



***Commencement Recognition Ceremony
for the UNC Graduates in Biology***

May 10, 2008

Dean E. Smith Center

Department of Biology

The University of North Carolina at Chapel Hill

FACULTY PROCESSION

The Biology Department gratefully acknowledges the **Triangle Tuba Quartet: Paul Gramann, (Euphonium), Jack Denniston, (Euphonium), Joe Lowman, (F Tuba), Irv Eisen, (BBb Tuba)** and the ushers and general assistance provided by Dept of Biology Undergraduate **Margaret Beckner** and members of Beta Beta Beta: **Hannah Yin and Rachael Bloom**.

WELCOME

Dr. Steven W. Matson, Professor and Chair, Department of Biology

RECOGNITION OF BIOLOGY MAJORS EARNING HONORS

DEPARTMENT OF BIOLOGY AWARDS

Announced by Dr. Charles E. Mitchell, Assistant Professor, Department of Biology

The R.E. Coker Award

The Department of Biology presents the R.E. Coker Award to senior undergraduates for excellence in research in organismal biology and ecology. (Plaque to be presented).

Nitin Sekar

The J. N. Couch Award

The Department of Biology presents the Couch Award to the senior undergraduate with interests in plant biology who has demonstrated the highest ideals of scholarship and research. (Plaque to be presented).

Michael Derek Westafer

The H. V. P. Wilson Award

The Department of Biology presents the H.V.P. Wilson Award to senior undergraduates for excellence in research in cellular and molecular biology. (Plaque to be presented).

Elizabeth Grace Jarvis and William Anthony Rearick

The F.J. LeClair Award

This award is given annually to an outstanding graduating senior for academic excellence in Biology with an emphasis in Plant Sciences. (Plaque to be presented).

Elizabeth S. Marx

The I. R. Hagadorn Award

The Department of Biology presents the I. R. Hagadorn Award to outstanding Junior Biology Majors (Plaque presented at the 2007 John K. Koeppel Undergraduate Research Symposium in Biology).

Christopher Michael Osborne

PHI BETA KAPPA

Announced by Dr. Ann G. Matthyse, Professor, Department of Biology
Phi Beta Kappa, the national academic honor society, elects members on the basis of outstanding academic achievement and high moral character.

Timothy Christopher Chang, Eliabeth Mardre Cherry, Kathleen Marie Claus, Dana Cooley Clifton, Emilee Anne Colella, Daniel Allan Cothran, Katherine Elizabeth Evans, John Francis Gillis II, Anna Louise Glasgow, Kathryn Laura Gouzoules, Amit Gupta, Christopher Foster Hanzaker, Elizabeth Grace Jarvis, Andrew Dale Kerkhoff, Spencer Devin Leach, Erica L. MacKenzie, Marjorie Beth Maynard, Bri Anne McKeon, Joel Leon Moore Jr., Vishwan Pamarthi, Bimal Ashokbhai Patel, Hannah Prentice-Dunn, Sarah Margaret Quinn, Craig Conover Reed, Nitin Sekar, Rachel Kumari Sircar, William Jackson Turbyfill III, Angela Mari Vandegrift, Seth Riley Vinson, Charles Devans Waters, Hayley McKenzie White, Lynda Liwen Yang, Carolyn M. Ziemer

**GRADUATION WITH HIGHEST HONORS, HONORS,
AND RESEARCH COMMENDATION**

Thesis titles are listed at the end of this program.

Announced by Dr. Lillie Searles, Associate Professor, Department of Biology

HIGHEST HONORS

Highest Honors in Biology is bestowed on truly outstanding students who have excelled in course work and who have completed a research project of considerable depth and significance.

Lisa Marie Bond, Alice Ann Broadhead, Elizabeth Grace Jarvis, Bimal Ashokbhai Patel, Gabriel Adam Pollock, William Anthony Rearick, Nitin Sekar, Michael Derek Westafer

HONORS

Honors in Biology is bestowed on outstanding students who have demonstrated excellence in biology course work and who have completed an independent research project of considerable merit.

Marybeth Anderson, Brittany Elizabeth Baffer, Richard Wayne Baker, Essraa Mohamed Bayoumi, Jessica Elyse Carter, Katherine Elizabeth Evans, Eric John Formeister, Christopher Eric Hilliard, David Keith Lorance, Evan Andrew Lutz, Frederick George Mann, Elizabeth S. Marx, Douglas Frederick Meardon, Sonya Purushothaman, Emily Carol Roberts, Robin Shailesh Shah, Caitlin Eileen Shaw, Chelsea Alexandra Snyder, Garrett Spencer Stigall, William Jackson Turbyfill III, Kiri Michelle Wiggins

RESEARCH COMMENDATION

Research Commendation in Biology is awarded to graduating seniors who have maintained strong academic records and have completed an independent research project of considerable merit.

Samuel Toms Abercrombie, Matthew Schreiber Conrad, Karl Christian Fetter, Richard Emmett Frye, Jordan Frederick Morreall, James Oh

BETA BETA BETA

Announced by Dr. Seth R. Reice, Associate Professor, Department of Biology
Beta Beta Beta, the National Biological Honor Society, elects full members on the basis of outstanding academic achievement and elects associates on the basis of their interest in and dedication to biology.

Andrew William Ambrose, Marybeth Anderson, Nichole Michelle Anderson, Rachel Ann Buchanan, Joshua Michael Card, Elizabeth Mardre Cherry, Emilee Anne Colella, Grete Mari Dudek, Caroline Leigh Furst, Melanie Arlene Goforth, Laura Fitzgerald Gruenhagen, Laura Pesci Kincer, Douglas Frederick Meardon, Justin Phillip Melton, Christopher Thomas Norman, Sarah Clarisia Oldham, Emily Carol Roberts, Sweetie D. Shah, Caitlin Eileen Shaw, Jacqueline Tyler Thomas, Lauren Kristen Waldron, Randi Leigh Wheatley, Lucy Sabrin Witt

GRADUATE ADDRESS

The speakers are graduating seniors who were selected by members of Beta Beta Beta to address the audience on behalf of the graduating class.

