List Of 2015 Reports

ID#	Title, First Author, and Category	Status
208	**Title:** In Vivo Metabolic Profiling of Brain Rodent Models by Relaxation-Enhanced MRS of the Downfield 1H Region at 21.1 T **First Author:** Roussel, T., Weizmann Institute of Science, Israel, tangi.roussel@weizmann.ac.il **PI:** Frydman, L., Weizmann Institute of Science and NHMFL, frydman@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 21.1 T **UCGP:** Yes **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation:** Yes **Director's Comments:** None	Approved
251	**Title:** Giant Faraday Effect and Properties of Magnetic Metal Thin Films in Multilayer Photonic Structures **First Author:** Smith, K., University of Texas at San Antonio, Physics and Astronomy, ksmith1281@gmail.com **PI:** Chabanov, A.A., University of Texas at San Antonio, Physics and Astronomy, andrey.chabanov@utsa.edu **Category:** Magnet Resonance Technique and Development **Facility:** DC Field Facility **Highest Measured Field:** 3.5 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** None	Approved
421	**Title:** Expeditious Dissolution DNP without Glassing Agents for Dissolution DNP at 5 T **First Author:** Lama, B., University of Florida, Biochemistry and Molecular Biology, bimalalama@ufl.edu **PI:** Long, J.R., University of Florida, Biochemistry and Molecular Biology, jrlong@mbi.ufl.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 5 T **UCGP:** No **VSP:** No **Accepted by** NMR in Biomedicine **Sign. Achievement:** No **Director's Recommendation:** Yes **Director's Comments:** Recent publication highlighting new DNP program	Approved
438	**Title:** In-Situ Electron Paramagnetic Resonance for Overhauser Dynamic Nuclear Polarization **First Author:** Dubroca, T.D., National High Magnetic Field Laboratory, dubroca@magnet.fsu.edu **PI:** Hill, S., National High Magnetic Field Laboratory, shill@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** EMR Facility **Highest Measured Field:** 14.1 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
454	**Title:** Magnetic Resonance Electric Properties Tomography at 21.1 T **First Author:** Amouzandeh, G., Florida State University, Physics, ga13d@my.fsu.edu **PI:** Grant, S.C., Florida State University, Chemical & Biomedical Engineering, grant@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 21.1 T **UCGP:** Yes **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
456	**Title:** Gated Microwaves for DNP Solid State NMR Experiments **First Author:** Smith, A.N.S., University of Florida, Biochemistry & Molecular Biology, adams@ufl.edu **PI:** Long, J.R.L., Univeristy of Florida, Biochemistry & Molecular Biology, jrlong@mbi.ufl.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 14.1 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
	Title: Effect of Different Radicals on Proton Hyperpolarization for Dissolution DNP **First Author:** Lama, B., University of Florida, Biochemistry and molecular biology, bimalalama@ufl.edu **PI:** Long, J.R., University of Florida, Biochemistry and molecular biology, jrlong@mbi.ufl.edu	

457	**Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 5 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
458	**Title:** Mechanistic Insights into DNP Enhancements with the use of Spin Labeled Lipids **First Author:** Smith, A.N.S., University of Florida, Biochemistry & Molecular Biology, adams@ufl.edu **PI:** Long, J.R.L., Univeristy of Florida, Biochemistry & Molecular Biology, jrlong@mbi.ufl.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 14.1 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
468	**Title:** Comparison of Susceptibility Artifacts in MREIT due to Different Electrode Materials **First Author:** Kasinadhuni, A.K.K., University of Florida, Biomedical Engineering, ak.kasinadhuni@ufl.edu **PI:** Mareci, T.H.M., University of Florida, Biochemistry, thmareci@ufl.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 4.7 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
475	**Title:** Instrumentation for Cyclotron Resonance and Electron Spin Resonance **First Author:** Beedle, C.C., NHMFL Los Alamos National Laboratory, beedle@lanl.gov **PI:** Beedle, C.C., NHMFL Los Alamos National Laboratory, beedle@lanl.gov **Category:** Magnet Resonance Technique and Development **Facility:** Pulsed Field Facility at LANL **Highest Measured Field:** 15 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
477	**Title:** Augmented Tune/Match Circuits for High Performance Dual Nuclear Transmission Line Resonators **First Author:** Erickson, M.G., AMRIS/UF, gyromagnetic1@yahoo.com **PI:** Erickson, M.G., AMRIS/UF, gyromagnetic1@yahoo.com **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 4.7 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement: Yes** **Director's Recommendation: No** **Director's Comments:** None	Approved
480	**Title:** Electron Paramagnetic Resonance Studies of the of the Heavy Fermion YbRh2Si2 **First Author:** Beedle, C.C., NHMFL Los Alamos National Laboratory, beedle@lanl.gov **PI:** Beedle, C.C., NHMFL Los Alamos National Laboratory, beedle@lanl.gov **Category:** Magnet Resonance Technique and Development **Facility:** Pulsed Field Facility at LANL **Highest Measured Field:** 15 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
481	**Title:** Major Upgrade to 600 MHz Magic Angle Spinning Dynamic Nuclear Polarization System **First Author:** Dubroca, T.A.D., National High Magnetic Field Laboratory, dubroca@magnet.fsu.edu **PI:** Cross, T., National High Magnetic Field Laboratory, cross@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 14.1 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
	Title: 1-H Quadrature Transceiver Surface Coil for IN VIVO Mice Imaging and Spectroscopy	

