FOXG1 Research Foundation 2021 Strategy

Since forming the FRF in 2017, we have been on a strategic path to a cure. We start with experimentation. We engage with world renowned neuroscientists at leading universities and biotech firms to test both existing drugs, and new state of the art treatments, such as gene therapies and antisense therapies.

The simplest way to think of our experimentation is in two phases. From 2017 - 2020 we completed Phase One, which involved building a plethora of FOXG1 models that replicate the FOXG1 gene mutations that exist in our children. Our scientists developed these models using zebrafish, mice, cells taken from our children and by building organoids – clusters of cells which replicate specific parts of our children’s brains. This is the longest of the two phases since it takes a couple of years for cells to grow sufficiently and for multi-generational reproduction of animal models that are required for testing.

In 2021 we moved on to Phase Two, where scientists from universities and biotech companies will start testing potential treatments for FOXG1 Syndrome.

In 2020 we announced a new collaboration with Taysha Gene Therapies and Creyon Bio. Both companies have chosen to include FOXG1 Syndrome as one of a small number of rare diseases they will be researching to test their gene therapies, and ASO therapies respectively.

In parallel, we have launched extensive small molecule drug screening projects to identify existing drugs and therapies that can be used to help treat symptoms of FOXG1 syndrome at three universities specializing in FOXG1 Syndrome - University of California San Diego, University at Buffalo and Kings College, London.

We are looking at every possible angle of science to find disease-modifying therapies for FOXG1 syndrome.

Together these projects represent the most promising work designed to get us to clinical trials by 2023.