Bender ’04 Wins Pepper Prize

Currently working on her D.M.D. at University of Pennsylvania School of Dental Medicine, Christine Bender ’04 received the George Wharton Pepper Prize, awarded annually to the senior “who most nearly represents the Lafayette ideal.”

A Trustee Scholarship recipient, Bender received an A.B. with honors in economics and business and a B.S. in neuroscience. Pepper award recipients are determined by a vote of students and faculty. The award goes to a student whose “sound academic record” is combined with “noteworthy participation in College activities and student life.”

Bender’s honors thesis, advised by Susan Averett, professor of economics and business, focused on ways to improve the access of homeless people to Medicaid. She became interested in the topic as a result of her volunteer work at Safe Harbor homeless shelter and a shelter for abused women and children.

Bender served as a psychology lab assistant and is a member of Psi Chi psychology honor society and Omicron Delta Epsilon economics honor society. Last summer she volunteered three days a week at Easton Hospital Dental and Medical Clinic, working closely with a hygienist and local dentists to provide subsidized dental care to the needy. Eventually, she would like to work with low-income children in an urban clinic.

Testing What People Think They See

Psychology major Michael Tuller ’05 has been working with Jeannine Pinto on an EXCEL research project focused on human perception. Tuller has learned that what people see and what they think they see isn’t always the same.

Now he will use the knowledge gained through this research in a yearlong honors project that, if successfully written and defended, would earn him honors in psychology upon graduation.

After reading several different studies about the perception of movement, Tuller videotaped interactions between people two summers ago and prepared a tape that was shown to research subjects last fall. Tuller says his tape, which was similar to ones Pinto made for two previous studies, was designed to determine whether viewers pay attention only to things that are likely to change or to unexpected changes in people’s interactions with each other.

“We saw some interesting results on people’s ability to detect change in the scenes created,” says Tuller.

The research is based partly on a study conducted by two Cornell University graduate students, one of whom posed as a prospective student asking directions. Each time the student began speaking to someone on campus, two other students would pass between the two parties carrying a large piece of plywood. The “prospective student” would quickly switch places with one of the plywood carriers.

In many cases, Pinto says, the

(continued on page 5)
Bookwala Receives National Attention and New Grant

In early August, the intriguing research by Jamila Bookwala on health and psychological issues relating to marital quality was profiled in an edition of USA Today and picked up by major newspapers across the country and in England, Australia, and South Africa. In addition, ABC News Radio distributed an interview with her to more than 3,000 affiliate stations.

Bookwala recently received a pilot grant to continue her research with students on the links between marital quality and health in older adults. Funded by the National Institute on Aging through the University of Wisconsin’s Institute on Aging and Rutgers University’s Institute for Health, Health Care, and Aging Research, the grant supports research on the links among marital quality, physical disability, and psychological well-being in adults middle-aged and older, using data from participants in the National Survey of Midlife Development in the United States (MIDUS).

Physical disability is an established precursor of poor mental health. An important question to answer is if a mechanism can be identified that enables marital quality to shield against the negative impact of disability on psychological well-being. Although recent research has been conducted on marital status as a factor in physical and mental health during the mature years, the role of the quality of the marital relationship in health during this life stage has received little attention. Most research on marital quality has been conducted on young newlyweds. Bookwala's research indicates that the quality of the marital relationship also may be an important contributor to psychological well-being during mature adulthood.

Bookwala recently published a related article coauthored by Jamie Jacobs ’03 on their comparative study of the links between marital processes and depressed affect in three different adult age groups. Their findings indicate that although there are no age differences in overall negative marital processes such as poor conflict resolution strategies, physical confrontations, and perceived unfairness, older adults report being happier in their marriages than younger adults. Among the most interesting findings are that negative marital processes are more strongly related to depressive symptomatology in younger adults compared to their older counterparts. By contrast, in older adults, marital happiness plays a stronger role in emotional well-being than it does in young adults. Therefore, the research suggests that the link between marital processes and symptoms of depression may vary across the life span.
Wendy Hill spent the academic year on sabbatical leave at Cornell University where she conducted research on the physiological and evolutionary mechanisms that influence mating systems in birds. She also spent time writing and attending lectures and seminars. She learned new techniques in behavioral endocrinology and psychopharmacology and looks forward to introducing students to these exciting advances.

