## List Of 2015 Reports

ID#	Title, First Author, and Category	Status
	<b>Title:</b> Selective Membrane Disruption Mechanism of an Antibacterial γ-AApeptide Defined by Multi-Frequency	
	EPR First Author: Kaur, P., NHMFL, pk11c@my.fsu.edu	
	PI: Song, L., NHMFL, song@magnet.fsu.edu	
	Category: Biology	
<u>221</u>	Facility: EMR Facility	Approved
	Highest Measured Field: 3 T	
	UCGP: Yes VSP: No Submitted to Biophysical J.	
	Sign. Achievement: Yes Director's Recommendation: Yes, definitely	
	Director's Comments: None	
	Title: Towards Increased Concentration Sensitivity for Continuous Wave EPR Investigations of Spin-Labeled	1
	Biological Macromolecules at High Fields	
	First Author: Song, L., NHMFL, song@magnet.fsu.edu	
	PI: Fanucci, G.E., University of Florida, Chemistry, fanucci@chem.ufl.edu Category: Biology	
393	Facility: EMR Facility	Approved
	Highest Measured Field: 3 T	
	UCGP: Yes VSP: No Submitted to J. Magn. Reson.	
	Sign. Achievement: Yes	
	Director's Recommendation: Yes, definitely Director's Comments: None	
	Title: Three-Dimensional MRM of the Drosophila Brain at High Resolution	
	First Author: Fernandez-Funez, P., NeurologyUF, pedro.fernandez@neurology.uf.edu	
	PI: Fernandez-Funez, P., NeurologyUF, pedro.fernandez@neurology.uf.edu	
	Category: Biology	
431	Facility: MBI-UF AMRIS	Approved
	Highest Measured Field: 14 T UCGP: No VSP: No Published in Scientific Reports (2015) 5 : 8920	
	Sign. Achievement: Yes	
	Director's Recommendation: Yes	
	Director's Comments: Recently published, high profile work	
	Title: Longitudinal Changes in Free-Water within the Substantia Nigra of Parkinson's Disease	
	First Author: Ofori, E., University of Florida, eofori@ufl.edu PI: Vaillancourt, D.E., University of Florida, vcourt@ufl.edu	
	Category: Biology	
	Facility: MBI-UF AMRIS	
<u>6</u>	Highest Measured Field: 3 T	Approved
	UCGP: No VSP: No Published in Brain 138/2322-2331	
	Sign. Achievement: Yes Director's Recommendation: Yes	
	<b>Director's Comments:</b> published translational work showing long-term impacts of basic research in magnetic	
	resonance technique development	
	Title: The Molecular Basis of the Rous Sarcoma Virus Capsid Tubular Assembly Probed by SsNMR	
	First Author: Jeon, J., University of Central Florida, Dept. of Physics, Jaekyun.Joen@gmail.com	
	PI: Chen, B., University of Central Florida, Dept. of Physics, Bo.Chen@ucf.edu	
	Category: Biology Facility: NMR Facility	
<u>134</u>	Highest Measured Field: 21 T	Approved
	UCGP: No VSP: No Publication Status: Manuscript in preparation	
	Sign. Achievement: Yes	
	Director's Recommendation: Yes	
	Director's Comments: None Title: Characterization of a Novel Oxylipin Defense Signal in Maize	
,	First Author: Christensen, S., USDA-CMAVE, shawn.christensen@ars.usda.gov	
		1
	PI: Christensen, S., USDA-CMAVE, shawn.christensen@ars.usda.gov	
	Category: Biology	
207	Category: Biology Facility: MBI-UF AMRIS	Approved
<u>207</u>	Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 14.1 T	Approved
<u>207</u>	Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 14.1 T UCGP: No VSP: No Published in P. Natl. Acad. Sci. U.S.A. 112/36/11407-11412	Approved
<u>207</u>	Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 14.1 T UCGP: No VSP: No Published in P. Natl. Acad. Sci. U.S.A. 112/36/11407-11412 Sign. Achievement: Yes	Approved
<u>207</u>	Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 14.1 T UCGP: No VSP: No Published in P. Natl. Acad. Sci. U.S.A. 112/36/11407-11412	Approved

