DFX can rapidly penetrate the blood-brain barrier and accumulate in significant concentration after systemic administration.

A treatment that utilizes deferoxamine to reduce brain injury after traumatic brain hemorrhage by preventing brain iron overload.

Competitive Advantage:
- **SPEED**: DFX can rapidly penetrate the blood-brain barrier and accumulate in brain tissue in significant concentration after systemic administration.
- **PROVEN DATA**: Based on the team’s data, DFX is currently in Phase II clinical trial for intracerebral hemorrhage. This will facilitate a larger clinical trial to examine the effectiveness of DFX in TBI with hemorrhage.
- **NOVEL TBI THERAPY**: There are currently no effective therapies for TBI patients. Iron chelation with DFX could be a new therapy for intracerebral hemorrhage.

Commercialization Roadmap:
- **INVESTIGATIONAL NEW DRUG (IND)** regulatory pathway
- **LICENSE TECHNOLOGY/THERAPY**
- **POTENTIAL PARTNERS** Drug companies

Project Milestones:
1. Characterize cerebral hemorrhage and brain iron accumulation after TBI in a rat model
2. Examine cerebral hemorrhage in TBI rats
3. Determine TBI-induced brain iron overload
4. Determine if the effects of DFX are greater on animals with more cerebral hematoma

The Need
- Red blood cells release iron as a byproduct
- Damages healthy tissue

The Technology
- Binds with excess iron so that it can be excreted

The Team
- Guohua Xi, MD  Neurosurgery
- Ya Hua, MD  Neurosurgery
- Richard Keep, PhD  Neurosurgery

Joyce Massey TBI Innovation Fund
2015 TBI Funded Research Projects

Funding was awarded based on the potential to impact the way TBI is diagnosed and treated during the initial “golden hours” of care.