opnMe by Boehringer Ingelheim

Study the neuromuscular junction in sarcopenia

How would you propose to elucidate cellular and molecular mechanisms driving neuromuscular junction dysfunction in primary and secondary sarcopenia using *in vitro* models?

Submit your scientific proposal for a chance to be selected to conduct your proposed research plan as part of your PostDoc project at the research facilities of Boehringer Ingelheim in Biberach, Germany, one of the leading pharmaceutical companies worldwide. This opportunity is open for submissions through January 22, 2026, 11:59 pm PST.

Boehringer Ingelheim

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What is the context of the opportunity that we are currently offering?

Sarcopenia, characterized by the progressive loss of skeletal muscle mass and function, is a major contributor to frailty, reduced mobility, and diminished quality of life in aging populations. Beyond age-related decline, sarcopenia frequently co-occurs with chronic conditions such as diabetes, chronic kidney disease (CKD), and liver disorders, exacerbating its clinical impact. While muscle-intrinsic mechanisms have been extensively studied, emerging evidence highlights the neuromuscular junction (NMJ) as a critical and early site of dysfunction in the pathogenesis of sarcopenia.

Despite its importance, the molecular and cellular mechanisms underlying NMJ degeneration in aging and disease-associated sarcopenia remain poorly understood. A deeper understanding of NMJ biology could unlock novel therapeutic strategies aimed at preserving neuromuscular integrity and function.

For this PostDoc grant, we invite you to submit your research plan that focuses on elucidating the cellular and molecular mechanisms underlying neuromuscular junction (NMJ) degeneration in primary and/or secondary sarcopenia using suitable *in vitro / ex vivo* model systems. A successful research proposal to our question will focus on these topics:

- **Advance the understanding of NMJ biology** in the context of primary (age-related) and secondary (disease-associated like CKD, liver disease etc.) sarcopenia.
- **Elucidate molecular and cellular mechanisms** contributing to NMJ degeneration and remodeling during sarcopenia progression.
- **Identify potential therapeutic targets** or biomarkers for early intervention and monitoring of NMJ integrity.

With your solution, you will impact an indication with high unmet medical need and lack of suitable treatment strategies. You will be able to benefit from the ecosystem of a large pharmaceutical player while contributing to sarcopenia research by targeting NMJ dysfunction, ultimately improving patient outcomes and quality of life.

Apply now to join the sarcopenia group of Boehringer Ingelheim in Biberach as part of the prestigious PostDoc grant program opn2TALENTS.

What potential solutions could be in scope?

Potential solutions may include the use, development and validation of *in vitro / ex vivo* neuromuscular junction (NMJ) models (human and murine) to support mechanistic studies in the sarcopenia research area. This could involve, but is not limited to the following approaches:

- Establishment of human and murine 2D and 3D models
- Mimicking aging using pharmacological, genetic or other approaches

- Exploration of the molecular mechanisms underlying neuromuscular junction (NMJ) degeneration using mechanical stress, reporter assays/optogenetic, patch-clamp and calcium imaging, live cell imaging etc.

What potential solutions would be out of scope?

Any project based on *in silico* models.

Any project based on *in vivo* models.

Any project that addresses the role of the neuromuscular junction dysfunction in the context of autoimmune disorders, toxic and drug-induced disorders, or any other genetic disorders.

What will be the reward to the winner?

As a winner of this call, you will have the unique opportunity to pursue your own submitted research project as a fully resourced two-years PostDoc (with the option for a one-year extension), in the Obesity and Sarcopenia team at Boehringer Ingelheim at our Discovery Research site in Biberach/Riss, Germany. As part of an international team of world-class scientists working on cardio-renal-metabolic diseases you will learn the processes and challenges of drug discovery in the pharmaceutical industry from the inside.

You want to learn more about living in Biberach at the river Riss?

Find out more here

At Boehringer Ingelheim, you will have access to a fully equipped laboratory within a state-of-the-art research facility, including cutting-edge tools such as Mantarray®. You will benefit from mentorship by our internal experts, opportunities to attend international conferences, and the chance to publish your findings in high-ranking journals. As part of the vibrant PostDoc community in Biberach, you will enjoy numerous opportunities for scientific and cross-functional exchanges to foster your personal and professional development. Additionally, you will gain firsthand experience in the drug discovery process, including its challenges, through specialized training and mentoring programs.

In addition, you can benefit from the rich packages for employee benefit. Our most important asset in achieving our global vision is our people. We prioritize the growth of our people through mentoring, coaching, skill-building, leadership development, and academic support. Our infrastructure promotes wellness with sports groups, health counseling, onsite medical services, and regular check-ups. Achieve work-life balance with flexible work hours, remote working, childcare support, counseling, and convenient amenities. We ensure financial health with employer loans, private insurances, access to discounts, and a company pension scheme. You can also benefit from our excellent healthy on-site catering and the opportunity for take-away meals. We offer relocation support and interim accommodation to make joining us easy.

