
UND SMHS Strategic Plan Individual Unit Report for 2023

GOAL 4 for **EDUCATION AND FACULTY AFFAIRS**

Mission of Education and Faculty Affairs: *Education and Faculty Affairs sustains a vibrant, inclusive and dynamic environment that enables learners and educators to achieve academic and professional excellence.*

Education and Faculty Affairs and its units provide resources, services and support for academic units as each carries out its strategic initiatives in alignment with UND SMHS Strategic Goals and the OneUND Strategic Plan.

Units Reporting to Associate Dean for Education and Faculty Affairs: Education Resources; Library Resources; Information Resources; Simulation Center; Interprofessional Education; Medical Accreditation

LEARNING

One UND Strategic Plan Goal 4: *Enhance discovery at a level consistent with most research-intensive universities (Carnegie R1) Goal by 2022, (\$120) million-internal and external funding sources.*

UND SMHS Strategic Plan Goal 4: *The SMHS will enhance basic, clinical, and translational health sciences discoveries while focusing on its stated purpose “of discovery of knowledge that benefits the people of this state and enhances the quality of their lives.” The SMHS will support Goal 4 by increasing its extramural funding by 5% per year based on a three-year rolling average.*

1. Describe if/how your unit has addressed this goal.

EDUCATION RESOURCES/MEDICAL EDUCATION

The Teaching, Learning and Scholarship division of Education Resources has enhanced basic, clinical, and translational discoveries by:

1. Supporting the application and submission of several grants and serving as PI, CoPI, and/or senior personnel on those grants which were funded

1. \$3.75M HRSA grant on Geriatrics Workforce (Serve as Program Director, Curriculum Engagement)—building a game for healthcare professionals to learn to apply Geriatric 4Ms to patient populations
2. \$75M HRSA supplemental grant for telehealth interprofessional team-based assessment and care planning
3. \$20.3M NIH DACCOTA Dakota Cancer Collaborative on Translational Activity (Evaluation Core Director)
4. \$15,000 AMA Innovation Grant (PI for competency-based education badging)
5. \$20,000 AMA grant for development of a student blood pressure virtual leaning activity
6. \$7,000 2021 CGEA Advancing the CGEA as a Community of Educational Scholars: “Teaching Together: A Multi-Institutional Approach to Faculty Development on Medical Education, 7/2022 to 6/2023

2. Independently and collaboratively directing research studies and disseminating original scholarship

1. Souvannasac, E., Renger, R., Van Eck, R. N., Basson, M. D., Renger, J. (2022). Lessons Learned in Evaluating System Interdependencies Using Qualitative Methods. *Evaluation Journal of Australasia*.
2. Haskins A, Nielsen S, Harris N, Salentiny A, Klug M. *Professional Identity Building Scale (PIBS) development: Measuring self-authorship and dimensions of professional identity in graduate students*. Cogent Education (under final review).
3. Renger, Jessica ; Renger, Ralph; Van Eck, Richard; Basson, Marc; Foltysova, Jirina (under review). Using System Navigators to Evaluate Complex Intervention Interdependencies. *Evaluation Journal of Australasia*.

