financial structure
  - Reviewers note significant challenges and concerns regarding recent disruptions to physical infrastructure, including lab spaces, due to construction in and around the Medical Sciences Building
  - A key challenge over the next few years will be to optimize research space for faculty, to facilitate human and animal studies and to maintain cohesion among wet and dry lab faculty in the Department who will be physically separated
- Long-range planning and overall assessment
  - Reviewers note significant risks to the long-term viability of the Nutrition in Medicine program, including financial challenges and the academic time commitment required of participating faculty; "The external funding model is not sustainable without a guarantee that this program will not be discontinued when that funding ends"
  - ► Reviewers note the "glaring" omission of an Indigenization strategy from the Department's strategic plan; especially given its importance in nutrition and recent efforts at higher levels
  - Reviewers note that a strategy to improve EDI opportunities is not apparent; they
    observe that several longstanding EDI-related programs at the Temerty Faculty of
    Medicine seem to lack methods for tracking success

#### The reviewers made the following **recommendations**:

- Relationships
  - Continue to broaden collaborations and status-only faculty at other institutions
  - ▶ Utilize status-only faculty to enhance research opportunities and breadth of course offerings in clinical and public health aspects of nutrition
  - ► Work with Advancement office to create alumni contact lists within the Department to help conduct more activities with student societies
- Organizational and financial structure
  - Explore ways to support departmental cohesion and collaborations despite physical separations and construction-related disruptions, including ensuring sufficient meeting space for visiting faculty and students
  - ► Department, Faculty, and University should work collaboratively to address concerns and cover costs due to impending shutdown and transfer of lab spaces and other construction-related disruptions
  - Regarding internal budgeting, the Faculty of Medicine needs to do a better job in communicating their budgeting more transparently, especially regarding base budgets.

- Rethink recent changes to how industry grants are covered up front by the Department; reviewers note that the current model is not sustainable if the university intends to expand industry funded research
- Long-range planning and overall assessment
  - Use the new Strategic Plan as a guide for future initiatives
  - Seek additional engagement from faculty members, and additional financial commitment from the Temerty Faculty of Medicine, to permanently establish the Nutrition in Medicine program within the Department's curriculum
  - More effort is needed by the Department in developing an Indigenization strategy, including Indigenization of the curriculum and seeking Indigenous research opportunities
  - Consider creating an Indigenous nutrition cluster within the Department led by current expertise, and actively engaging new researchers through collaboration
  - ► Succession planning for the Program in Food Safety, Nutrition and Regulatory Affairs (PFSNRA) requires urgent attention at the Department level
  - Explore ways to fully integrate PFSNRA into the Department to enhance connections to industry
  - ► Improve tracking of success of EDI-related initiatives
  - ► Implement a more careful EDI strategy during the faculty hiring process, including efforts at attracting underrepresented groups
  - Development of a Minor in Nutritional Sciences may provide additional sources of revenue
  - ▶ Department will need to address space challenges over the next 5-10 years; financial resources should be sought to assist with faculty cohesion and productivity
  - ► Address consistent concerns across all degree levels regarding course offerings and career counseling in regard to careers beyond medicine and doctoral training
  - Reviewers note the need to holistically embrace EDI and Indigenization through faculty and student recruitment, course offerings and research opportunities

# 2 Administrative Response & Implementation Plan





L. Trevor Young, MD PhD FRCPC
Dean
Vice Provost, Relations with Health Care Institutions

March 3, 2023

Professor Susan McCahan Vice-Provost, Academic Programs Division of the Vice-President & Provost University of Toronto

Dear Susan,

# DEPARTMENT, UNDERGRADUATE & GRADUATE PROGRAMS Joint Decanal Cover Letter | Temerty Faculty of Medicine and Faculty of Arts & Science

On behalf of the Temerty Faculty of Medicine and Faculty of Arts & Science at the University of Toronto, we would first like to thank the reviewers—Dr. Robert Bertolo, Dr. Sharon Donovan, Dr. James House—for their very comprehensive review of the Department of Nutritional Sciences (DNS) on February 7-8, 2022. We would also like to thank Dr. Deborah O'Connor, Chair of DNS, the administrative staff, and all those who contributed to the preparation of the outstanding self-study report. We also wish to thank the many staff, trainees, and faculty members who met with the external reviewers and provided thoughtful feedback. The reviewers noted "[DNS] is recognized globally as one of the top nutrition programs for research and graduate training. In terms of the number of scientific publications and their impact (citation metrics), the Department is in the top 1-2 in North America. The faculty also garner national and international awards and recognitions and are successful in competing for extramural funding. The University also hosts key centers of excellence and initiatives, which the departmental faculty activity participate in and lead".

The thorough report provided by the reviewers is an invaluable guide for program enhancements and future strategic directions of DNS. The reviewers identified a number of areas for enhancement including development of functional infrastructure, succession planning for senior faculty, a focus on fundraising as well as expanded collaborations and partnerships, and addressing gaps in the undergraduate nutrition course sequence necessary to facilitate licensure as a registered dietitian. The reviewers' recommendations and the 2021-2026 DNS strategic plan are well aligned. Each of the recommendations has been addressed in the Programs' Responses column in the accompanying table, and in the Chair's cover letter. We are in full agreement with the responses of Dr. O'Connor and have provided additional comments addressing each of the recommendations in the Deans' Responses column of the table.

