THE AMERICAN COLLEGE OF PSYCHIATRISTS
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# 2024 Award for Creativity in Psychiatric Education
# **Application Form**

**Please complete and return this application with any supporting materials (not to exceed 30 pages total) by email to nathan@acpsych.org by June 30, 2023**

## Guidelines

This Award is open to any creative/innovative program for psychiatric education that has been in operation for at least two years, includes program outcome data, and has been a part of a U.S. or Canadian psychiatric residency training program approved by ACGME or The Royal College. Trainees may include medical students, residents, other physicians, allied mental health professionals, or members of the community. The program and any contributors must be free from commercial interest or benefit. Applicants must submit a completed form and related documentation by June 30, with the total submission not to exceed 30 pages. Please include all relevant information about your program within these 30 pages; do not rely on hyperlinks as your program's primary source of information.

## Applicant Information:

Name of person completing this application: Vanessa Lentz, MD, FRCPC

Title: Training/Program Director

Name of educational program: (e.g., Diversity Training Program): General Psychiatry Residency Program

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Department Chair: Karin Neufeld, MD, FRCPC, ABPN

## Program Information (use additional space as needed):

1. Brief description of program:

We are honored to submit our highly innovative program in psychiatric education, instigated at McMaster University, for consideration of The American College of Psychiatrists' 2024 Award for Creativity in Psychiatric Education. As we will describe below, we believe that our initiative promotes the creativity that fuels important changes in the educational needs of our psychiatry residents, while also providing an integral experience to residents who will, throughout their careers, care for patients with a multitude of psychiatric and medical challenges, alongside non-psychiatry medical colleagues including nurse practitioners, family physicians, and hospitalists.

Background and Context:
The McMaster University General Psychiatry Residency Program is a 5 year program spanning the PGY1-5 years, designed to prepare residents to be competent general psychiatrists. The residency program has 2 campuses: the Hamilton Campus, based on Hamilton, Ontario, Canada, and the Waterloo Regional Campus (WRC) distributed site, based in the Kitchener-Waterloo-Guelph tri-cities area of Ontario, about 30 miles from Hamilton, Ontario. Our Program is fully accredited by The Royal College of Physicians and Surgeons of Canada (RCPSC).

The PGY1 year in Canadian psychiatry residency programs functions much like the American, broad-based Internship year, with residents completing thirteen, 4-week blocks in various medical specialties relevant to the practice of Psychiatry. In 2019, the Program initiated plans for a new, unique rotation that each resident in our program would undertake in their PGY1 year. We termed this the **Medical Team to Inpatient Psychiatry (MT2IP) Rotation**. The previous Program Director (Dr. JoAnn Corey, MD; 2009-2014; 2019-2021), and Nurse Practitioner Dr. Andrea McKnight NP, MScN, DNP, were instrumental in the design of this significant innovation which remains, to the best of our knowledge, unique in North America.

Description of MT2IP Rotation: In this capacity, each PGY1 resident works with the medical team consulting to the psychiatric inpatient units (the "Inpatient Medical Service") at two major psychiatric health care facilities: the West 5th campus site of St. Joseph's Healthcare (SJHH; in Hamilton, ON) and at the Homewood Health Centre (in Guelph, ON). Both facilities are fully affiliated teaching hospitals with McMaster University, and each are regional sites for the acute and tertiary care of patients with major psychiatric illness requiring hospitalization for stabilization. (As stand-alone psychiatric facilities, neither cares for patients requiring urgent medical care.) The medical teams consulting to the units in these facilities are made up of full-time Nurse Practitioners and Family Medicine/Emergency Medicine hospitalists who provide daytime medical coverage to these units. These medical teams at the SJHH West 5th Campus and Homewood Health Centre are exceptional services with nurse practitioners of the highest caliber. Indeed, it was due to her outstanding experience in working with the SJHH medical team herself that Dr. Corey recognized the incredible learning potential for psychiatry residents. As such, this interprofessional collaboration has our PGY1 residents working with and learning from these teams in providing assessments and care for inpatients' physical ailments.