4. Renger, R., Renger, J., Van Eck, R. N., Basson, M., Foltysova, J. (under review). A comparative case study illustrating the influence of a system perspective on the outcome evaluation of simple versus complex interventions. *Evaluation Journal of Australasia*.
5. Renger, J., Renger, R., Van Eck, R. N., Basson, M., and Renger, J. (in Press). Tracking and Reporting Milestones. *Canadian Journal of Program Evaluation*.
6. Van Eck, R. N., Salentiny, A., & Johnson, E. J. (under review). Badging for Competency in Undergraduate Medical Education: A Case Study of Integration in Required Curriculum. Paper presentation submission to AAMC Learn, Serve, Lead, 2023.
7. Johnson, E. J., Van Eck, R. N., & Salentiny, A. (under review). Use of a Points System to Assess and Track IPC Activity for Badging in Undergraduate Medical Education. Paper presentation at the Collaborations Across the Border.
8. Salentiny, A.M. and Van Eck, R. N. (2022). *Evolving Needs and Preferences: Observations and Implications from Two Years of Pandemic-Era Faculty Development Needs Assessments*. Presented at the annual meeting of the AAMC CGEA conference, March 30–31, 2022 (virtual).
9. Van Eck, R. N., Salentiny, A. M., Carr, P., & Dunlevey, J. R. (2022). *Using Instructional Design and Performance Support Technology to Support MD Curriculum Redesign for Improved Mapping, Linking, Student Workload, and Teaching Modality*. Poster presented at the annual meeting of the AAMC CGEA conference, March 30–31, 2022 (virtual).
10. Johnson, E. J., Relling, D., Van Eck, R. N., Allen, J., Janssen, S., Burns, C., & Hanson, D (2022). Interprofessional Telehealth Simulations for Health Science Students. Paper presentation for Bridging Research with Practice: Interprofessional Collaboration, Health Science Research and Evidence Based Practice Conference, Fargo, ND, October 19–20, 2022.

3. Providing faculty development and support of research and education scholarship skills

TLAS provides 20-30 hours per year of faculty development workshops and individual meetings with faculty to support their scholarship. In addition, the TLAS Teaching Academy enrolls 10 faculty from across the school to engage in faculty development around teaching and education scholarship. Faculty this year will develop theory-driven and evidence-based interactive learning modules using the Media Recording Studio technology and assets. Faculty will develop and implement education scholarship plans around these products and incentives will be provided for conference presentations and publications.

In the Medical Education division of Education Resources, Drs. Minnie Faith Kalyanadundaram and Patrick Carr are working on educational grant funding related to associations between matriculation profiles, performance in the curriculum, and standardized assessment outcomes.

INTERPROFESSIONAL EDUCATION AND COLLABORATION (IPEC)

IPEC has 4 established activities:

- Interprofessional Health Care Course (IPHC) with 8 professions
- PharmD/MD student match
- 3 IP simulation activities including the ROBOTS sim developed with AMA grant funding to include telehealth.
- Badging program for Interprofessional Collaboration has been added to the MD program.

Utilization of learning objectives in IPEC for several clerkships are now included. In addition, geriatric learning experiences, including community-oriented activities are in development. We are having conversations about “Consult Cohorts”, which would put the Learning Communities to better use.

Many of these activities and evaluation methods lead to scholarly activity. We have received separate AMA grants with respect to the ROBOTS project, the “Chronic Disease History and Physical”, and the hypertension treatment interactive virtual module. We have done oral presentations at international, national, and state

meetings, as well as posters, presentations and journal publications since 2018. Development and dissemination of IP learning is very important for better team-based learning and health care for North Dakota.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

The work related to continuous quality assurance (QA) by the Office of Medical Accreditation (OMA) and the work related to continuous quality improvement (CQI) by the Dean's Quality Improvement Panel (DQIP) addresses Goal 4 in the ongoing reviews of LCME Standards and Elements associated with medical school's research efforts and by analyzing outcome data from AAMC Graduate Questionnaire (GQ). Two accreditation "elements" that best represent this goal are expectations related to "Community of Scholars/Research Opportunities" and "Scholarly Productivity".

3.2 The medical education program is conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars and provides sufficient opportunities, encouragement, and support for medical student participation in the research and other scholarly activities of its faculty.

4.2 The faculty of a medical school demonstrate a commitment to continuing scholarly productivity that is characteristic of an institution of higher learning.)

LIBRARY RESOURCES

Library Resources fosters intellectual challenge and a spirit of inquiry through ongoing efforts to fully integrate information literacy and critical thinking into SMHS curricula. Library Resources is currently engaged in departmental strategic planning and librarians have prioritized an exploration of departmental curricula, courses, and assignments to identify opportunities where skills of locating, appraising, and using high quality information sources are best placed to accomplish full integration with disciplinary work.