Marybeth Anderson and Lisa Marie Bond
“Scoring Big with UNC Biology”

RECOGNITION AND AWARDING OF CERTIFICATES

Presented by Dr. William M. Kier, Professor and Assoc. Chair, assisted by Dr. Kerry Bloom, Professor, (reading for Ph.D. recipients), Dr. Kelly Hogan, Lecturer, and Dr. Gregory P. Copenhaver, Associate Professor, (both reading for undergraduates), and members of the Biology faculty

-List of Graduates Below-

A professional photographer will take an individual photo of each graduate. Proofs will be mailed shortly.

ACKNOWLEDGEMENT OF GRADUATES AND FAMILIES

Dr. Steven W. Matson, Professor and Chair, Department of Biology

RECESSION OF GRADUATES

Please wait for the graduates to exit the auditorium.

RECEPTION

Please join us for the reception in the Ram’s Head Plaza (follow the graduates!).

Masters of Arts & Doctors of Philosophy Awarded in Biology

Thesis and Dissertation titles in italics

Mezher Adli, PhD. *Investigating the Role of IKK Epsilon in Cancer Associated NF-Kappab Activity*

Lisa Marie Antoszewski, PhD. *Regulation of E2f1-target gene expression during Drosophila embryogenesis*

Martin T. Ferris, PhD. *The Evolution of the Host Range of the Bacteriophage PHI-6*

Willow Noelle Gabriel, PhD. *The Tardigrade Hypsibius Dujardini as a New Model for Studies on the Evolution of Development*

Mehmet Murat Koseoglu, PhD. *Cell Cycle Regulation of the Stem Loop Binding Protein: a Key Player in Histone mRNA Metabolism*

Yvette Gabrielle Langdon, PhD. *The Requirement of SHP-2 in Vertebrate Cardiac Development*

Mia R. Lowden, PhD. *Genesis of End-To-End Chromosome Fusions*

Elizabeth Marie Mandel, PhD. *Molecular Mechanisms of Tbx20 Regulation*

Justin Scott McAlister, PhD. *Evolution off Phenotypic Plasticity: the Role of Resource Availability*
Erin Kate McCarthy, PhD. *Regulation of Asymmetric Spindle Positioning in the Early C. Elegans Embryo*
Jonathan Perry Micancin, PhD. *Acoustic Variation and Species Discrimination in Southeastern Sibling Species, the Cricket Frogs Acris Crepitans and Acris Gryllus*
Gregory J. Ragland, PhD. *Life history evolution in seasonal environments : phenological and*

environmental determinants of thermal adaptation in Wyeomyia smithii
Amber Rice, PhD. *Ecological Character Displacement and Its Consequences: Population Genetic Analyses in Spadefoot Toads*
Adam B. Robertson, PhD. *Mutl Coordination of Two DNA Repair Pathways: Methyl-Directed Mismatch Repair and Very Short Patch Repair*
Shusaku Shibutani, PhD. *Drosophila E2F1 Is Degraded during S Phase in a PCNA-, Cul4, And Cdt2-Dependent Manner*
Miin Feng Wu, PhD. *Roles of Auxin Response Factors in Arabidopsis Flower Development*

Class of 2008 Biology Graduates

Our congratulations to the many students who received awards not listed below. Space allows us to list only the Biology Department Awards and Honors, Phi Beta Kappa, and Beta Beta Beta. All information in this program is based on records available at time of printing and thus may be altered once spring semester grades are recorded.

Students Graduating December 2007 or May 2008 with a First Major in Biology

Cristina-Marie Hannah Abboud,
Samuel Toms Abercrombie, BA, *Research Commendation*
Joseph Benjamin Adams, BS with Distinction, Minor in Chemistry
Radha Adhar, BS, Minor in Chemistry
Akram Hazem Alami, BS, Minor in Chemistry
Fouad Hazem Alami, BS, Minor in Chemistry
Susan Crosby Alexander, BS, Minor in French
Virginia Dunn Alldredge, BS with Distinction, Minor in History
Ian Matthew Allen, BS, BA in Communications Studies, Minor in Chemistry
Leslie Lauren Allen, BA
Natasha Desiree Allen, BA
Andrew William Ambrose, BA, Minor in Chemistry, Beta Beta Beta
Marybeth Anderson, BS with Distinction, Minor in Chemistry, *Honors*, Beta Beta Beta
Nichole Michelle Anderson, BA, Beta Beta Beta
Zahra H. Assar, BS, Minor in Chemistry
Adam Charles Atkinson, BA, Minor in Chemistry
Erica Stacy Babson, BS, Minor in Chemistry
Brittany Elizabeth Baffer, BS, Minor in Chemistry, *Honors*
Richard Wayne Baker, BS with Distinction, Minor in Chemistry, *Honors*
Shelby Ann Ball, BS, Minor in Medical Anthropology, Minor in Chemistry
Ashley Renee Bass, BS, Minor in Chemistry
Essraa Mohamed Bayoumi, BS, Minor in Chemistry, *Honors*

Victoria Brooke Beasley, BS with Distinction, Minor in Business Administration
Rachael Dorothy Bernstein, BS, Minor in Chemistry
Robert Michael Bero, BS, Minor in Chemistry
Christopher Mark Beyer, BS, Minor in History
Laura Beth Bills, BS, Minor in Chemistry
Meredith Anne Binkley, BS, Minor in Chemistry
Lance Kendall Blevins, BA, Minor in Asian Studies
Heidi Elise Block, BS, Minor in Chemistry
Lisa Marie Bond, BS with Highest Distinction, Minor in Chemistry, *Highest Honors*
Elisabeth Anne Bradner, BA, BS in Environmental Sciences
Shenan Marie Bradshaw, BS with Distinction, Minor in Chemistry
Lindsay Cheryl Bridges, BS with Highest Distinction, Minor in Spanish, Minor in Chemistry, *Honors*
Jasmine Alyse Bristol, BA
Megan Elizabeth Brock, BS, BA in Romance Languages, Minor in Chemistry
Matthew William Brown, BS with Distinction, Minor in Chemistry
James Richard Browning, BA, Minor in English
Mary Allison Buchanan, BA, Minor in Marine Science
Briana Michelle Buckner, BA, Minor in Chemistry
Cydney Allixandria Bullock, BA, BA in History
Kelley Alexis Bump, BA, BA in Economics
Lauren Elizabeth Burcal, BS with Distinction, BA in Chemistry
Kristen Carol Burke, BS with Distinction, Minor in Chemistry

