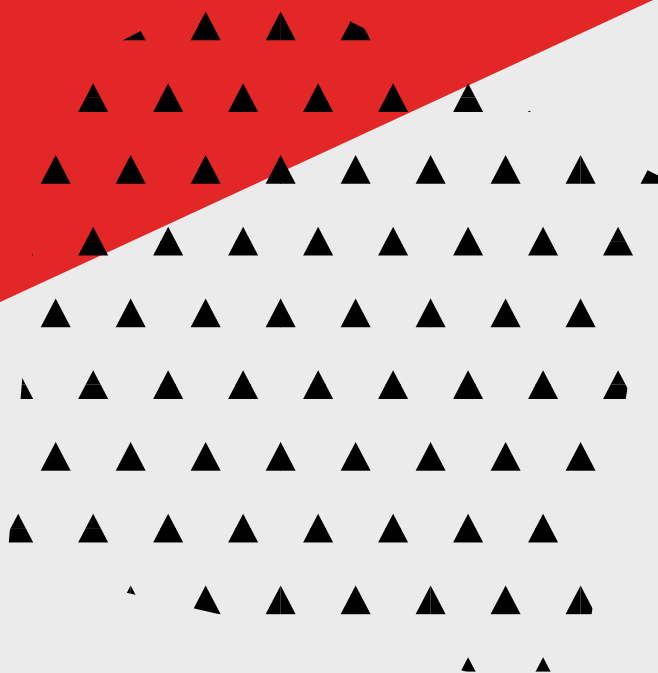




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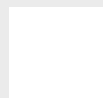


Educational leadership,  
scholarship & practice



# Teaching Scholars

Mid-term Report  
**JUNE 2018**



# Introduction



The University of Calgary Teaching Scholars Program is a program designed to strengthen educational leadership across the University of Calgary. The pilot program provided up to \$40,000 over three years (2016 – 2019) to support teaching and learning initiatives that addressed a topic of shared interest within, or across faculties. The Scholars initiatives were designed to help other instructors strengthen their teaching practices and improve student learning. The goals of this program were to:

- Build teaching and learning capacity within and across disciplines;
- Establish and connect small working groups and networks of practice;
- Contribute to inquiry, excellence, and innovation in teaching and learning;
- Enhance student learning experiences; and,
- Strengthen educational leadership across the institution.

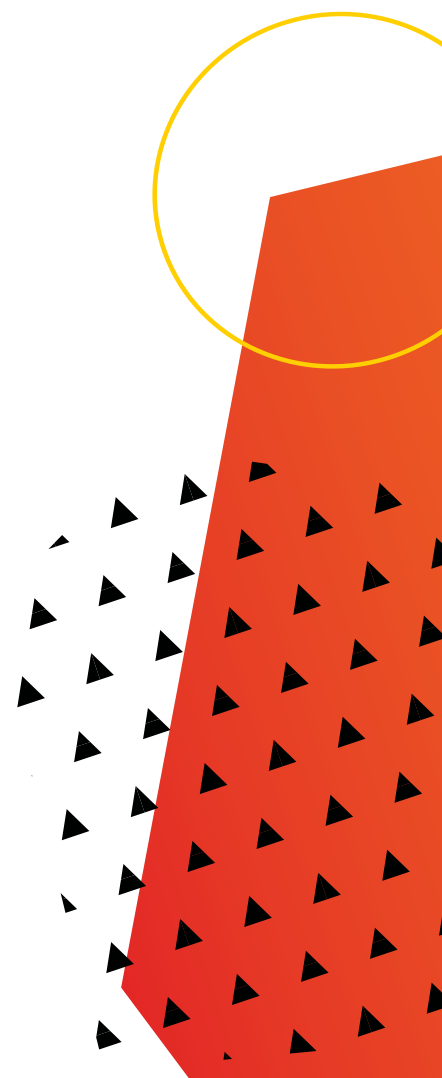
**A total of \$360,400 was committed to 14 Teaching Scholars from across nine faculties at the University of Calgary from 2016 to 2019.** The distribution of the Scholars across the University is representative of the tangible way in which we are striving to build integrated networks of educational leadership.

