Collegiate Academy of the North Carolina Academy of Science

ANNUAL REPORT 2009

Members for 2008-2009

Memberships included 15 group members and 3 individual memberships.

Group Memberships:
Belmont Abbey College
Campbell University
Catawba College
Davidson College
East Carolina University
Elon University
Gardner-Webb University
 Guilford College
Lenoir-Rhyne University
Meredith College
Peace College
University of North Carolina-Greensboro
University of North Carolina-Pembroke
Wake Forest University
Warren Wilson College

The following had memberships in the previous year but did not renew for 2008-9:
Bennett College & St. Andrew Presbyterian College

Individual Memberships:
University of North Carolina, Wilmington-Cheston Saunders
Western Carolina University-Jennifer Prather
Brevard College-Laurie Cuffney

Officers for 2008-2009

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>John Gurski</td>
<td>Catawba College</td>
</tr>
<tr>
<td>Vice President</td>
<td>Kenneth Jones</td>
<td>Belmont Abbey College</td>
</tr>
<tr>
<td>Secretary</td>
<td>Sara Lachance</td>
<td>Guilford College</td>
</tr>
<tr>
<td>Historian</td>
<td>Javier Luzon</td>
<td>UNC Greensboro</td>
</tr>
</tbody>
</table>
Faculty on the Executive Committee for 2008-2009

Director:  Dr. Yuko Miyamoto  Elon University
Faculty Advisor:  Dr. Joseph Poston  Catawba College
Lecture Program Coordinator*:  Dr. Lisa Bonner  Peace College
Yarborough Grants Coordinator*:  Dr. W. David Webster  UNC-Wilmington

Pending: Positions renewed yearly by the NCAS president upon consultation with the Executive Director(s)

Collegiate Academy Activities

Fall Undergraduate Research Workshop
The workshop was held on October 4, 2008 at North Carolina State University in Durham. Dr. Charles Lytle organized the meeting. There were 14 students and 4 faculty in attendance, totaling 28 participants. We had participants from Wake Forest University, Guilford College, Campbell University, Catawba, UNC-Greensboro, and Belmont Abbey College.

Highlights of the meeting included:
- Speakers from NC State regarding undergraduate research opportunities throughout North Carolina
- Speaker Dr. Kathleen Kennedy from North Carolina Biotechnology Center discussing the career opportunities in the biotech industry
- A fun social mixer event coordinated by our CANCAS officers
- A wonderful set of presentations from NC State faculty

Annual Meeting
The meeting was held at the Warren Wilson College on April 3-5, 2009. There were a total of 82 students representing 15 institutions. *Includes site registration.

At the CANCAS board meeting we had 40 students and 6 institutions represented. The schools were Belmont Abbey College, Catawba, Campbell, Lenoir-Rhyne College, UNCG, Catawba, Warren Wilson, Peace College, UNC-Pembroke, and Guilford College.

Collegiate Academy Initiatives & Accomplishments

Increase interaction among CANCAS members
The officers also wanted to facilitate interaction between students from various schools at the Fall Workshop. They had created a several fun ice breaker activities to foster interactions. All of the participants, students and faculty, seemed to have a great time.

Improve communication among individuals, institutions, and CANCAS.
The CANCAS historian, Javier Luzon, managed the already created Facebook page by creating invitations and event blogs, making photos and information available. CANCAS officers will hopefully improve the communication with the CANCAS members.
CANCAS Website
The CANCAS Website has been up and working for the past few years with links to membership application, current and upcoming events. It has been working successfully, thanks to Dr. Karen Guzman for posting the events and updating the website.

Revision of the CANCAS Handbook and Constitution
No revisions were made this past year.

Derieux Awards, 2009

Poster Presentations (11)

<table>
<thead>
<tr>
<th>Place</th>
<th>Student</th>
<th>Topic Area</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Brian Beaty</td>
<td>Cell/Molecular</td>
<td>Elon University</td>
</tr>
<tr>
<td>2nd</td>
<td>Ryan Vary</td>
<td>Chemistry</td>
<td>Guilford College</td>
</tr>
<tr>
<td>3rd</td>
<td>Evan Hall</td>
<td>Zoology</td>
<td>Catawba College</td>
</tr>
</tbody>
</table>