Overall, DNS has made excellent progress under the leadership of Dr. O'Connor and as noted by the reviewers, "The committee commends Dr. O'Connor's leadership during a very difficult period of time due to COVID restrictions and departmental space constraints...Dr. O'Connor is viewed as an effective and attentive leader of the Department." We congratulate Dr. O'Connor on her outstanding leadership and look forward to continuing to work with her and members of DNS to ensure the continued success and growth of the Department to attain its strategic and operational aspirations.

The next review of DNS is scheduled in 2028-29. In 2024, we will follow up with the Chair on the implementation of the external reviewers' recommendations and, later that year, provide you with an interim report on the status of the implementation plan.

Sincerely,

Melanie Woodin, PhD

Dean

Professor, Department of Cell & Systems Biology

1 Wood

Faculty of Arts & Science

Trevor Young, MD, PhD, FRCPC

Dean

Temerty Faculty of Medicine

Vice Provost, Relations with Health Care Institutions

cc: Lisa Robinson – Vice Dean, Strategy & Operations, Temerty Faculty of Medicine
Justin Nodwell – Vice Dean, Research & Health Science Education, Temerty Faculty of Medicine
Bill Ju – Acting Vice Dean, Undergraduate, Faculty of Arts & Science
Gillian Hamilton – Acting Vice Dean, Academic Operations, Faculty of Arts & Science
Alison Chasteen – Acting Associate Dean, Unit-Level Reviews, Faculty of Arts & Science
Andrea Benoit – Academic Review Officer, Office of the Dean, Faculty of Arts & Science
Anastasia Meletopoulos – Academic Affairs Manager, Office of the Dean, Temerty Faculty of Medicine
Daniella Mallinick – Director, Academic Programs, Planning & Quality Assurance, Office of the Vice
Provost, Academic Programs

Deborah O'Connor - Chair, Dept. of Nutritional Sciences, Temerty Faculty of Medicine

# 2021-22 UTQAP Review of MED Department of Nutritional Sciences - Review Recommendations

| Request Prompt verbatim from the request   | Rec. # | Recommendations from Review Report verbatim from the review report  | Programs' Responses   | Deans' Responses   |
|--|--------|---|---|--|
| The reviewers recommended the inclusion of food science-related courses in the undergraduate curriculum, and noted   | 1      | "Issues related to the undergraduate program also need to be addressed: Inclusion of food science-related courses in the curriculum"  | We began recruitment for a teaching-stream faculty position and included Food Science as one of the areas of expertise from the successful candidate.  LEAD: Associate Chair Undergraduate Education  | DNS has already started working to implement this recommendation through the hiring of a new teaching-stream faculty member with expertise in the area of Food Sciences.   |
| undergraduate students' desires  | 2      | "Consider re-implementing a minor in nutrition program"   | We have not had a minor in Nutritional Sciences previously, but our Undergraduate Curriculum Planning Committee has begun reviewing the requirements for a minor. A minor in Nutritional Sciences was also identified as an initial priority as part of the 2021-26 Dept. of Nutritional Sciences (DNS) strategic plan.  LEAD: Associate Chair Undergraduate Education  | DNS is currently considering this recommendation, which also aligns with their 2021-26 strategic plan.  Any suggestions for new program proposals are considered in the larger landscape of A&S undergraduate program offerings. In this case, any discussion around a new minor would involve consultations with the A&S Life Sciences Curriculum Committee, the A&S Vice-Dean, Academic Planning, the A&S Vice-Dean Operations and the A&S Vice-Dean, Undergraduate. |
|  | 3      | Students "did want more variety in course options. They mentioned examples such as: social science aspects of nutrition; community/international nutrition; food policy; nutrition-based lab course (in addition to the research experience course now offered). They also mentioned that the statistics course is inadequate and a more appropriate course should be developed." | The Undergraduate Curriculum Planning Committee has begun a review of course offerings for both currency and relevance. We will explore the requirements for offering some graduate courses jointly as graduate-undergraduate courses.  Regarding the statistics courses, we will now accept other comparable statistics courses from other departments to fulfill program requirements (e.g., from Psychology, Sociology, etc.)  LEAD: Associate Chair Undergraduate Education | DNS is in the process of reviewing all curricular course offerings for currency and relevance. The Department also now allows students to pursue statistics courses in other departments to meet the requirements for their program and will work with the A&S Dean's Office to ensure student access to the indicated courses.  |
| The reviewers recommended reviewing undergraduate courses to determine if unique experiential learning opportunities could be integrated within existing course designs. | 4      | "DNS should review the course offerings to determine if unique experiential opportunities can be integrated within the existing course designs, thus offering new and relevant experiences for both the BSc students and the graduate students who would serve as TAs."   | Some courses (e.g., NFS487H) have recently included experiential learning opportunities (e.g., genetic testing). NFS394 and NFS494 are almost exclusively experiential leaning. New faculty postings since the external review now specifically solicit applicants who incorporate a hands-on approach to their teaching. We envision our new teaching faculty member will champion bringing  | DNS has taken steps to solicit new faculty members who will be able to incorporate a hands-on approach to their teaching, and the participation of new faculty members with experience in creating experiential learning opportunities will be helpful towards increasing offerings for BSc and graduate students.   |