<u>220</u>	First Author: Penman, C., University of Florida, Environmental Horticulture, christyjohns001@gmail.com PI: Guy, C.L., University of Florida, Environmental Horticulture, clguy@ufl.edu Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 3 T UCGP: No VSP: No Publication Status: Not at this time Sign. Achievement: No Director's Recommendation: No Director's Comments: None Title: Free-Water Imaging in Parkinson's Disease and Atypical Parkinsonism	Approved
<u>5</u>	First Author: Planetta, P.J., University of Florida, planetta@ufl.edu PI: Vaillancourt, D.E., University of Florida, Applied Physiology and Kinesiology, vcourt@ufl.edu Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 3 T UCGP: No VSP: No Accepted by Brain Pending Sign. Achievement: Yes Director's Recommendation: No Director's Comments: None	Approved
<u>144</u>	Title: Dissociating mTBI and PTSD Brain Activity at Rest First Author: Gravano, J.T., University of Florida, Clinical & Health Psychology, jtgravano@phhp.ufl.edu PI: Perlstein, W.M., University of Florida, Clinical & Health Psychology, wmp@phhp.ufl.edu Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 3 T UCGP: No VSP: No Publication Status: Manuscript in preparation Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>161</u>	Title: Sodium MRI of Glioma in Animal Models at Ultrahigh Magnetic Fields First Author: Schepkin, V.D., NHMFL/FSU, schepkin@magnet.fsu.edu PI: Schepkin, V.D., NHMFL/FSU, schepkin@magnet.fsu.edu Category: Biology Facility: NMR Facility Highest Measured Field: 21 T UCGP: No VSP: No Published in NMR in Biomed Jul 15. doi: 10.1002/nbm.3347 (invited review article) Sign. Achievement: Yes Director's Recommendation: No Director's Comments: None	Approved
<u>195</u>	Title: MR Monitoring of Hindlimb Muscles in Cachexic Mice First Author: Vohra, R., UF, Physiology and Functional Genomics, ravneet@ufl.edu PI: Walter, G.A., UF, Physiology and Functional Genomics, glennw@phys.med.ufl.edu Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 4.7 T UCGP: No VSP: No Publication Status: Not at this time Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>11</u>	Title: Characterization of Brain Morphology in Mucopolysaccharidosis Type IIIB Affected Mice Using Magnetic Resonance Imaging First Author: Gilkes, J.A., University of Florida, Medicine, janine.gilkes@medicine.ufl.edu PI: Heldermon, C.D., University of Florida, Medicine, coy.heldermon@medicine.ufl.edu Category: Biology 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
<u>47</u>	Title: White Matter Lateralization of the Parietofrontal Orienting Network as a Biomarker Predicting Degree of Attention Impairment Following Traumatic Brain Injury: Insights from Diffusion MRI Tractography First Author: Hill-Jarrett, T., University of Florida, Clinical & Health Psychology, thilljarrett@phhp.ufl.edu PI: Perlstein, W.M., University of Florida, Clinical & Health Psychology, wmp@phhp.ufl.edu Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 3 T UCGP: No VSP: No Publication Status: Not at this time Sign. Achievement: No	Approved

	Director's Recommendation: No Director's Comments: None	
<u>52</u>	Title: Dissociating Functional Brain Activity in Blast-Related Traumatic Brain Injury and Post-Traumatic Stress Disorder First Author: Perlstein, W.M., University of Florida, Clinical and Health Psychology, wmp@phhp.ufl.edu PI: Perlstein, W.M., University of Florida, Clinical and Health Psychology, wmp@phhp.ufl.edu Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 3 T UCGP: No VSP: No Publication Status: Manuscript in preparation Sign. Achievement: No Director's Recommendation: No Director's Comments; None	Approved
