Biographical Sketch Barbara R. Baumstark, Ph.D. Professor, Department of Biology Georgia State University <u>biobrb@langate.gsu.edu</u>

EDUCATION

<u>Institution</u>	Degree	Year Awarded	Field of Study
Massachusetts Institute of Technology (Boston, MA)	Ph.D.	1976	Biochemistry
University of California	B.A. est honors)	1970	Biology

PROFESSIONAL EXPERIENCE

1984-present	Assistant, Associate, and Full Professor, Department of Biology, GSU
1980-1984	Assistant Professor, Dept. of Biochemistry, Emory University
1976-1980	Research Associate/NIH Postdoctoral Fellow, Emory University
1976	Instructor, Department of Biology, M.I.T

PROFESSIONAL ACTIVITIES AND AWARDS

2000 - pres 1999 - pres	Director of Instructional Programs, Department of Biology, GSU Director, Bio-Bus Project, GSU		
1999 - pres 1999 - pres	Editorial Board, Current Microbiology		
2004 - pres	Participant, PRISM (Partnership for Reform in Science and Mathematics)		
2001 pros	Initiative		
2003	Member, NSF CCLI (Course, Curriculum, and Laboratory Improvement)		
	Review Panel (Panel Chair, Interdisciplinary Science)		
2003	Outstanding Teacher Award, College of Arts & Sciences, GSU		
2003 – pres	Chair, Departmental Curriculum Committee, GSU		
2002	Invited Presentation. "Process for the Development of Student Learning		
	Outcomes." In: Improving Undergraduate Instruction in Science,		
	Technology, Engineering, and Mathematics, Committee on Undergraduate		
	Science Education, National Research Council, Nat. Academy of		
	Sciences, 11/20/02, Washington, DC		
2001	GSU Instructional Innovation Award		
2001	GSU Nominee, Carnegie Professor of the Year		
2001	Member, Advisory Board for the Center for Teaching and Learning, GSU		
1998 - pres	Member, QUE (Quality in Undergraduate Education) Project		
1998-2001			
	Education Project)		

1998-2001	Member, PACTS (Performance Assessment of Colleges and Technical
	Schools), Georgia Board of Regents (Chair, Science Subcommittee)
1996	Member, Prokaryotic Genetics Panel, NSF
1993-99	Graduate Director, Department of Biology, GSU
1991-93	Acting Chair, Department of Biology, GSU
1987-91	Graduate Director, Department of Biology, GSU
1988-99	Trustee, Georgia Society for Genetics
1988-89	President, American Society for Microbiology, Southeastern Branch
1987-92	Member, Prokaryotic Genetics Panel, National Science Foundation
1986	Outstanding Junior Faculty Award

MAJOR EXTERNAL FUNDING

Educational Awards

2001-2004.	NSF GK-12: The Bio-Bus Pilot Project. B.R. Baumstark, PI.
	Annual Costs 2003-04: \$553,990 [\$546,228 direct];
	Total funding: \$1, 387,565 [\$1,364,754 direct].
1996-2005.	GSU Research Foundation. Research Program Enhancement Award:
	Program in Microbial Biotechnology. (B.R. Baumstark, PI; co-
	investigators: Z. Eichenbaum, J.Houghton, P. Kaur, CD. Lu, and P.C.
	Tai). Current annual costs (2003-2004): \$97,000.
1997-2001.	U.S. Department of Education. Graduate Assistance in Areas of National

Need GAANN Program -- Biology. (\$366,510 total), B.R. Baumstark, PI.

Research Awards

2001-2002.	Georgia Research Alliance. Infectious Disease Cluster – Bacterial
	Infections Component: (\$300,000 to GSU). B.R. Baumstark and J.R.
	Scott, Emory University, co-PIs. Additional GSU colleagues: R.
	Attanasio and Z. Eichenbaum.
1981-1994.	National Science Foundation. Regulation of Lysogeny by Phage P1 and
	P7. (\$847,000 total), B.R. Baumstark, PI.

