



Mission Statement

The goal of the Imaging working group is to generate standardized consensus recommendations for both localized and whole body image acquisition and interpretation for the detection, characterization and imaging response evaluation of benign and malignant neoplasms, using a multi-parametric and volumetric analysis.

Group Focus Areas

1. Evaluate the test-retest variability and interobserver performance of WB-MRI in NF1, NF2 and schwannomatosis.
2. Investigate the diagnostic accuracy of quantitative functional and metabolic localized and functional imaging techniques for tumor characterization and assessment of treatment response in NF1, NF2 and schwannomatosis
3. Investigate the added value of contrast enhanced imaging to both localized (spinal and peripheral) and WB-MRI protocols for tumor characterization and assessment of treatment response.
4. Develop and validate tumor response criteria for spinal neurofibromas.

Current Members:

Researchers & Clinicians (Institution/email)

Last	First	Institution
Ahlawat	Shivani	John Hopkins
Blakeley	Jaishri	John Hopkins
Plotkin	Scott	Mass General Hospital
Huson	Susan	Manchester
Bredella	Miriam	Mass General Hospital
Harris	Gordon	Mass General Hospital
Mautner	Victor	University Hamburg, Eppendorf
Widemann	Brigitte	National Cancer Institute
Dombi	Eva	National Cancer Institute
Korf	Bruce	University of Alabama
Shin	Chie-Schin	Indiana University
Robertson	Kent	Indiana University
Karajannis	Matthias	New York University



Ardern-Holmes	Simone	The Children's Hospital at Westmead
Evans	Gareth	St. Mary's Hospital, Manchester
Babovic	Dusica	Mayo Clinic
Connor	Steve	Guy's Hospital
Ly	Ina	Mass General Hospital
Lin	Carol	CHOC
Ho	Chang Yueh	IUPUI
Fayad	Laura	Hopkins
Jordan	Justin	MGH

Patient Representatives (Organization/email)

Patient representatives:

Name	Disease group	Relationship
Mikki Montgomery	SWN	Patient
Dale Berg	SWN	Patient
Alexandra Cellucci	NF2	Patient and parent
Andres Lessing	NF1	patient

Endpoints Published (.pdf reference):

- A. Dombi E, Ardern-Holmes SL, Babovic-Vuksanovic D, Barker FG, Connor S, Evans DG, Fisher MJ, Goutagny S, Harris GJ, Jaramillo D, Karajannis MA, Korf BR, Mautner V, Plotkin SR, Poussaint TY, Robertson K, Shih CS, Widemann BC; REiNS International Collaboration. Recommendations for imaging tumor response in neurofibromatosis clinical trials. *Neurology*. 2013 Nov 19;81(21 Suppl 1):S33-40. doi: 10.1212/01.wnl.0000435744.57038.af. PubMed PMID: 24249804; PubMed Central PMCID: PMC3908340.
- B. Ahlawat S, Fayad LM, Khan MS, Bredella MA, Harris GJ, Evans DG, Farschtschi S, Jacobs MA, Chhabra A, Salamon JM, Wenzel R, Mautner VF, Dombi E, Cai W, Plotkin SR, Blakeley JO; Whole Body MRI Committee for the REiNS International Collaboration; REiNS International Collaboration Members 2016. Current whole-body MRI applications in the neurofibromatoses: NF1, NF2, and schwannomatosis. *Neurology*. 2016 Aug 16;87(7 Suppl 1):S31-9. doi: 10.1212/WNL.0000000000002929. PubMed PMID: 27527647; PubMed Central PMCID: PMC5578359.
- C. Cai W, Steinberg SM, Bredella MA, Basinsky G, Somarouthu B, Plotkin SR, Solomon J, Widemann BC, Harris GJ, Dombi E. Volumetric MRI Analysis of Plexiform Neurofibromas in Neurofibromatosis Type 1: Comparison of Two Methods. *Acad Radiol*. 2018 Feb;25(2):144-152. doi: 10.1016/j.acra.2017.09.004. Epub 2017 Oct 31. PubMed PMID: 29097016; PubMed Central PMCID: PMC5794522.



Endpoints Being Evaluated (Project lead):

- A. Imaging Utilization in People with NF1 – Survey Based Assessment (Ahlawat/Blakeley)
- B. Multicenter Analysis of spinal neurofibromas (Dombi - NCI/NYU)
- C. Systematic Review and Evidence-Based Guidelines on the Role of Imaging in the Diagnosis and Management of Adults with Schwannomatosis (Berg/Ahlawat)

Meeting Schedule (Coordinator's contact info): Shivani Ahlawat - sahlawa1@jhmi.edu