

Translational Science:

Addressing gaps through cross-training and collaboration

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What does it take?



Building the right team



- » Program: Interventional therapy to be delivered to brain in an adult progressive degenerative disorder
- » Scientific/Engineering/Medicine
 - Delivery : Device engineers, computational scientists, programmers, materials scientists, vector scientists
 - Neuroimaging/radiology
 - Pharmacology/formulation/GMP
 - Neurobiology/molecular science
 - Neurosurgery
 - Neurology

Building the right team



- » Program: Interventional therapy to be delivered to brain in an adult progressive degenerative disorder
- » Other disciplinary expertise
 - Bioethics
 - Legal
 - Regulatory
 - Program management
- » Extended disciplinary envelope
 - Neuroeconomics
 - Payors
 - Pharma

Sustaining alignment and participation

- » Institutional support
- » Recognition/attribution for interdisciplinary contributors
- » Participant commitment to long term goals rather than funding cycle
- » Effective governance mechanism
- » Transparency
- » Open process for publication
- » Underwriting mechanisms that extend program duration
- » Shared IP and agreements to effectively out-license



Signs of turbulence

- » Institutional assertion of IP primacy
- » Loss of consensus/commitment to reach agreement
- » Data sequestration
- » Participant drop out
- » Inability to secure continued underwriting



Recommendations

» Academia

- Revise promotion/tenure framework
- Value, incent and reward team science
- Subordinate IP discussions to program goals
- Lower barrier to out-licensing
- Support inter-, multi- and trans-disciplinary trainees

» Federal sponsor(s)

- Develop mechanisms for sustaining underwriting
- Augment intramural/extramural collaboration
- Develop additional training mechanisms for translation

» Pharma

- Broaden pre-competitive interest
- Develop framework for early data access: “ a look under the hood”
- Revise mechanism(s) for sponsored program support