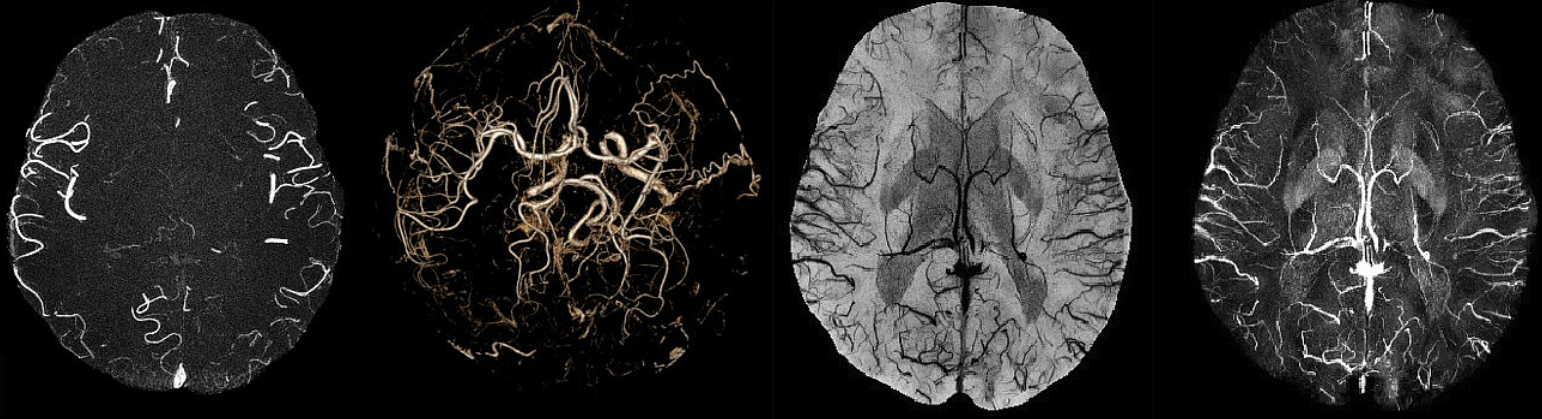# Magnetic Resonance Innovations

"Your partner in brain image analysis"

Magnetic Resonance Innovations, Inc. was founded in late 1994, by E. Mark Haacke, PhD.

Today, we are positioning ourselves to combine our patents, expert consulting knowledge and service experience to produce advanced MRI post-processing modules that quantitatively assess and extract key regions of interest, biomarkers and pathological landmarks for the research and diagnosis of neurological diseases.

We assist institutions with longitudinal research by providing quantifiable metrics for neurodegenerative diseases:
* Multiple Sclerosis
* Traumatic Brain Injury
* Parkinson's Disease
* Stroke
* Migraine
* Dementia
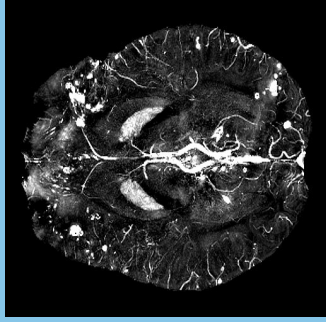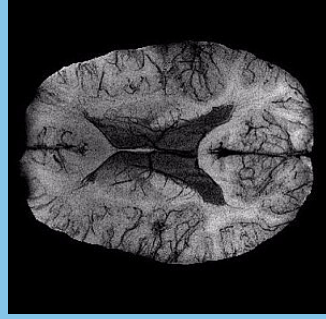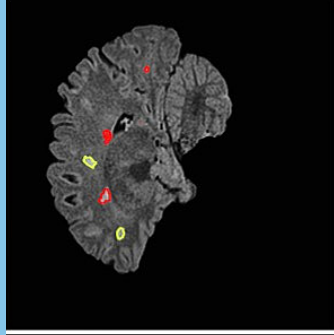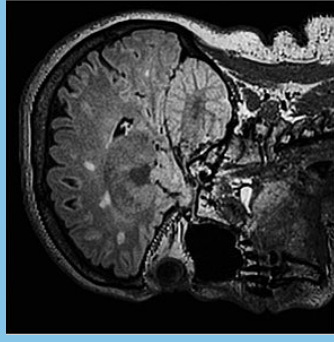* Idiopathic Intracranial Hypertension
* Headache

Our Products

SPIN is a user-friendly, fast and reliable medical image software package with most common basic image viewing tools and advanced quantitative MR post-processing tools. SPIN was created as the main platform for our advanced modules in order to provide the radiology community with a comprehensive solution for quantitative MRI analysis. It includes advanced quantification modules for blood flow, iron content, cerebral microbleeds, white matter hyperintensities and perfusion imaging.

Cerebral Microbleed (CMB):
Detects CMBs and quantifies their number, volume and iron content.

Iron Quantification (IRON):
Advanced module to provide the means to quantify iron content in every part of the brain.

Flow Quantification (FLOW):
Quantifies the speed of the blood in every pixel and makes it possible to measure the total flow into and out of the brain as a function of the cardiac cycle.

Perfusion Weighted Imaging (PWI):
Offers new algorithms for estimating perfusion to brain tissue such as double injection perfusion analysis for better arterial input function estimation.

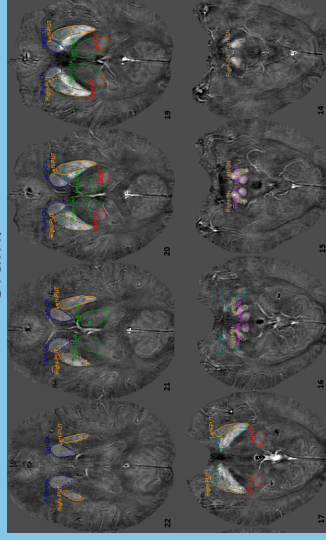### Susceptibility Weighted Imaging (SWI) & Quantitative Susceptibility Mapping (SWIM)

White Matter Hyperintensity (WMH):
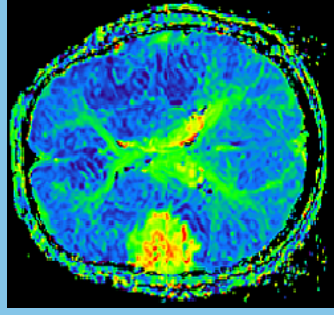Offers new algorithms foDetects abnormal WM lesions with clinical applications in: longitudinally tracking disease progression or drug treatment efficacy