As part of the program, Scholars:

- Complete meaningful and relevant initiatives of shared disciplinary and/or interdisciplinary interests, with clearly-defined outcomes, that are designed to build teaching and learning capacity and enhance student learning experiences within and/or across faculties.
- Develop and implement initiatives that enable and engage other instructors to help strengthen their teaching and learning practices, and to build networks of practice across the broader academic community.
- Participate in an interdisciplinary community of practice with Teaching Scholars from across the University of Calgary (hosted by the Taylor Institute for Teaching and Learning).
- Disseminate the results of their initiatives for the benefit of the broader academic community, through their respective faculties and the Taylor Institute for Teaching and Learning.
- Complete mid-term and final reports outlining their projects' progress and findings.

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### Providing meaningful feedback for student learning: Creating a program of assessment for veterinary students

**Dr. Kent Hecker**  
**Faculty of Veterinary Medicine**

Within the Faculty of Veterinary Medicine, a program of assessment has been implemented within our final clinical year. Colleagues and I are currently reviewing data that will inform how best to collect and disseminate information back to our stakeholders. We have provided international workshops on programmatic assessment and are beginning to publish collaborative work from the University of Calgary and Utrecht (Holland). This Teaching Scholars program has catalyzed a number of collaborations within our faculty, across the Teaching Scholars program, and internationally.

“

The Teaching Scholars program has challenged me to broaden my understanding of education, learning, scholarship, and teaching. As a result, new avenues of teaching and scholarship have opened up for me. This includes building collaborative research ties with international partners and Scholars like Tom O’Neill and Rachel Ellaway. I have been encouraged to lead various educational initiatives within the University of Calgary and internationally. It has also afforded the opportunity to build collaborations in new areas, specifically in neuroeducation (Canada Foundation for Innovation funded lab) across disciplines with collaborators in Medicine (Heather Jamniczky), Psychology (Andrea Protzner), Veterinary Medicine (Amy Warren, Emma Read) and beyond (neuroeconomist, Olave Krigolson, University of Victoria).”

## Program SAGES (SoTL Advancing Graduate Education in STEM)

**Dr. Isabelle Barrette-Ng, Department of  
Biological Sciences, Faculty of Science**

Between the 2016 fall term and the 2017 spring term, we had the pleasure of seeing the first cohort of 14 outstanding graduate students complete Program SAGES (SoTL Advancing Graduate Education in STEM). We also engaged with ten experts in the scholarship of teaching and learning to develop innovative workshop learning opportunities and worked with twelve faculty mentors to support individualized authentic teaching practicum opportunities for each member of the graduate student cohort. Each graduate student in this first cohort successfully completed the program and presented a capstone interactive poster presentation at the first annual Celebration of Teaching and Learning event in June 2017. Learning from the successes and challenges during the pilot year, we expanded the enrolment of Program SAGES to 22 and invited students and faculty mentors from four different faculties (Science, Kinesiology, Veterinary Medicine and Medicine) aligned with the STEM disciplines.



“

I designed, implemented and offered two new pass/fail credit courses in the Faculty of Science focused on the development of a reflective, evidence-based teaching practice for STEM graduate students. Also, 14 graduate students in the Faculty of Science successfully completed the program in 2016-2017. Results indicate that participation in the program changed the graduate students' approaches to teaching, as they become more inclined toward student-centred teaching. The program also has a significant effect on graduate students' self-efficacy as teachers. Interviews with faculty mentors revealed that graduate students improved their teaching practices and learned new teaching strategies from their mentees.

Sharing experiences has helped me realize that many of the challenges faced by different disciplines are surprisingly similar, and that creative solutions to problems in one area can often be applied to another area, sometimes with surprisingly effective results. I am highly grateful for the opportunity to be a member of this group. Each meeting has exposed me to different thoughts and resources that have enriched both my teaching and educational leadership practices.”



### Implementation of a team-based learning strategy in the Faculty of Nursing program using an innovative technological approach

**Dr. Linda Duffett-Leger**  
**Faculty of Nursing**

As a Teaching Scholar I have been working on the development and commercialization of a tool to support the implementation of team-based learning (TBL), an experiential learning approach, in the classroom. As an assistant professor in the Faculty of Nursing, I have actively explored the benefits and pitfalls of using e-learning technologies in the classroom, which has inspired me to investigate the impact of e-technology on students and instructors in higher education. I used my findings to leverage teaching and learning seed funding to develop a unique response system (TaBLex). This system supports students and instructors in courses that apply TBL approaches. Providing students with immediate feedback about their learning is foundational to TBL; however, the ability for instructors to do this has not been well-supported by pre-existing teaching and learning tools. Tablex, a software designed in collaboration with students and faculty to address this challenge, has application in other faculties and instructors who might want to adopt TBL in their own classrooms.

