



Guidelines and Criteria

Contents

1. Definition of leadership as the basis for mentoring criteria
2. Criteria for ENMC Mentors
3. Criteria for ENMC Mentee candidates
4. Selection process Mentees and follow-up
 - 4.1. Application
 - 4.2. Pre-selection procedure
 - 4.3. Selection procedure
 - 4.4. After selection – starting the mentoring programme
 - 4.5. Evaluation of the Mentorships and the ENMC programme
5. References

1. Definition of leadership as the basis for mentoring criteria

What are the attributes of a successful leader in the neuromuscular research field? ENMC has developed a definition of a science leader based on research performed by a collaboration of Dutch Health and Research Institutes¹, the US Declaration of Research Assessment (DORA)² and EURODOC which is the European Declaration on Sustainable Researcher Careers³.

A leader in the NMD field shows the following personal, professional, academic and scientific responsibility skills:

Personal characteristics: Demonstration of enthusiasm, thoroughness, empathy, creativity, innovation, boldness, uniqueness and willingness to receive feedback. Leaders need to be able to self-reflect and adjust accordingly.

Professional (Management) skills: Supporting team science, such as being able to gather talent, enabling promotion of coworkers, coping with and manage effectively unexpected problems and drawbacks (being resilient), supporting team members in a positive and integral way, being aware of work pressure and mental health issues, being able to handle all administrative aspects which comes with the job as head of a group or department. Being able to delegate tasks and responsibilities to team members. Transferrable skills are learned during one's life and are useful in every work environment (academic and non-academic) and every personal situation. Typical examples of transferrable skills are communication, project management, teamwork, collaboration with non-academics, time management etc.

Academic skills: Having a clear vision on where the research needs to go, having original ideas and social skills, being inspiring, diplomatic and versatile, having a broad scientific interest. Furthermore,

leadership is associated with presence and visibility in the field: i.e. leaders should be able to network and create successful (international) collaborations for their teams, give important contributions to international congresses such as key-note lectures, chair sessions, organise meetings and workshops, create and foster relationships, be successful at fundraising and winning grants.

Responsibility and Engagement skills: Being aware of the role of the NMD RR&I (Responsible for Research and Innovation)^{4,5} and aligning it with society at large, citizens, patient advocate groups, individual patients, other healthcare professionals (nurses, paramedics), policy at local, regional and (inter)national level, and ongoing public debates e.g. related to ethical, legal and social aspects (ELSA). Being able to engage and interact with a diverse range of stakeholder groups, communicating in an open, transparent and understandable (in terms of language and format) way, being aware of gendered aspects in research content and in innovation. And, in general having a high level of⁵:

- Anticipation: What might be the intended and unintended consequences arising from a project's RR&I activities (e.g. democratic, societal, economic, scientific)?
- Reflection: What are the underlying objectives, motivations, values, assumptions and commitments that drive one's own research and the methods applied? Are they valid? Are there alternative ways to reach the objectives?
- Inclusion: Is the stakeholder's input/contribution included in all stages of research? Can a diversity of relevant societal actors engage in discussions about the desirable and undesirable needs/outcomes of a research and/or innovation project, from the early throughout the final stage of a project?
- Responsiveness: How are the answers which arise from questions concerning anticipation, reflection and inclusion informing your research and the methods applied? Which mechanisms are put into place for this purpose?

The above-mentioned definition has helped the ENMC to define the basic criteria for the choice of the mentors and to focus on the areas of development for the mentee candidates in the ENMC mentoring programme.

2. Criteria for becoming ENMC Mentors

- Candidates to become mentors preferably have had previous successful mentor experiences.
- Mentors are (or have been) key opinion leaders in the NMD field or in other areas than neuromuscular science and meet the definition of leader traits and skills as indicated above. Mentors do not necessarily need to be from the NMD field.
- Inspiring leaders are inspiring, but can be – at the same time – over-awing, perceived as an impossible standard to reach. The mentors need to acknowledge the difficulties of getting to high positions, share experiences, e.g. juggling family and work commitments, making choices or compromises where necessary^{6,7}.
- Mentors need to be good at interacting with people.
- Mentors must commit to being available to their mentee for at least 3-4 years and need to be able to start and complete at least one mentorship, but preferably commit for a longer period of time.
- Mentors have a unique set of skills and talents to share with a mentee, they do not have to be experienced in all skills mentioned here.

Mentors will be asked to provide the ENMC with a short bibliography and a set of personal and leadership traits that they would like to offer to ENMC mentees. This information will be made available on the ENMC website for mentees to choose the two mentors who can best help them with their individual mentor questions and goals.