What are the requirements to participate in this call?

Your proposal outlining your own research plan should contain a clear description of the planned activities to elucidate the cellular and molecular mechanisms underlying neuromuscular junction (NMJ) degeneration in primary and secondary sarcopenia using *in vitro and ex vivo* suitable model systems.

Additional requirements:

- PhD with strong background in molecular and cell biology, medicine and pharmacology or related field.
- Hands-on *in vitro* and *ex vivo* experience in the field of muscle biology.
- Strong understanding of neuro muscular junctions and the pathways that drive the pathophysiology of sarcopenia.
- Displayed examples of creativity that led to out-of-the-box scientific ideas and results.
- Track record of independent research as exemplified through publications or patents.
- Ability to drive projects in a matrix environment.
- Very good oral communication and presentation skills as well as the ability to work in multidisciplinary teams in a matrix environment.
- Fluent language skills in English are mandatory, German language skills is a plus.

What information should be included in your answer submission?

Please use our PostDoc grant application template to provide a 4–5-page non-confidential proposal (available for download on the following site). Please complement with your CV, publication list, and recommendation letters.

If confidential data exists that would strengthen the proposal, please indicate that information is available to share under a Confidential Disclosure Agreement (CDA). If we find the non-confidential concept proposal sufficiently interesting, we will execute a CDA for confidential discussions.

What are the individual steps and timelines of the overall program?

Step 1	Please complete your application including a project proposal by January 22, 2026, 11:59 pm PST at the very latest. A full application package consists of your CV including references and a publication list. In addition, please submit the scientific project proposal based on our template (available for download from the following site). Please note that we will be unable to accept applications without a research proposal addressing our scientific question.

Step 2	We plan to finalize the review of all applications within four weeks by February 18, 2026.
Step 3	All final candidates will be invited for an opn2TALENTS interview week that will take place from March 11 – 20, 2026. Even as we plan to give enough time for the finalists to prepare for their travel plans, we suggest that you block this time frame in your calendars already now. Please expect that you will be invited for only one day during this time frame. Depending on your location, please reserve more than one day for travel. All final candidates have the chance to present and discuss their research proposal at an internal meeting. Please prepare a PowerPoint version of your project proposal and be prepared for an in-depth scientific discussion of your ideas and approaches. Please also be prepared for additional interviews with members of the scientific team and our human resources department. Please address any questions you may have during this week as well.
Step 4	Beginning of April 2026, we plan to announce the final winner of the opn2TALENTS PostDoc grant.
Step 5	Q2/2026, represents the earliest start date to work on your project at our Research and Development site in Biberach, Germany.

How to apply?

- Check the outline of the opn2TALENTS grant opportunity "Study the neuromuscular junction in sarcopenia" on opnMe.
- Alternatively, you may click the "Get Application Template" banner.
- Follow the instructions to upload your submission document (requires login or registration).
- The upload allows you to attach additional application files such as your CV, publication list, and references. Please note that the maximum file size is 15MB per file.
- You will be able to access your final submitted collaboration proposal in your personal dashboard and follow its review status.
- Please also visit the FAQ section on opnMe.com to learn more about our opn2TALENTS program.

What else is important to Boehringer Ingelheim?

- Our purpose is to transform lives for generations. Therefore, we developed three key principles for our PostDoc program which are determining our plans and actions: Drive cutting-edge science, new concepts and technologies; enrich Boehringer Ingelheim's innovation ecosystem with highly motivated, young fellows, who will help to build on science to develop new medicines; and train the next generation of leading scientists.

- Our campus community culture is great for sharing ideas and makes it easy to access technologies, meet experts, and approach leaders of all levels. There's a great spirit of freedom, fluidity, and fierce collaboration.
- Interactions are sound and informal. It's not particularly hierarchical, more team-based with a start-up attitude. We are always keen to help and speak up, open to positive change and new ideas that support our mission to improve lives.
- Our Speak-Up policy is an important part of our Code of Conduct. Only in this way we can continuously develop and improve as a company.
- Diversity, Equity, and Inclusion (DEI) is an integral part of Boehringer Ingelheim's identity; a key element of our culture and contributes to our 'Sustainable Development – For Generations'.
- Our core values of empathy, respect, passion, and trust nurture a diverse, collaborative, open and inclusive environment which is key to innovation, value creation and sustainable growth. With the inclusion of various experiences, backgrounds, and characteristics, Boehringer Ingelheim creates an openness to different approaches, solutions, and perspectives, all contributing to create "Value through Innovation".