|   |   |   | ideas and speakers to our monthly faculty meeting to brainstorm on how to incorporate more experiential learning opportunities.  LEAD: Associate Chair Undergraduate Education  | The A&S Office of Experiential Learning & Outreach Support (ELOS) is available to provide pedagogical supports to undergraduate A&S courses, including consulting with individual faculty and unit or program leaders interested in developing or expanding experiential learning and/or undergoing experiential learning curriculum planning. ELOS can also provide administrative support, resources and guidance on funding for experiential learning, as well as offering partner supports, including partnership development, relationship management and partner recognition. |
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| The reviewers observed that, due to the lack of an accredited undergraduate program in dietetics, students completing the program are not eligible to apply to the Dalla Lana School's MPH program. They noted that this is a major concern for students, and recommended that the department pursue strategies to support students' admission into MPH programs, including possible articulation pathways with other institutions or the development of an accredited program. | 5 | "This was identified as a major issue by students and more should be done to facilitate this degree option. Options could include the exploration of articulation agreements with existing accredited programs (e.g. Guelph, Toronto Metropolitan University), whereby existing or future DNS courses could be mapped against dietetic competency requirements and positioned as acceptable courses within existing accredited programs." | This issue was also identified in our strategic plan and is listed as an initial priority. We are working to identify courses that undergraduates can take in the DNS and other U of T departments to fulfill some of the requirements for entry into the MPH Nutrition & Dietetics Program or postgraduate training program to secure licensure as a registered dietitian. Accordingly, we mapped DNS and other U of T undergraduate courses to the courses of accredited Ontario programs (Guelph, TMU, Brescia) and to the Integrated Competencies for Dietetic Education & Practice. We are working with an RD with experience in the accreditation process (Joann Herridge) to develop a list of courses to satisfy the accreditation requirements. <i>LEAD: Chair</i> | DNS has a comprehensive plan in place to address current gaps in the curriculum to help allow undergraduate students to fulfill requirements for entry into Dalla Lana's MPH program in Nutrition & Dietetics. This plan involves collaboratively mapping out courses to create a list that will satisfy accreditation requirements.  The A&S Dean's Office and Office of the Faculty Registrar will continue to engage in discussions with DNS about possible collaborations.  |
| The reviewers recommended a number of strategies for addressing the issue of limited course offerings at the graduate level, including developing modular courses, reviewing existing fourth-year courses to determine which are suitable to  | 6 | "The doctoral students articulated that there were not enough courses, particularly if someone does the MSc and PhD in the Department. The idea of shorter (modular) courses were supported as a way to increase the variety of courses offered without adding too much additional faculty burden."   | We will begin exploring the possibility of developing a modular graduate course, perhaps reviving Current Topics in Nutritional Sciences (which has been idle for several years) under this new format.  Medium Term  LEAD: Associate Chair Graduate Education  | DNS is addressing the needs of doctoral students by starting to explore the possibility of developing a modular graduate course to increase the variety of courses offered.   |

| be expanded into joint undergraduate/graduate courses, and working with cognate departments to develop a list of potential courses that students can take outside of the Department.  | 7  | The department should review existing 4th year course offerings to determine which courses may be suited to be co-listed as a graduate offering.   | The Associate Chairs of Undergraduate and Graduate Education will review existing 4 <sup>th</sup> -year course offerings to determine which courses may be suited to be co-listed as graduate offerings.  Medium Term  | DNS' education leadership has agreed to review courses currently offered to 4 <sup>th</sup> -year students to determine which ones may be also offered to graduate students.   |
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|   | 8  | Thus, the number of courses required for the degree presents challenges for some students, especially those that transfer from MSc to PhD. DNS should consider only 4 courses for reclassified students, instead of 2+4 courses.   | Doctoral students who already have a strong nutrition background are encouraged to take some of their courses outside DNS. For example many of our students have majored at the undergraduate level in nutrition and have completed a MSc in nutrition. They may even have practiced as a clinical dietitian. Rather than taking additional nutrition courses, they are encouraged to explore courses in other departments that help augment knowledge and skills required for their thesis research (e.g., physiology, immunology, bioinformatics, clinical trials).  | DNS already has a helpful approach to support graduate students to fulfill the course requirements for their degree, including encouraging them to explore courses in other departments.   |
|   |    |  | It is not clear why the reviewers are focusing specifically<br>on transfer students, given that these students represent<br>only a small minority of our PhD students.   |  |
|   | 9  | The Department should consider developing a list of potential courses that can be taken outside of the Department and work with the cognate departments to reduce barriers to entry.   | As perhaps one of the most multi-disciplinary departments at U of T, the courses that our graduate students take outside of DNS are highly specific to their research group and research topic. We believe it is most suitable that a list of potential courses is identified between the student and their advisor with additional input from their supervisory committee.  | Temerty Medicine is supportive of DNS' approach of taking a case-by-case approach to create suitable lists of potential courses for graduate students to ensure they are able to do full justice to their research group and research topic. |
| The reviewers noted graduate students' comments that teaching assistantships, while abundant, frequently do not help them to develop valuable skills in teaching or lab demonstration; they recommended addressing this by incorporating experiential learning objectives into TA's responsibilities. | 10 | "Graduate students appreciated the abundance of TA opportunities, but felt these jobs did not provide any worthwhile skills for their careers, since they were primarily grading assignments. They would appreciate more classical TA opportunities, such as lab instruction/demonstration and teaching opportunities. DNS should consider incorporating a TA system with experiential learning objectives that include teaching of tutorials or the classroom | We will explore opportunities for TAs to become more engaged with teaching beyond grading assignments. Although we do not currently offer any lab courses for demonstrations, we will examine whether there are any opportunities for TAs to be involved in the 3 <sup>rd</sup> - and 4 <sup>th</sup> year undergraduate research project courses. This could be in the form of weekly 2-3 hour sessions from TAs from different labs who can provide hands-on demonstrations of various lab techniques to the group of students enrolled in these research project courses. <i>LEAD: Associate Chair Graduate Education</i> | DNS has agreed to find ways for TAs to participate in more hands-on teaching experiences. Additional opportunities to enhance teaching skills can be explored in conjunction with TAHSN-affiliated research institutes.                      |

