



### PhD student position in frames of the NCN SONATA project

“Mechanism of splicing of *MBNL1* transcript and its implications for potential therapeutic strategies for myotonic dystrophy” - 2020/39/D/NZ3/01658

Place: Department of Gene Expression, IMB&B, AMU

#### About the project

The main idea of SONATA is to define the splicing mechanism of alternative exons of Muscleblind-like (MBNL) proteins through identification of trans-acting regulators and cis-acting regulatory elements involved in this process. Gained knowledge will be further used to modulate the MBNL isoform ratio with genetic tools to improve the MBNL function in myotonic dystrophy (DM1)- affected cells.

MBNL family of proteins are splicing factors that govern fetal-to-adult alternative splicing transition and consequently the production of adult isoforms of proteins playing a key role as developmental regulators in skeletal muscles, heart and brain. Their functional depletion has severe consequences for body development causing a return to fetal-like pattern of alternative splicing. It occurs in a fairly frequent genetic neuromuscular disorder, DM type 1 and type 2. MBNL isoforms are encoded by a few alternative exons which carry crucial information including a cellular localization, capability of forming dimers, splicing activity and their stability in cells. Thus far, the splicing mechanism of *MBNL* transcript remains elusive. Our studies and others show that MBNL proteins autoregulate their own alternative exons but information on co-regulators engaged in this process is sparse.

#### Requirements:

- MSc in one of the followings: biology, molecular biology or biotechnology
- Solid theoretical knowledge in molecular biology techniques and practical skills in laboratory. Practical experience in mammalian cell culture and RNA and protein analyses (qPCR, RT-PCR, SDS-PAGE, IP) will be strongly emphasized.
- Motivation and potential for research within the field
- Ability to work independently and in a team, be innovative and creative
- Having a good command of both oral and written English

**Terms of employment:** scholarship, around 3500pln (netto)

**Application deadline:** September 17, 2021

**Announcement of results:** September 22, 2021

**Applications or any questions** direct to dr Katarzyna Taylor, [kksiazek@amu.edu.pl](mailto:kksiazek@amu.edu.pl)

#### How to apply:

Interested candidates should e-mail the following documents:

- Cover letter explaining your interest in the project and the relevance of your background and experience to the position.
- Letter of recommendation and contact to at least one potential referee.
- CV with a full summary of your education and experience

Please include a candidate statement at the bottom of your CV to allow us to process your data: “I hereby give consent for my personal data included in the job offer to be processed for the purposed of recruitment under the Data Protection Act 1997 (Dz. U. 2002 no. 101, item 926 with subs. Changes).” / “Wyrażam zgodę na przetwarzanie danych osobowych w celach rekrutacji zgodnie z ustawą z dnia 29 sierpnia 1997 r. o ochronie danych osobowych (tekst jedn.: Dz. U. z 2002 r. Nr 101, poz 926 z późn. zm.).”

We reserve the right to contact only with the selected candidates who may expect additional questions before they get invited for an interview.