MAST Genes Research Foundation https://mastgenes.org 7089 S Fillmore Ct, Centennial, CO 80122 EIN 88-3836516



Strategic Research Priorities

Originally approved by the board on 03/25/2023. Last revised on 04/22/2023.

Research Values

- Data produced during research should be shared openly to enable collaboration
- Research that is synergistic across the family of MAST genes is preferred over single-gene research
- Patients/caregivers should be directly involved in the research plan

Current Priorities

- 1. Build patient base (social media, registry) by engaging as many MAST families as possible
 - How many total patients?
 - o From where (city/state/country)?
 - o Which gene?
 - O Which mutation?
 - Patient age and primary symptoms (related to #4 below)
 - Create partnerships with diagnostic tools and companies to connect patients/caregivers with the foundation for future research
- 2. Network and strategize with other rare disease groups (e.g. <u>Project 8p</u>, <u>Jordan's Guardian Angels</u>, <u>Coalition to Cure CHD2</u>, <u>Syngap Research Fund</u>)
- 3. Create a packet to send to families to share the long-term research plan and any short-term resources that could be helpful.

Future Priorities

- 1. Partner with other organizations (e.g. <u>COMBINEDBrain</u>, <u>Rare Epilepsy Network</u>, <u>NORD</u>, GeneDx, Invitae)
- 2. Explore drug repurposing studies
- 3. Develop questionnaire to inquire needs from families (e.g. which clinical symptoms most challenging; where would treatments have most impact for families)
 - Be able to look at needs of large group vs individual genes with the questionnaires.
 - Where are families located (city/state/country)
 - Which gene and mutation

- Use questionnaire to establish priority areas for research
- 4. Look into biobanking (send which samples to whom? Ideally, in the US and contracted so Foundation can direct who/when samples can be used; Combined brain?).
- 5. Look into natural history options (e.g. Ciitizen, RareX, SPARK)
- 6. Host meetups for families to interact
- 7. Partner with American Epilepsy Society for grant
- 8. Establish a clinical center of excellence