News:

New CANCAS Officers and Campus Liaisons (2013-2014)

President: Michael Khayat Guilford College
Vice President: Brenten Bottoms Nash CC/NSCU?
Secretary: Kelsey Worthy Guilford College
Historians: David Creasman Campbell University
           Megan Bucek Mount Olive
Campus Liaison: Vacant! Elon University
Campus Liaison: Vacant! Campbell University
Campus Liaison: Gabriel Gore Guilford College
Campus Liaison: Logan Bearfield Lenoir-Rhyne University
Campus Liaison: Alicia Vazquez Mount Olive College

- CANCAS Executive Officers and student officers/board members will meet in August to set the strategic plan for 2013-2014.

- Faculty on Executive Committee for 2013-2014
  - Co-Director: Dr. Michele Malotky Guilford College
  - Co-Director: Dr. Michael Bruno Guilford College
  - Faculty Advisor: Vacant
  - Yarbrough Grants Coordinator Dr. Yuko Miyamoto Elon University

- Fall Undergraduate Research Workshop
  - We are still looking for a location for the Fall 2013 workshop. Please consider hosting it at your institution! If you have any suggestions/leads, please contact Michele Malotky (mmalotky@guilford.edu) or Michael Bruno Brunom@guilford.edu

- NCAS Annual Meeting (April, 2013 @ UNC-Pembroke):

  - Poster Presentations: Cell and Development, Physiology and Microbiology:
1st: Allison L. Nogi (Elon U), The effects of acrylamide (AA) ingestion on liver and sciatic nerve function.

2nd: (tie): Ameya S. Kulkarni (North Carolina State U), and Mary Beth Hawkins. Investigating the differential binding affinity of genistein to ERs α and β using site-directed mutagenesis of ERβb, an estrogen receptor subtype found in a teleost fish.

2nd (tie): Franklin Trent Beeninga (North Carolina State U) and Mary B. Hawkins. Site-directed mutagenesis of a single amino acid in the ligand-binding domain of teleost ERba alters its binding affinity to RU486.


3rd (tie): Chris Smith (Campbell), Erin Byrd, Natalia Goh, Michelle Thomas, Erik Hill and Sharon Mason. Isolating fluoroquinolone resistant gram-negative organisms from porcine fecal matter.

Poster Presentations: Biotechnology, Genomics and Molecular Biology:

1st: Sarah Hafner (UNC-Pembroke), Uzoma S. Ikonne, Marsalis Smith, Meagan L. Wisniewski, Dennis J. Hoover, Kishore Viswanathan, Heather Romine, Dennis L. Wright, and Ben A. Bahr. Development of non-peptidyl small molecules for positive lysosomal modulation and protection against protein accumulation disorders.

2nd (tie): Emelie Andersson (Mount Olive College), Andrey Sorokin, and Bradley Miller. Endothelin-1 signaling via the adaptor protein p66 Shc in renal glomerular mesangial cells.

2nd (tie): Jordan D. Taylor (North Carolina State U), and Mary Beth Hawkins. Mutagenesis of estrogen receptor βa reveals novel role in binding of RU486.

3rd (tie): Anthony F. Fata (Elon), Brett Schuchardt, Srikripa Chandrasekaran, and Linda M. Niedziela. Effect of environmental stressors on molecular pathways that control ion homeostasis in Saccharomyces cerevisiae and Danio rerio.

3rd (tie): Armando Corona (UNC-Pembroke), Heather Romine, Ebru Caba, Robert C. Elliott, Hsin-wei Wang, Charles Giardina, Don-Guk Shin, and Ben A. Bahr. A model of brain damage to study early and delayed
responses with focused opposing gene profiles that make up the brain’s response to injury.

**Poster Presentations: Botany, Ecology, Environmental Science and Zoology:**

1st: Marlon R. Barber (Catawba), and Constance Rogers-Lowery. Effects of ocean acidification on growth of a marine hydroid.