Andrew Cochran Burr, BA, Minor in Writing for Screen and Stage
Ronald Wayne Burris, BS, Minor in Chemistry
Melissa Ann Burt, BS, Minor in Environmental Science, Minor in Chemistry
Janet Ashton Butler, BS, Minor in Chemistry
Katharine Kimmel Butler, BA, Minor in Spanish
Erica L. Cabaleiro, BS, BFA in Studio Art, Minor in Chemistry
Whitney Lea Campbell, BA
Andy Cao, BS, Minor in Chemistry
Joshua Michael Card, BS, Minor in Chemistry, Beta Beta Beta
Gregory Jose Carrero, BS, BA in Romance Languages, Minor in Chemistry
Jessica Elyse Carter, BS with Distinction, BA in Romance Languages, Minor in Chemistry, *Honors*
Michael Joseph Casale, BS with Distinction, Minor in Chemistry
Nicole Renee Caviness, BA, Minor in History
Timothy Christopher Chang, BS with Highest Distinction, BA in Mathematics, Minor in Chemistry, *Phi Beta Kappa*
Jeremy Claude David Chemla, BS, Minor in Chemistry
Elizabeth Mardre Cherry, BS with Highest Distinction, Minor in Chemistry, Beta Beta Beta, *Phi Beta Kappa*
Shefali M. Chudgar, BS, BA in Economics, Minor in Chemistry
Si Wook Chung, BS, Minor in Chemistry
Tavia Denise Clark, BS, Minor in Chemistry
Veronique Nicole Danae Clark, BA, Minor in Social and Economic Justice
Andrew Blake Clayborne, BA
Dana Cooley Clifton, BS with Highest Distinction, Minor in Chemistry, *Phi Beta Kappa*
Emilee Anne Colella, BS with Highest Distinction, Minor in Chemistry, Beta Beta Beta *Phi Beta Kappa*
Christopher Eric Comerford, BS with Distinction, Minor in Chemistry
Matthew Schreiber Conrad, BS, Minor in Chemistry, *Research Commendation*
Ashley Jean-Ann Cook, BS, Minor in Chemistry
Demetria Renee Cooper Watford, BS, Minor in Chemistry
Jonathan Andrew Copp, BS with Distinction, BA in Chemistry
Christopher Michael Corbin, BS, Minor in Chemistry
Scott Lee Cornella, BA with Distinction, Minor in Chemistry
Lisa Green Covington, BS, Minor in Chemistry
Timothy Allen Crouch, BA
William Brent Curtis, BS, Minor in Chemistry
Dustin K. Dalton, BS, Minor in Chemistry
Matthew Michael D'Ambrosio, BS, Minor in Chemistry
Shawntana Lachelle Daniels, BA, BA in African and Afro-American Studies
Matthew Curran Darch, BS, BA in Economics, Minor in Chemistry
Tyler James Davis, BS, Minor in Chemistry
Komal Jayant Desai, BA, BA in History
Brendan Patrick Devine, BS, Minor in Chemistry
Vishal Harkisan Dhandha, BS with Highest Distinction, Minor in Chemistry
Daniel W. Driskill, BS, Minor in Chemistry
Bradley Thomas Dryer, BS, Minor in Chemistry
Grete Mari Dudek, BS, Minor in Chemistry, Beta Beta Beta
Jeffery William Duffy, BS, Minor in Chemistry, *Honors*
Rachel Elizabeth Duncan, BA with Distinction, Minor in Hebrew
Anne Marie Dvorak, BS, Minor in Chemistry
Spencer Colston Edgerton, BS, Minor in Chemistry
Hollie Raye Edwards, BS with Distinction, Minor in Chemistry
Sara Bunting Edwards, BS, Minor in Chemistry
Heather Cameron Eisenson, BS with Distinction, BA in Chemistry
Jacob Darren Elliott, BA
Jessica Caitlin Elmore, BA
Brittany Danielle Enders, BS, Minor in Chemistry
Bryan Gregory Evans, BS, Minor in Chemistry
Katherine Elizabeth Evans, BS with Distinction, Minor in Chemistry, *Honors, Phi Beta Kappa*
Laura Nell Exline, BA with Distinction, BA in English
Megan Jo Eyler, BS with Distinction, Minor in Business Administration, Minor in Chemistry
Megan Allen Faestel, BS, Minor in Chemistry
Amy Lynn Fair, BS, Minor in Chemistry
Emily Elizabeth Fay, BS with Distinction, BA in Psychology, Minor in Chemistry
Lauren M. Fedorkowicz, BS, BA in Romance Languages, Minor in Chemistry
Megan Marie Ferrara, BA
Karl Christian Fetter, BA, BA in German, *Research Commendation*
Jeffrey Ryon Finn, BS, Minor in Chemistry
William Hulme Fleming, BS, Minor in Chemistry
Lindsay Denise Foley, BS, Minor in Chemistry
Khristy Ann Fontillas, BS, Minor in Chemistry
Eric John Formeister, BS with Highest Distinction, Minor in Chemistry, *Honors, Phi Beta Kappa*
Kevin Mark Franzese, BS, Minor in Chemistry
Charles Douglas Frye, BS, Minor in Chemistry