|  |    | lectures to enhance those skills among graduate students."  |  |  |
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| The reviewers noted student concerns that the "Department overall is geared to steering undergraduates to graduate research studies"; both undergraduate and graduate students indicated a desire for more exposure to non-academic career options such as public health, food industry, or government.  | 11 | "Students felt that the Department overall is geared to steering undergraduates to graduate research studies, but for those not interested or able, career options are not apparent nor encouraged. Students felt more should be done to promote non-research, non-dietetic career choices.  Alumni have made inroads in this respect, but DNS could formalize this better."                        | The DNS Alumni Association (DNSAA) runs a student-alumni mentorship program every year that pairs undergraduate (and/or graduate) students with alumni working in various fields, both within and external to academia. Students meet one-on-one with their mentor throughout the program and are invited to group professional development and social events. Events held by the DNSAA include Career Night seminars, where alumni working in government, industry, public health, academic, etc., are invited to speak to current students about their career journeys and provide insight into their respective fields.                           | The DNS supports a formal student-alumni mentorship program that includes exploration of a variety of career journeys in the field of nutritional sciences and beyond.   |
| The reviewers recommended that the department "consider and reflect on the totality of engagement of all tenure-stream faculty within the BSc program, in order to ensure that their expertise is being integrated in the achievement of program objectives overall"; they also recommended considering strategies to make better use of status-only faculty in delivering | 12 | "DNS should reflect on the totality of engagement of all tenure-stream faculty within the BSc program, in order to ensure that their expertise is being integrated in the achievement of the overall program objectives."   | Through our DNS Workload policy (revised 02/2021), which encompasses undergraduate and graduate teaching and administrative duties, we are reasonably confident that all core faculty are now contributing to our teaching mission whether in the Faculty of Arts & Science (A&S) BSc program, medical education or our MSc and doctoral programs. Perhaps not adequately presented in our self-study were the contributions of faculty (including cross-appointed faculty) who frequently guest lecture in undergraduate courses or those who host students through our 3 <sup>rd</sup> - and 4 <sup>th</sup> -year undergraduate research courses. | DNS is working to ensure that tenure-stream faculty within the BSc program are contributing to the Department's teaching mission as a whole.   |
| the undergraduate curriculum.  | 13 | "It was observed that status-only faculty could also be better utilized. This pool of expertise should be strategically incorporated into courses (even 1-2 lectures each) as a condition of their appointment. This strategy need not be onerous—it can be as simple as workshops or discussions on their research or practice, which would benefit students and expand teaching capacity in DNS." | Approximately half of our graduate students are mentored by status-only faculty; additionally they provide graduate student stipends from their research grants. Many also serve on graduate student supervisory committees and act as DNS examiners. Additionally, many cross-appointed faculty take students in the 3 <sup>rd</sup> - and 4 <sup>th</sup> -year undergraduate research courses. In hindsight the significant contributions of our cross-appointed faculty could have been better articulated in the self-study.  | The ways in which DNS effectively engages status-<br>only faculty members may not have been well<br>articulated in the Department's self-study report,<br>but the Dean is aware of the Chair's efforts to<br>address this issue. The Dean is also aware and<br>supportive of ongoing efforts to integrate status-<br>only faculty into addressing gaps within<br>undergraduate course offerings. |