RECENT PUBLICATIONS (of 31 total)

Kirma, N., Ferreira, J., and Baumstark, B. (2004) Characterization of six type A strains of *Clostridium botulinum* that contain type B toxin gene sequences. FEMS Micro. Lett. 231, 159-164.

Fiskus, W., Padmalayam, I., Kelly, T., Guibao, C., and Baumstark, B.R. (2003). Identification and characterization of the DdlB, FtsQ, and FtsA genes upstream of FtsZ in *Bartonella bacilliformis* and *Bartonella henselae*. DNA and Cell Biol <u>22</u>, 743-752.

Padmalayam, I., Fiskus, W., Massung, R.F., and Baumstark, B.R. (2003). Molecular cloning and analysis of a region of the Bartonella baciliformis gene NlpD, Lisoaspartyl methyltransferase and YajC homologs. DNA Cell Biol <u>22</u>, 347-353.

Lee, K.N, Padmalayam, I., Baumstark, B. and Massung, R. (2003) Characterization of *ftsZ* gene from *Ehrlichia chaffeensis*, *Anaplasma phagocytophila*, and *Rickettsia rickettsii* and use as a differential PCR target. DNA Cell Biol. 22, 179-186.

REFLECTIVE STATEMENT

As any science professor can affirm, the feeling of exhilaration that accompanies scientific exploration is well worth the years of preparation required for scientific career. Unfortunately, our students' natural enjoyment of discovery can be dampened significantly if their academic success is made contingent upon their ability to memorize facts in the absence of an interesting conceptual context. My objective as a member of the biology faculty is to develop teaching methods that enable our students to retain their fascination with science while providing the content knowledge and practical skills they need to become scientifically literate citizens and successful scientific professionals.

When I came to GSU as an assistant professor twenty years ago, I looked forward to the opportunity to pursue my joint interests in research (in the field of microbial and molecular genetics) and student learning. Shortly after I became a biology faculty member, I was asked to serve as departmental Graduate Director. During the 12 years I spent in that position, I was able to see nearly 250 students through to the completion of their degree programs (75 doctoral and 171 master's students). As Graduate Director, I noticed a striking correlation between our incoming graduate students' comfort level with independent scientific investigation and their prior exposure to hands-on experimentation and critical thinking. This observation drew me increasingly into the development of instructional activities for younger students. To learn more about innovative approaches to undergraduate, and ultimately K-12, education, I became active in several state and national initiatives directed toward education reform, including the QUE (Quality in Undergraduate Education) project and the PACTS (Performance Assessment of Colleges and Technical Schools) program.

During my first few years at GSU, my primary instructional and administrative duties were directed toward the graduate programs. However, I soon became convinced that students who are given experiences in scientific inquiry early in their academic careers enter our graduate programs with an enhanced enthusiasm for science and a greater facility for asking scientifically driven questions. Such students are a pleasure to teach, and their presence in the classroom and the laboratory creates a rewarding learning environment for themselves and their mentors. Thus, I have found it to be in my own best interests to help out with the development of hands-on, inquiry-based activities for our undergraduates. During the past five years, I have become heavily involved in three undergraduate course initiatives, all of them focused on the laboratory experience.

1. *Restructuring of Biol 3910 (Genetics Laboratory).* In collaboration with Dr. Therese Poole, a lecturer in our department, I have sought to make the course projects-based rather than protocol-based. Using bacterial systems, students now take part in a "mutant hunt" that extends over seven laboratory sessions. Since each group of students conducts the mutant selection independently, they all get unique mutants. They must then evaluate their observations, form hypotheses to explain them, and develop experiments to test these hypotheses.

2. *NSCI 3000-3003 (Integrated Science for Education Majors).* This course series represents a collaborative venture between faculty members from physics, chemistry, geology and education. The series, termed "Your Home in the Universe"

(NSCI 3000-3003) is designed for pre-service middle school science teachers and is built around the central theme of science in and around the home. The theme-based approach makes science relevant to our students' lives in ways that they can then pass along to their K-12 students. We also make laboratory activities an integral part of the classroom experience (rather than a separately scheduled part of the course) so that our students can gain an appreciation for the importance of hands-on experimentation to the understanding of scientific concepts. My primary responsibility in this course is to serve as the instructor for NSCI 3003, the third semester of the series that is focused predominantly on the life sciences.