Richard Emmett Frye, BS, Minor in Chemistry,
Research Commendation
Tiffany Fuller, BS, Minor in Chemistry
Caroline Leigh Furst, BA, Minor in Spanish, Beta
 Beta Beta
Ruoqi Gao, BS with Distinction, BA in Chemistry
Mollie Audette Getson, BS, Minor in Chemistry
Cara Danielle Gewolb, BS with Distinction, Minor in
 Chemistry
Kathryn Deane Gibbons, BS, Minor in Chemistry
Heather Faith Gillespie, BS, Minor in Chemistry
John Francis Gillis II, BS with Highest Distinction,
 BA in Psychology, Minor in Chemistry, *Phi Beta*
Kappa
Anna Louise Glasgow, BA with Highest Distinction,
 Minor in Environmental Science *Phi Beta Kappa*
Sam Lucas Glover, BS, Minor in African and Afro-
 American Studies, Minor in Chemistry
Melanie Arlene Goforth, BS, Minor in Chemistry,
 Beta Beta Beta
Swaroop S. Gonchikar, BS with Distinction, Minor
 in Chemistry
Monica Lancelli Gonzalez, BS, Minor in Chemistry
Christina Marie Goss, BS with Distinction, BA in
 Romance Languages, Minor in Chemistry
Kathryn Laura Gouzoules, BS with Highest
 Distinction, Minor in Chemistry,
Phi Beta Kappa
Richard James Graven, BA, BA in Philosophy
David Josiah Greenslade, BA
Timothy John Grinder, BS, Minor in Chemistry
Laura Fitzgerald Gruenhagen, BA with Distinction,
 Beta Beta Beta
Amit Gupta, BS with Highest Distinction, BA in
 Anthropology, Minor in Chemistry,
Phi Beta Kappa
Jonathan Mario Gutierrez, BS, Minor in Exercise
 and Sports Studies, Minor in Chemistry
Corey Allen Hadley, BS, Minor in Chemistry
Ameer Mohammad Hamdan, BS with Distinction,
 Minor in Chemistry
Shakia Tranece Hardy, BA, Minor in Chemistry
Ariel Elisa Harris, BA
Lora Elizabeth Harris, BA, Minor in Cognitive
 Science
Peyton K. Harris, BA
Sheeva K. Harris, BS, Minor in Chemistry
Tammy Brewer Harris, BA
Marie Elizabeth Harrison, BS, Minor in Chemistry
Leah Katherine Hawkins, BS with Distinction,
 Minor in Chemistry
Andrew Charles Hayek, BS, Minor in Chemistry
William D. Hays, BS with Distinction, Minor in
 French, Minor in Chemistry
John Nathal Hedrick, BS, Minor in Chemistry
Juliana Maria Henao, BA
Anna E. Henning, BA
Timothy Ryan Hensley, BS, BA in Chemistry
Heather Lee Hildebrand, BS, Minor in Spanish,
 Minor in Chemistry
Christopher Eric Hilliard, BS with Distinction,
 Minor in Spanish, Minor in Chemistry, *Honors*
Audrey Renee Holland, BS, Minor in Chemistry
William David Holland, BS, Minor in Chemistry
Stephen David Hoyle, BA
Benjamin Mark Hulkower, BS with Distinction,
 Minor in Chemistry
Emily Sarah Hulkower, BS, Minor in Spanish,
 Minor in Chemistry
Jonathan McKenzie Hunt, BA
Ashley Michelle Hutchison, BS, Minor in Chemistry
Monique J. Huynh, BS, Minor in Anthropology,
 Minor in Chemistry
Jennica P. Jackson, BS, Minor in Chemistry
Amirkeyvan Jalali, BS, Minor in Chemistry
Elizabeth Grace Jarvis, BS with Highest Distinction,
 Minor in Chemistry, *Highest Honors, Phi Beta*
Kappa
Anna Blair Johnson, BS with Distinction,
 Minor in Chemistry
Erin Renee Jones, BS, Minor in Chemistry
Cameron Leigh Jordan, BS, Minor in Chemistry
Young Gi Jung, BS, Minor in Chemistry
Shayri Mansukhlal Kansagra, BS, Minor in
 Anthropology, Minor in Chemistry
Laura A. Keenan, BS, BA in Psychology, Minor in
 Chemistry
Shawna Kim Kelly, BS, Minor in Chemistry
Amber Ali Khan, BS, Minor in Chemistry
Bongju Kim, BS, Minor in Chemistry
Laura Pesci Kincer, BS, Minor in Chemistry, Beta
 Beta Beta
Katy Anne Kirk, BS with Distinction, Minor in
 Chemistry, *Phi Beta Kappa*
Kathryn Marie Kirkpatrick, BS with Highest
 Distinction, Minor in Chemistry,
Phi Beta Kappa
Alan Hunter Kneidel, BA, Minor in Creative Writing
Jennifer M. Kolos, BS, BA in Psychology, Minor in
 Chemistry
Joshua Lee Koonce, BA
Zachary Hokuhele Koterba, BS, Minor in Chemistry
Neal Kumar, BA, Minor in Entrepreneurship
Leigh A. Lapish, BA, BA in Peace, War, and Defense
Lindsay A. Larson, BS with Distinction, Minor in
 Chemistry
Katherine Amelia Lasater, BS, BA in Romance
 Languages, Minor in Chemistry
Joshua Glenn Lawrimore, BS with Distinction,
 Minor in Chemistry
Thao Thi Le, BS, Minor in Chemistry
Chan J. Lee, BS, Minor in Chemistry