Jamila Bookwala spent her junior faculty research leave (spring 2004) at Polisher Research Institute (formerly Philadelphia Geriatric Center) where she continued to research links between marriage and health in older adults. This past summer, she was appointed to the editorial board of The Gerontologist, a peer-reviewed journal published by the Gerontological Society of America.

Matt McGlone has left Lafayette to join the faculty of the Department of Communication Studies, University of Texas-Austin.

Conference Presentations
Ann McGillicuddy-De Lisi presented a poster on “Aversive Racism in Elementary School Children” coauthored with Melissa Daly ’01 and Angela Neal ’01 at the annual Jean Piaget Symposium on the Development of Knowledge in Toronto, Ontario.

In May, Jeannine Pinto presented research she conducted with EXCEL Scholar Mike Tuller ’05 at the annual meeting of the Vision Sciences Society, Sarasota, Fla. Their poster was entitled “Detection of Changes to People and Objects in Complex Scenes.”

Susan Basow and Suzanne Montgomery ’03 presented “Gender and Ratings of College Professors: A Complex Picture” in February at the Association for Women in Psychology meeting, Philadelphia, Pa. The paper was based in part on Montgomery’s honors thesis. Basow also presented “Best Professors: Gender Factors in Students’ Choice of Their Best and Worst Professors” in March at a colloquium in the Social Psychology Program, University of California-Santa Cruz. She gave a talk in July on “The Double Bind: Female Faculty in the Classroom” as part of the symposium, Feminist and Lesbian/Gay/Bisexual Educators: Challenges and Opportunities at the APA meeting, Honolulu, Hawaii.

Jamila Bookwala, Danielle Charych ’03, and Melissa Mitchell ’03 presented a paper on the relationship between pain and cognitive function in older adults at the Gerontological Society of America annual meeting, San Diego, Calif. Bookwala presented two other papers there—one on the moderating effects of marital quality on the link between physical disability and depressed affect among older adults and the other on the cross-lagged relationships among care-giving strain, marital quality, and depressive symptoms in elderly spouse caregivers (coauthored by B. Zdaniuk and R. Schulz, University of Pittsburgh).

In April, Joseph Benoit ’04 and Bookwala presented a paper on the moderating role of social network size on the link between marital status and physical disability among older adults at the Conference on Human Development, Washington, D.C.

Publications


J. Bookwala, “Understanding the Links between Adult Attachment and Relationship Aggression: Perceptions of Own and Partner’s Adult Attachment Styles,” Advances in Psychology Research 25 (2003), 3-12.
Britton Receives Lindback Award for Research

For her research addressing the effects of methylphenidate (Ritalin) on basic learning processes, Gabrielle Britton received a Christian R. and Mary F. Lindback Foundation Junior Faculty Award. Britton, a behavioral neuroscientist, focuses on the biological basis of learning and memory. Ritalin is a commonly prescribed stimulant for Attention Deficit Hyperactivity Disorder (ADHD). The National Institute of Mental Health and other organizations warn that the drug should not be used in children under 6 years of age because the safety, efficacy, and long-term effects have not been established. Despite this warning, the Journal of the American Medical Association reported that between 1991 and 1995 Ritalin use among preschool children increased 180 percent, and for 2- to 4-year-olds, between 200-300 percent.

Britton Receives Lindback Award for Research

EXCEL Scholar Kristopher Klein ’04 (right) served as research assistant to Gabrielle Britton.

Clinical studies have shown that Ritalin works very well to alleviate the symptoms associated with ADHD, but in ways and for reasons that are still not clear. The apparent benefits have led to a 700 percent increase in production in the past eight years, 90 percent of which is consumed in the U.S. These facts compelled Britton to investigate the drug’s effects on basic learning processes.

Britton began her research in summer 2003 with EXCEL Scholar Kristopher Klein ’04. The studies have suggested that Ritalin has negative effects on basic motor learning processes and the brain areas that control them. She continued these studies during the past summer with Susan Bothwell ’05, neuroscience major and EXCEL Scholar.

The recipient of a research grant from the National Institute of Mental Health in 2001, Britton is on research leave for fall 2004. Her work has been published in such journals as Journal of Neuroscience, Brain Research, and Neurobiology of Learning and Memory.

