Tuesday, June 20, 2023

17:00	Welcome Reception at XYZ bar in Aloft Hotel		

Wednesday, June 21, 2023

	Technical Sessions in Clemson University at Greenville ONE (1 N Main St, Greenville, SC 29601)		
7:30	Breakfast at Greenville ONE		
	Session 0: Opening Remarks (Jennifer Andrew and Thompson Mefford)		
8:30	Introduction to Meeting: Dean Gramapadhye		
	Session 1: Delivery and Bioapplications (Chair: Jennifer Andrew)		
8:40	**Reimhult**	**Austria**	**Polymer brush-grafted magnetic nanoparticles and magnetically triggered release from lipid and block copolymer vesicles**
9:30	Bao	USA	Magnetic Screening Nanoplatform with Immobilized Transmembrane Receptors for Drug Discovery
9:55:00 A	Rosch	Germany	Amplification- and enzyme-free detection of viral nucleic acids and single-nucleotide mismatches using magnetic signal amplification
10:20	Coffee Break		
10:45	**Wong**	**USA**	**Superparamagnetic Iron Oxide Nanoparticles (SPIONs) for Early Detection of Disease and for Theranostics Applications**
11:35	Rivas	Spain	Magnetic nanocluster-based sensor for rapid diagnosis of pneumococcal pneumonia
12:00	Panel Discussion with Speakers from Session 1		
12:25	Lunch on site		
	Session 2: Imaging I (Chair: Sam Oberdick)		
14:00	**Foster**	**Canada**	**Magnetic Particle Imaging: A Novel Modality for In Vivo Cell Tracking**
14:50	Viereck	Germany	Towards integrated hyperthermia application and monitoring for localized drug-release in magnetic particle imaging
15:15	Good	USA	Inter-user comparison for quantification of superparamagnetic iron oxides with magnetic particle imaging across two institutions
15:40	Break (Poster presenters please hang your poster)		
16:05	**Mattingly**	**USA**	**Scaling Magnetic Particle Imaging from bench-top to humans for functional brain imaging**
16:55	Baumgarten	Austria	Experimental Demonstration of Human-Sized Quantitative Imaging of Magnetic Nanoparticles with Nonlinear Magnetorelaxometry
17:20	Velazquez-Albin	USA	Effect of post-synthesis oxidation on magnetic particle imaging (MPI) performance
17:45	Panel Discusion with Session 2 presenters		
18:00	Poster Session		
19:30	Dinner in town with friends new and old		

Thursday, June 22, 2023

7:30	Breakfast at Greenville ONE		
	Session 3: Career Panel - (Chair: Mas Crawford)		
8:00	Career Panel at Greenville ONE		
	Session 4: Material Challenges Theory and Synthesis (Chair: Carlos Rinaldi)		
9:00	**Serantes**	**Spain**	**Some materials' science challenges to overcome towards successful application of magnetic nanoparticle hyperthermia**
9:50	Goldfarb	USA	Effective Demagnetizing Factors for Composites of Interacting Nanoparticles
10:15	Rahman	USA	Silica Coating of Iron Oxide Magnetic Nanoparticles by Reverse Microemulsion Method and their Functionalization with Cationic

10:40	Coffee Break		
11:05	Rivera-Llabres	USA	Size tunable fabrication of magnetic alginate microparticles (MAMs) as architectural micropatterning porogens in hydrogels using
11:30	Tracy	USA	Surface Functionalization of Magnetite Nanoparticles for pH-Controlled Assembly and Modeling of Ligand Removal
11:55	Laha	USA	Shape anisotropic iron oxide nanostructures for cancer theranostics
12:20	Panel Discusion with Session 4 presenters		
12:45	Lunch on site		
	Session 5: Particle Manipulation (Chair: Ron Goldfarb)		
14:00	Woods	USA	Traceable Thermometry and Thermal Imaging using Magnetic Nanoparticles
14:25	Crawford	USA	Tunability and Ordering in 2D Arrays of Magnetic Nanoparticles Assembled via Extreme
14:50	Andrew	USA	Structure-property relationships in core-shell magnetoelectric nanowires –towards minimally invasive neural stimulation
15:15	Kottenbrock	USA	Magnetic Mapping of Bio-Inspired Clusters of Iron Oxide Nanoparticles
15:40	Todd	USA	Three-Way Magnetic Sorting
16:05	Panel Discusion with Session 5 presenters		
	Enjoy Greenville		
18:00	Dinner at Greenville ONE		

Friday, June 23, 2023

	Session 6: Imaging II (Chair: Paula Foster)		
8:00	Breakfast at Greenville ONE		
9:10	**Mason**	**USA**	**The hardware challenges of scaling MPI to human size and the importance of MNP development for clinical success**
10:00	Yu	USA	Tracking Dendritic Cell Vaccination Using Magnetic Particle Imaging
10:25	Zabow	USA	In vivo MRI tracking down to single cell level with microfabricated magnetic particles
10:50	Coffee Break		
11:15	Sannidhi	USA	Exploration of Methods to Estimate Magnetophoretic Mobility of Individual Magnetic Nanoparticles by Particle Tracking Velocimetry
11:40	Oberdick	USA	Shaped Magnetic Hydrogel Microparticles for Multispectral Magnetic Resonance Contrast and Smart Sensing
12:05	Panel Discusion with Session 6 presenters		
12:30	Session 7: Conference Closing (Chairs: Jennifer Andrew and Thompson Mefford)		

Poster Session: Wednesday, June 21, 2023

18:00 Poster Session

Poster #	Presenter	Country	Title
1	Bermudez-Berrio	USA	Amphiphilic surfactants to mediate the transfer of iron oxide nanoparticles from organic to aqueous solutions
2	Caprow	USA	Developing a clinically useful ferrofluid to protect healthy optical tissue during plaque brachytherapy
3	Engelhard	USA	Rotational Magnetic Drug Targeting – Comparison of Magnetomotive Systems
4	Eswaran	USA	Design and properties of magnetic particle imaging (MPI) tracers using nitroDOPA anchored coatings
5	Hauwaert	Belgium	Impact of biocompatible surface functionalisation of MNP on susceptibility, magnetisation and coercivity
6	Hunter	USA	Quantitative measurements of the influence of polymer brush length on magnetic nanoparticle interactions and signal enhancement
7	Imhoff	USA	An Automated Fe Quantification Assay Using a Liquid Handling Robot
8	Khan	Pakistan	Comparative Investigation of Magnetic, Di-Electric, Optical, and Electrical Properties of Mono $BaFe_2O_4$ and Hexa $BaFe_{12}O_{19}$

9	Malaj	USA	Studying the Effect of Magnetic Nanoparticle Aggregation on the Effective Magnetic Anisotropy
10	McDonough	USA	Two-Dimensional Imaging Using a Single-Sided Field Free Line Magnetic Particle Scanner
11	Paul	USA	Designing Magnetic Nanoparticles and Nanocomposites for Use in Biomedical and Environmental Applications
12	Zhao	USA	Direct Synthesis of Monodisperse Water-Dispersible Iron Oxide Nanoparticles for Potential Biomedical Applications