<u>99</u>	Title: EPR Studies of Protein-Protein Interactions Involved in the Assembly of Bacterial Nanoinjectors First Author: De Guzman, R.N., University of Kansas, rdguzman@ku.edu PI: De Guzman, R.N., University of Kansas, rdguzman@ku.edu Category: Biology Facility: EMR Facility Highest Measured Field: 1 T UCGP: Yes VSP: No Publication Status: Manuscript in preparation Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>122</u>	Title: Tetrameric Structural Heterogeneity Revealed by Dynamic Short Hydrogen Bonds in the Histidine Tetrad of the M2 Proton Channel First Author: Miao, Y., FSU, Chemistry and Biochemistry/NHMFL, miao@magnet.fsu.edu PI: Cross, T.A., FSU, Chemistry and Biochemistry/NHMFL, cross@magnet.fsu.edu Category: Biology Facility: NMR Facility Highest Measured Field: 14.1 T UCGP: No VSP: No Published in Structure vol 23, page 2300-2308 Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>227</u>	Title: Determining the Embryonic Origin of Primate Encephalization via High Resolution MRI First Author: Halley, A.C., University of California, Berkeley, Anthropology, drewhalley@berkeley.edu PI: Deacon, T.W., University of California, Berkeley, Anthropology, deacon@berkeley.edu Category: Biology Facility: MBI-UF AMRIS UCGP: No VSP: No Publication Status: Manuscript in preparation Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>232</u>	Title: Intra-arterial Injected Adipose Derived Stem Cells for Stroke Therapy Cause Lacunar Strokes in Rats First Author: Rosenberg, J., NHMFL, CIMAR, rosenberg@magnet.fsu.edu PI: Grant, S.C., FSU, Chemical and Biomedical Engineering, grant@magnet.fsu.edu Category: Biology Facility: NMR Facility Highest Measured Field: 21.1 T UCGP: Yes VSP: No Publication Status: Not at this time Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>233</u>	Title: Solid-State NMR Studies of the Effect of Hydrophobic Mismatch on the Structure of Polytopic Membrane Proteins First Author: Ward, M.E., University of Guelph, Physics, mward01@uoguelph.ca PI: Ladizhansky, V., University of Guelph, Physics, vladizha@uoguelph.ca Category: Biology Facility: NMR Facility Highest Measured Field: 21.1 T UCGP: No VSP: No Publication Status: Not at this time Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
	Title: Small World Network Analysis of DTI-based Connectivity in Isolated Neural Ganglia First Author: Ould Ismail, A., Florida State University, Chemical & Biomedical Engineering, aoo12@my.fsu.edu PI: Grant, S.C., Florida State University, Chemical & Biomedical Engineering, grant@magnet.fsu.edu Category: Biology	

<u>234</u>	Facility: NMR Facility Highest Measured Field: 11.75 T UCGP: Yes VSP: No Publication Status: Manuscript in preparation Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>249</u>	Title: Structural Study of the Full-Length M2 Proton Channel in Membrane Bilayers First Author: Tang, T., NHMFL; FSU, Chemistry, tctangb15@gmail.com PI: Cross, T.A., NHMFL; FSU, Chemistry, cross@magnet.fsu.edu Category: Biology Facility: NMR Facility Highest Measured Field: 16.9 T UCGP: No VSP: No Publication Status: Manuscript in preparation Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>276</u>	Title: Membrane Interaction of Virus-Mimicking Polymer Molecular Brushes Studied by Multi-Frequency EPR First Author: Hyat, Z., NHMFL, zh13c@my.fsu.edu PI: Liang, H., Texas Tech Uni, hjliang.ttuhsc@gmail.com Category: Biology Facility: EMR Facility Highest Measured Field: 3 T UCGP: Yes VSP: No Publication Status: Manuscript in preparation Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