3. Restructuring laboratories for Biol 2107K/2108K (Introductory Biology for Majors). Last year, I volunteered to oversee the laboratory experiences for our introductory biology majors, a cohort of approximately 150 students per semester in a two-semester series [note: I have noticed throughout my educational career that the act of volunteering to teach courses is the best way to end up with the courses you most want to teach]. Working with some excellent teaching assistants, we have incorporated several inquiry-based activities into the laboratory schedule. Sample activities include: a) a "baby switching scenario" where students initially use blood typing (using simulated blood) to try to match babies to their prospective parents, and ultimately resort to DNA testing to finalize the matches; b) an "environmental toxin" scenario, where students are asked to determine the source of nitrate toxicity responsible for a cluster of blue baby syndrome in a rural Georgia town.

Through my experiences with ever younger and younger students, I have come to believe that professors can improve education not only by working within the university setting, but also by sharing their expertise with novice learners in the K-12 arena. In pursuit of this goal, my biology colleagues and I started an outreach program called the Bio-Bus project. The Bio-Bus is a 30-foot self-contained mobile instructional laboratory that travels to Georgia's K-12 schools and presents activities designed to stimulate children's enthusiasm about science. The idea to use a mobile laboratory evolved not so much out of our experiences as professors or even as scientists, but as parents. Many of our faculty members realized that we shared a common experience in our children's schools: as soon as the science teachers discovered that we were scientists, they would ask us to bring activities to their classroom that would get their pupils excited about science. We were always happy to oblige but were often frustrated dealing with the problems of transporting equipment and supplies back and forth in our personal minivans, SUVs, and subcompacts. We thought it would be safer (and a lot more fun) for GSU to have a mobile lab dedicated to science that we could use for our outreach activities. To our delight, GSU's Provost and the Deans of Arts and Sciences and Education jointly provided the funds we needed to design and build our mobile lab. With that encouragement, we designed the "Bio-Bus", a 30-foot mobile lab complete with state-of-the-art microscopy and biotechnology equipment as well as 10-12 laboratory stations for students. On the side of the Bus is a portrait of Pounce, the blue panther that serves as GSU's mascot, decked out in a lab coat and staring into a microscope.

During the first year of its existence (1999-2000), the Bio-Bus was operated entirely by volunteers (including myself as *ad hoc* driver). Initially, we had planned to

start our formal program slowly by pilot testing a few activities at selected schools. We quickly discovered, however, that Georgia teachers are eager for science in all forms. We ended up visiting over 50 schools during our first year of operation, and soon found ourselves faced with more requests than we could adequately handle.

In my position as director of the Bio-Bus project, I have discovered an extremely valuable instructional resource for Georgia's K-12 systems: our own pool of highly motivated and enthusiastic undergraduate and graduate students. During our early years, numerous students volunteered to ride with us on the Bus. In 2001, I secured a \$1.37M NSF grant that paid for 16 graduate and undergraduate fellowships. According to the terms of the fellowship, each NSF Fellow spends 15 hours/week on the Bio-Bus. Students are drawn from multiple scientific disciplines such as biology, chemistry, physics, geology and anthropology. Together, we work to develop hands-on activities in a wide range of subject areas.

In the five years it has been on the road, the Bio-Bus has made more than 800 visits to schools and community organizations located in 23 Georgia counties. In the process, we have shared our science experiences with over 75,000 Georgia students. To meet the demand for our activities, the University provides us with funding for three staff members and has bought us two more vehicles (one duplicate Bio-Bus and a "Bio-van" for those activities that are presented in the classroom). The support from the University has made it possible for us to offer all of our services free of charge.