The overarching goals for the PGY1 Psychiatry resident during this rotation include: to develop competency in the recognition, assessment, investigations and management of medical comorbidities which have an increased prevalence in people with psychiatric presentations; to gain an appreciation for the demands on and expertise of healthcare professionals who provide care for physical health concerns to people with significant mental illness; and to obtain interprofessional education and understand the role and impact of the Nurse Practitioner. This

rotation serves as a prime opportunity for residents to care for the physical health issues of psychiatric inpatients, many of whom are hospitalized for lengthy periods of time. Our residents learn about care of physical ailments including metabolic syndrome, diabetes, hypertension, endocrine disorders, neurologic disorders, management of psychotropic side effects such as constipation, as well as serious side effects such as risk of agranulocytosis and/or bowel obstruction with the use of clozapine. It also provides exposure in assessing patients with psychiatric illness for other complaints and associated investigations.

Logistically, each PGY1 resident is assigned to a primary Nurse Practitioner or Hospitalist supervisor, and the resident provides daytime coverage to approximately 3-4 units, with an average unit encompassing 24 inpatients. Our PGY1 residents are responsible for new admissions to these units, producing a history and physical exam, addressing acute or time-sensitive issues (e.g. treating a positive VDRL result), considering screening tests as necessary (e.g., ordering a mammogram if indicated), as well as addressing chronic issues (e.g. longstanding uncontrolled blood sugars in the context of Type 2 Diabetes Mellitus). Residents also liaise with family members as permitted by consent and monitor for risks regarding the initiation of new drugs (e.g. postural hypotension in a clozapine trial in an older adult patient). Residents are observed as appropriate, and review their patients daily with their Nurse Practitioner/Hospitalist supervisor. The final evaluation is completed by the supervisor, in conjunction with any other applicable service staff with whom the resident has worked. In addition, more broadly speaking, there has been, and continues to be, significant collaboration and sharing of ideas between the Inpatient Medical Service, the Training Director of the General Psychiatry Residency Program, and the residents.

This program and all its contributors are entirely free of any commercial interest or benefit.

2. In what way is your program creative and innovative?

As mentioned above, we believe that the MT2IP Rotation is one of its kind in North America. Historically, and still all too often, the medical care of psychiatric inpatients has generally been underemphasized (Walker et al., 2015), and the literature is clear that patients with major mental illness are at significantly greater risk of morbidity and mortality and die earlier than their peers (De Hert et al., 2011; Houben et al., 2019; Onyeka et al. 2019). In addition, in the last approximately 15 years, medical education has increasingly and importantly recognized the critical contributions by our interprofessional team to residents' training, including demonstrating that better care is provided when provided by an interprofessional team (Walsh et al., 2014; Brashers et al., 2020). In this vein, our program serves to capitalize on two important areas that optimize the education of our residents, with the ultimate goal of providing the best care possible to patients with major mental illness.

At the time of its inception, it was highly innovative to allow nurse practitioners to supervise medical residents; indeed, prior to the initiation of the rotation, there had been concern and even objection by some faculty members that this be permitted to occur. Having had the idea for this rotation in 2019, when the Royal College of Physicians and Surgeons of Canada was preparing to roll-out Competency Based Medical Education (CBME) in Canadian Psychiatry residency programs, Dr. Corey successfully advocated at the level of the RCPSC Psychiatry Specialty Committee for Nurse Practitioners to be included in the list of possible assessors able to complete evaluations of residents within the competency of "assessing, diagnosing and participating in the management of patients with medical presentations relevant to psychiatry".

Also innovative and creative is the fact that our residents rotate on a service providing care to patients whom they will later see wearing their other hat - that is, of a psychiatry resident on one or more core (or elective) psychiatry rotations. For example, while a resident may wear the hat of a PGY1 on the MT2IP Rotation at one point in their PGY1 year, they may, just a few short months later, be working on the same unit seeing the same patients as a PGY2 resident doing their core acute inpatient psychiatry rotation. This is partially availed by the nature of these facilities. For example, at the 311 bed SJHH West 5th campus, there are several acute mental health units (serving the foundational PGY2 general inpatient psychiatry rotation), but also several tertiary mental health units (including a mood disorders unit, a geriatric mental health unit and geriatric behavioral support unit, as well as several units serving those with schizophrenia spectrum illness and those in the forensic system). This provides a very unique perspective that highlights both the varying roles one may have within the same academic setting, but also affords knowledge and experience that the resident will take with them to the subsequent rotation and their work with the patient(s) in question.

