DEVELOPMENT OF THE FIRST NON-MUSCLE MYOSIN-2 (NM2) SPECIFIC INHIBITOR

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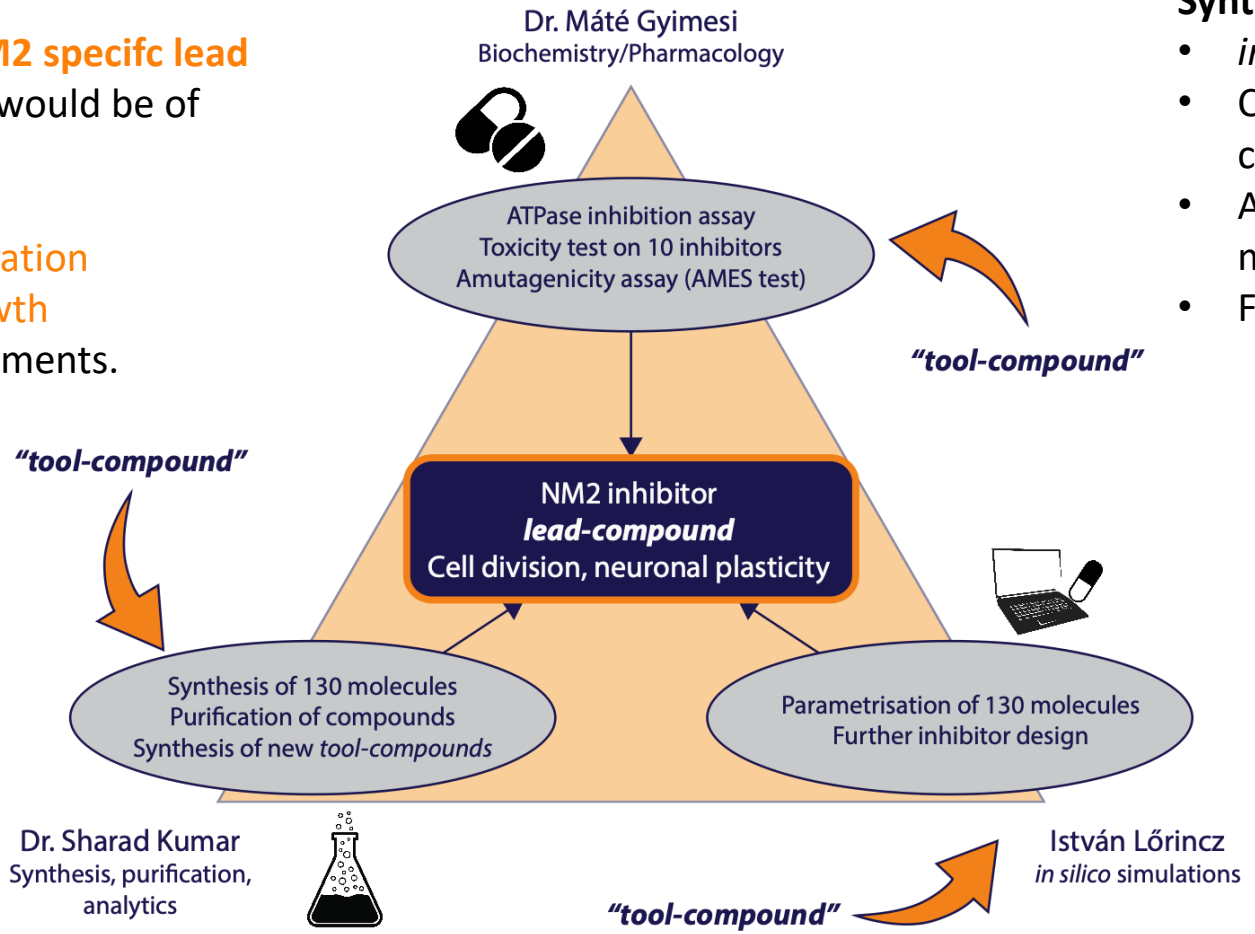
Scientific goal:
Synthesis of an NM2 specifc lead compound, which would be of high importance in

- chemotherapy
- cellular regeneration
- neurite outgrowth

inducing drug treatments.



Synthesis/ method / protocol:

- *in silico* design of „*tool-compound*" derivatives
- Combinatoric chemistry synthesis of tool-compound naftate derivatives
- ATPase assay fo the purified compounds on 7 myosin-2 isoforms
- Further development for a lead compound

Result:

- Parametrisation and molecular dynamic simulation of 130+ naftate derivatives
- Synthesis and analytics of 100+ molecules
- Start of ATPase mesurements on NM2 isoforms
- AMES mutagenicity assay on 1 molecule
- Optimiztation of neurite outgrowth test on 5 molecules