|  |    |  | For the past 3 years and going forward, the Chair has been sitting down with cross-appointed faculty to discuss their commitment to DNS by way of teaching (nutritional medical education, BSc undergraduates, DNS graduate students) and service for new and renewed appointments. Specific commitments are included in their appointment letters.  Following the review of undergraduate courses previously described, we will see where gaps remain that our cross-appointed faculty might be able to help with. LEAD: Chair   |  |
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| The reviewers observed that many recent faculty hires "have had difficulty starting their labs, securing materials, engaging prospective students and generating collaborations within and beyond the Department"; they encouraged "focused attention on ensuring the success of this key cohort going forward." | 14 | "Many ECR have had difficulty starting their labs, securing materials, engaging prospective students and generating collaborations within and beyond the Department While granting agencies allow for COVID interruption explanations, it is still particularly challenging when your lab cannot even be established. DNS is sensitive to these issues and we encourage focused attention on ensuring the success of this key cohort going forward." | <ul> <li>DNS has recently implemented several initiatives that are intended, in part, to support new faculty members, including:         <ul> <li>Each new faculty member has is now assigned a senior faculty mentor by the Chair.</li> <li>An internal peer review panel for CIHR Project Grants, led by the Research Programs Officer (Dr. Laura Vergeer) and Associate Chair of Research &amp; Innovation (Dr. Richard Bazinet). Pls in DNS review each other's grants and provide feedback ahead of the CIHR deadline.</li> <li>CFI application support from the Research Programs Officer, Associate Chair of Research &amp; Innovation, and/or the Business Manager (Slavica Jovanovic).</li> <li>DNS Research Day: a full-day conference hosted by DNS that showcases graduate student research and promotes networking among students, faculty, staff and alumni (inaugural event held successfully in October 2022).</li> <li>We will continue to communicate with our new faculty and solicit their feedback as to how DNS can facilitate their success.</li> <li>LEAD: Chair and Associate Chair Research &amp; Innovation</li> </ul> </li> </ul> | DNS has already implemented initiatives to provide support to new faculty members, and Temerty Medicine is committed to ensuring that Faculty-wide resources and initiatives for new faculty members are widely promoted in all departments, including DNS. Of particular importance are new and ongoing initiatives offered through the Office of Clinical & Faculty Affairs in the area of wellness and support for faculty. |
| The reviewers remarked on the omission of an Indigenization strategy from the Departmental   | 15 | "There is also a need to holistically embrace EDI and Indigenization through faculty and   | We have indeed been engaged in this practice. However it should be recognized that this is a complex process that will take considerable time to realise this goal (long  | DNS has been working towards incorporating EDI and Indigenization in faculty recruitment through collaborating with other stakeholders, including the  |

| strategic plan, noting the need to "holistically embrace EDI and Indigenization through faculty and student recruitment, course offerings and research opportunities"; they recommended that the department implement a strategy for hiring faculty from underrepresented groups, create an Indigenous nutrition research cluster, and explore ways to include Indigeneity in program curricula. |    | student recruitment, course offerings and research opportunities."  | term). An example of new practices includes sending personal emails to indigenous scholars known to DNS faculty to make them aware of new faculty job postings. Similarly, at our request, the Director of EDI in Research & Innovation shared a recent posting with contacts at the Black Research Network and Indigenous Research Network.  LEAD: Chair and Associate Chairs Graduate Education and Research & Innovation   | Director of EDI in Research & Innovation at the University of Toronto. In terms of student recruitment, Temerty Medicine's newly created Office of Access and Outreach works collaboratively with departments across the Faculty to increase representation of historically and currently underrepresented and underserved groups in health professions and health sciences education.  In terms of extra-curricular course offerings, the Centre for Faculty Development offers a variety of EDI-based workshops and training opportunities for members of the Temerty Medicine community. Research consortia such as the Black Research Network and Indigenous Research Network are also crucial stakeholders and potential collaborators with all faculties and departments at the UofT. |
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|  | 16 | "The commitment to EDI is acknowledged within the SSR, however it is not clear how DNS has committed to reconciliation in relation to our indigenous communities. There is limited evidence that students graduate from the program with a perspective of how the harms of the past must be addressed." | We believe that we are making progress on this initiative. DNS is a member of the Collaborative Specialization in Indigenous Health, and Dr. Malik has a guest lecture on Indigenous nutrition in her 4 <sup>th</sup> -year course (NFS490H: International and Community Nutrition).  Dr. Treena Delormier, an Indigenous scholar and researcher specializing in nutrition spoke at the most recent Lawson Centre's Food as Medicine Update (November 25, 2022). We plan to expand these activities through guest lectures by Indigenous Scholars, and through the inclusion of an Indigenous nutrition module in our planned modular graduate course.  Medium and Long Terms  LEAD: Chair and Associate Chair Graduate Education | DNS has begun to explore opportunities to address reconciliation and relation with Indigenous communities, including inviting guest lecturers on Indigenous nutrition, and they plan to expand these offerings in the future. Temerty Medicine's Office of Indigenous Health and the Centre for Wise Practices at Women's College are both valuable resources and sources of knowledge and expertise to help educate and collaborate with Temerty Medicine departments and units.   |
|  | 17 | "The Department should consider creating an indigenous nutrition cluster within the Department led by current expertise, and actively engaging new researchers through collaboration. There are many funding opportunities available for new faculty in   | In addition to the progress described in Programs' Responses #16 (above), we believe that an important first step to developing an Indigenous nutrition cluster will be via our planned graduate modular course. The inclusion of an Indigenous nutrition module in this course   | The Temerty Medicine Office of Indigenous Health is available to advise and consult with departments and units on their education initiatives pertaining to Indigenous knowledges and experiences. They are closely aligned with the central university's Office of Indigenous Initiatives as well as the Centre for Wise   |