3. What significant educational issue is addressed by your program?

This program addresses two significant educational issues in psychiatry training. First, it attends to the increasingly recognized need for interprofessional education in psychiatry residency education. It also increases residents' knowledge and skills in the identification, assessment and early management of medical issues in patients with psychiatric illness. There is growing evidence supporting the need for integrated care for psychiatric inpatients with medical comorbidities and that traditional models of care do not work for these individuals (Jansen et al., 2018; Melamed et al., 2019). The coexistence of a psychiatric and medical diagnosis increases mortality (Walker et al., 2015), and is related to increased length of hospital stay, higher medical costs and an increase in re-hospitalizations (Jansen et al., 2018). Psychiatry residents agree that they need to know how to assess and begin management of the medical comorbidities associated with a mental health diagnosis but describe lack of knowledge, experience, training, and supervision as barriers to gaining this competency (Wehr et al., 2017, Jones-Bourne and Arbuckle, 2018). A curriculum designed to address the inherent vulnerability, increased morbidity, and premature death found in the psychiatric patient population should be integrated into psychiatry resident's education allowing for an integrative medicine clinical experience (McCarron et al., 2015, Jones-Bourne and Arbuckle, 2018). Our MT2IP rotation illustrates how a clinical rotation involving an integrative model of care for psychiatric inpatients can be implemented into the curriculum, utilizing the primary care Nurse Practitioner as a supervisor, to address the need for integrated psychiatry-medical care training in psychiatric residency.

Furthermore, appreciation for non-physician medical educators is expanding with evidence demonstrating the value of non-physician educators' contributions to medical education (Reisenberg et al., 2009). Studies show that residents recognize the Nurse Practitioner's value in team functioning and areas of specialized knowledge when providing education to medical residents, and Nurse Practitioners' teaching skills that were valued highly were different than that of the physician educator (Henley et al., 2000, Walsh et al., 2014). A large portion of the literature highlights the importance for residents to understand healthcare providers roles, as this is an integral part of interprofessional education (Miles et al., 2020). The MT2IP Rotation has increased our learners' understanding and appreciation for the expertise provided by our Nurse Practitioner colleagues.

Lastly, it is important to note that the feedback from our residents gaining this educational experience from Nurse Practitioner educators highlights that this rotation has been incredibly well-received. The rotation has

been described as one of the best of the PGY1 year at McMaster University; here are a few snapshots of residents' experiences:

"As a Psychiatry resident, working with the Inpatient Medical Services Team has been an incredible experience. Not only have I had the opportunity to fine-tune my skills in the medical management that is most relevant to my future patient population, but I have also had the opportunity to witness, learn from, and be inspired by the team of Hospitalists and Nurse Practitioners who are true champions and advocates for the medical needs of these patients. The collaboration I have participated in through this team while they work with Psychiatrists has no doubt lead to safer and more effective care, which already has me thinking how I can continue prioritizing similar collaborations in my own future career."

-Dr. Patricia Malinski (PGY1 Resident, 2022-23)

"I had an excellent learning experience on the Inpatient Medical Team rotation. Compared to the other off-service PGY1 rotations, it was unique because it allowed us to focus on medical issues specifically in psychiatric patients and settings. Given that these are the patients we will be working with and the settings we will be working within for the rest of residency and our careers, I found the rotation more applicable for my learning and my future. I feel I left the rotation having learnt clinically useful takeaways that I will actually incorporate in my practice moving forward."

-Dr. Tya Vine (PGY1 Resident, 2022-23)

"The Inpatient Medical Services team provides a unique learning environment for psychiatry residents that enhances our learning and equips us with skills that will benefit us throughout our careers. The ability to provide medical care exclusively in a mental health setting prepares us in navigating the often difficult task of performing medical histories in this population, educating patients, and engaging in shared decision-making. It has been beneficial in learning creative approaches to history taking, creating differentials, and implementing management plans in situations where clear communication and agreement with patients on treatment may be challenging. The highly experienced and skilled clinicians on this team have had a great impact in our formation and have fostered strengths in medical management that will serve us well in caring for patients in any environment into the future."

