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   - Poster Session .................................. 13

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AGENDA

Thursday, April 15, 2010

5:00 - 7:00pm  Student and Faculty Rep Arrival and Check-in
              Georgia Tech Hotel and Conference Center

6:30pm  Ad Hoc - Faculty Representative Dinner
          Waterhaven at Tech Square?

Friday, April 16, 2010

7:30am  Continental Breakfast Available at GLC Break Stations

7:45am  Additional Check-in, Outside Room 222

8:30am  Opening Plenary, Room 222
        Greetings and Introduction
        Dr. Karen Harwell, Director, Undergraduate Research, Georgia Tech
        Welcoming Remarks
        Dr. Gary Schuster, Provost, Georgia Tech

8:45am  Plenary Speaker, Room 222
        Dr. Ozlem Ergun, Co-Director, Center for Health and Humanitarian Logistics, Georgia Tech
        Introduction by Dr. Karen Harwell, Director, Undergraduate Research, Georgia Tech

9:35am  Oral Session Breakout A (3 sessions)
        See page 10 for presentation times and room locations

10:35am  Break

10:50am  Oral Session Breakout B (3 sessions)
         See page 11 for presentation times and room locations

12:10pm  Lunch Buffet, Lobby Atrium

1:00pm  Plenary Speaker, Room 222
        Dr. Gil Weinberg, Director of Music Technology, Georgia Tech
        Introduction by Dr. Dana Hartley, Director, Undergraduate Studies, Georgia Tech

2:00pm  Oral Session Breakout C (3 sessions)
         See page 12 for presentation times and room locations

3:20pm  Break
AGENDA

3:35pm  Plenary Sessions (one for students, one for faculty)
   Students, Room 222 - “Research Careers: A Panel Session”
   Ms. Marlit Hayslett, Director, Office of Policy Analysis and Research, Georgia Tech
   Research Institute
   Dr. Steven Girardot, Director, Success Program, Georgia Tech
   Dr. Todd McDevitt, Director, Stem Cell Engineering Center, School of Biomedical
   Engineering, Georgia Tech
   Ms. Leanne West, Center Director, Landmarc Research Group, Georgia Tech
   Research Institute
   Faculty, Room TBD

4:45pm  Break

5:30pm  Poster Session and Reception
   Academy of Medicine
   See pages 13-14 for poster list

7:00pm  Variety Show with GT faculty & staff comedy and music, GT Glee Club
   Academy of Medicine Theater

Saturday, April 17, 2010

8:00am  Continental Breakfast Available at GLC Break Stations

9:00am  Opening Session, Room 222
   Thank you from Georgia Tech
   Dr. Ray Vito, Vice-Provost, Graduate and Undergraduate Studies
   Conference Announcements
   Dr. Karen Harwell, Director, Undergraduate Research

9:15am  Oral Session Breakout D (3 sessions)
   See page 15 for presentation times and room locations

10:15am Break

10:30am Oral Session Breakout E (3 sessions)
   See page 16 for presentation times and room locations

11:50am Closing Session, Room 222
   Ending Thoughts
   Dr. Dave Brown, ACCIAC Coordinator and Wake Forest Provost Emeritus
   Dr. Karen Harwell, Director, Undergraduate Research, Georgia Tech

12:30pm Lunch Buffet, Lobby Atrium

1:30pm  Adjourn
## CONFERENCE SCHEDULE

### Oral Session Breakout A - Friday, 9:35am-10:35am

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Affiliation</th>
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</thead>
<tbody>
<tr>
<td>9:35am</td>
<td><strong>Anti-Realism in the Age of the Supercollider</strong></td>
<td>James Remeika</td>
<td>Miami</td>
</tr>
<tr>
<td>9:55am</td>
<td><strong>Guilt and compulsive washing: An experimental test of interrelationships</strong></td>
<td>Amy Goetz</td>
<td>Florida State</td>
</tr>
<tr>
<td>10:15am</td>
<td><strong>The Relationship between Family Home and School Involvement and School Readiness</strong></td>
<td>Johayra Bouza</td>
<td>Miami</td>
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### Oral Session Breakout A - Friday, 10:15am-11:15am