|   |    | this area and it seems to be an opportunity missed by the Department."   | will allow us to expand our network of Indigenous scholar collaborators, test curriculum content, etc.  Medium and Long Terms  LEAD: Associate Chair Graduate Education  | Practices at Women's College, who all work collaboratively with UofT community members.  |
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|   | 18 | "The Faculty membership is somewhat underrepresented in EDI and a strategy to improve this is not apparent. There is no tracking or metrics of candidates' (self-declared) profile from the pool of applicants to the long list to short listed candidates to identify if there are barriers. A more careful strategy should be implemented during the hiring process, including efforts at attracting underrepresented groups." | Of note, we are a small faculty and many members are at or beyond normal retirement age. Faculty of this vintage tend not to represent designated groups. See response to point 15 above regarding attracting underrepresented groups.  Statistics assembled from the hiring dossier from our last two hires (double hire) indicate that of 50 applications received for a new Assistant Professor position, 30 were female, 19 were male and one self-identified as other; 15 individuals self-identified as a racialized person/person of colour. This would suggest we are getting some traction in attracting a diverse group of applicants. As described above in other sections strategies have been implemented to increase applications from indigenous and black scholars.  LEAD: Chair and Associate Chairs Graduate Education and Research & Innovation | Temerty Medicine has been committed to increasing the representation of underrepresented faculty members across all departments and units as part of the strategic direction of Excellence through Equity from the most recent Academic Strategic Plan (2018-2023). DNS appears to be making strides in attracting a more diverse applicant pool for faculty members positions, with a particular focus on Black and Indigenous scholars. Temerty Medicine has recently created recommendations and guidelines for searches for leaders and faculty members that incorporate Excellence through Equity as a core strategy, and this is made available to departments and units via the Temerty Medicine Office of Inclusion & Diversity website. The UofT Office of the Vice-Provost, Faculty & Academic Life, has also created helpful resources, guidelines, recommendations and supports for departments seeking to strategically incorporate equity into faculty searches. |
| The reviewers noted that physical infrastructure is an ongoing issue for the Department, commenting on the key near-term challenges to "optimize research space for faculty, to facilitate human and animal studies and to maintain | 19 | "A key challenge over the next few years will be to optimize research space for faculty, to facilitate human and animal studies and to maintain cohesion among wet and dry lab faculty in the Department who will be physically separated."  | Agreed. We will continue to utilize strategies of hybrid work as we have over the pandemic.  Lead: Chair and Associate Chairs, TFoM Facilities  Management & Space Planning  | Temerty Medicine will work collaboratively with DNS to support hybrid work and optimize research space for faculty members.  |
| cohesion among wet and dry lab faculty in the Department who will be physically separated"; they recommended that the Department and the Faculty of Medicine seek resources to provide assistance for early career                  | 20 | "The lab moves continue to challenge DNS success and the frustrations were readily apparent The Faculty must make accommodations for these [early career] faculty in the form of discretionary funding for pilot research or student support, justified by their particular challenges.  Moreover, DNS should be able to make final  | DNS agrees the lab moves continue to be a concern and defers to the Dean's Office concerning compensation to early career faculty impacted by this move.  LEAD: TFOM Dean's Office   | The Office of the Dean will explore additional mechanisms to support the success of early career faculty in DNS impacted by the move.  |

| researchers, and to minimize disruptions to overall cohesion |    | decisions on how to restructure the Department in the new spaces.  |   |  |
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| and productivity.  | 21 | The Faculty should also ensure there is sufficient meeting space in the various locations to ensure visiting faculty/students have places to meet to maintain the collegial nature of the Department. Moreover, costs related exclusively to the move need to be compensated (e.g. animal care, tissue culture, etc.).   | We have been providing information to Facilities Management & Space Planning as they ready space for the five research groups moving to 777 Bay. DNS defers to the Dean's office on issues of compensation.  LEAD: TFOM Dean's Office and Facilities Management & Space Planning  | The Office of the Dean will work with DNS and with Facilities Management & Space Planning to explore mechanisms to minimize disruption including at the financial level associated with the move.  |
| prioritized in the Request for Administrative Response       | 22 | "There was clear commentary related to the absence of dietetics related courses for these students as well as the fact that the undergraduate program is not an accredited program. Despite messaging to this effect on the website, there is a clear communication gap with these students and more effort should be made to advise these students upon entry that dietetics is not an option."               | As described above (Rec. #5), we are working on identifying courses that undergraduates can take in the DNS and other U of T departments to partially fulfill the academic requirements for licensure as a registered dietitian. We have also reached out to TMU to see if there may be opportunities to partner on courses we neither have faculty nor specialty space to accommodate. In the meantime, we will explore ways in which we can help ensure incoming students are aware that our program is not currently accredited. | Temerty Medicine supports DNS' plan to collaborate across institutions to partner on courses to increase offerings for students and to communicate more clearly to incoming students about current limitations in the program pertaining to dietetics courses as well as accreditation of the program. |
|  | 23 | "Curriculum review successfully identified gaps in subject areas and identified key skills. However, this was done at the Department level. Skill development should be targeted at the individual student. As offered, some students could feasibly select nutrition courses that will not achieve these skills. Mapping should be such that every student gets these skills regardless of course selection." | The Undergraduate Curriculum Planning Committee will revisit the curriculum mapping they completed to ensure that students achieve the necessary skills, while ensuring there is flexibility to enable students to take the desired optional courses.  Immediate and Medium Terms   | DNS will be engaging in a curriculum mapping exercise to address skills development for individual students.   |
|  | 24 | "DNS should consider articulating more specific learning outcomes, using the Faculty of Arts and Science Degree Level Expectations for Honours Bachelor Degrees as a template, particularly in client-facing materials (websites)."  | We will review the learning outcomes from the A&S and ensure they are reflected on DNS's website.  Immediate and Medium Terms   | To help inform their website, DNS will review client-facing materials from the Faculty of Arts & Sciences.   |