Christine M. Lee, BS, BA in Chemistry
Gin Hee Lee, BS, Minor in Chemistry
Alexander Douglas Leet, BS, Minor in Chemistry
Helen Abigail Legrand, BS with Distinction, Minor in Chemistry
Lamesha Yvonne Lennon, BA, BA in Music
Jenna Lauren Lentz, BS, Minor in Chemistry
David Yan Lin, BS, Minor in Chemistry
Tessa Gabrielle Lindsay, BA, Minor in English
Carolyn Owen Linke, BA
Jie C. Liu, BS, Minor in Chemistry
Sara Ximeng Liu, BS, BA in Psychology, Minor in Chemistry
Maren Carlyle Locke, BS with Distinction, Minor in Chemistry
David Keith Lorange, BS with Distinction, Minor in Chemistry, *Honors*
Katherine Grace Lozada, BS, Minor in Chemistry
Meghan Elizabeth Lumsden, BS, Minor in Chemistry
Evan Andrew Lutz, BS with Distinction, Minor in Chemistry, *Honors*
Riana Lynn, BS, BA in African and Afro-American Studies, Minor in Chemistry
Erica L. MacKenzie, BS with Highest Distinction, BA in International Studies, Minor in Chemistry, *Phi Beta Kappa*
Jennifer A. Mackey, BS, Minor in Italian, Minor in Chemistry
Meredith Paige Mahaffee, BS, Minor in Chemistry
Mani Maheshwari, BS, Minor in Chemistry
Sophia Naz Malik, BS, Minor in Chemistry
Charlene Rose Mangi, BS with Distinction, Minor in Chemistry
Frederick George Mann, BS with distinction, BS in Chemistry, *Honors*
Steven Justin Mann, BS, Minor in Chemistry
James Zixuan Mao, BS, Minor in Chemistry
Chelsea Elian Marcuard, BS with Distinction, Minor in Chemistry
Wesley David Marsh, BS, BA in Chemistry
Andrea Laura Martin, BS, Minor in Chemistry
Meaghan Elizabeth Martin, BS, BA in Romance Languages, Minor in Chemistry
Candace Elvina Martindale, BA
Elizabeth S. Marx, BS, Minor in Chemistry, *Honors*
Rana Awni Marzouq, BA
Althea Maria Mascarenhas, BS with Highest Distinction, BA in Anthropology, Minor in Chemistry
Mona Syeda Masood, BS, Minor in English, Minor in Chemistry
Jonathan Elliott Matthews, BS, Minor in Chemistry
Stephanie Lynn Mazzucca, BS, Minor in Chemistry
Steven West McAllister, BA
Jessica Marcella McComb, BS, Minor in Chemistry
Samantha Dawn McCullough, BS, BA in Psychology, Minor in Chemistry
Erin Alison McKenney, BS, Minor in Chemistry
Bri Anne McKeon, BS with Distinction, BA in Romance Languages, Minor in Chemistry, *Phi Beta Kappa*
Brendan Thomas McQuellon, BS, Minor in Chemistry
Caitlin Mary McShane, BS, Minor in Chemistry
Mary Margaret Meade, BS, Minor in Anthropology, Minor in Chemistry
Douglas Frederick Meardon, BS with Distinction, Minor in Chemistry, *Honors* Beta Beta Beta
Fletcher MacNair Mebane, BS, Minor in Chemistry
Justin Phillip Melton, BS, Minor in Chemistry, Beta Beta Beta
Ashley Gray Messina, BS, Minor in Chemistry
Sarah Marie Mian, BS with Distinction, Minor in Chemistry
Steven R. Michaelis, BS, Minor in Chemistry
John Robert Michalak, BS, Minor in Chemistry
Asiyah Zahra Mikell, BS with Distinction, Minor in Chemistry
Ronald Walden Milam, BS with Distinction, Minor in Chemistry
Sarah Jesslyn Milewski, BA, Minor in Classical Humanities
Douglas Grayson Miller, BS, Minor in Chemistry
Paul Elliott Miller, BS with Highest Distinction, Minor in Chemistry
Sarah Elizabeth Miller, BS, Minor in Chemistry
Samantha Lynn Moore, BS, Minor in Chemistry
Mindy Scott Morgan, BA
Tiffany LaShawn Morgan, BA
Jordan Frederick Morreall, BS, Minor in Chemistry, *Research Commendation*
Elizabeth Ann Mosley, BS with Distinction, Minor in Women's Studies, Minor in Chemistry
Andrew B. Moss, BS, Minor in Chemistry
Caroline Nakatudde Nakay Mpande, BS, Minor in Chemistry
Lauren Eva Mullinax, BS, BA in Romance Languages, Minor in Chemistry
Catherine Taylor Murphy, BA
Sabrina LaChae Murray, BS, Minor in Chemistry
Medina Musawwir, BS, Minor in Chemistry
Virginia Winston Narron, BS, Minor in Chemistry
Fabian M. Nehrass, BS, BA in Political Science, Minor in Chemistry
Elizabeth Michelle Neuffer, BS with Distinction, Minor in Chemistry
Joseph A. Newberg, BS with Distinction, Minor in Chemistry
Howard Wilson Newell, BA
Sarah Ann Nickens, BS, Minor in Chemistry

Christopher Thomas Norman, BS, Minor in Chemistry, Beta Beta Beta

Sarah Anne Norris, BS, Minor in Chemistry

Nathan Daniel Nyanjom, BA, BA in History, Minor in Chemistry

Sarah Clarisia Oldham, BA, Beta Beta Beta

Onah Chukwuka Onah, BS, Minor in Chemistry

Christopher Michael Osborne, BA with Highest Distinction, Minor in Spanish *Phi Beta Kappa*

Katherine Ann Overmyer, BS, Minor in Chemistry

Nikhil Girish Pai, BS, BA in Dramatic Arts, Minor in Chemistry

Vishwan Pamarthi, BS with Highest Distinction, Minor in Entrepreneurship, Minor in Chemistry, *Phi Beta Kappa*

Jiwon Park, BS, Minor in Chemistry

Amanda Denise Parker, BA, Minor in Marine Science

Amit Prafulbhai Patel, BS, Minor in Chemistry

Bimal Ashokbhai Patel, BS with Distinction, Minor in Anthropology, Minor in Chemistry, *Highest Honors, Phi Beta Kappa*

Hardik Sureshchandra Patel, BS, Minor in Chemistry

Jaymin Chetan Patel, BS, Minor in Environmental Studies, Minor in Chemistry

Parth Sudhir Patel, BS with Distinction, Minor in Chemistry

Raj Kirit Patel, BS, Minor in Chemistry

Samir Balwant Patel, BS, Minor in Chemistry

Tanvi Bhupendra Patel, BA

Vidhi Ramesh Patel, BS, Minor in Anthropology, Minor in Chemistry

Andrew Ryan Pernell, BS with Distinction, Minor in Chemistry

Brienne J. Petcher, BS with Highest Distinction, Minor in Chemistry

Jeremy Kyle Petree, BS with Distinction, Minor in Chemistry

Laura Elizabeth Phelan, BS, Minor in Spanish, Minor in Chemistry

David Evan Pollock, BS with Distinction, Minor in Chemistry

Gabriel Adam Pollock, BS with Highest Distinction, Minor in Chemistry, *Highest Honors, Phi Beta Kappa*

Amy Michelle Powell, BS, Minor in Chemistry

Ashley Wynn Powell, BS, Minor in Chemistry

Hannah Prentice-Dunn, BA with Distinction, BA in International Studies, *Phi Beta Kappa*

