Welcome Package v1.0

By Peter George Maliha, MD and Laurie Lallier-Carbonneau, MD

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Introduction

Welcome to the Nuclear Medicine program at the Université de Montréal.

Through the program, you will learn all the theoretical and practical elements necessary for independent practice.

In addition to the theoretical and practical curriculum, you will be expected to participate in teaching and/or research and/or administrative projects to have an overview of the horizons and opportunities offered by the specialty.

Resources

This is not an exhaustive list, but designed to guide you. If you find any good books along the way, please let us know to update them.

Textbooks

General Content

Mettler FA, Guiberteau MJ. Essentials of Nuclear Medicine and Molecular Imaging: Essentials of Nuclear Medicine and Molecular Imaging E-Book. Elsevier Health Sciences; 2018.

O'Malley JP, Ziessman HA. Nuclear Medicine and Molecular Imaging: The Requisites: Nuclear Medicine and Molecular Imaging: The Requisites E-Book. Elsevier Health Sciences; 2020.

Henkin RE. Nuclear Medicine. Mosby Elsevier; 2006.

Musculoskeletal

Elgazzar AH. Orthopedic Nuclear Medicine. Springer; 2017.

Cardiology

Zaret BL, Beller GA. Clinical Nuclear Cardiology: State of the Art and Future Directions E-Book. Elsevier Health Sciences; 2010.

Heller GV, Hendel RC. Nuclear Cardiology: Practical Applications, Fourth Edition. McGraw Hill Professional; 2022.

Neurology

Fraioli F. PET/CT in Brain Disorders. Springer; 2019.

Paediatrics

Trier ST. Pediatric Nuclear Medicine and Molecular Imaging. Springer; 2014.

PET

Linen EC. PET and PET/CT: A Clinical Guide. Thième; 2019.

Physics

Saha GB. Physics and Radiobiology of Nuclear Medicine. Springer New York; 2014.

Cherry SR, Sorenson JA, Phelps ME. *Physics in Nuclear Medicine*. Elsevier Health Sciences; 2012.

Radiopharmacy

Saha GB. Fundamentals of Nuclear Pharmacy. Springer; 2017.

Kowalsky RJ, Weatherman KD. Radiopharmaceuticals in Nuclear Pharmacy and Nuclear Medicine. American Pharmacists Association; 2020.

Radiobiology

EJ Hall, Giaccia AJ. Radiobiology for the Radiologist. Lippincott Williams & Wilkins; 2018.

Saha GB. Physics and Radiobiology of Nuclear Medicine. Springer New York; 2014.

Case books

Donohoe KJ, Abbeele ADV den. Case-Based Nuclear Medicine. Thième; 2011.

Kim CK. Nuclear Medicine and PET/CT Cases. Oxford University Press; 2015.

Ziessman HA. Nuclear Medicine: Case Review Series E-Book. Elsevier Health Sciences; 2010.

Wolin EA. Top 3 Differentials in Nuclear Medicine: A Case Review. Thième; 2019.

Journals

Seminars in nuclear medicine (https://www.sciencedirect.com/journal/seminars-in-nuclear-medicine)

Journal of nuclear medicine (https://jnm.snmjournals.org/)

European Journal of Nuclear Medicine and Molecular Imaging

(https://eanm.org/publications/journals/european-journal-of-nuclear-medicine-and-molecular-imaging-einmmi/)

Guidelines

SNMMI (https://snmmi.org/Web/Clinical-Practice/Procedure-Standards/Proc

EANM (https://eanm.org/publications/guidelines/overview/)

Free Online Resources for Residents

AMSMNQ

- To be informed of nuclear medicine activities in Quebec
- https://www.amsmng.ca/acces-membre

CANM

- Free access to multiple educational modules
- https://new.canm-acmn.ca/membership

SNMMI

- Free access to the JNM
- Multiple free webinars (high educational value)
- Discount for SNMMI annual meeting
- https://sites.snmmi.org/Member/MemberOptions

RSNA

- Free access to the RSNA
- Discounts for the RSNA Annual Meeting
- Multiple free educational modules of high value (even in nuclear medicine)
- https://www.rsna.org/membership/discounted-membership-rates

Continuing Professional Development

As a resident, you can earn continuing professional development points and carry over 25 credits per section to next year.

https://www.royalcollege.ca/fr/membership/membership-royal-college/member-benefits/benefits-for-resident-affiliates.html#:~:text=Les%20r%C3%A9sidents%20affili%C3%A9s%20peut%20accumuler,en%20mesure%20d'y%20participating.