-Dr. Kyle Fediuk (PGY1 Resident, 2022-23)

"The Inpatient Medical Team rotation was a highlight of PGY1. It was an opportunity to work with a highly skilled group of practitioners to learn how to manage medical issues in patients admitted to psychiatry. In the setting of a psychiatric hospital, I felt uniquely positioned to learn about common comorbidities, managing psychotropic side effects, and screening/preventative health, experience which will be important throughout my career in psychiatry. The team was knowledgeable, welcoming, and motivated to teach, and I felt I was able to help provide excellent medical care with their guidance."

-Dr. Ana Kovacevic (PGY1 Resident, 2021-22)

As supervisors, our Nurse Practitioner colleagues have also described the MT2IP Rotation as an incredibly positive and fulfilling collaborative learning experience. As discussed further below, the next step would be to repeat evaluation after a larger number of residents have completed the rotation such that we can best implement an integrative model of education throughout all 5 years of the residency program to maintain competency.

4. What year did your program begin?

Planning for this initiative began in the winter of 2019, and the rotation went live on July 1, 2020. Since this time, 24 residents have completed the rotation during their PGY1 year, with an additional 10 incoming PGY1 residents scheduled to undertake the rotation in the 2023-24 academic year.

5. Have other academic centers created similar programs modeled on yours? If yes, please specify:

Given the relatively recent establishment of this program, and the fact that we are only beginning to have sufficient data to consider dissemination, we do not believe that any other academic centers have created similar programs modeled on this one. A review of the literature conducted in June 2023 did not reveal any similar programs.

6. Has your program been presented at a national meeting, won awards from other organizations, or been accepted for publication?

This program is being presented at the upcoming International Congress of Nursing in Montreal, Quebec, Canada (July 1-5, 2023).

7. What method of self-evaluation is integrated into the program? Explain and provide a sample of the evaluation tool as well as any outcome data that the program has generated:

Since its inception, this program has been evaluated in two principal ways. First, the program has been evaluated in the same way as all rotations within the General Psychiatry Residency Program - that is, via the collection of formal rotation evaluations occurring via an integrated online teaching and learning platform for undergraduate and postgraduate medical education. The platform used at McMaster University is MedSIS. As such, since September 2021, evaluations of all supervising Nurse Practitioners and of the rotation itself have been collected as each resident completes their rotation. The evaluations are 'published' by the platform for analysis only on an annual basis (to ensure resident anonymity). This component of the self-evaluation is the most integrated into the Program, although we continue to look for additional means of obtaining feedback on a frequent basis.

Secondly, during the 2022-23 academic year, supervising Nurse Practitioner Dr. Andrea McKnight led an evaluation of the program, as part of her dissertation work for her Doctorate in Nursing through D'Youville University. Below is a summary of her work:

**Background:** An integrative care clinical rotation, with a Nurse Practitioner (NP) as a supervisor, was developed attempting to address the need for psychiatry residents to develop the A mandatory 4 week clinical rotation for first year psychiatry residents was incorporated into the teaching curriculum at one institution. Psychiatry residents worked with the inpatient medical services team NPs providing care for non-psychiatric, medical issues to patients admitted to psychiatric inpatient units. A survey assessing the satisfaction of the clinical rotation and their experience working with the NP as a clinical supervisor was gathered.

**Methods:** The clinical rotation was incorporated into the psychiatry residents' in PGY1 curriculum. The clinical block was scheduled throughout the academic year for 4 weeks at a time, with 7-8 residents per academic year completing the rotation. The clinical supervisor was chosen at random with at least every member of the IMS team supervising a psychiatry resident once per academic year. Units managed by the Inpatient Medical Service team include acute mental health, mood disorders, schizophrenia, secure and general forensics, forensic assessment, acute corrections stabilization unit, senior mood disorders, and senior behavioral disorders.