Oral Presentations

<table>
<thead>
<tr>
<th>Place</th>
<th>Student</th>
<th>Session</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
<td>William Harrison</td>
<td>“</td>
<td>Campbell University</td>
</tr>
<tr>
<td>3rd</td>
<td>Elizabeth Kirby</td>
<td>“</td>
<td>Lenoir-Rhyne University</td>
</tr>
<tr>
<td>1st</td>
<td>Breanne Yingling</td>
<td>Microbiology, Molecular Biology &amp; Genetics, Math (13)</td>
<td>Lenoir-Rhyne University</td>
</tr>
<tr>
<td>2nd</td>
<td>Michael Munday</td>
<td>“</td>
<td>University of North Carolina at Greensboro</td>
</tr>
<tr>
<td>3rd tie</td>
<td>Kyle Fuller</td>
<td>“</td>
<td>Warren Wilson College</td>
</tr>
<tr>
<td>3rd tie</td>
<td>Holly Dowling</td>
<td>“</td>
<td>Peace College</td>
</tr>
<tr>
<td>2nd tie</td>
<td>Krishna Chagarlamundi</td>
<td>“</td>
<td>Meredith College</td>
</tr>
<tr>
<td>2nd tie</td>
<td>Jenna Anderson</td>
<td>“</td>
<td>Warren Wilson College</td>
</tr>
<tr>
<td>3rd tie</td>
<td>Meg Phillips</td>
<td>“</td>
<td>Warren Wilson College</td>
</tr>
<tr>
<td>3rd tie</td>
<td>Amanda Liss</td>
<td>“</td>
<td>University of North Carolina at Greensboro</td>
</tr>
</tbody>
</table>
### 1st
- **Robert S. Oakes**
- Chemistry, Physics & Engineering/ Behavioral, Health, Anthropology (11)
- Lenoir Rhyne University

### 2nd
- **Daniel Brown**
- “
- Elon University

### 3rd tie
- **Jacob Thiesen**
- “
- Lenoir Rhyne University

### 3rd tie
- **Alisha Huettig**
- “
- Lenoir Rhyne University

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**Derieux Judges, 2009**

- Paul Bartels-Warren Wilson College
- John Brock-Warren Wilson College
- John N. Brzorad, Lenoir-Rhyne College
- Steve Cartier-Warren Wilson College
- Vicki Collins-Warren Wilson College
- Francie Cuffney, Meredith College
- Karen Guzman-Campbell University
- Vincent Henrich, UNC Greensboro
- Jeff Holmes-Warren Wilson College
- Tom Jones, Gardner-Webb University
- Dean Kahl-Warren Wilson College
- Erin Lindquist-Meredith College
- Connie Lowery, Catawba College
- Tim Meehan-Warren Wilson College
- Linda Niedziela, Elon University
- Maria S. Santisteban-University of North Carolina at Pembroke
- Jean-Luc Scemama, East Carolina University
- Janice Swab-Meredith College
- Robert Sotak, North Carolina State University
- Michael Torres-Warren Wilson College
- Lou Weber-Warren Wilson College
- Lei Zhang, Winston-Salem State University
### Yarbrough Grant Report: Grant Recipients, 2009-2010 Academic Year

<table>
<thead>
<tr>
<th>Student Recipient</th>
<th>Faculty Sponsor</th>
<th>Institution</th>
<th>Proposal Topic</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson, Tonya</td>
<td>Lee-Brown, Melanie</td>
<td>Guilford College</td>
<td>Genomic analysis of the free-living nitrogen-fixing bacterium <em>Azotobacterium zettouvi</em></td>
<td>$200</td>
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<tr>
<td>Kivela, Rachel</td>
<td>Cartier, Stephen</td>
<td>Warren Wilson College</td>
<td>Heavy metal analysis of tree core sample</td>
<td>$200</td>
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<tr>
<td>Mmalang, Kopano</td>
<td>Collins, Victoria</td>
<td>Warren Wilson College</td>
<td>Trace mineral composition of <em>Imbrasia belina</em> (mopane worm), a common food in Botswana</td>
<td>$50</td>
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<tr>
<td>Shanblatt, Erin</td>
<td>Brock, John</td>
<td>Warren Wilson College</td>
<td>Lead and arsenic concentrations in Lake Fontana, Lake Julian, and Swannonoa River sediment</td>
<td>$50</td>
</tr>
<tr>
<td>Smith, Isaac</td>
<td>McDougal, Karen</td>
<td>Lenoir-Rhyne College</td>
<td>The effect of kiko goats (<em>Capra hircus</em>) on the aboveground production of kudzu in the Piedmont of North Carolina</td>
<td>$300</td>
</tr>
<tr>
<td>Thalmayer, Isaiah</td>
<td>Boyd, Amy</td>
<td>Warren Wilson College</td>
<td>Phylogeny of <em>Uvularia</em> (Colchicaceae) derived from morphology</td>
<td>$50</td>
</tr>
<tr>
<td>Yount, Lindsay</td>
<td>Fanning, Marsha</td>
<td>Lenoir-Rhyne College</td>
<td>The separation of allelopathy and resource competition by the invasive species <em>Pueraria lobata</em></td>
<td>$300</td>
</tr>
</tbody>
</table>
Lecture Program

The new website now has information regarding the speaker list, instructions for inviting a speaker, volunteering to be a speaker and instructions to contact Dr. Lisa Bonner so that she is aware of who has been invited to be a speaker. The website allows for links to contact the speakers directly. The website should allow for the ability to track speakers who have been contacted.

Executive Co-Director

Dr. Erin Lindquist has agreed to join the NCAS board as the Executive Co-director of CANCAS and was officially appointed at the 2009 NCAS meeting at Warren Wilson College in April 2009.

Respectfully submitted, Yuko Miyamoto,
Executive Co-Director