New Award for Outstanding Neuroscience Student

The inaugural recipients of the Rappolt-Oechsle Award—Alyssa Picchini ’04 and Meghan Ramsey ’04—were recognized at the April honors convocation. The new prize is to be awarded annually to the outstanding senior based on scholarship in the classroom and laboratory, and service to the major, College, or community.

Trustee Scholarship recipients Picchini and Ramsey also both received prestigious Goldwater Scholarships, the premier national undergraduate award in the field of mathematics, science, and engineering.

In EXCEL Scholar research with Wendy Hill, Picchini studied the effects of estrogen and exercise on depression in female rats. She presented her research findings at the Society for Neuroscience meetings last year. She also conducted honors research in neuroscience with Elaine Reynolds, neuroscience program chair and associate professor of biology, exploring hormonal and behavioral factors that affect neurogenesis in animals.

Picchini graduated magna cum laude and is a member of Psi Chi honorary society. She began a research training award position this summer in the laboratory of pathophysiology of mood and anxiety disorders, National Institutes of Health.

Ramsey was a Rhodes Scholar state finalist. Last summer she participated in the Summer Undergraduate Research Fellowship Program at Mayo Clinic. In her honors research in chemistry she studied the stability and folding of proteins, a process relevant for understanding Alzheimer’s disease, with Yvonne Gindt, assistant professor of chemistry.

Ramsey received the Dr. and Mrs. David Schwimmer ’35 Prize in Honor of Theodore A. Distler, awarded to the premedical student who “best represents the humanitarian, cultural, and scientific qualities required of the true physician.” A member of Phi Beta Kappa and Psi Chi, she graduated summa cum laude and began medical school this fall at Medical College of Stanford University.

The new award was made possible by the generosity of William C. Rappolt ’67 and Walter Oechsle ’57.
Class of 2004 Honors Theses

Students who plan to graduate with departmental honors select a topic of research prior to their senior year. They complete the thesis with the guidance of a faculty adviser and then defend it orally before a faculty committee. They must also have at least a 3.0 GPA in the major.

Rachael Blackman ’04 with Gabrielle Britton
“Feedback Signals Reduce Fear during Classical Fear Conditioning”

Blackman received honors in neuroscience for her study of the role feedback has in alleviating learned fear. She established a novel paradigm in which to characterize the neural basis of learned safety. She and Britton submitted a manuscript based on their work to a peer-reviewed journal and will present the results in November at the Society for Neuroscience in San Diego. She is currently working as a research associate at Yale University and plans to apply to graduate school in 2005.

Kristen Cahill ’04 with Susan Basow
“Effects of Character Gender and Participant Gender on the Perception of Relational and Physical Aggression”

In Cahill’s study, Lafayette students read 11 different scenarios and rated the degree of aggression and harm portrayed. In general, aggression in female friendship pairs was rated more negatively than aggression in male friendship pairs. Cahill, who received honors in psychology, is pursuing a doctorate in school psychology at University of Pennsylvania.

Shana Merrill ’04 with John Shaw
“Factors Affecting the Use of Nondirectiveness by Genetic Counselors”

Merrill, who received honors in psychology, examined factors that may influence genetic counselors’ willingness to be nondirective. Based on responses to a questionnaire, she found that they used the most directive techniques with clients who had a fetus with a mild genetic condition. They were more directive when the client was undecided about what to do than when the client was leaning toward terminating the fetus or carrying the fetus to term. As predicted, older and more experienced genetic counselors were more directive than younger, less experienced ones.

Leslie Saint ’04 with Andrew J. Vinchur, Rexford Ahene, Susan Averett
“Access Discrimination and the Wage Gap between Black and White Women”

See article right.

Perception Study
(continued from page 1)

person giving directions did not notice that his or her conversation partner was a different person, even though one student was slightly overweight and balding and the other was thin with a full head of hair.

“Students were more likely to pick up on it, but faculty had trouble,” Pinto says.

When the Cornell students posed as construction workers instead of students, switching in the same fashion, fellow students were less likely to notice the change.

His honors thesis is “an extension of the work I have been doing with Professor Pinto,” says Tuller, noting that he has learned much through his work with Pinto.