Ahead of the implementation of the clinical rotation all members of the IMS team went through a 1-hour orientation on the overall clinical rotation goals, CanMEDS role-specific objectives of the clinical rotation, and the evaluation process for the psychiatry residents during the clinical rotation. The psychiatry resident faculty Lead facilitated the orientation and directed members of the IMS team to the important Entrustable Professional Acts (EPAs) of high and possible yield during this clinical rotation. An EPA is a key task of a discipline that an individual can be trusted to perform in a given health care context, once sufficient competence has been demonstrated (Royal College of Physicians and Surgeons of Canada, 2016).

To protect Human subjects during this project full ethics approval was obtained from D'Youville University's Institutional Review Board. In addition, Hamilton Integrated Research Ethics Board constituted the project as a quality improvement activity and an exemption was granted. Data for assessment of the psychiatry's resident experience was gathered by an online voluntary secure survey using Lime Survey. The survey was sent to psychiatry residents through email who have completed the clinical rotation since the clinical rotation was established. In order to proceed with the online survey all participants had to give consent to be involved in the project. The survey includes 14 Likert questions, 4 open ended questions, and 2 multiple choice questions. For the Likert scale questions, a response of one indicated the highest possible rating (e.g. extremely useful, extremely applicable, and very satisfied) with five indicating the lowest possible rating (e.g. Not at all useful, not at all applicable, very dissatisfied). The questions focus on the usefulness, applicability, knowledge acquired, understanding of the NP role, and supervision of the NP during the clinical rotation. The first multiple choice question asks participants to check all EPAs for which they had the opportunity to be observed, and the second multiple choice question asks the participants to indicate the percentage of time they spent with the NP as the primary supervisor. Participants could choose from 0-25%, 26-50%, 51-75%, and 76-100% as their response (see tables in supplementary document).

**Results:** At the time of the survey distribution there were a total of 19 residents who had completed the clinical rotation and were eligible to participate in the project. Out of the 19 eligible participants, 13 residents completed the survey, with a 68% response rate. Given the survey was anonymous, no identifiable factors were collected so no further details on the participant population was gathered. Questions one, two, three, and four asked residents to rate usefulness, applicability and helpfulness of the clinical rotation. When participants were asked how useful the clinical rotation was, 77% of participants indicated the clinical rotation was either extremely useful or moderately useful with a mean response of 1.92 and standard deviation of .759. The remainder of the participants (23.1%) indicated the clinical rotation was somewhat useful. Questions 2 and 3 were similar in that they both evaluated how helpful the clinical rotation was in the development of their ability to assess, investigate and manage physical health concerns. The participants' responses indicated that they found the clinical rotation to be more helpful in their development of their ability to manage physical health concerns, with a mean response of 1.69 and standard deviation of .751, than in the development of their ability to perform assessments and investigations confidently. Overall the participants found the clinical rotation to be extremely applicable to their future practice as a psychiatrist with a mean response of 1.54 and standard deviation of .776.

Overall, when asked about certain conditions in which the participants felt that their knowledge on assessment and management improved the majority of responses was somewhat. The two conditions that the participants felt that their skills improved in, was first Constipation, with a mean response of 1.38 and standard deviation of .506, and Diabetes Mellitus with a mean response of 1.69 and standard deviation of .480. Cardiovascular Disease was the condition that the participants felt that their knowledge on assessment and management did not improve the most in (mean 2.23, standard deviation .438). The mean number of EPAs participants had the opportunity to be observed for, during the clinical rotation was 2.85 with a standard deviation of 2.511. Out of all the participants who responded to the survey 61.5% had the NP as the primary supervisor 76-100% of the time, 30.8% of the participants had the NP as their primary supervisor for under 50% of the time. Questions 8, 9, 10, and 11 all pertain to satisfaction of the NP as a clinical supervisor and the understanding and appreciation of the role. The majority of the participants (92.3%) indicated they were very satisfied with having the NP as their supervisor with a mean response of 1.07 and a standard deviation of .277. A large proportion of the participants (76.9%) felt the NP provided effective interprofessional education, and that they had gained a new appreciation for the NP role and an improved understanding of the NP's role and scope of practice.