Competition

Each year at the annual conferences of the AMSMNQ and the CANM, residents have a chance to present a project or a case.

It is highly recommended to attend and present almost every year.

Study Tips for the Royal College

Studying for the Royal College (RC) is arduous and will require a great deal of rigor. This is why it is recommended to start studying at the beginning of the residency in order to consolidate knowledge each year. The goal is that when you reach the end of your residency, your study will be more of a revision! In general, the focused study for the Royal College begins between 9-12 months before the exam. Every year, residents of all universities form study groups. You are encouraged to join one of these groups, ideally with residents from other universities, as you will be able to benefit from each other's strengths. Studying with other residents also encourages you to maintain some discipline, as you are encouraged to keep up and stay up to date, which can be beneficial at times when you might lose a bit of motivation. All in all, you should know that there are several studying techniques that work. Ask for advice from residents who have already done the RC, choose the elements that suit you and make a study plan that is adapted to you.

For the nuclear medicine residency program at the University of Montreal, you will also have written and oral mock exam. Although challenging, they prepare you well for the Royal College and allow you to test and adjust your studying by highlighting your strengths and weaknesses and assessing your progress during your residency.

The Royal College examination consists of a written examination over 2 days, consisting of a basic science exam (physics, radiobiology, radiopharmacy, radiation protection, quality control, statistics) (3 hours) and a clinical exam (3 hours), as well as an oral exam consisting of several stations with several cases to be interpreted (approximately 2 hours).

General Tips for the Royal College Study

As for mock exams, all these tips apply, but on a smaller scale of course, because you won't spend as much time on them, but take these practices as "mini-RCs". In the end, the more time you put into studying, the better! But remember that mental health is essential, so respect your limits and choose an approach that will allow you to keep a certain work-life balance!

- As mentioned above, join a study group, ideally with residents from other university(ies) as well.
- The RC year is a very demanding year, so make time for yourself and your activities outside of medicine! For example, decide on a certain amount of free time you allow yourself and stick to it! Often, during these big study periods, it's much more beneficial to allow yourself to do an activity you enjoy for 2 hours than to study for 2 more hours.

- It is a good idea to set study goals, either in terms of the number of hours you want to devote to it per day or per week, or in terms of the number of documents to read.
- What to study? It's time to review/consolidate everything you've read during your residency! Thus, all the resources mentioned in the "Resources" section of this document are relevant. In general, your study will focus mainly on basic science books, general reference books (e.g., Requisites, Mettler), updated guidelines from the ACMN (CANM), EANM, and SNMMI (available for free online), articles on important studies including those related to therapy (e.g., ALSYMPCA, NETTER, VISION, etc.), relevant Seminars articles (accessible free of charge via the Université de Montréal), some courses you will have attended during your residency, presentations of the Review Course that takes place in Edmonton each year you attend during your 4th year of residency (paid for by the program), as well as specialized books on certain specific topics (see the "Resources" section).
- Again, ask other residents and attendings for advice! They've all gone through it!

Advice on the written exam

- Sleep well the night before!
- On the Royal College website, you can view the percentage of questions in the written exam that is devoted to each topic.
- You'll have enough time to answer all the questions and to review some of them at the
 end, but there are a lot of sub-questions, so don't rely on the "total" number of
 questions listed. In short, don't waste too much time on questions you don't know;
 You'll come back to it at the end if you have time.

Advice on the oral exam

- Sleep well the night before!
- Remember that if your residency at the University of Montreal has gone well so far, you are competent and certainly able to pass this exam.
- Each year, several nuclear physicians from different backgrounds offer graduating residents oral examination practices. The more you do, the more cases you see, the better! Several of these nuclear physicians have already been evaluators at the RC and therefore give good advice.
- You are limited in time during your oral exam, so you have to go straight to the point, but remain systematic so as not to forget anything.
- The RC is primarily tests your ability to develop a good differential diagnosis and come to a conclusion that is adequate, even if it is not necessarily the correct diagnosis.

•	The evaluators are there to help you move forward, to get as many points as possible,
	but must adopt a neutral attitude, so don't be surprised if some seem "cold" or even
	a little abrupt; They are in charge of managing your time.