Through research and planning for this integration, librarians have conducted an in-depth review of literature. The focus of the review is on the use of intellectual frameworks by academic libraries across the country as they have crafted information literacy curricula. Librarians had hoped to find models that could be employed by SMHS to scaffold information literacy and critical thinking for SMHS disciplines. However, findings indicated that very few librarians are documenting use of theoretical planning as they develop programming. Therefore, several SMHS librarians have drafted an article analyzing this body of literature and have submitted it for publication.

An important aspect of the research enterprise is data management. As of January 2023, the National Institute of Health has instituted a new Data Management and Sharing Policy that will impact all future NIH-funded research. Librarians hope to help create policies and procedures to aid SMHS researchers in compliance. Additionally, librarians have unique knowledge and skills related to best practices in documentation, data organization, and compliance with data standards. SMHS librarians continue to explore opportunities to provide assistance and guidance to the SMHS community.

Finally, with successful research endeavors follows dissemination and publication. Librarians are currently engaged in two initiatives to increase visibility of SMHS research. The first initiative is to increase the visibility of research output by expanding SMHS collections on UND's Scholarly Commons. Placement of article pre-prints, research posters, and academic work exposes the work of SMHS scholars to a global audience by increasing findability and removing access barriers of paywalls and other factors implicit in traditional publishing. The second initiative is the recruitment of a qualified scholarly communications librarian who would bring new expertise and skills to SMHS. This addition of this librarian would build capacity within Library Resources to support the work of researchers by providing assistance and training on topics such as author rights, copyright, digital scholarship, traditional publishing, open access publishing, and many other challenges that surface through the process of preparing and submitting a manuscript for publication.

INFORMATION RESOURCES

Information Resources supports departments in scholarly and creative activity by implementing and maintaining appropriate technologies and systems.

2. Describe how your efforts are being assessed.

EDUCATION RESOURCES/MEDICAL EDUCATION

Efforts are being assessed by amount of funding, increase in funding year-over-year, number of publications, hours per year

INTERPROFESSIONAL EDUCATION

There is a high priority to develop and implement evaluation and outcome measures that are meaningful.

- “Competency checklists” with gamification/badging components across a wide variety of IP settings have been approved and will be used beginning with the class of 2026 for many of these activities for the processes of evaluation and outcome measures, i.e., proficiency in IPE. Done in conjunction of Dr. Richard Van Eck, Dr. Adrienne Salentiny, and Michelle Montgomery, MSW LCSW
- Clerkship IP Learning objectives are a part of routine clerkship evaluations
- IPHC- MCQ for medical students, preceptor evaluation, student reflection
- ISCLE-preceptor and student reflection
- AMA grant projects were assessed/will be assessed by students and faculty for suitability in curriculum development.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

The medical education program’s efforts to achieve successful outcomes related to these specific elements are accomplished through self-assessment processes in which the LCME data collection instrument (DCI) is utilized to gather data and answer related questions. These data are analyzed by the established accreditation review committees. Further insight was obtained through the use of outside consultants.

LIBRARY RESOURCES

Library Resources monitors usage of SMHS collections on the UND’s Scholarly Commons. Although comprising only 5.2% of the materials available in the Commons, 30% of all downloads from the Commons are from SMHS collections.

3. Describe how your unit analyzed these data and what assessments were determined.

EDUCATION RESOURCES/MEDICAL EDUCATION

The Teaching, Learning and Scholarship division of Education Resources typically increases funding year over year by more than 10% and have an average of over 2 publications per year. This exceeds our goals given current resources. The IPC Badging program is the result of continued efforts to build badging curricula and will be used as a template for future badging initiatives as per the AMA Innovation grant award.