The final questions of the survey were open-ended and asked participants what aspects of being supervised by the NP were effective, what aspects were not effective, if there were any areas of clinical knowledge that the NP could not address, and if there was anything else in regards to the participants learning experience that they would like to share. Responses to the question about aspects that were affected by the NP reflected the following themes: unique skill set, more effective in interdisciplinary teams, strong knowledge on guidelines, provided more hands-on procedural learning compared to physicians. Responses to being asked about less affective aspects of the NP generated one theme: no aspects. This was similar to the theme that was generated when asked if there were any areas of clinical knowledge or skills that the NP could not address: no knowledge and skills were addressed. Lastly, additional information about the participants' experience generated the following themes: learning about prevalence and impact of physical health comorbidities shaped residency trajectory, working with the NP was the strength of the clinical rotation, light clinical load led to less exposure and repetition.

**Discussion:** This paper describes the implementation of an integrative clinical rotation that is clinically relevant to psychiatry resident's curriculum. This was a response to an identified need for increased exposure and experience with managing the medical comorbidities of psychiatry inpatients for the psychiatry resident program. This clinical rotation has been successfully implemented for 2.5 academic years with positive feedback on its relevance to clinical practice and strength of having a NP as a clinical supervisor. The survey results indicate that overall the residents found the clinical rotation useful, applicable, and helpful for their future practice as a psychiatrist. In addition, satisfaction scores with having the NP as a supervisor are high with a large majority of residents reporting that they were very satisfied with the NP and outlining the NP to be the strength of the clinical rotation. The satisfaction with the NP as a supervisor was not dependent on how much time the resident spent with the NP as a supervisor, even those who spent less than 50% of their time with the NP still rated their satisfaction as very satisfied. In addition, over 75% of the participants were able to have at least one EPA observed during this clinical rotation, with multiple participants having several EPAs observed, outlined in Table 2.

Overall the perceived improvement in knowledge and assessment of common medical comorbidities related to psychiatric diagnosis was lower than expected. There could be a number of reasons for this. First thing to consider are factors that may influence the sensitivity to detect meaningful change, including the use of a non-validated questionnaire, small sample size, inconsistent resident participation in the survey (68% response rate),

and the inability to measure change in repeated measures on the same participant. Another reason could be the short time of the clinical rotation. With the clinical rotation only being 4 weeks, this does not allow for a lot of time to improve knowledge and skills for the selected conditions in the survey. In addition, depending on the assigned NP and the assigned inpatient units to cover, this could determine the amount of exposure a resident will have to a certain condition. For example, a resident may have more opportunity to manage cardiovascular disease and metabolic conditions if caring for inpatients with schizophrenia in comparison to caring for inpatients with mood disorders. Some units have a higher turnover of patients allowing for a larger exposure volume of clinical conditions, an acute psychiatric unit would have a higher patient turnover in the 4-week block compared to a forensic unit which may not experience any turnover. Despite these identified weaknesses, there was still a high satisfaction with the clinical rotation as a whole. The plan is to continue with the delivery of the clinical rotation for first year psychiatry residents with the hope of expanding an integrative model of education throughout all 5 years of the residency program to maintain competency.

In summary, integrative care between psychiatry and medicine continues to be a need in psychiatry resident education. An integrative care clinical rotation was developed in a psychiatry resident program in Canada to meet this need. This clinical rotation received consistent feedback that identified the usefulness of the clinical rotation and the strength of the NP as a supervisor.

8. Please attach to this application any additional narrative description or other information that would assist the Committee in evaluating your program.

Please see supplementary documentation (attached) for the following additional information:

1. Copy of survey distributed as part of the evaluation of the Medical Team to Inpatient rotation (MT2IP) since inception in 2020, undertaken by NP Dr. Andrea McKnight in 2022-23 (see pages 1-4;
2. Outcome raw data of the evaluation of the Medical Team to Inpatient (MT2IP) rotation since inception in 2020, undertaken by NP Dr. Andrea McKnight in 2022-23 (see pages 5-14);
3. Survey results of the evaluation of the Medical Team to Inpatient rotation since inception in 2020, undertaken by NP Andrea McKnight in 2022-23, showing mean scores and standard deviation (see pages 15-16);
4. The McMaster Psychiatry General Psychiatry Residency Program Goals & Objectives for the Medical Inpatient Medical Team to Psychiatry (MT2IP) rotation (see pages 17-20).

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