“She gives me a lot of immediate feedback and she’s always willing to discuss her work and gear it to the things I’m interested in,” he says, adding that his other professors have been easy to approach as well.

“They’re all really willing to help,” Tuller is a member of Kappa Delta Rho fraternity and completed an internship with Turning Point, an agency that assists victims of abuse.

Saint ’04 Receives Top Psychology Award

The Herbert W. Rogers Psychology Prize to the outstanding senior psychology major was awarded this year to Leslie Saint ’04. She graduated summa cum laude with departmental honors in both of her majors, psychology and Africana studies. She is now a law student at Cornell University School of Law.

Saint conducted a thesis examining access discrimination as a possible explanation for the wage gap between black and white women. Her research included both economic and psychological analyses and was jointly supervised by Andrew Vinchur, Rexford Ahene (Africana studies) and Susan Averett (economics and business). Earlier in her career Saint did research with Jeannine Pinto into how people perceive motion through peripheral vision.

“Support from professors has been critical to my academic success,” Saint says.

Former coordinator of Lafayette’s resident adviser program, she also served on the Landis Community Outreach Center board and was treasurer of the Association of Black Collegians.

Childs Wins Teaching Award

Known for his engaging and dynamic lecturing style in the classroom and for his patient, effective mentoring skills outside of the classroom, Alan Childs received a Superior Teaching Award at the annual Aaron O. Hoff Awards ceremony in May. The award is given annually to two faculty members in sciences and engineering and two in humanities and social sciences who are chosen by Student Government based on nominations from the student body.
Students Conduct Research One-on-One with Faculty

Studying research and theoretical accounts of the development of fetal alcohol effects, Kelly Brady ’05 worked with Ann McGillicuddy-De Lisi. Brady examined experimental animal models of a range of behavioral and physical effects of prenatal alcohol exposure as well as studies of fetal alcohol effects on all aspects of development during ontogeny. She identified various neural mechanisms involved at different periods of prenatal development in producing fetal alcohol effects.

Working as EXCEL Scholars with Susan Basow, Laura Capotosto ’05, Karen Mandel ’05, and Julie Phelan ’05 have been involved in the data analysis of two studies examining gender effects on student ratings of professors, both conducted at University of California-Santa Cruz. Phelan continued to work with Basow during the summer helping to write up one of the projects and completing data analysis of the second.

Josie Dykstra ’05 collaborated with John Shaw as an EXCEL Scholar during summer 2003 and this past year on a review of the research on eyewitness confidence. Together they authored the chapter “Eyewitness Confidence from the Witnessed Event through Trial” to appear in a forthcoming handbook on eyewitness memory.

Four independent studies advised by Susan Basow were completed during the year. Krissy Gibbons ’04 completed “Incarcerated African American Women: The Role of the Black Community” with E. Nixon (adjunct faculty member); Elecia Kruise ’04, “Assessment of the Diagnosis of Asperger Syndrome”; Shana Merrill ’04, “Factors Affecting Adolescents’ Ambivalence Towards Pregnancy”; and Jennifer Rubinstein ’04, “Art Therapy with Sexually Abused Children.”

The focus of an EXCEL Scholars collaboration between Jessica Martin ’04 and Ann McGillicuddy-De Lisi was the development of implicit racism in children. The literature suggests that children are aware of “racial” differences by about 3 years of age, and prejudice increases from 4-7 years, when it levels off or even declines. They found that children’s negative attitudes towards children of color do not decline during the early years, but are transformed into more indirect and implicit forms of racism.

Based on an independent study project in Women’s Studies, Amanda Roth ’04 wrote and published a paper on femininity, sports, and feminism in Journal of Sport & Social Issues (August 2004). Susan Basow is coauthor and was project supervisor.

In an independent study with Jeannine Pinto, Dennis Schlegel Jr. ’05 reviewed current literature on the interactions between visual and proprioceptive information in body perception.

Two independent studies were completed under Jamila Bookwala’s supervision. Joelle Sobin ’05 reviewed the literature on gender differences in marital aggression using a life-span perspective. She is coauthor on a paper, submitted to a journal, which surveys age differences in the reported experiences of physical aggression and subsequent injury among men and women within a marriage. Meghan Sweeney ’05 reviewed the literature linking levels of folic acid to cognitive decline and dementia in older adults.

