

Signal Processing Methods Monitor Cranial Pressure

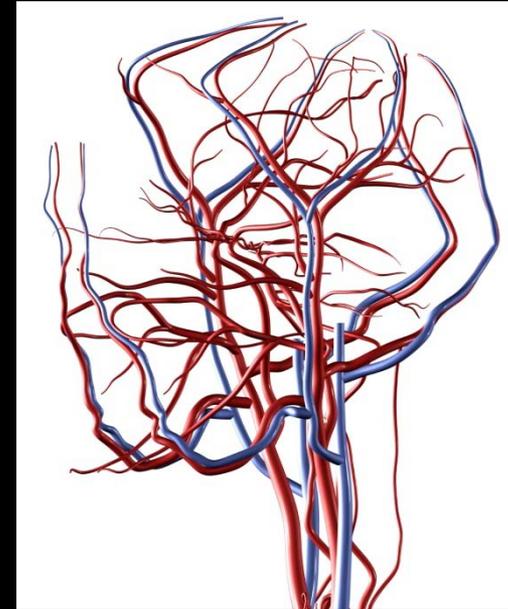


Goddard Space Flight Center

***DynaDx Corporation
Mountain View, California***

Originating Technology/NASA Contribution

- ◆ Goddard scientist and mathematician Dr. Norden Huang invented a set of algorithms for analyzing nonlinear and nonstationary signals
- ◆ This user-friendly signal processing technology, Hilbert-Huang Transform (HHT), can be used to analyze data for a wide variety of applications



Partnership

- ◆ Through an auction managed by Ocean Tomo Federal Services LLC, DynaDx licensed a portfolio of NASA patents, including the HHT
- ◆ The auction was the first ever sale of government patent licenses through a public auction of intellectual property
- ◆ The HHT won an “R&D 100” Award and was named a NASA “Invention of the Year”

Product Outcome

- ◆ The company developed scientific computation software with a built-in HHT algorithm
- ◆ DynaDX’s HHT-based Multimodal Pressure-Flow process provides medical diagnosis and prediction of brain blood flow-related problems
- ◆ The technology alerts caregivers to changes in intracranial pressure in patients