Although the NSF program (and the generous fellowships it provided) recently ended, I have been gratified to see that the numbers of graduate students and undergraduates applying to work on the Bio-Bus is actually increasing. Through the generous support of GSU's administration, we will be able to continue to provide funding for our college students. As vibrant young adults who just happen to love science, they provide positive role models for our K-12 students and in this way encourage them to consider careers in scientific fields.

I believe that the Bio-Bus program has much to offer both to the Georgia K-12 education system and to our own students. For our school districts, it provides activities that enhance content knowledge, expose children to inquiry-based learning experiences and generate interest in science as a career option. For our undergraduates and graduate students, it provides the opportunity to experience the sense of accomplishment that accompanies successful instruction. Furthermore, since one of the best ways to develop a thorough understanding of a concept is to teach it (as every professor knows), the Bio-Bus experiences strengthen our own students' understanding of fundamental scientific principles.

Based on my experiences at GSU, I have become convinced that attitudes toward and interest in science are molded long before students enter the university. As professors, we can make for ourselves a highly rewarding teaching environment in the university classroom by working to provide inquiry-based learning opportunities at all levels of science education.

Course Materials

Courses taught (last three years)

NSCI 3003. Integrated Science for education majors: Life Sciences. Fa02, Fa03, and Fa04. Serves 20-24 students/semester.

Biol 4500/6500. Human Genetics. Sp02, Sp03, Sp04. Serves 30-50 students/semester. Biol 8610. Molecular Genetics of Prokaryotes (team-taught with Dr. C-D Lu). Sp05. Serves 25-30 students/semester.

Biol 2107/2108. Principles of Biology for Majors (lab coordination and development only). Fa04, Sp05. Serves ~270 students/semester.

Biol 7802. Instructional Methods (TA mentoring and pedagogy). Fa04, Sp05. Serves 10-12 students/semester.

Courses taught (more than three years ago): GSU 1010: Freshman Learning Community: Education in the New Millennium Biol 495/695: Microbial Physiology and Genetics Biol 497/697: Phage and Bacterial Genetics Biol 498/698: Eukaryotic Molecular Genetics Bio 850: Chromosome Structure and Function Biol 3910: Genetics Laboratory Biol 3800: Cell and Molecular Biology Biol 470/870: Biology Seminar Biol 873/Chem 873: Nucleic Acid Structure and Function Pers 2002C: Scientific Controversies and Misconceptions Hon 226: Genetic Engineering: the right to life and future society

1. Course Philosophy I – the evaluation process.

With the application of molecular approaches, the information available in the field of genetics has been increasing at an ever-accelerating rate. As a molecular geneticist, I endeavor to provide my students with a solid scientific foundation in currently accepted concepts, along with the tools to evaluate the legitimacy of new theories as they appear. I recognize that a thorough understanding of genetic concepts requires a familiarity with basic scientific vocabulary. However, just as the commitment of vocabulary lists to memory does not confer mastery of a foreign language, so memorization of genetic terminology outside an appropriate scientific context does not endow students with a last proficiency in the field. To obtain fluency in science, students must continuously reinforce their skills by applying their newly achieved knowledge to the understanding of hypotheses and the interpretation of observations. Exam and study questions in my courses are designed to give students experience in discussing specific theories, interpreting data, and evaluating a theory's merits and limitations.

Exam Sample (from Biol 4500/6500: Human Genetics).

Mona Clonal, a master's student working in your laboratory, is studying the mechanism of cytoplasmic protein synthesis in humans. Following uv irradiation of a human cell line, she recently isolated an amber mutant that was specifically deficient in

the initiation of translation. Before reporting her result to her advisor, she has asked some of her colleagues who are milling about in the laboratory to speculate on the types of gene product(s) that might be affected by the mutation. So far, she has received the following responses:

i. Genevieve Genetique (a visiting scientist from the Pasteur Institut). "The mutated gene almost certainly codes for one of the many ribosomal proteins (either initiation factors or structural proteins) that are required for eukaryotic initiation."

ii. Russ Regulon (a doctoral student from the microbial physiology lab next door). "The mutated gene is most likely to code for the initiator tRNA, which in the human cytoplasm incorporates methionine at the N-terminus rather than the N-formyl methionine normally seen in bacteria and mitochondria."
iii. Norma Jean Baker (the lab's dishwasher, who never attended college but passionately keeps up with the scientific literature). "I believe that the mutated gene codes for human 18S rRNA, since this is the RNA that helps anchor the ribosome to the initiation region."