| 25 | "In Tables 4.2 – 4.9, the program learning outcomes have been nicely mapped against the existing DNS courses, but this information does not appear to have been translated into existing course syllabi. A review of the current course syllabi provided specific course-based objectives, but not the program-level objectives. Consideration should be given to emphasizing these program-level objectives within the syllabi." | The Undergraduate Curriculum Planning Committee will review the course syllabi to ensure that both course-based and program-based objectives are met.  Immediate Term and Medium Terms   | DNS will review the course syllabi to address the alignment of course-based and program-level objectives.  |
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| 26 | [Offering courses remotely] "has been leveraged with expanded offerings at Scarborough campus and could be further expanded strategically (e.g., potentially link to dietetic course requirements)."  | With the hiring of a new teaching stream faculty, we will revisit our course offerings and identify opportunities for expanded offerings. However this will need to be discussed with A&S as they have expressed concern with TFoM offering more courses that could potentially take A&S students away from their courses.   | After consultation with A&S, DNS will have the potential to expand course offerings with the hiring of new faculty members.  |
| 27 | "Graduate students commented on the need for additional mental health resources, and DNS should work with the Faculty of Medicine and U of T to ensure that all students are aware of the resources available to them. Time should be devoted during orientation sessions and reinforced during seminar classes as to the nature of the wellness resources available to students."  | We have strived to make our faculty and students aware of the available mental health resources at U of T in the form of presentations at orientation sessions; e.g., in February 2021 the Nutritional Sciences Graduate Students' Association held a virtual session on mental health and wellness resources available at the University, facilitated by Heidi Cho, Wellness Counsellor & Coordinator at U of T Health & Wellness. We will aim to integrate similar sessions into our existing programs (e.g., the annual orientation session for new graduate students, at seminar) to help ensure that all students are aware of the resources available to them. Additionally, we have added links to U of T mental health resources to the homepage of DNS's website: <a href="https://nutrisci.med.utoronto.ca/">https://nutrisci.med.utoronto.ca/</a> | In addition to DNS' targeted activities to promote wellness resources for students, Temerty Medicine is committed to ensuring that all graduate students across the Faculty have access to up-to-date information about the mental health resources and supports available to them at both the Faculty as well as at the central university through regular communications channels and targeted outreach initiatives. |
| 28 | "While DNS has been successful in recruiting students who hold major scholarships (34.3% of MSc students; 47.5% of PhD students), those without major scholarships must be funded from the grant  | Our Department strongly believes that this recommendation should be prioritized. In fact, since the visit by the external reviewers, graduate stipend levels have increased even further (~\$37,000/yr for MSc students and ~\$40,000/yr for PhD students beginning in   | Temerty Medicine is committed to providing increased funding for graduate students across the Faculty. Temerty will substantially increase its graduate student stipends beginning in the 2023-2024 academic year, making them the highest in  |

|    | funds of the respective supervisor. This represents an issue as funding levels from the Tri-Council agencies are not positioned at a level that would allow the support of many students on a grant. The Department should consider positioning a strategy to work with alumni and donor relations to develop greater internal supports for graduate student stipends to address this issue." | September 2023), putting additional strain on supervisors' resources. The Chair, Associate Chair of Graduate Education, and the Graduate Coordinator of Admissions & Awards will be meeting in the near future with Advancement to strategize the development of greater internal supports for graduate student stipends.  Further additional financial support from the TFoM Dean's Office has been committed to support graduate student stipends across the faculty.            | Canada. As a result, students in Master of Science programs will receive \$37,000 per year. PhD candidates will be offered \$40,000 annually.  Temerty Medicine's Office of Advancement is well positioned to provide strategic guidance and direction on opportunities to afford greater internal supports for graduate student stipends in the future. |
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| 29 | "Minimum stipend rates mandated by the Faculty of Medicine continue to be a barrier to expanding the graduate program. There should be more discussion with Faculty on how advancement funds are distributed among departments to support graduate students. In particular, there seems to be little transparency on how decisions are made with these funds at the department level."        | DNS believes that this recommendation should be prioritized. Within the last 6 months, discussions on this topic have begun to occur at TFoM Graduate Chairs meetings. DNS representatives have enthusiastically participated in these discussions and have encouraged TFoM leaders to continue to move forward on these initiatives.  | Dr. Justin Nodwell, Temerty Medicine's Vice Dean of Research & Health Science Education, has been leading collaborative discussions with Temerty's graduate department chairs regarding the equitable distribution of advancement funds, and these discussions about strategic ways forward will continue in the future.                                 |
| 30 | "DNS has an exceptional track record with publications per thesis (72% with >5 papers!), but this is much higher than expected in the field and likely contributes to the longer time to completion. Publication expectations could be tempered to help lower times to completion."   | While it is generally expected that most graduate students, particularly those in the PhD stream, will publish at least one first-authored paper prior to completing the program, there is no minimum number of publications per thesis required. We will, however, ensure that this is clearly communicated to graduate students and their supervisors.  LEAD: Associate Chair Graduate Education   | DNS plans to address time to completion issues in multiple ways, including clearly communicating to graduate students and their supervisors regarding minimum number of publications per thesis required.  |
| 31 | "funding from industry seems to be underrepresented There should be more effort at establishing MITACS and Alliance type funding among DNS faculty, especially ECR."  | We are working on encouraging more of our faculty and trainees to apply for Mitacs funding. For example, at our May 2022 faculty meeting, we had a Mitacs representative give an overview of the various Mitacs programs and answer questions from faculty. DNS members have recently successfully acquired Mitacs funding (e.g., for a postdoctoral fellowship at the Rogers Hixon Ontario Human Milk Bank at Mount Sinai Hospital).  LEAD: Associate Chair Research & Innovation | DNS is taking steps to address the issue of underrepresented funding from industry.  |

