



Fellowship Objectives: CanMEDS Roles

Where applicable, please provide objective(s) for each of the following:

The answer space below will expand to accept point form or paragraph entries; enter "N/A" if individual CanMEDS role is not applicable

1. Medical Expert

As Medical Experts, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centered care. Medical Expert is the central physician Role in the CanMEDS framework

1. Demonstrate knowledge of the relevant basic sciences:
 - 1.1 relevant anatomy, pathology, physiology, and pathophysiology
 - 1.2 physics and instrumentation
 - 1.3 radiopharmacy
 - 1.4 radiation biology
 - 1.5 radiation safety and protection
 - 1.6 computer sciences
 - 1.7 tracer kinetics
 - 1.8 quality assurance

2. Demonstrate knowledge of the relevant clinical sciences:
 - 2.1 a broad knowledge of clinical medicine relevant to molecular imaging
 - 2.2 diagnostic use of PET radionuclides including principles of their use, techniques, indications, interpretation, and pitfalls.
 - 2.3 complementary and correlative roles of other imaging tests (e.g. CT, MR)
 - 2.4 analyze and interpret other oncology imaging techniques including CT, and MR.

3. Demonstrate consultation skills including:
 - 3.1 advise the referring physician on appropriate molecular imaging technique.
 - 3.2 supervise the scan
 - 3.3 analyze and interpret molecular imaging studies incorporating clinical, other diagnostic imaging to arrive at a diagnosis

2. Communicator

As Communicators, physicians effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

1. communicate effectively with referring physicians both orally and by written report.
2. demonstrate skills in working with others who present significant communication challenges

3. Collaborator

As Collaborators, physicians effectively work within a healthcare team to achieve optimal patient care.

1. identify and describe the role, expertise, and limitations of all members of the interdisciplinary health care team
2. develop collaboration with other members of the health care team (clinical and research based)
3. participate effectively in an interdisciplinary team meeting including multidisciplinary tumor boards and teaching rounds.
4. effectively present imaging findings in multidisciplinary tumor boards.

4. Leader

*As Managers, physicians are integral participants in healthcare organizations, organizing sustainable practices, making decisions about allocating **resources**, and contributing to the effectiveness of the healthcare system.*

1. adequately oversee molecular imaging studies (including PET/CT and PET/MR).
2. assume responsibility for radiation safety and MR safety within the division.
3. understand population-based approaches to health care services and the implication for medical practices relevant to nuclear medicine



5. Health Advocate

As Health Advocates, physicians responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations.

1. demonstrate an understanding of public health policy as it relates to molecular imaging

6. Scholar

As Scholars, physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

1. Clinical
 - 1.1 pose a clinical question in molecular imaging
 - 1.2 identify gaps in knowledge around the clinical question
 - 1.3 formulate a plan to fill the gaps
 - 1.4 propose a solution
 - 1.5 implement the solution in practice. Evaluate the outcome and reassess the solution.
 - 1.6 identify practice areas for research
 - 1.7 critically appraise research methodology and medical literature
2. Research
 - 2.1 Appropriate research methodologies
 - 2.2 Data collection and analysis.
 - 2.3 Kinetic modeling in PET
 - 2.4 Advanced MR techniques including diffusion weighted imaging and dynamic contrast enhanced (DCE) imaging techniques.
 - 2.5 Plan a clinical trial, get multidisciplinary support when needed, obtain regulatory approvals, data gathering and interpretation, manuscript writing.
 - 2.6 Present research at relevant scientific meeting.
 - 2.7 Engage in collaborative meetings with other research groups across the department and the institution.
 - 2.8 Develop proposals for obtaining internal and external funding for research activities.
3. Education:
 - 3.1 demonstrate an understanding of preferred learning methods in dealing with students, residents, and colleagues
 - 3.2 teach junior colleagues and students

7. Professional

As Professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.

1. Discipline-based objectives:
 - 1.1 display professional attitudes, including punctuality, availability, self-motivation, and conscientiousness
 - 1.2 use appropriate strategies to maintain and advance professional competence
 - 1.3 continually evaluate personal abilities, knowledge, and skills, and know personal limitations
2. Personal / professional boundary objectives:
 - 2.1 adopt specific strategies to heighten personal and professional awareness
 - 2.2 strive to balance personal and professional roles and responsibilities and to demonstrate ways of attempting to resolve conflicts and role strain
3. Objectives related to ethics and professional bodies:
 - 3.1 know and understand the professional, legal, and ethical codes to which physicians are bound in clinical work and research.
 - 3.2 recognize, analyze, and attempt to resolve ethical issues in clinical practice
 - 3.3 understand and be able to apply legislation relevant to clinical practice
 - 3.4 recognize, analyze, and know how to deal with unprofessional behaviours
 - 3.5 know and apply principles of practice outcome analysis, aiming at improving one's practice