Mona now turns to you for your response. Do you agree with one of the others (and if so which one), or do you have a fourth opinion? Briefly explain your reasoning.

2. Course philosophy II: Scientific Responsibility

I feel strongly that all students, whether planning a career in science or not, should be aware of the effects that scientific discoveries have on societal attitudes and policy. Therefore, I incorporate bioethical considerations in all courses I teach, regardless of level or target audience. Below is an example of a bioethics scenario that I give to my students. The scenario is passed out in class, and students submit their "gut reaction" to the problem. They are then asked to spend time thinking about their initial response. They are encouraged to talk over the problem with classmates, family members and friends. They subsequently hand in a more lengthy (250-500) document in which they expand on or modify their initial reaction based on their discussion with others.

Bioethics Assignment (from NSCI 3003: Integrated Science for Education Majors)

After many years of trying to adopt a child, you have just been cleared to adopt a 6 month-old female infant. When you go with the adoption agency's lawyer on your first trip to visit the baby girl, you are delighted to see that she appears perfect in every way: she has all her fingers and toes, she's alert and responsive, and she favors you with a big smile as soon as she sees you. You ask the lawyer how anyone could give up such a beautiful, intelligent child for adoption, and he replies that her mother had become too sick to care for her. "Don't worry, though," he says. "The mother doesn't have anything contagious. She suffers from a disease that only affects adults -- something called Huntington's Disease."

Discuss how (or whether) this new information would affect your decision to adopt the child.

With recent advances in biotechnology (as discussed in class), it is now possible to determine whether an individual is destined to get Huntington's Disease without establishing an elaborate pedigree. Would you wish to have the child tested for the Huntington's Disease gene before proceeding with the adoption? (Note: since you would not be the legal guardian of the child at this point, a request for testing would require a court order). Would the results of such a test affect your decision to adopt?

Student Accomplishments

Research students

Students working in my laboratory have been listed 33 times as co-authors with me on peer-reviewed research publications. Graduates have been successful in obtaining positions in academia, industry, and the private sector.

Doctoral students

Burt Anderson, Ph.D. '88. Associate Professor, University of South Florida Francis Osborne, Ph.D. '91. Entrepreneur, developing perfumes from botanical extracts Joseph Ferreira, Ph.D. '93. Staff scientist, CDC (previously with the FDA) Ron Ferguson, Ph.D. '94. Core facility supervisor, University of Florida Malcolm Zellars, Ph.D. '94. Lecturer, Georgia State University Patricia Bralley, Ph.D. '95. Laboratory research supervisor, Emory University Indira Padmalayam, Ph.D. '96. Assistant Professor, India Nameer Kirma, Ph.D. '97. Research Assistant Professor, University of Texas Timothy Kelly, Ph.D. '99. QC Director, Diosynth Biotechnology.
Warren Fiskus, Ph.D. '03. Post-doctoral Fellow, University of South Florida Current Ph.D. students: Drew Kohlhorst, Todd Parker, Tanushree Soni, Anne Whitney

M.S. Thesis students

Swati Jadhav (current)	Harsha Banagu (current)	Abdur Rob (current)
Kemba Lee, M.S. '99	Zhenhuan Chen, M.S. '97	Dana Scotchlas, M.S. '94
Angela Johnson, M.S. '94	Nameer Kirma, M.S. '93	

M.S. Non-thesis students_(graduated since 2001). Kimberlee Bissell, Lakisha Carter, Mayra Colombani, Alisia Fowler, Jason Hamilton, John Lassiter, Reginald Lewis, Kimberly McGill, Erin Minor, Quentin Nelson, Tanushree Soni

Undergraduate Research students (since 2001). Ara Alan, Ebony Broadwater, Crystal Jones (Honor's Program), Michelle Iturbe, Genevieve Kawata, Roshni Mammen, Derek Moates, Dana Rowland, Namjun Seoh

Bio-Bus Students

The following page gives a list of student participants in the Bio-Bus program since 1999.