3. Criteria for ENMC Mentee candidates

- Mentees are strongly motivated basic scientists, translational researchers, health care professionals and neurologists working in the field of NMD and have a proven track record in science.
- Mentees are in their mid-career (they have already completed their PhD and one or more post-doc positions) and wish to seek mentoring in order to progress their careers to become independent researchers and/or potential future leaders⁸. These individuals will be at the stage in their careers where they are developing their own research plans and are establishing their research teams and collaborative networks.
- The candidates should be able to indicate which aspects of the definition of a leader, as stated above, they have already developed and which ones they need to become aware of and/or improve with help from the two mentors.
- Mentees have a clear and realistic mentoring question and goals for the short- and the long term.

4. Selection process mentees and follow up

4.1 Application

- Mentees will need to apply for the mentoring programme following the above criteria. The ENMC has prepared a template application form, including a motivational letter and bibliography.
- The mentees should not provide a long list of all papers of which they were author or co-author. They need to provide a list of the 5 most interesting publications, which represent best their line of research.
- The mentees need to submit letters of recommendation from research centres (clinical departments and/or laboratories) where they have worked previously, or from other relevant institutes/ organisations e.g. policy makers, funders, hospitals, or patient advocacy groups.
- The deadline to apply for the mentoring programme is the 1st of July.

4.2 Pre-selection procedure

- All applications will be received and processed by the ENMC office (enmc@enmc.org).
- The Research Director will review all applications, check on eligibility criteria and prepare a short list of the best candidates for that year.
- Personal interviews will be held virtually with the candidates on the short list. The interview committee is formed by members of the ENMC Mentoring Programme Workgroup and will prepare a ranked list of candidates.
- During the online interview, the candidates should include their own vision on of the tasks elements of 'Responsible for Research and Innovation' (RRI)⁹:
 - Self-reflection
 - Engagement
 - Science communication
 - Open science and open access⁴
 - Team science

- Patient participation in research

4.3 Selection procedure

- The ranked list of candidates will be reviewed by the ENMC Research Committee and recommendations will be prepared for the Executive Committee.
- The ENMC Executive Committee will make a final selection of mentees in November of each year.
- The outcome of the mentee selection process will be personally communicated to the candidates by the ENMC office and will be disseminated to the NMD field via the December newsletter and ENMC's social media.

4.4 After selection – starting the mentoring programme

- Mentees may choose their two mentors themselves from the list of mentors. This list is available via the ENMC website and will expand over time. However, the ENMC can't guarantee that the chosen mentors by the mentees will become their mentors as this is depending of the availability of the mentor as they may already be a mentor of another mentee.
- At least one of the mentors should come from the NMD field and preferably one comes from a different area (other medical areas, corporate business, etc.). ENMC will guide this process according to the core values as laid down in this mentoring programme.
- The mentors should be complementary in their skills to support the mentee.
- The ENMC will bring the mentee and mentors in contact with each other. Mentors and mentees will then discuss the mentoring goals, deliverables and plan bilateral conversations.
- ENMC will support the mentors, if needed, in providing resources including books, websites, videos on mentoring.
- From the first meeting onwards, mentors and mentee are themselves responsible for the implementation of and a successful outcome of the mentoring programme. In case intervention is needed because of inter-personal difficulties, ENMC will look for another match or mediating solution.

4.5 Evaluation of the Mentorships and the ENMC programme

- The ENMC will be available to mentors and mentees for any questions arising or support needed, during the entire duration of the mentorship programme.
- The mentoring period will be evaluated after 3-4 years to determine whether the programme fulfilled the needs of the mentees. After 7-10 years, mentees will be contacted to evaluate the received support, their career progress, and their contributions along the full science-society axis.
- The experiences of the first years will give information on how to improve the mentoring programme and optimise the outcomes for the mentees to reach ENMC's goals.

5. References

¹ <https://www.nwo.nl/en/policies/statement+recognition+and+reward+of+academics>

² <https://sfdora.org/resources/>

³ <https://zenodo.org/record/3194228#.X1naUOdxnK>

⁴ https://ec.europa.eu/research/openscience/pdf/os_rewards_wgreport_final.pdf

⁵ Stilgoe and Owen (2013). Developing a Framework for Responsible Innovation, Research Policy.
<https://www.sciencedirect.com/science/article/pii/S0048733313000930>

⁶ The Australian Academy of Sciences EMCR (early-mid career researcher) Forum <https://www.science.org.au/supporting-science/early-and-mid-career-researchers-0/about-emcr-forum> and the Australian Academy of Health and Medical Sciences <https://aahms.org/mentorship-program/>

⁷ Clance and Imes (Fall 1978). "The Impostor Phenomenon in High Achieving Women: Dynamics and Therapeutic Intervention"(PDF). *Psychotherapy: Theory, Research & Practice*. **15** (3): 241–247. doi:[10.1037/h0086006](https://doi.org/10.1037/h0086006).

⁸ <https://mrc.ukri.org/skills-careers/interactive-career-framework/#?careerstage=5>

⁹ <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>

This Programme is made possible thanks to financial support from the ENMC Company Forum.