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:15am</td>
<td><strong>Manipulating Inositol Trisphosphate Signaling Increases Drought Tolerance in Transgenic Tomato Plant</strong></td>
<td>Hayley Hedges</td>
<td>NC State</td>
</tr>
<tr>
<td>9:55am</td>
<td><strong>Expression of Glucocorticoid Receptors in the Follicles of the Broiler Breeder Hen</strong></td>
<td>Lauren Bola</td>
<td>NC State</td>
</tr>
<tr>
<td>10:15am</td>
<td><strong>Tied to the Land or to the Market: The Story of an Organic Farm</strong></td>
<td>Connor Fitzmaurice</td>
<td>Boston College</td>
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### Oral Session Breakout A - Friday, 11:15am-12:15pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15am</td>
<td><strong>Every Child is My Child: Caring for AIDS Orphans in South Africa</strong></td>
<td>Isiuwa Mabatah</td>
<td>Boston College</td>
</tr>
<tr>
<td>9:55am</td>
<td><strong>The Effects of Positive and Negative Stress on the Parenting of Adolescents</strong></td>
<td>Angela Chiang</td>
<td>Maryland</td>
</tr>
<tr>
<td>10:15am</td>
<td><strong>Aerobic Fitness and Heart Rate Variability in Prematurely Born Adolescents with Very Low Birth Weight</strong></td>
<td>Sarah Aspinwall</td>
<td>Wake Forest</td>
</tr>
</tbody>
</table>
# CONFERENCE SCHEDULE

## Oral Session Breakout B - Friday, 10:50am-12:10pm

### Session B-1, Room TBD

#### Engineering

10:50am  
*New Method for Calculating Skin Friction at Laminar-Turbulent Transition*  
Whitney Lohmeyer, NC State

11:10am  
*Calibrating Astronomical Antenna Arrays with Orbiting Data Satellites*  
Ian Czekala, Virginia

11:30am  
*Improvement of Fuel Properties of Cottonseed Oil Methyl Esters with Commercial Additives*  
Anurag Mandalika, Clemson

11:50am  
*Copper Pitting: A Study of Potential Accelerants and Inhibitors in Pipe Corrosion*  
Kara Dodson, Virginia Tech

### Session B-2, Room TBD

#### Biochemistry

10:50am  
*Identification of Fluoranthene Degrading Bacteria using Stable Isotope Probing*  
Douglass Crandell, UNC - Chapel Hill

11:10am  
*Generation of a Mutant Core Streptavidin for Complexation with and Crystallization of Biotinylated M*  
Steve Hsieh, Georgia Tech

11:30am  
*Intrauterine Fetal Cardiac Delivery of Antisense miR-7 Impairs Beta Cell Development*  
Enrique Garcia, Miami

11:50am  
*Interaction between the Transcription Factor mouse Vezf1 and RhoB in Vascular System Development*  
John Campbell, NC State

### Session B-3, Room TBD

#### English and Linguistics

10:50am  
*The Better to Explore With: Curiosity in “Alice in Wonderland” and “Little Red Riding Hood”*  
Heather Fine, Virginia Tech

11:10am  
*Illuminating Culture, History, and Tradition: Cognitive Literary Theory and the St. John’s Bible*  
Erin Eighan, Boston College

11:30am  
*The phonetic inventory of S’gaw Karen*  
Stephany Lu, UNC - Chapel Hill

11:50am  
*Unearthing Walloon: Linguistic Artifacts in a Modern World*  
Catherine Hadshi, Boston College

*Hosted by Georgia Institute of Technology*
CONFERENCE SCHEDULE

Oral Session Breakout C - Friday, 2:00pm-3:20pm

Session C-1, Room TBD
Cells and Nervous System

2:00pm  
High Fidelity Photopatterning and Characterization of Hydrogels for 3D Cell Co-Culture  
Nathaniel Bloodworth, Georgia Tech

2:20pm  
Modulating the Release of Growth Factors in Embryonic Stem Cells using Modified Microparticles  
Katy Hammersmith, Georgia Tech

2:40pm  
Single Cell Analysis of Osmosis as Assessed by High-Field 1H and 23Na Magnetic Resonance Imaging  
John Walsh, Florida State