Matthew David Preslar, BS, Minor in Chemistry

Ginger Renee Price, BS, BA in Romance Languages, Minor in Chemistry

Sonya Purushothaman, BS with Distinction, Minor in Women's Studies, Minor in Chemistry, *Honors, Phi Beta Kappa*

Sarah Margaret Quinn, BS with Highest Distinction, BS in Psychology, Minor in Chemistry, *Phi Beta Kappa*

William Anthony Rearick, BS, BA in Mathematics, Minor in Chemistry, *Highest Honors*

Jamey Elizabeth Redding, BS, Minor in Chemistry

Christopher Michael Reed, BS, Minor in Chemistry

Craig Conover Reed, BS with Highest Distinction, Minor in Japanese, Minor in Chemistry, *Phi Beta Kappa*

Thomas Madison Revelle, BA, Minor in Coaching Education

Eric Roland Rich, BS, BA in Romance Languages, Minor in Chemistry

Pilar Cristina Roa, BA, BA in Anthropology

Angela Dawn Roach, BA, Minor in Marine Science

Emily Carol Roberts, BS with Distinction, Minor in Chemistry, *Honors*, Beta Beta Beta

Joshua Charles Rock, BS, Minor in Chemistry

Eric Edward Rooney, BS, Minor in Chemistry

William Brandon Ross, BA

Mark S. Roth, BS, Minor in Chemistry

Jessica Marie Roy, BA, BA in Anthropology

Sarrie Renee Rubin, BA

Ashleigh Nicole Rushing, BS, Minor in Chemistry

Aleksandr G. Saksonskiy, BS, Minor in Chemistry

Audrey Lenore Sanford, BS, Minor in Chemistry

Christina Lorene Schauer, BS, Minor in Chemistry

Nitin Sekar, BS with Highest Distinction, BS in Environmental Sciences, Minor in Chemistry, *Highest Honors, Phi Beta Kappa*

Reem Nicolas Semaan, BS, Minor in Chemistry

Kimberly Joy Semmler, BS, Minor in Chemistry

Whitney Lynn Seward, BA

Robin Shailesh Shah, BS with Distinction, BA in Chemistry, *Honors*

Sweetie D. Shah, BS, Minor in Chemistry, Beta Beta Beta

Caitlin Eileen Shaw, BS with Distinction, Minor in French, Minor in Chemistry, *Honors*, Beta Beta Beta

Gregory Faison Shaw, BS, Minor in Chemistry

Sekou Sidibe, BS, Minor in Chemistry

Joel William Simon, BS, Minor in Chemistry

David Robert Singletary, BS with Distinction, Minor in Chemistry

Adam Landon Sipe, BS with Highest Distinction, Minor in Chemistry

Rachel Kumari Sircar, BS with Highest Distinction, Minor in Chemistry, *Phi Beta Kappa*

Melanie Danielle Smith, BA, Minor in Social and Economic Justice

Chelsea Alexandra Snyder, BS, Minor in Chemistry, *Honors*

Soomin Christopher Song, BS, Minor in Chemistry

Catherine Soriano, BS, Minor in Chemistry
Charles Gerrish Sproule IV, BS with Distinction,
 Minor in Chemistry
Holly Rebecca Stegner, BA
Daniel Brewster Stern, BA with Distinction
Jessica Elaine Stevens, BA, Minor in Chemistry
Caleb Michael Stewart, BS, Minor in Chemistry
Garrett Spencer Stigall, BS with Distinction, Minor
 in Chemistry, *Honors*
Laura Kennedy Stockton, BA, BA in Exercise and
 Sport Science
Blair Olivia Sudderth, BA, Minor in Spanish
Joni Lynn Sullivan, BA
Ashton Brittiany Sumner, BA
Katie Lynn Supler, BA, BS in Environmental
 Sciences
Bronco Aurelius Suzuki, BS, Minor in Chemistry
Kristyn Nicole Swan, BS with Distinction, Minor in
 Chemistry
Lindsey Christine Swanson, BA, Minor in Chemistry
Adam Richard Szymanowski, BS, Minor in Spanish,
 Minor in Chemistry
Vivek Nitin Thanawala, BS, Minor in Chemistry
Alexandra Lehman Tharrington, BA, Minor in
 Chemistry
Jacqueline Tyler Thomas, BS, Minor in Chemistry,
 Beta Beta Beta
Zainab Isha Thomas, BA
Kimberly Susan Buttke Thompson, BS, Minor in
 Chemistry
Pavani Thotakura, BS with Highest Distinction,
 Minor in Chemistry
Kara Elise Timmons, BS, Minor in Chemistry
Stephen Alexander Tripp, BS, BA in Physics, Minor
 in Chemistry
Christopher M. Tully, BS, Minor in Chemistry
William Jackson Turbyfill III, BA with Distinction,
 Minor in Music, *Honors*,
Phi Beta Kappa
Courtney Louise Turner, BS, BA in Chemistry
Angela Mari Vandegrift, BS with Highest
 Distinction, BA in Psychology, Minor in
 Chemistry
Jeffrey Michael Verboon, BS, Minor in Chemistry
Seth Riley Vinson, BS with Highest Distinction,
 Minor in Chemistry, *Phi Beta Kappa*
Anna Catherine Wagner, BS, Minor in Chemistry
Lauren Kristen Waldron, BS, Minor in Chemistry,
 Beta Beta Beta