| 32 | "The Program in Food Safety, Nutrition and Regulatory Affairs (PFSNRA) has been a success story in DNS for decades. However, succession planning requires urgent attention at the Department level. More should be done to fully integrate this program into DNS to enhance connections to industry." | We concur with the recommendation that succession planning is required for the PFSNRA. The Chair will begin meeting with Dr. Anderson who has been an avid champion of the program since its inception and its leader.  There is a range of opinions amongst faculty regarding the wisdom of enhancing connections to industry as particular industries are associated with unhealthy diets. A reasonable first step would be to sort out a succession plan for leadership of the PFSNRA. New leadership could then tackle how to proceed with enhanced connections to industry in an ethical and mutually beneficial way. LEAD: Chair | Temerty Medicine supports DNS' strategic approach to address succession planning for the PFSNRA as well as to explore options for connecting with industry partners who enhance the Department's values around ethics and reciprocity. |
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# 3 Committee on Academic Policy & Programs (AP&P) Findings

The spokesperson for the reading group found the review to be positive overall. The group felt that the review summary accurately reflected the full review. The group identified two points on which they requested clarification beyond what was covered in the Dean's response: concerns regarding tangible pathways and timelines for students to pursue a career in dietetics; and impact of the move to 777 Bay St. for "dry laboratory" researchers.

Justin Nodwell, Vice-Dean, Research & Health Science Education, responded by noting the complexity of the move due to the renovation of the west wing of the Medical Sciences Building. He said that they were actively exploring ways to minimize any impact and were exploring possible solutions to move the dry labs into the Naylor Building situated next door.

Deborah O'Connor commented that they had been working on the development of a tangible pathway for students to pursue a career in dietetics, however that the issue was more complex than simply adding more courses. She explained that collaboration with cognate units (and potentially with Toronto Metropolitan University [TMU]) would be necessary, and that the course sequence would require accreditation through a third-party service managed by the Partnership for Dietetic Education and Practice (PDEP). At least five new courses would need to be launched, syllabi would need to be revised, and aa large teaching kitchen would be required. Discussions with TMU were underway and preliminary feedback from the accrediting body was expected in Fall 2023. She also noted that that plans were underway to launch a new specialist program, ideally in Fall 2025.

No follow-up report was requested...

# 4 Institutional Executive Summary

The reviewers praised the Department of Nutritional Sciences as one of the top nutrition programs for research and graduate training in the world. They noted the high levels of undergraduate and graduate student satisfaction and commended both the Department's commitment to advancing undergraduate students' research success and graduate students' impressive research productivity. They applauded the Department's faculty members, noting they are "recognized globally for their contributions in the areas of precision nutrition, chronic disease prevention, healthy human development, and nutrition, food and public policy." They celebrated the high degree of collegiality among the faculty and undergraduate and graduate students, noting that the Department Chair is viewed as "an effective and attentive leader." Finally, they had high praise for the organization and engagement of the DNS alumni group, observing that the group provides invaluable career mentoring services for students.

The reviewers recommended that the following issues be addressed: including food science-related courses in the undergraduate curriculum, and addressing undergraduate students' desires for an improved statistics course and for more variety in course options; reviewing

undergraduate courses to determine if unique experiential learning opportunities could be integrated within existing course designs; addressing concerns due to the lack of an accredited undergraduate program in dietetics and pursuing strategies to support students' admission into MPH programs, including possible articulation pathways with other institutions or the development of an accredited program; addressing the issue of limited course offerings at the graduate level; addressing graduate students' concerns that teaching assistantships frequently do not help them to develop valuable skills in teaching or lab demonstration; addressing student concerns regarding a lack of exposure to non-academic career options such as public health, food industry, or government; ensuring that the expertise of tenure-stream faculty is integrated in the achievement of program objectives, and considering strategies to make better use of status-only faculty in delivering the undergraduate curriculum; ensuring that recent faculty hires are supported in starting their labs, securing materials, engaging prospective students and generating collaborations within and beyond the Department; developing Indigenization and EDI strategies to "holistically embrace EDI and Indigenization through faculty and student recruitment, course offerings and research opportunities"; and addressing concerns related to physical infrastructure and key challenges of optimizing research space for faculty, facilitating human and animal studies, and maintaining departmental cohesion during periods of construction and physical separation.

The Dean's Administrative Response describes the division and unit's responses to the reviewers' recommendations, including an implementation plan for any changes necessary as a result.

# 5 Monitoring and Date of Next Review

In 2024 the Dean will follow up with the Chair of the Department of Nutritional Sciences on the implementation of the external reviewers' recommendations and will provide an interim report to the Vice-Provost, Academic Programs no later than December 2024 on the status of the implementation plans.

The next UTQAP review of the Department of Nutritional Sciences will be commissioned in 2028-29.

# 6 Distribution

On June 30, 2023, the Final Assessment Report and Implementation Plan was posted to the Vice-Provost, Academic Programs website and the link provided by email to the Dean of the Temerty Faculty of Medicine, the Secretaries of AP&P, Academic Board and Governing Council, and the Ontario Universities Council on Quality Assurance. The Dean provided the link to unit/program leadership.