3:00pm  
Fluorescent Mimics of 5-hydroxytryptamine as Nervous System Imaging Probes  
Teresa Micotto, Miami

Session C-2, Room TBD
Arts and Architecture

2:00pm  
Fa La Mi… If You Want to Sing: The Sacred Harp Tradition of Central Florida  
Natalie York, Miami

2:20pm  
West Meets East: Art, Politics, & Culture in Edo Japan  
Brittany Newman, Virginia Tech

2:40pm  
Influence of the Panathenaic Way on Relationships between Religious and Public Art in Ancient Athens  
Emily Wild, Wake Forest

3:00pm  
Ephemeral Cities: Using Cellular Automata to Model Growth Patterns of Tent Cities  
Brittany Utting, Georgia Tech

Session C-3, Room TBD
Conflicts of Identity and Perception

2:00pm  
The Right to Remain Anonymous  
Amanda Cote, Virginia

2:20pm  
Liberals vs. Conservatives: Differences in Social Perception  
Leah Townsend, UNC - Chapel Hill

2:40pm  
A Networked Democracy: Facebook and Political Information  
Cohen Simpson, Clemson

3:00pm  
Culture, Philosophy, Pedagogy: Wind Band Education in Japan and the United States  
Austin Ramsey, UNC - Chapel Hill
CONFERENCE SCHEDULE

Poster Session - Friday, 5:30pm-7:00pm

1. **Endocrine Disruption Due to Cadmium in the Shrimp Species L. Vannamei**
   Amber Williams, Boston College

2. **Investigation of Nutrient Intake and Food Security in Women of Childbearing Age in Limpopo, South Africa**
   Anastasia Crihfield, Virginia

3. **Origin of Porphyrin Rings: Is the Cycle of Life Fueled by Stardust?**
   Andrew Rice, Florida State

4. **Novel Biopolymer-Based Nanofibers for Regenerative and Therapeutic Medicine**
   Brinda Monian, NC State

5. **Gestational Cocaine’s Effects on Olfactory Preference and Neuronal Activation**
   Brittany Ross, UNC - Chapel Hill

6. **Pork Barrel Spending and Congressional Elections**
   Carlos Antonorsi, Miami

7. **Using Digital Image Correlation on Pressure Loaded Blister Testing of PEM**
   Chase Siuta, Virginia Tech

8. **Gamma Ray Bursts and X-Ray flares: What’s Really Going on Inside a Dying Star?**
   Chris Blackwell, NC State

9. **Perceived Stigmas to Psychological Treatment**
   Danielle Leach, Clemson

10. **Encoding Beauty: Ovulating Women Encode the Attractiveness of Male and Female Targets**
    Elizabeth Gill, Florida State

11. **Initial Studies in the Formation of [Fe-S] Clusters in Gram-positive Bacteria**
    Emily Earles, Wake Forest

12. **Using Double Stranded DNA Probes for the Detection of RNA**
    Gita Mahmoudabadi, Georgia Tech

13. **Exploring the Microbiome of the Premature Gastrointestinal System**
    Guru Shan, Boston College

14. **Beyond the Canal: Exploring Panama’s National Dances**
    Hanaah Frechette, Florida State

15. **Intensity Fluctuations of Stochastic Electromagnetic Beams**
    Hilary Jacks, Miami