John Andrew Waller, BS, BA in Political Science,
 Minor in Chemistry
Kyle Wang, BS with Highest Distinction,
 Minor in Chemistry
Justin Taylor Ward, BS with Highest Distinction,
 Minor in Music, Minor in Chemistry, *Phi Beta
 Kappa*
Christina Marie Warwick, BS, Minor in Chemistry
Charles Devans Waters, BS with Highest
 Distinction, BS in Environmental Sciences, Minor
 in Chemistry, *Phi Beta Kappa*
Mark D. Wesoloski II, BS, Minor in Chemistry
Michael Derek Westafer, BS with Distinction, Minor
 in Chemistry, *Highest Honors*
Sarah Michelle Whalen, BA
Djavan Andreas Wharton-Lake, BA
Randi Leigh Wheatley, BS, Minor in Chemistry,
 Beta Beta Beta
Hayley McKenzie White, BS with Highest
 Distinction, Minor in Chemistry, *Phi Beta Kappa*
Daniel Bennett Whitesides, BS, BA in Romance
 Languages, Minor in Chemistry
Adina Y. Wiggins, BS, Minor in Chemistry
Kiri Michelle Wiggins, BS with Highest Distinction,
 Minor in Chemistry, *Honors*
James Robert Witherite, BS, Minor in Chemistry
Lucy Sabrin Witt, BS, Minor in Chemistry,
 Beta Beta Beta
Amour L. Wolfe, BS, Minor in Anthropology, Minor
 in Chemistry
Stanley Alexander Wolicki, BS, Minor in Chemistry
Quinn Steven Woodruff, BS, Minor in Chemistry
Julian Emile Wooten, BS, Minor in Chemistry
Sirima Yaemsiri, BS with Highest Distinction, Minor
 in Business Administration, Minor in Chemistry
Esther Seung-Ae Yi, BS, Minor in Chemistry
Theodore Wing Yip, BS, Minor in Chemistry
John Robert Younce, BS, Minor in Spanish, Minor
 in Chemistry
Stephen Yu, BS with Distinction, Minor in Chemistry
Musan Zhang, BS, BA in Chemistry
Frank Yuchen Zhong, BS, Minor in Chemistry
Carolyn Melinda Ziemer, BS with Highest
 Distinction, BA in Romance Languages, Minor in
 Chemistry, *Phi Beta Kappa*
Elizabeth L. Zoeller, BS, Minor in Chemistry, *Phi
 Beta Kappa*

Students Graduating with a Second Major in Biology

- Lucas Allen Adamski**, BS in Clinical Laboratory Science, BS in Biology, Minor in Chemistry
Justine Renee Barnes, BA in Psychology, BA in Biology
Alice Ann Broadhead, BS in Mathematics with Highest Distinction, BA in Biology, *Highest Honors*
Robin Kimberly Burk, BA in Journalism and Mass Communications, BS in Biology, Minor in Chemistry
Lauren Alexa Engstrom, BA in Exercise and Sport Science, BA in Biology
India Blaire Evans, BA in Elementary Education with Highest Distinction, BA in Biology
Jordan Matthew Fleuriet, BS in Information Science, BS in Biology, Minor in Chemistry
Jacqueline Beverley Harkema, BA in International Studies with Distinction, BA in Biology, Minor in Chemistry
Matthew Aldrich Johnston, BS in Psychology with Distinction, BA in Biology
Meredith Lynn Johnston, BS in Biostatistics with Distinction, BS in Biology, Minor in Mathematics, Minor in Chemistry
Rebecca Diane Lee, BA in Psychology, BA in Biology
Tian W. Li, BS in Chemistry with Distinction, BS in Biology
Christopher Brannon Love, BA in Psychology, BA in Biology
Joel Leon Moore, Jr., BS in Chemistry with Distinction, BS in Biology, *Phi Beta Kappa*
Tina Marie Morris, BA in Psychology, BA in Biology
Daniel Lee Morse, BS in Clinical Laboratory Science, BS in Biology, Minor in Chemistry
Rebecca Shepard Parrish, BA in Art History, BA in Biology, Minor in Chemistry
Merle Chui Yi Tai, BA in Anthropology, BA in Biology
Hannah N. Travlos, BA in Psychology, BA in Biology
Sally Scott Whisler, BA in Environmental Studies, BA in Biology
Lynda Liwen Yang, BS in Computer Science with Highest Distinction, BS in Biology, Minor in Chemistry, *Phi Beta Kappa*

Students Graduating with a Minor in Biology

- Jocelyn Marie Adams**, BA in Anthropology with Distinction
Jillian M. Antonellis, BA in Psychology with Highest Distinction, BA in Romance Languages
Laura Dendy Askins, BA in Environmental Studies with Distinction
Cecil VanBuren Bagley Jr., BA in Religious Studies
Anne Marie Barr, BA in Communication Studies
Amit Bhagwandass, BA in English
Hala Talal Borno, BS in Chemistry with Distinction
Raphael Francis Brancato, BA in Chemistry
Rachel Ann Buchanan, BA in Exercise and Sport Science, Beta Beta Beta
Addie Marie Burke, BS in Health Policy and Administration
Adam Michael Burkhart, BS in Chemistry
Joseph Yi-qiao Cao, BS in Chemistry, BA in History
Annamarie S. Carter, BS in Chemistry
Kathleen Marie Claus, BS in Chemistry with Highest Distinction, *Phi Beta Kappa*
Elisabeth Renee Cordell, BA in Journalism and Mass Communications, BS in Psychology
Daniel Allan Cothran, BA in English with Highest Distinction, *Phi Beta Kappa*
Juan Jesus Diaz, BA in Exercise and Sport Science
Matthew Edward Ellis, BA in Chemistry
Kevin Bradford Elmore, BS in Chemistry
Alisan Fathalizadeh, BS in Chemistry with Distinction
Benjamin James Faulkenberry, BA in History
Lara Ann Frame, BA in Anthropology, BA in Romance Languages
Stephanie Jo Grant, BS in Environmental Sciences and Engineering
Christopher Foster Hanzaker, BS in Chemistry with Highest Distinction, *Phi Beta Kappa*
Kelly Marye Hines, BA in Environmental Studies
Brian Armiger Holliday, BS in Chemistry
Andrew Dale Kerkhoff, BA in Music with Distinction, *Phi Beta Kappa*
Valeriya Romanovna Khodush, BS in Nutrition
Megan Hope Kimsey, BA in Exercise and Sport Science with Distinction
Spencer Devin Leach, BA in Environmental Studies with Highest Distinction, *Phi Beta Kappa*
Hyun Jung Lee, BA in Psychology
Emma Terese Lundsmith, BS in Psychology
Catherine Murphy Majestic, BA in Psychology
Eric William Martin, BA in Chemistry

Marjorie Beth Maynard, BA in Comparative Literature with Highest Distinction, *Phi Beta Kappa*