2nd (tie): Chantia M. Stewart (Nash Community College), LaShonda M. Caine, and David A. Beamer. A phylogeographic profile of the salamander genus, Pseudotriton.

2nd (tie): LaShonda M. Cain (Nash Community College), Jessica M. Avila, David A. Beamer, and Sean P. Graham. Diversification of seepage salamanders across a complex geologic landscape.

3rd (tie): Jessica M. Avila (Nash Community College), Brenten L. Bottoms, and David A. Beamer. Morphological variation within mountain dusky lineages (Desmognathus).

3rd (tie): Anna Sanford (UNC-Pembroke) and Patricia Sellers. Plankton diversity of Krinshaw Pond.

**Poster Presentations: Behavioral Science, Chemistry, Health Science and Physics:**

1st: Rachael Cole (UNC-Pembroke), and Freya Liu. Handedness of wild capuchin monkeys in positioning events.

2nd: Dominick S. DeFelice (UNC-Greensboro), Caitlin Ross, Michael Simone-Finstroem, Prachaval Sukumalanand, and Olav Rueppell. Geographic variation in polyandry of the eastern honey bee supports division of labour hypothesis for multiple mating in social insects.

3rd: William J. Lloyd (Campbell), and Elizabeth D. Blue. Microwave-assisted transesterification of (±)Menthol and Methyl-2-chloropropionate.

**Oral Presentations: Biotechnology, Molecular Biology, Microbiology and Cell and Development:**

2nd (tie): **Kristine Elizabeth Parks (Meredith)** and Janna Nicole Kukelhan. Isolation and purification of nifN gene from *Klebsiella pneumoniae*.

2nd (tie): **Agape Lucas** (North Carolina A and T), Darwin Operario, and Eric Houpt. Development of an efficient real-time PCR assay for Rickettsia and Ehrlichia bacteria using *Amblyomma americanum* DNA


**Oral Presentations: Chemistry, Physics, Science Education and Health Sciences**

1st: **Melissa. Rhoney (Lenior_Rhyne)**, The effect of vitamin C (ascorbic acid) on the growth of *Escherichia coli*.

2nd (tie): **Leah Sigmon (Lenior-Rhyne)**. The effect of vitamin E supplementation on the maintenance of tetanus antibody levels in Equus caballus.

2nd (tie): **Mary Reding (Warren Wilson)**, and D. Kahl. Aflatoxins in peanut butter measured using enzyme linked immunosorbant assay (ELISA).

3rd: **Nicholas Mangum (Campbell)** and Jason Ezell. Gamma ray emitting isotopes in the environment and their relative intensities.

**Oral Presentations: Botany, Zoology, Ecology and Environmental Science**

1st: **Mary Podgorak-Lagro** (Catawba) and Jay Bolin. An evaluation of hybrid intermediacy in the germination ecology of Ashe's Sumac, *Rhus ashei* (*Rhus michauxii X Rhus glabra*).


3rd (tie): Amelia Snyder (Warren Wilson) and J. Brock. Migration of metals from a coal ash pond into the sediment of the French Broad River.

3rd (tie): Kristoffer Wild (UNC-Pembroke), and John H. Roe. Risk and response of box turtles to prescribed fire.

➢ Yarbrough Grants
  o Yarbrough Grant recipients were selected for the 2013-2014 academic year, with the combined total awards valued at $1990.50
  o It is requested that the names of the grant recipients be included in the annual meeting program.

Goals:

➢ Increase student participation in CANCAS through student-organized events (service projects, fall workshop, Museum/field trips...)
➢ Expand recruitment efforts through Facebook and other forms of social media
➢ Increase attendance by college and HS students at the fall workshop
➢ Expand communication between officers and liaisons in an effort to foster community, expand membership (particularly underclassmen) and develop more programming/events.

Respectfully submitted: Michele Malotky, Executive Co-Director