	Title: Immune Responses to Autologous Schwann Cell Grafts in a Minipig Spinal Cord Injury Hemicontusion Model First Author: Santamaria, A.J., Univeristy of Maimi, The Miami project to cure Paralysis, ASantamaria@med.miami.edu PI: Guest, J.D, University of Miami, Neurological Surgery, JGuest@med.miami.edu Category: Biology Facility: NMR Facility Highest Measured Field: 11.75 T UCGP: Yes VSP: No Publication Status: Manuscript in preparation Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>298</u>	Title: Chemically-Rich Structure and Dynamics in the Active Site of Tryptophan Synthase First Author: Caulkins, B., UC Riverside, Chemistry, bethany.caulkins@email.ucr.edu PI: Mueller, L.J., UC Riverside, Chemistry, leonard.mueller@ucr.edu Category: Biology Facility: NMR Facility Highest Measured Field: 21.1 T UCGP: No VSP: No Publication Status: Not at this time Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>340</u>	Title: Gold Covered Iron Oxide Nanoparticles as MRI Contrast Agents at 11.75 T First Author: Wi, L., NHMFL, CIAMR, samx5@vt.edu PI: Rosenberg, J.T., NHMFL, CIMAR, rosenberg@magnet.fsu.edu Category: Biology Facility: NMR Facility Highest Measured Field: 11.75 T UCGP: Yes VSP: No Publication Status: Not at this time Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>434</u>	Title: Characterizing Blood Brain Barrier Breakdown with Status Epilepticus Brain Injury First Author: Magdoom , K.N., Mechanical & Aerospace Engineering, mkulam@ufl.edu PI: Sarntinoranont, M., Mechanical & Aerospace Engineering, msarnt@ufl.edu Category: Biology 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

<u>437</u>	Title: Effects of PDE5A Inhibition on Skeletal Muscle 1H2O T2 after Exercise in Dystrophic Mice First Author: Batra, A., University of Florida, Physical Therapy, abhinandanbatra@phhp.ufl.edu PI: Forbes, S.C., University of Florida, Physical Therapy, scforbes@ufl.edu Category: Biology 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 Title: In vivo Detection and Quantification of Protein Clearance using 13C-filtered MRI & MRS First Author: Prosser, R.S., University of Toronto, Chemistry, scott.prosser@utoronto.ca PI: Prosser, R.S., University of Toronto, Chemistry, scott.prosser@utoronto.ca Category: Biology Facility: MBI-UF AMRIS	Approved
<u>446</u>	Highest Measured Field: 11.8 T UCGP: No VSP: No Publication Status: Not at this time Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>447</u>	Title: Development of a Perfusion System for MR Microscopy of Small Samples First Author: Flint, J.J., UF, Neuroscience, jflint@mbi.ufl.edu PI: Blackband, S.J., UF, Neuroscience, blacki@mbi.ufl.edu Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 14.1 T UCGP: Yes VSP: No Published in Science Reports 5:18095 (2015) Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>448</u>	Title: MR Microscopy of Aplysia Neurons with Direct Histological Correlation First Author: Lee, C.H., UF, Neuroscience, chlee@mbi.ufl.edu PI: Blackband, S.J., UF, Neuroscience, blackie@mbi.ufl.edu Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 14.1 T UCGP: Yes VSP: No Published in Science Reports 10;5:11147 (2015). Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>449</u>	Title: MR Microscopy of a Mouse Model of Recessive Polycystic Kidney Disease First Author: Lee, C.H., UF, Neuroscience, chlee@mbi.ufl.edu PI: Guay-Woodford, L., University of Alabama, Genetics, LGuaywoo@childrensnational.org Category: Biology Facility: MBI-UF AMRIS Highest Measured Field: 14.1 T UCGP: No VSP: No Published in Physiological Reports 3(8) (2015) Sign. Achievement: No Director's Recommendation: No Director's Comments: None	Approved
<u>452</u>	Title: Metabolic Assessments of Migraine Using 1H Spectroscopy at Ultra-High Fields First Author: Abad, N., Florida State University, Chemical & Biomedical Engineering, na10@my.fsu.edu PI: Harrington, M.G., Huntington Medical Research Institutes, Neurosciences, mghworks@hmri.org Category: Biology Facility: NMR Facility Highest Measured Field: 21.1 T UCGP: Yes VSP: No Publication Status: Manuscript in preparation Sign. Achievement: Yes Director's Recommendation: No Director's Comments: None	Approved