Jessica Helen McGann, BS in Psychology

Emily Kathryn Meineke, BS in Environmental Sciences

Philip Joseph Musial, BA in English

Jaime L. Neill, BS in Environmental Sciences with Distinction

Melanie Helen Parish, BA in Mathematics

Azadeh Pirnia, BA in Psychology

Joseph Micah Prendergast, BA in Philosophy with Distinction

Natalie Rose Pritchett, BS in Health Policy and Administration

Malcolm Strachan Ross, BS in Chemistry with Distinction

Jessie Lauren Russell, BA in Chemistry

Monica Pankaj Shah, BS in Chemistry, Minor in Asian Studies

Shanique Sherita Shaw, BS in Psychology

Amber Nicole Smith, BA in Exercise and Sport Science

Weston James Smith, BA in Chemistry

Emma Kristine Susick, BS in Environmental Sciences

Marpu Ayomi Trotmon, BA in Anthropology

Casey Elizabeth Watkins, BA in Chemistry with Distinction

Christina Marie Wyatt, BS in Environmental Sciences and Engineering with Distinction

Ying Zhao, BS in Chemistry with Distinction

GRADUATES WITH *HIGHEST HONORS* IN BIOLOGY

Biology Majors, and their thesis titles, awarded Highest Honors in Biology

Lisa Marie Bond. *The Effect of Mitotic Spindle Tension on Histone Protein Turnover in Saccharomyces cerevisiae*

Alice Ann Broadhead. *Tactile Perception in Older Adults*

Elizabeth Grace Jarvis. *Expression of the Xenopus Transcription Factor Tbx20 in Early Neurogenesis*

Bimal Ashokbhai Patel. *The Effects of Mating System and Meiotic Drive on Linkage Disequilibrium in the Mimulus guttatus Species Complex*

Gabriel Adam Pollock. *The Effects of Nerve Growth Factor on the Reactivity of Dorsal Root Ganglion Cells to Endogenous Neurotransmitters*

William Anthony Rearick. *Anti-tumor Activity of MerTK-deficient Mice*

Nitin Sekar. *The Use of Four Elephant Corridors by Wild and Domestic Animals in Mudumalai Wildlife Sanctuary*

Michael Derek Westafer. *Genetic Cloning of aik1aik2 Suppressors*

GRADUATES WITH *HONORS* IN BIOLOGY

Biology Majors, and their thesis titles, awarded Honors in Biology

Marybeth Anderson. *The Effects of Centromeric Attachment on Kinetochore Structure in the Yeast Saccharomyces cerevisiae*

Brittany Elizabeth Baffer *Isolation of Gene(s) Responsible for Binding of Agrobacterium tumefaciens to Plant Host Cells*

Richard Wayne Baker *Developing a Novel in vivo Technique to Identify Unknown Substrates of the E3 Ligase Rsp5*

Essraa Mohamed Bayoumi *The Effect of a Mutation in the PPAR γ Gene on the Induction of Adiponectin by Thiazolidinedione Drugs*

Lindsay Cheryl Bridges. *The Effects of Various Population Characteristics on Linkage Disequilibrium in Mimulus guttatus and M. nasutus*

Jessica Elyse Carter *The Role of Palladin in Early Vertebrate Vasculogenesis*

Jeffery William Duffy. *Screen for Residues that Regulate Nucleotide Exchange in G Proteins*

Katherine Elizabeth Evans *A Comparison of the Environmental Condition of Three Distinct Sites of Pokeberry Creek*

- Eric John Formeister** *The Role of SOX9 in Cell Lineage Specification in the Mouse Small Intestine Epithelium*
- Christopher Eric Hilliard** *Presentation of Smith Antigen to B Cells by Dendritic Cells and Macrophages in Mus musculus*
- David Keith Lorance** *Characterization of Sox4 as an Intestinal Stem Cell Marker*
- Evan Andrew Lutz** *Conditions Affecting α -Synuclein Aggregation and its Implications in Parkinson's Disease*
- Frederick George Mann** *Gene Order Polymorphisms in Yeast*
- Elizabeth S. Marx** *Vegetation Dynamics of the Buck Creek Serpentine Barrens, Clay County, NC*
- Douglas Frederick Meardon** *Using Existing Alleles of the Canoe Protein to Begin a Structure-Function Study in Drosophila melanogaster*
- Sonya Purushothaman** *Characterization of a Novel Putative Methyltransferase that is Enriched on the Inactive X-Chromosome*
- Emily Carol Roberts** *Induction of Cellulose Synthesis by Agrobacterium tumefaciens*
- Robin Shailesh Shah** *Identification of Transcriptional Regulatory Elements in the Promoter of the Yes-Associated Protein (YAP) Gene*
- Caitlin Eileen Shaw** *Menstrual Cycle Regulation of Anabolizing and Metabolizing Enzymes of Endocannabinoids in Human Endometrium*
- Chelsea Alexandra Snyder** *Prothoracicotropic Hormone: A Role in the Adult Insect*
- Garrett Spencer Stigall** *Development of a Novel Intra-Oral Drug Delivery Device for the Treatment of HIV/AIDS Associated Oral Infections*
- William Jackson Turbyfill III** *Cell Cycle-Controlled Degradation of E2F1 in Drosophila Imaginal Discs*
- Kiri Michelle Wiggins** *Analysis of TGF- β 1 Receptors as Potential Genetic Modifiers of Cystic Fibrosis Lung Disease*

GRADUATES WITH RESEARCH COMMENDATION IN BIOLOGY

Biology Majors, and their thesis titles, awarded Research Commendation in Biology

- Samuel Toms Abercrombie** *Traits of Introduced and Native Grass Species in North Carolina that Influence Rates of Herbivory and Pathogen Acquisition*
- Richard Emmett Frye** *Characterization of Epidermal Growth Factor Receptor Independent Colorectal Tumors in the Apcmin Mouse Model*
- Matthew Schreiber Conrad** *The Role of Nitric Oxide in Catechol-O-methyltransferase-dependent Pain Sensitivity*
- Jordan Frederick Morreall** *The Role of Bub1 Loss in Transformation*
- Karl Christian Fetter** *Variation within a New Collection of Psilophyton forbesii*
- James Oh.** *Identification and analysis of Drosophila CNS midline cell cis-acting regulatory modules*

Congratulations and Best of Luck to All Our Graduates!

*The Faculty and Staff of the Department of Biology
University of North Carolina at Chapel Hill*