497	**First Author:** Elumalai, M., AMRIS,UF, malathy@ufl.edu **PI:** Mareci, T.H., UF, Biochemistry and Molecular Biology, thmareci@ufl.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 17.6 T **UCGP:** Yes **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
498	**Title:** Selective Wirelessly Adjustable Multiple-Frequency Probe with Automatic Impedance Matching for MR Imaging and Spectroscopy **First Author:** Bashirullah, R., University of Florida, Electrical Engineering, rizwan@ufl.edu **PI:** Mareci, T.H., University of Florida, Biochemistry and Molecular Biology, thmareci@ufl.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 11.1 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
500	**Title:** Cantilever System to Reduce Phase Noise Caused by Vibrations in 11.1T **First Author:** Elumalai, M., AMRIS,UF, malathy@ufl.edu **PI:** Mareci, T.H., UF, Biochemistry and Molecular biology, thmareci@ufl.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 11.1 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
265	**Title:** Enhanced MRI T2 Relaxivity of Nanostructured Iron Oxides on Graphene Oxide **First Author:** Thapa, B, University of Puerto Rico, Molecular Sciences Research Center, bibech.thapa@gmail.com **PI:** Beltran-Huarac, J, University of Puerto Rico, Molecular Sciences Research Center, juan.beltran1@upr.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 4.7 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
278	**Title:** Solid State NMR Studies of A Paramagnetic Material—Li1.2Ni0.13Mn0.54Co0.13O2 **First Author:** Li, X.L., FSU, chemistry, xl14e@my.fsu.edu **PI:** Hu, Y.Y.H., FSU, chemistry, hu@chem.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 7 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
279	**Title:** Spin-Locking and Cross-Polarization under Magic-Angle Spinning of Uniformly Labeled Solids **First Author:** Hung, I., NHMFL, hung@magnet.fsu.edu **PI:** Gan, Z., NHMFL, gan@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 18.8 T **UCGP:** No **VSP:** No **Published in** J. Magn. Reson. 256//23-29 **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
281	**Title:** Heteronuclear NOE in Direct 13C MAS DNP **First Author:** Hung, I., NHMFL, hung@magnet.fsu.edu **PI:** Gan, Z., NHMFL, gan@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 14.1 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No	Approved