“

A key success has been the development of a TBL platform (TaBLex), developed with students and instructors, and specifically designed to address the challenges to the uptake of TBL in the classroom. Currently, no other learning management system in Canada has integrated a TBL tool. This is an opportunity for learning management systems like D2L to integrate this experiential learning platform, making TBL more accessible to instructors and students.

As a member of a network of Teaching Scholars, I have had the opportunity to interface with colleagues from other faculties, who will allow me to explore teaching and learning from a broader perspective. It is through this network that I have developed a partnership with Tom O’Neil, in the integration of his peer evaluation tool into the design of a TBL platform. I will also be working with Isabelle Barrette-Ng to pilot TaBLex in her classroom with biology students.”



## Presence in the academy: A community of practice in contemplative pedagogy

**Dr. Rachael Crowder**  
**Faculty of Social Work**

Over the past eighteen months, Presence in the Academy: A Community of Practice in Contemplative Pedagogy has provided introductory workshops on concepts, theory and practices of contemplative approaches to teaching and learning to 27 faculty members from twelve different faculties/departments; two 2.5-day mindfulness retreats to 46 teaching faculty members representing about 15 different faculties and/or departments; an eight-week mindfulness-based stress reduction program to 22 faculty Members representing twelve faculties/departments; and 14 personal consultations with individual faculty members from Nursing, Medicine, Social Work, Geography, and Business, on applying and evaluating contemplative approaches in teaching practices and courses.



“

This initiative has hosted over 100 participants in its various offerings, consisting of graduate students, faculty in all ranks, and others working directly with students, representing at least 15 distinct disciplines altogether. This work has rejuvenated and built my confidence in my own teaching practice, especially in the context of contemplative pedagogy. It has added a deeper reflexive quality to my teaching practice. It has been immensely rewarding to fill a position where I can share this initiative with others, connect with instructors on a human level and facilitate the dialogue and self-discovery methods that I have used therapeutically as a social worker and trauma therapist. This experience has helped me translate the knowledge and skills to a broader audience.”



## Developing student teamwork skills through feedback on personality and conflict management styles

**Dr. Tom O'Neill**  
**Dr. Melissa Boyce**  
**Department of Psychology**

**Dr. Marjan Eggermont**  
**Dr. Denis Onen**  
**Schulich School of Engineering**

We have encountered several key successes in implementing this Teaching Scholars initiative. We have exposed hundreds of students to interventions that we believe will be helpful in their gaining critical insight and improving their teamwork skills. This has also provided us with a solid number of participants for our data sample, which will help us in offering better empirical proof of our intervention's validity. Further, it will allow us to potentially share critical insight with the academic community once we have analyzed our findings. The project has provided an opportunity to help a number of undergraduate and graduate students grow and develop as facilitators and researchers.

“

The Teaching Scholars Program has provided us with the opportunity to influence the teamwork skills of more undergraduate students than I could have possibly imagined. We've now had over 60,000 teamwork assessments taken through our web-based itpmetrics.com platform. We continue to rigorously evaluate the efficacy of the interventions based on this website. We have succeeded in training several undergraduate and graduate students, within the Individual and Team Performance (ITP) lab. A very unexpected outcome was meeting another Teaching Scholar, which resulted in significant collaboration and a manuscript involving competency-based medical education. I want to extend my deepest appreciation to the Teaching Scholars Program visionaries and administrators for making this possible. The chance to move ITPmetric.com forward has given me a platform to be recognized as an educational leader and to impact the teaching practices and student experiences far beyond the University of Calgary.”



