



Time	Session	Student(s)	Presentation Title	Institution	Faculty & GA Mentors	Local chair
11:00	Biostatistics	Lisaurie Lopez-Rivera	Measuring Periciliary Liquid Depth in New Born Pigs with Cystic Fibrosis Disease and in Control Pigs	UI	Prof. Michael J. Welsh Prof. David Stoltz Prof. Kathryn Chaloner	Leslie Hogben
11:30	Biostatistics	Alex Sawyer Carey Stuart Mark Chikwem	Biomarker Analysis for Early Signs of Cancer Treatment Response	UI	Prof. Brian J. Smith	
12:00	Lunch					
1:00	Biostatistics	Yawa Adonsou Jennifer Griffiths Darius McDaniel Florencia Tolentino	Helping with Science from Home: Volunteer Computing	UI	Prof. Mary Kathryn Cowles	Chad Vidden
1:30	Biostatistics	David-Erick Lafontant Yao Tapoayi	Electronic Data Patterns in Vehicles Involved in Unsafe Outcomes	UI	Prof. Jeffrey Dawson	
2:00	Biostatistics	Gloriell Cardona-Melendez Vanessa Rivera-Quinones	Study of Glaucoma Change Probability for Open-angle Glaucoma	UI	Ming Yang Prof. Gideon Zamba	
2:30	Break					
3:00	Biostatistics	Angela Yazzie Danielle Dodgen	Relationships Between Speech Patterns and Music Appreciation for Cochlear Implant Wearers	UI	Prof. Jacob J. Oleson	Minnie Catral
3:00	Student Evaluations in Carver 232					
3:30	Statistics	Ashley E. Johnson	The Effect of Non-constant Variance on Spatial Prediction	ISU	Eunice Kim, Jonathan Hobbs Prof. Zhengyuan Zhu	Minnie Catral
4:00	Biostatistics	Marie Ozanne	Comparing the Spatial Qualities from Two Measurements of Air Quality Over Chicago	UI	Prof. Jacob J. Oleson	
4:30	Biostatistics	Yawa Adonsou Jennifer Griffiths Darius McDaniel Florencia Tolentino	Statistical Computing or Graphics Cards: Testing a New R Library	UI	Prof. Mary Kathryn Cowles	



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11:00	Mathematics	Andrew Becklin David Medina Gabriel Porrata	The Shapes of Energy Minimizing Polygons	UI	Jonas Meyer Prof. Oguz Durumeric	Minnie Catral
11:30	Mathematics	Karin Schmidt Matthew Mueller Melissa Martinez	Tangle Analysis of Protein-DNA Complexes	UI	Mary Therese Padberg Prof. William Schellhorn Prof. Isabel Darcy	
12:00	Lunch					



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1:00	Mathematics	Michael McConnell Jared Stewart Eliseo Acevedo-Díaz	A Family of Spreads of \mathbb{F}_q^{2n} and their Collineations Groups	UI	Carlos De La Mora Prof. Oscar Vega	Leslie Hogben
1:30	Mathematics	Héctor Torres-Aponte Maria Ñeco Arroyo	Minimum Ranks of Subgraphs of Hypercubes	ISU	Jason Smith Prof. Leslie Hogben	
2:00	Mathematics	Brandon Groth Jessica Schuck Robert Kleven, Xueying Lu	Iterative Methods for the Simplified Steady State Integro-Differential Radiative Transfer Equation	UI	Joseph Eichholz Prof. Weimin Han	
2:30	Break					
3:00	Mathematics	David Boehmer Curtis Stochl Juan Melindez	The Geometric Meaning of Matrix Multiplication	UI	Ross Kilgore Prof. Victor Camillo	Chad Vidden
3:30	Mathematics	Skylar Stark Laura Collins Widad Abdalla, Yun Hao	Numerical Methods for DAEs: The Generalized- α Method	UI	Scott Small Prof. Laurent Jay	
4:00	Student Evaluations in Carver 232					
4:00				Grinnell		Chad Vidden
4:30	Mathematics	Daniel Mysnyk Molly Peterson Carlos Ortiz, An Yang	Iterations and Boundary Value Problem	UI	Alvaro Correa Prof. Juan Gatica	



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8:30	Statistics	Travell Williams	Estimating Water Quality Through Subsampling	ISU	Young Kim Prof. Mark Kaiser Prof. Dan Nordman	Takisha Harrison
9:00	Statistics	Millicent Grant	Effect of Parent Hostility on Young Adult Child's Perception of Parental Support a Decade Later	ISU	Laura Hildreth Prof. Frederick Lorenz	
9:30	Break					
10:00	Statistics	Katrina Williams	Using Generalized Linear Model Methodology to Identify Differentially Expressed Genes from RNA-Seq Data	ISU	Joshua Bernhard Prof. Peng Lui Prof. Dan Nettleton	Takisha Harrison
10:30	Statistics	Jared Mills	Logistic Regression Analysis of Next Generation Sequencing Data to Identify Allele Specific Expression Differences between Reciprocal Hybrids	ISU	Joshua Bernhard Prof. Peng Lui Prof. Dan Nettleton	
11:00	Mathematics	Leonora Ortiz Darius Pandy Bernardo Turrubiarres	Approximation Near Expiration of the Exercise Boundary for an American Put	UNI	Ryan Flugum, Paul Barloon Prof. Osvaldo Mendez Prof. Douglas Mupasiri	
11:30	Mathematics	Kerisha Burke Bili Lawal Joseph Raya-Ellis	Generalizing the Black-Scholes Pricing Formula for a Dividend Paying Stock with Stochastic Volatility	UNI	Ryan Flugum, Paul Barloon Prof. Osvaldo Mendez Prof. Douglas Mupasiri	
12:00	Lunch					



NSF Alliance/VIGRE/REU-site/NIH - ISIB
 2010
 Iowa Summer Research Symposium

Room Schedule for Thursday, July 29

Carver 202

Time	Session	Student(s)	Presentation Title	Institution	Faculty & GA Mentors	Local chair
8:30	Mathematics	Marie Archer Rana Haber Xavier Martinez-Rivera Antonio Ochoa	Eventually Exponentially Positive Matrices and their Sign Patterns	ISU	Craig Erickson Dr. Minerva Catral Prof. Leslie Hogben	Craig Erickson
9:30	Break					
10:00	Mathematics	Ben Thompson Yao Messan Jacob Erb	On Fitting Curves to 3-Dimensional Data Sets	UI	Susan Brooks Prof. Jon Simon	Craig Erickson
10:30	Mathematics	Jon Juett Colin Johnson Rob Carmen	Computing Cyclotomy Using Representation Theory	UI	Syvillia Averett Prof. Philip Kutzko	
11:00	Mathematics	Timothy Pluta Matthew Temba Brian Wu	A Stochastic Game Based on the Gambler's Ruin Scenario for a Cookie Random Walk	ISU	Chad Vidden Reza Rastegar Prof. Alexander Roitershtein	
12:00	Lunch					