	Director's Recommendation: No **Director's Comments:** None	
329	**Title:** NMR Mapping of the LTS Outsert for the New HTS-LTS R&D Magnet for High-Resolution Nuclear Magnetic Resonance Spectroscopy **First Author:** Litvak, I., FSU/NHMFL, litvak@magnet.fsu.edu **PI:** Brey, W.W., FSU/NHMFL, wbrey@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
391	**Title:** Implementation of EPSI Sequence for dDNP 13C Metabolite in-vivo Imaging **First Author:** Collins, J.H.P., UF, Biochemistry and Molecular Biology, jhpcollins@ufl.edu **PI:** Long, J.R., UF, Biochemistry and Molecular Biology, jrlong@mbi.ufl.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 11 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
407	**Title:** EPR Spectroscopy Towards Achieving Overhauser-DNP at 14.1T **First Author:** Akinfaderin, A., National High Magnetic Field Laboratory, EMR, aaa12g@my.fsu.edu **PI:** Hill, S.O., National High Magnetic Field Laboratory, EMR, shill@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** EMR Facility **Highest Measured Field:** 8.5 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
414	**Title:** Investigation of the Effects of Glassing Matrix Deuteration and Gd3+ Doping on 13C Dynamic Nuclear Polarization at 5 Tesla **First Author:** Kiswandhi, A., University of Texas at Dallas, Physics, andhika.kiswandhi@utdallas.edu **PI:** Lumata, L.L., University of Texas at Dallas, Physics, lloyd.lumata@utdallas.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 5 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
416	**Title:** Field Regulation Instrumentation for 1.5 GHz Series-Connected Hybrid (SCH) Magnet **First Author:** Litvak, I., Florida State University, NHMFL, litvak@magnet.fsu.edu **PI:** Brey, W.W., Florida State University, NHMFL, wbrey@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 7.1 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
3	**Title:** Using the Continuous Time Random Walk Model to Quantify Anomalous Diffusion in Post Mortem Huntington's Disease Tissues from Mice **First Author:** Magin, R.L., University of Illinois at Chicago, Bioengineering, rmagin@uic.edu **PI:** Magin, R.L., University of Illinois at Chicago, Bioengineering, rmagin@uic.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 17.6 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
	Title: The Development of the TQTPPI Imaging of 23Na+, 35Cl- and 39K+ at 21.1 T **First Author:** Neubauer, A.N., Heidelberg University, Computer Assisted Clinical Medicine, andreas.neubauer@medma.uni-heidelberg.de **PI:** Schepkin, V.S., National High Magnetic Field Laboratory, CIMAR, schepkin@magnet.fsu.edu	

105	**Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 21.1 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
145	**Title:** Development of a Spin-Echo EPI Acquisition Technique for MRE of the Mouse Brain **First Author:** Klatt, D.K., UIC, BioE, dklatt@uic.edu **PI:** Klatt, D.K., UIC, BioE, dklatt@uic.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 11 T **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
151	**Title:** 39K and 23Na Relaxation Times and MRI of Rat Head at 21.1 Tesla **First Author:** Nagel, A.N., DKFZ, Heidelberg, Germany, a.nagel@dkfz.de **PI:** Nagel, A.N., DKFZ, Heidelberg, Germany, a.nagel@dkfz.de **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 21.1 T **UCGP:** No **VSP:** Yes **Submitted to** NMR in Biomedicine **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
160	**Title:** In vivo Triple Quantum Effects of Bound Potassium, Chloride and Sodium Ions at 21.1 T **First Author:** Schepkin, V.D., NHMFL/FSU, schepkin@magnet.fsu.edu **PI:** Budinger, T.F., Lawrence Berkeley National Laboratory/UCB, tfbudinger@lbl.gov **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 21 T **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
188	**Title:** Effects of Dielectric Substrates on Resonance Frequency of Archimedean Spirals **First Author:** Hooker, J.W., Florida State University, National High Magnetic Field Laboratory, hooker@magnet.fsu.edu **PI:** Hooker, J.W., Florida State University, National High Magnetic Field Laboratory, hooker@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 14 T **UCGP:** Yes **VSP:** No **Submitted to** IEEE Trans. Appl. Supercond. **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
189	**Title:** 1H-13C Dual-Optimized NMR Probe Based on Double-Tunes HTS Resonators **First Author:** Ramaswamy, V., Florida State University, National High Magnetic Field Laboratory, ramaswamy@magnet.fsu.edu **PI:** Brey, W.W., Florida State University, National High Magnetic Field Laboratory, wbrey@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** MBI-UF AMRIS **Highest Measured Field:** 14 T **UCGP:** Yes **VSP:** No **Submitted to** IEEE Trans. Appl. Supercond. **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved
206	**Title:** CEST-Weighted Imaging on Glioma Rodent Models: Strong Contrast Enhancement at 21.1 T **First Author:** Roussel, T., Weizmann Institute of Scince, tangi.roussel@weizmann.ac.il **PI:** Frydman, L., Weizmann Institute of Science and NHMFL, frydman@magnet.fsu.edu **Category:** Magnet Resonance Technique and Development **Facility:** NMR Facility **Highest Measured Field:** 21.1 T **UCGP:** Yes **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Approved

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