In an EXCEL Scholars project, Inku Subedi ’05 conducted a review of existing measures of marital quality with Jamila Bookwala. She created a database of these measures, drawing comparisons among the different scales and identifying their psychometric properties. She is currently collecting data at colleges in Nepal as part of her honors research comparing attitudes toward older adults in the U.S. and Nepal.

In an Advanced Research course, Joseph Benoit ’04 developed a conference abstract and subsequent presentation on the moderating role of social networks in the link between marital status and disability in late life. With Jamila Bookwala as coauthor, he presented the paper in April at the Conference on Human Development hosted by George Mason University, Washington, D.C.

In another Advanced Research project, Rebecca Zagatta ’05 was guided by Susan Basow on her study entitled “Effects of Association with a Homosexual on Liking: Masculinity and Femininity among Male College Students.” She administered two hypothetical descriptions of a male college student and examined whether the roommates’ sexual orientation affected male students’ impressions of the student in the scenario.

In work on complex scene perception with Jeannine Pinto, Mike Tuller ’05 developed video filming and editing skills. The video was used as a stimulus for a study of attention and results were presented at the annual meeting of the Vision Sciences Society, Sarasota, Fla.
Course Links Academic Rigor with Community Service

Last spring, 14 psychology majors interned in a variety of settings as part of Advanced Applied Psychology, a course that provides supervised field experience in psychology-related work settings. Each student logged 80 to 100 hours of service to the community.

Students were charged with integrating academic work with field experience. Each kept a weekly journal, met regularly with an on-site supervisor and faculty supervisor, brought their analysis of community experience to meetings for discussion with other students, and created a paper or project that represented a synthesis of prior coursework, independent reading and/or research during the semester, and field experiences. Besides providing valuable community service, students gained skills, knowledge, and insights about themselves as well as the people and groups they served.

Christen Dean ’04—Youth as Resources program, Nitschman Middle School, Bethlehem, Pa. Dean, along with interns from other institutions, ran an after-school group providing homework help, activities, speakers, and nutritious snacks. Students could talk about problems in the school and community and consider solutions. They also held an intercultural fair.

Jessica Martin ’04, Paul Milnes ’04, and Samantha Freeman ’04—case-workers, Children’s Home of Easton. Martin and Milnes worked with one teen student, Freeman with a group of young teenage girls. Staff liaisons and supervisors praised the students’ contributions to the children’s progress.

Jessica Merkel-Keller ’04—Praxis, a residential Alzheimer’s facility. She worked with adults who have disorders that affect cognition, personality, and communication. She gained skills and an appreciative perspective of rehabilitation processes for people with progressive disorders.

Ilana Strauss ’04 and Lauren Breecker ’05—volunteer childcare aides, Lehigh Valley Child Care Center at College Hill. The students assisted with everyday activities of preschool children. The supervising teacher described their help as invaluable.

Jeanette Theodat ’04—Valley Youth House. She mentored two children and formed a bond with the families, helping them to acquire other services.

Abigail Frueh ’04 and Janelle Amidon ’04—human resources, Lafayette Ambassador Bank. Frueh wrote and presented a policy paper to management, which became policy. Amidon conducted Internet searches, created spreadsheets, evaluated positive and negative aspects of possible decisions, and made presentations to management.

Cristin Timoney ’05—Family Life Educational and Counseling Services, Norristown, Pa. She worked with children from low socioeconomic backgrounds. Groups of 5- to 12-year-old children were evaluated for cognitive, physical, and social problems, and received homework help, counseling, and support in a safe environment.

Melissa Zine ’04—Mylestone Equine Rescue. Zine combined classroom and applied experience on learning and behavior modification, an interest in animal behavior, and volunteer work with children and adults at a mental health facility to understand and work with horses having a history of maltreatment.

Melanie Fraine ’04—human resources, Pinebrook Services for Children and Youth. She gathered information and made recommendations about developing a domestic violence policy for the organization, which serves children and families involved in foster care and adoption placement.

Ali Kelley ’04—Make-A-Wish Foundation, Wilkes-Barre, Pa. She worked with a supervisor in public relations whose specialty was marketing and media.

HONORS GRADUATES

The following 17 psychology (P) and neuroscience (N) majors graduated with honors in 2004 as designated.