INTERPROFESSIONAL EDUCATION

For the ROBOTS sim, the CATS measurement tool for interprofessional collaboration was modified to include the telehealth component for assessment and led to incorporating an important IP activity into curriculum. Nursing students and medical students evaluate the AMA hypertension interactive learning module in development for suitability for curriculum nationwide. Some scholarly activity surrounded this development. As noted, badging is being developed as an assessment tool. We anticipate scholarly activity surrounding this.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

In January 2022, the medical program concluded a two-year self-study analysis of how it meets the expectations of its accrediting body (the LCME) and identifies areas of strengths and challenges. The self-study analysis

concluded that the school's research efforts is an area of institutional strength. The self-study summary as reported to the LCME follows:

Focused Areas of Basic Science, Clinical, and Translational Research

As a community-based medical school, the UND SMHS has historically experienced success by focusing research efforts on targeted areas in human health; a longstanding example of that success at UND is neuroscience. As part of its more recent strategic vision and initiatives, the school has actively recruited and hired faculty researchers and educators in areas of focus including epigenetics, host–pathogen interaction and Native American health. The dean also has collaborated with the UND vice president for research to support and fund a postdoctoral fellowship program, which has supported the hiring of 12 new postdoctoral fellows at the school since 2017. In addition, the school became the lead institution for the federally funded Dakota Cancer Collaborative on Translational Activity consortium (including UND, North Dakota State University, University of South Dakota, and major hospital systems across the region with whom the school partners in its educational efforts) that has received funding of \$20.4 million over five years from the National Institutes of Health to build clinical and translational research in the region through a combination of pilot programs, career development awards, and other programs that build bridges between the school's scientists and hospital clinicians.

The school recently has committed over \$2.0 million to support and expand UND SMHS research core facility capabilities, including new staffing and new instrumentation. The commitment to achieve the school's mission toward “the discovery of knowledge that benefits the people of this state and enhances the quality of their lives” is demonstrated by the school's increased sponsored funding by 12.5% per year over the past decade, with a record \$38.5 million in extramural funding received in FY 2021, a 25% increase over the prior fiscal year.

In addition, revision of the Research Experience for Medical Students (REMS) course has provided an increased opportunity for medical students to participate in research. In AY 2021–22, 67 first-year medical students (86% of first-year medical students) will participate in the REMS course, representing a 60% increase in medical student participation in this elective research opportunity over the past academic year.

Separate from the above self-study summary statement, it is also important to also note that approximately 250 publications have been accomplished by SMHS faculty during the past year, representing a threefold increase in the number of publications reported in the previous year.

4. Describe how your unit will implement any further changes and what barriers may exist.

EDUCATION RESOURCES/MEDICAL EDUCATION

The Teaching, Learning and Scholarship division of Education Resources is reapplying for the next round of HRSA and NIH funding opportunities this year and will publish and present on ongoing research. There is little to no additional capacity for additional research or funding given current resources and the current rate of scholarly productivity will be difficult to sustain. Badging curricula will be rolled out in July and new badging proposals will be generated over the next year.

INTERPROFESSIONAL EDUCATION

We are always on the lookout for IP education and collaboration partners. IP is a curricular area that has many opportunities for teaching and learning scholarship. As well, this plays a role in workforce development. Barriers are often institutional, but this is less of an issue as time goes on. IP collaboration across institutions is the next goal after the successful launch of the PharmD/MD student match program with NDSU and success within UND. This will almost certainly lead to additional scholarly activity in the teaching and learning realm. IP collaboration is an important skill set for the future delivery of health care in North Dakota.

OFFICE OF MEDICAL PROGRAM ACCREDITATION AND QUALITY IMPROVEMENT

DQIP has the responsibility to identify accreditation standards and elements that require ongoing monitoring to ensure that the medical program meets the expectations set out by those standards and elements. Element 3.2 (see above) has been identified as one of those elements that will undergo regular tracking and reviewing.

PROVIDE A RATING OF YOUR PROGRESS ON THIS GOAL: ● On Track; ● Delayed; ● Behind

● **Education and Faculty Affairs units are on track with progress on Goal 4**