<u>453</u>	Title: Quantitative Spectroscopy of Sodium during Migraine Progression First Author: Abad, N., Florida State University, Chemical & Biomedical Engineering, na10@my.fsu.edu PI: Harrington, M.G., Huntington Medical Research Institutes, Neurosciences, mghworks@hmri.org Category: Biology 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	Approved

	Director's Comments: None	
	Title: MRI Microscopy of Human Motor Neurons Progress Report	
<u>491</u>	First Author: Niederhut, D.N., University of California, Berkeley, Anthropology, dillon.niederhut@berkeley.edu	
	PI: Deacon, T.D., University of California, Berkeley, Anthropology, deacon@berkeley.edu	
	Category: Biology Facility: MBI-UF AMRIS	
	Highest Measured Field: 17.6 T	Approved
	UCGP: No VSP: No Publication Status: Not at this time	
	Sign. Achievement: No	
	Director's Recommendation: No	
	Director's Comments: None	
	Title: Magnetic Field Measurement in Rat's Spinal Cord: A Study of Magnetic Anisotropy in White Matter	
<u>493</u>	First Author: Banan, G.B., University of Florida, Physics, guita.banan@ufl.com	
	PI: Mareci, T.H., University of Florida, Biochemistry and Molecular Biology, thmareci@ufl.edu	
	Category: Biology Facility: MBI-UF AMRIS	
	Highest Measured Field: 17.6 T	Approved
	UCGP: No VSP: No Publication Status: Not at this time	
	Sign. Achievement: No	
	Director's Recommendation: No	
	Director's Comments: None	
	Title: Direct Visualization of Muscle Fibrosis and Mineralization Using MR Microscopy	
	First Author: Vohra, R., University of Florida , Ravneet Vohra	
	PI: Walter, G.A., University of Florida , Physiology, glennw@ufl.edu	
	Category: Biology	
<u>505</u>	Facility: MBI-UF AMRIS Highest Measured Field: 17.6 T	Approved
	UCGP: No VSP: No Publication Status: Manuscript in preparation	
	Sign. Achievement: No	
	Director's Recommendation: No	
	Director's Comments: None	
	Title: Anatomy of the Goliath Grouper Skull	
	First Author: Chapman, F., U Florida, School of Forest Resources and Conservation-Fisheries and Aquatic	
	Sciences, fchapman@ufl.edu	
	PI: Chapman, F., U Florida, School of Forest Resources and Conservation-Fisheries and Aquatic Sciences,	
	fchapman@ufl.edu <b>Category:</b> Biology	
<u>507</u>	Facility: MBI-UF AMRIS	Approved
	Highest Measured Field: 17 T	
	UCGP: No VSP: No Publication Status: Not at this time	
	Sign. Achievement: No	
	Director's Recommendation: No	
	Director's Comments: None	Į
1	Title: Diffusion Tensor Imaging Analysis to Assess Stem Cell Therapy Efficacy in Traumatic Brain Injury	
	<b>First Author:</b> Abad, N., Florida State University, Chemical & Biomedical Engineering, na10@my.fsu.edu <b>PI:</b> Grant, S.C., Florida State University, Chemical & Biomedical Engineering, grant@magnet.fsu.edu	
	<b>Category:</b> Biology	
	Facility: NMR Facility	<b>.</b> .
<u>508</u>	Highest Measured Field: 11.75 T	Approved
	UCGP: Yes VSP: No Submitted to Neurotrauma	
	Sign. Achievement: No	
	Director's Recommendation: No	
<u> </u>	Director's Comments: None	
	Title: Quantitative Imaging of Sodium during Migraine Progression	
	<b>First Author:</b> Abad, N., Florida State University, Chemical & Biomedical Engineering, na10@my.fsu.edu <b>PI:</b> Harrington, M.G., Huntington Medical Research Institutes, Neurosciences, mghworks@hmri.org	
	Category: Biology	
	Facility: NMR Facility	A
<u>510</u>	Highest Measured Field: 21.1 T	Approved
	UCGP: Yes VSP: No Publication Status: Manuscript in preparation	
1	Sign. Achievement: No	
	Director's Recommendation: No	
	Director's Comments: None	1
	Total Reports: 39	