Summa Cum Laude
Abigail Frueh (P)
Meghan Ramsey (NS)
Leslie Saint (P)
Heather Wood (P)

Magna Cum Laude
Rachael Blackman (NS)
Kristen Cahill (P)
AllisonCarrier (P)
Alison Kelley (P)
Alyssa Picchini (NS)
Jennifer Rusak (P)
Stephen Tanner (NS)

Cum Laude
Joseph Benoit (P)
Joseph Cohen (P)
Melanie Fraine (P)
Jessica Martin (P)
Samantha Molyneaux (P)
Lisa Oliveri (P)

PSI CHI INDUCTS NEW MEMBERS

Twenty-eight students were inducted into Psi Chi, the national honor society for psychology, in April. They were: Omoniyi Olukemi Adekanmbi ’04, Lori B. Astheimer ’05, Joseph J. Benoit ’04, Susan P. Bothwell ’05, Kelly M. Brady ’05, Laura J. Capotosto ’05, Danielle S. Charych ’05, Joseph R. Cohen ’04, Megan J. Coyer ’05, Melanie E. Fraine ’04, Melissa A. Gorman ’05, Lisa M. Hudak ’05, Kyle C. Klitsch ’04, Karen L. Mandel ’05, Jessica Lynn Martin ’04, Jessica V. Merkel-Keller ’04, Samantha A. Molyneaux ’04, Michele A. Nelson ’05, Lisa M. Oliveri ’04, Julie E. Phelan ’05, Alyssa M. Picchini ’04, Andrew T. Segan ’05, Brett K. Strouse ’05, Meghan L. Sweeney ’05, Erin E. Tamarin ’05, Ellen P. Tarves ’05, Cristin A. Timoney ’05, and Allison J. Webber ’05.
Human Perception Exhibit Featured in Oechsle

The eye sees not itself
But by reflection.
William Shakespeare, Julius Caesar, Act I, Scene 2.

For most people, most of the time, seeing is effortless and invisible. They are unaware that their interactions with the world are mediated by sensory and perceptual processes. Last spring, students in “Perception,” taught by Jeannine Pinto, brought these processes into view. They created science museum-style exhibits describing, illustrating, and demonstrating visual processing. In addition to offering visitors to Oechsle Hall pleasure for the eye and mind, the exhibits provided students a rare opportunity to present technical information to an untutored audience.

On display through spring and summer for prospective students and parents, the display was also visited by middle-school students from an Easton Area School District gifted program.

Kudos to Support Technicians

With the move to Oechsle Hall and the much-needed expanded space for research, the amount of computer equipment and number of research animals has increased. Thanks to the efficiency of Rob Bouton ’72, technician, and Tammy Handelong, animal caretaker, everything has been running smoothly. Bouton joined the staff in 2004 and Handelong in 2001.

Bouton, who received a degree in electrical engineering from Lafayette, takes care of all computer equipment and any laboratory needs including the necessary electronics for researching brain activity in mammals. He and his wife, Diane, have a son, Greg, who is a senior at Lafayette this fall.

Handelong, who has experience with local pet stores, takes care of more than 50 animals including zebra finches, rats, mice, crayfish, fish, and pigeons. She and her husband, Tom, have two sons, Evan and Russell.

Welcome Visiting Faculty

Interested in the role of endogenous opioids in female sexual behavior, Jean C. Doerr received her Ph.D. in behavioral neuroscience from University at Buffalo. Her research focuses on how changes in hormones over the menstrual cycle affect the endogenous opioid system and result in cyclic changes in pain perception. She especially enjoys teaching physiological psychology, statistics, and research methods.

Preparing to defend her doctoral dissertation at Lehigh University, “Coordination of Syntactic and Phonological Processes in Sentence Production,” Kristine Schuster also was an adjunct faculty member last fall. She is interested in the cognitive processes of language production and cross-linguistic processing differences.

Additional research interests include ethical standards in academia and the cognitive factors involved in motivation for athletic performance.

David W. Sidener recently completed his doctoral dissertation at Western Michigan University on behavioral mediation of short-term memory processes in children. He says that the relevant contingencies of reinforcement led him to become a radical behaviorist. In addition to basic research on human learning processes, he is also interested in the treatment of behavior excesses and skill deficits in children diagnosed with autism and other developmental disabilities.