## Enhancing educational leadership, student engagement and community ties: The untapped potential of block week courses

**Dr. Conny Burian**  
Faculty of Arts

Being a member of a community of practice has been the most inspiring highlight for me. Sharing insights, challenges, and successes over a period of time and learning about my colleagues' exciting projects has profoundly impacted my views of teaching: I have come to recognize that teaching does not have to be a solitary activity, and that teaching and research are profoundly interconnected. This experience has also given me a sense of interdisciplinarity and shown me the value of collaboration across disciplines and faculties. Finally, being part of a community of practice has given me the chance to reflect on educational leadership. The term 'leader' is a label I am not terribly comfortable with. However, the realization that leadership can be shared has transformed my view. Good leaders, I now know, are good listeners; they are humble and willing to critically reflect on their own teaching practices.



“

I received a Best Poster Award for my 2017 poster presentation at the University of Calgary's Conference on Postsecondary Learning and Teaching. I also consider it a great success that my research assistant found it easy to recruit interviewees — students as well as instructors — which indicates that there is interest in this initiative, and that many are eager to participate. The Teaching Scholars initiative has profoundly impacted my own teaching. I no longer feel alone as an instructor; I have come to realize that while teaching can be a solitary activity, becoming part of a larger network of practice can have an immensely beneficial impact on teaching and learning.”



## Embedding Professional Development Education in the Graduate School Curriculum

**Dr. Derrick Rancourt**  
**Cumming School of Medicine**

My project involves shifting graduate teaching practice toward professional development (PD). Professorships have dried up, requiring 95% of graduate students to explore other careers. Unfortunately, graduate students are not being effectively trained to transition to non-academic positions. Through this project, Cumming School of Medicine graduate programs have adopted a competency model, which will train students to monitor professional development in eight competency areas: 1) Self-Management, 2) Communication, 3) Project Management, 4) Teamwork, 5) Leadership, 6) Critical Thinking/ Problem-Solving, 7) Information/Data Management, and 8) Innovation. As part of the adoption process, we are currently conducting workshops to expose students and supervisors to the model. We have also started working with graduate programs in other faculties.

“

I have seen students' professional skills awareness improve. I have also seen improvement reflected in students' impact statements offered after the course. These statements reveal students becoming aware of professional skills and why they are important for successful transition to the workforce.

This year I also introduced design thinking as a career development concept. I've learned that the combination of storyboarding and informational interviewing may be applied to research more broadly than just career development. Accordingly, I am pitching a new NSERC CREATE graduate training program based on the application of design thinking to basic science research. It is still a work in progress, but I think that my move to create a dedicated professional development office supporting Cumming School of Medicine's graduate students, senior undergraduates and postdoctoral fellows has been successful.”

## Building stronger connections between indigenous and non-indigenous peoples, schools and communities through praxis-based learning opportunities

**Dr. Yvonne Poitras-Pratt**  
**Dr. Patricia Danyluk**  
**Werklund School of Education**

This initiative has resulted in a series of activities focused on improving relations between Indigenous and non-Indigenous peoples, schools and communities through praxis-based learning opportunities. Our project represents important first steps in supporting, sharing, and collaboratively improving the overall success of Indigenizing efforts made by fellow faculty members and students. Our project highlights include: (a) an arts-based event entitled “Eyes Open, Eyes High” featuring Werklund education students and New Blood, a high school performance group: <https://werklund.ucalgary.ca/media-room/news-events/raising-awareness>; (b) service-learning opportunities for Werklund education students in First Nations schools: <https://werklund.ucalgary.ca/upe/service-learning/indigenous-education>; (c) graduate students actively responding to the Truth and Reconciliation Commission’s 94 Calls to Action in a variety of community settings; (d) two leadership gatherings with researchers engaging with Indigenous communities from a wide variety of disciplines; and (e) two Brain Architecture Game events (Werklund School of Education) and one Poverty Simulation learning event (campus-wide). Together, these initiatives are helping us realize stronger connections between Indigenous and non-Indigenous peoples, schools, and communities.



“

As a result of our arts-based events, academic publications, and presentations at academic conferences, educators have started referencing our work through the application of our approaches and terminology. For instance, educators in local school districts have now embraced the vocabulary describing small actions as “ripples.” Our program work’s impact is also visible through growing professional interest in our approaches to reconciliation, as evidenced by an August 2017 invitation to present on reconciliatory pedagogy to over 100 school administrators and leaders in the Rockyview School Division. Our growing presence in local First Nations schools is evidenced through an increase in field placements, new hires, and service learners, and through these schools’ growing requests for our students. Finally, the open source publications that we have uploaded to sites such as Research Gate and Academia.edu have garnered over 100 reads throughout the past year.