(continued on next page)
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<tr>
<th>No.</th>
<th>Title</th>
<th>Presenter, Institution</th>
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<tbody>
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<td>16</td>
<td>High Temporal Resolution Decoding of Object Position Using MEG</td>
<td>Juraj Mesik, Maryland</td>
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<td>17</td>
<td>Anatomical Analysis of Optiflo on Patient Specific Geometries</td>
<td>Kalpi Desai, Georgia Tech</td>
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<tr>
<td>18</td>
<td>Vibrational Sum Frequency Generation Spectroscopy Study of Acetonitrile</td>
<td>Katherine Manfred, Maryland</td>
</tr>
<tr>
<td>19</td>
<td>Investigating 14-3-3 Protein's Function in the Brain Using Transgenic Mice</td>
<td>Kourtney Graham, Florida State</td>
</tr>
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<td>20</td>
<td>Access to Health Care in Uganda</td>
<td>Leek Deng, Wake Forest</td>
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<tr>
<td>21</td>
<td>Strengthening of Cornea by UV Collagen Crosslinking</td>
<td>Lung Lau, Miami</td>
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<tr>
<td>22</td>
<td>The Relationship Between Performance and Sleep Quality in Sleep Deprived Persons</td>
<td>Michelle Burnett, Clemson</td>
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<tr>
<td>23</td>
<td>The Effects of Adult Neurogenesis on Contextual Fear Conditioning</td>
<td>Tik Pratik, Virginia</td>
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<tr>
<td>24</td>
<td>Product Image Location: A Perceptual Cue for Portion Size?</td>
<td>Sara Michalski, Miami</td>
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<tr>
<td>25</td>
<td>Fishing Phytophthora in Maryland</td>
<td>Xiaojie Zhang, Maryland</td>
</tr>
</tbody>
</table>
CONFERENCE SCHEDULE

Oral Session Breakout D - Saturday, 9:15am-10:15am

Session D-1, Room TBD
Chaos and Control

9:15am
*And the Beats Go On: The Beat Generation and the Affirmative Apocalypse*
Michael Graziano, Florida State

9:35am
*Freedom out of Chaos*
Jeff Guilford, NC State

9:55am
*European Security Landscape Post-9/11*
Colby Mangels, Georgia Tech

Session D-2, Room TBD
Gender and Sexuality

9:15am
*The Image of Women in Advertising*
Kelsey Martin, Georgia Tech

9:35am
*Gender Differences in Cotton Productivity in Uganda*
Xiaojie Zhang, Maryland

9:55am
*Perceptions of Sexuality After Sexual Assault*
Rebekah Torcafe, Virginia Tech

Session D-3, Room TBD
Measuring our Impact - Environment and Business

9:15am
*Mortality of Incidentally Caught and Released Sablefish in Alaskan Longline Fisheries*
Megan Stachura, Miami

9:35am
*Evaluating Success and Failure in Small Businesses in Rural Armenia*
Sophia Moradian, Boston College

9:55am
*The Effect of Temperature Inversions on Pollutant Concentrations in Mountainous Terrain*
Effie George, Virginia
Oral Session Breakout E - Saturday, 10:30am-11:50am

Session E-1, Room TBD
Marginalized Voices

10:30am  A New Deal for Junkies: Changing Perceptions of Addiction and Treatment, 1935-1974
Erin Weiss, Virginia Tech

10:45am  The Things Unknown: Ecuador and Argentina
Alberto Gabrielli, Wake Forest

11:10am  Politicized Christianity, Conflict and Reconciliation in South Suda
Daniel Thompson, Miami

11:30am  Translation in the Cultural War for Hawaii: The Arabian Nights in 19th Century Hawaiian Newspapers
Alyssa Hughes, Boston College

Session E-2, Room TBD
Biomechanics and Biochemistry

10:30am  Marine Fish Osmoregulation Involving an Intestinal Proton Pump
Samuel Guffey, Miami

10:50am  Using Dendrimers to Mimic Iron Sulfur Cluster Proteins
Jodie Greene, NC State

11:10am  Investigating the Effects of Tumor Secreted Proteins on Mesenchymal Stem Cell Motility and Microrheology
Daniel McGrail, Georgia Tech

11:30am  Comparison of Locomotory Biomechanics of Antarctic and Pacific Krill
Nadir Kabir, Georgia Tech

Session E-3, Room TBD
Modeling and Computation

10:30am  Size Switching in Multiagent Formation Control
Samuel Coogan, Georgia Tech

10:50am  Electronic Health Records: A Teaching Tool
Loren Klingman, Clemson

11:10am  An Automated, Cross-Platform, Cooperative Testing Solution for DSP Applications
Kishan Sudusinghe, Maryland

11:30am  Mathematical Modeling of 2009 H1N1 Influenza Prophylaxis Measures in Schools
Virginia Ahalt, Matthew Bachstein, and James Segars, Clemson