Our Teaching Scholars initiative has allowed us to take a leadership role within our various teaching domains, whether Indigenous education or service-learning, where we are able to intentionally target our interests around contributing to the scholarship of teaching and learning. Recognizing the growing need for research-informed practice and scholarship in this area, we are collecting resources, fostering partnerships, and applying for other funding opportunities that will allow us to create a collection of publicly available Open Education Resources.”



## Enhancing interprofessional team performance through simulation among undergraduate students

**Dr. Sandra Goldsworthy**  
**Faculty of Nursing**

In healthcare, teamwork is clearly recognized as a priority for patient safety. Growing evidence suggests that teamwork and interprofessional competencies lead to safer patient care and enhanced knowledge, skills and behaviours among healthcare providers (IOM, 2015, IPEC, 2011). Simulation is being heralded as a transformative approach that can be used in teamwork training. Currently, students from both medicine and nursing are taught teamwork concepts in a sporadic and siloed approach. There is no commonly accepted interprofessional education framework or taxonomy within or across faculties. The opportunity to practice teamwork skills as a team rather than in isolation is critical to patient safety. The purpose of this Teaching Scholar Project is to (a) examine teamwork training in the nursing and medical curriculum; (b) develop collaborative teamwork activities and strategies for integration into the nursing and medical undergraduate curricula; (c) create virtual simulations and curriculum aimed at building interprofessional team competencies; and (d) ultimately improve patient safety through increasing teamwork competence among interprofessional healthcare teams.

“

The key success, I believe, is the promotion of patient safety by working with and learning from other professions rather than in traditional siloes to build competency in working among teams for our undergraduate students. This interprofessional simulation project to build team competency engaged professors from Nursing, Medicine, Social Work, Respiratory therapists, practical nurses and paramedics from three different educational institutions (University of Calgary, SAIT and Bow Valley College). The Taylor Institute Teaching Scholar program has enabled me to advocate for experiential, hands-on learning for our students and promote safer patient care by building interprofessional team communication competencies.”



## CRAWWLA: Competence, resilience, and adaptability with and without learning augmentation

**Dr. Rachel Ellaway**  
**Cumming School of Medicine**

Negotiating university teaching and learning requires participants to adapt to change. Teaching and learning can be affected by the absence or presence of key technologies (such as smartphones or laptops), the presence or absence of particular peers or colleagues, or the ways that certain places support (or do not support) different classroom approaches. We describe this continuum as 'with and without.' There are many ways for teachers and learners to negotiate the 'with and without' of teaching and learning in higher education, and there are many opportunities to use 'with and without' deliberately to effect particular learning outcomes. However, we have found little deliberate engagement with the challenges and opportunities of 'with and without' on teaching and learning. This project seeks to turn this corner by engaging Calgary faculty in developing skills and tools to make better uses of 'with and without' in all aspects of their teaching activities.



“

Our successes have been limited so far as most of our discovery has been highly conceptual. We would, however, point to our deepening conceptual understanding of 'with and without' issues in professional tertiary education and our emerging work publishing along these lines.”



## Scholarly dissemination

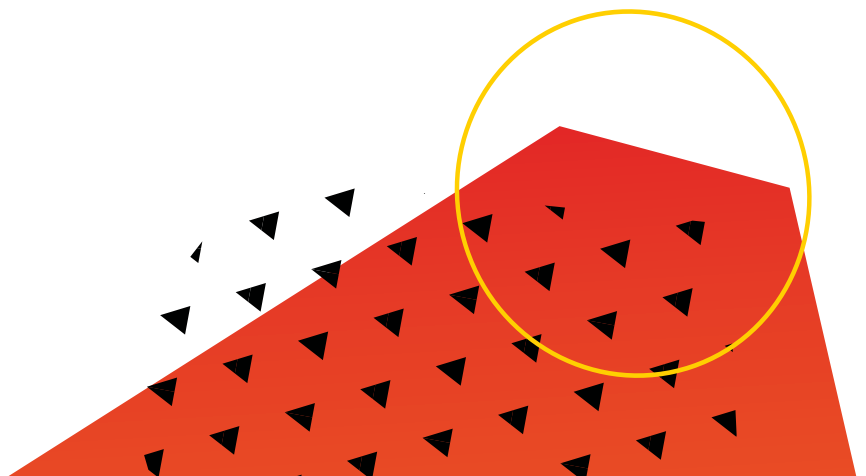
The Scholars' work has been disseminated through various channels at local, national and international levels (Table 1).

Table 1: Summary of the Teaching Scholars' overall scholarly contributions as of the pilot mid-point (from May, 2016 to December, 2017).

Peer-Reviewed Publications	7
Peer-Reviewed Publications in Progress	3
Book Chapters	2
Conference Presentations/Proceedings/Papers	36
Invited Lectures/Workshops & Events	12
Community Outreach	2
Scholarly Blogs	22
Publications, Interviews, Media and Awards	9

## Awards and recognition

The Teaching Scholars have been recognized nationally for their educational leadership. Between 2017-2018, Isabelle Barrette-Ng was awarded a 3M National Teaching Fellowship, Kent Hecker received funding from the Canada Foundation for Innovation to build a neuroeducation laboratory, and Yvonne Poitras-Pratt received a Confederation of Alberta Faculty Associations distinguished academic award.



## Lessons learned

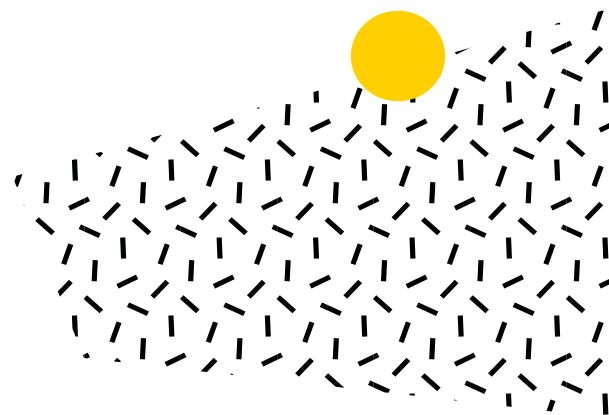
In addition to the tangible successes achieved through the implementation of their projects, the Scholars identified three distinct elements that emerged from their experience in the Teaching Scholars Program. First, some Scholars have articulated that by virtue of involvement in the program, their roles as educational leaders in teaching and learning practices have evolved and been enabled. The program has afforded them the opportunity to demonstrate creativity by implementing innovative projects designed to enhance teaching practices and student learning. In doing so, the program has allowed them to self-identify and be recognized as educational leaders.

Second, the program has facilitated interdisciplinary practice and engagement. The Scholars were drawn from across disciplines at the University of Calgary, and their shared presence at regular community of practice meetings has fostered relationship-building; this relationship-building has resulted in the sharing of ideas and insights between academics with a passion for teaching and scholarly activities. The integration of ideas and/or practices into one another's teaching and educational leadership approaches promotes interdisciplinarity. The Program has presented a forum for the sharing of resources through collegial collaboration between the Scholars themselves, in their interactions with the Taylor Institute, and through the development of new partnerships at the local, national and international levels.

Third, the program has enabled their development as educational leaders by providing appropriate resources, funding and time to implement meaningful teaching and learning projects in their local contexts, and through the collegial, practical and scholarly resources provided by the Taylor Institute for Teaching and Learning. The Taylor Institute has supported the continued growth and evolution of the community of practice. The work of the Scholars has expanded beyond the scope of the program, with new projects being created as a result of evolving partnerships and collaborations.

As we move forward into the final year of the pilot program, we have learned:

- To continue being intentional about the multiple disciplinary perspectives and forms of scholarship that are inherent to strengthening teaching and learning in higher education;
- To continue promoting our community of practice's expanding boundaries by leveraging the Taylor Institute's resources, providing informal opportunities for the Scholars to engage outside of the context of our community of practice meetings, exploring further opportunities for collaboration amongst the Scholars, and encouraging broader dissemination of this Program initiatives' results.
- To simplify and streamline the application and reporting requirements for the Program.
- The establishment of this pilot Teaching Scholars Program recognizes the importance that the University of Calgary places on enhancing capacity for educational leadership within and across disciplines, and it has resulted in initiatives that strengthen teaching and learning practices within and across faculties.





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