Bio-Bus Students (current)

Undergraduate Students: Ara Alan, Joan Flores, Philip Janini, Crystal Jones, Puja Katecha, Katie Lowrie, Michael Nebiker, Candice Nelson, Dorinda Nelson, Mona Nouripour, Tera Ung, Chameka Watson

Graduate Students: Olamipo Awoyemi, Sarah Bexell, Dana Brown, Drew Kohlhorst, Ian Merlet, Chandan Morris, Seemie Syed, David Tippens, Michelle Ventura

Bio-Bus Alums – where they are now

Olamipo Awoyemi (M.S. '04): GSU's TEEMS teacher certification program Gayatri Ayalasomayajula (M.S.'04): continuing work with the Bio-Bus Steven Brown (M.S., '04): Fernbank science outreach coordinator for physics Lakisha Carter (M.S.'03): medical school Merry Clark (M.S. '02): GSU's molecular genetics doctoral program Mayra Colombani (M.S. '04): high school teacher in Fayette Vashonda Dailey (M.S. '04): Fernbank science outreach coordinator for chemistry Jessica Echols (B.S. '03): working in the private sector Warren Fiskus (Ph.D. '03): post-doctoral fellow at the University of South Florida Jason Hamilton (M.S. '02): high school chemistry teacher in Gwinnett Rita Hardin (M.S.'01): sales representative for biotech company Katina Johnson (M.S. '03): research technician for a chemistry company Shelby Jones (B.S. '03): GSU's microbiology doctoral program Kristina Keys (M.S. '03): Ph.D. program at Morehouse School of Medicine Timothy Laeger (M.S. '03): medical school John Lassiter (M.S. '04): continuing work with the Bio-Bus program Benton Lawson (M.S. '04): research technician at Yerkes Primate Center Kimberly McGill (M.S. '03): research technician at the Research Triangle Quentin Nelson (M.S. '02): pharmacy Ph.D. program Rachel Sanchez (M.S. '02): research technician at Oregon State; doctoral applicant Kun Hui Yi (M.S. '04): in nursing school

Documentation of student learning.

The development of assessment tools for biology at the national level has been hampered by the broad information base in this field. However, my participation in the integrated science course for middle school education majors has provided me with an opportunity to measure teaching effectiveness, since all pre-service teachers must take the Praxis II examination for certification. The 2002-2003 Praxis II exam marked the first time that all GSU middle school science concentrators had gone through our integrated science series. Currently, the results from this cohort are the first quantitative data we have on the success rates of our students (the 2003-04 scores are not yet available).

Although the sample size of students who have gone through the NSCI series and completed the Praxis II is limited (about 20 students), our early results look extremely promising. A comparison of these results with those of the previous year (the first year that scores were reported by science discipline) gives the results shown on the next page.

Wildele School Life Science				
Year	Lowest	Second	Third	Highest
Taken	quartile	quartile	quartile	quartile
2001-2002	10%	48%	33%	10%
2002-2003*	0%	30%	55%	15%
Year Taken	Below 50 th percentile		Above 50 th percentile	
2001-2002	58%		43%	
2002-2003*	30%		70%	

Praxis Results Middle School Life Science

*first year all students had completed NSCI 3003 (life sciences)

Student Perceptions

Like all professors who seek to provide optimal learning experiences for their students, I am thrilled when student perceptions of my teaching ability are high, and disappointed when student evaluations are critical. Still, I believe that it is important that professors not allow themselves to be intimidated by the student evaluation process to the extent that they are reluctant to introduce innovative approaches to learning into their classes.

Although my numerical scores on student evaluations have been solid over the years (averaging 4.6 out of 5.0 on "overall teaching effectiveness" in all courses taught at GSU), I find that the most helpful information I get from my student evaluations comes in the form of the written comments. I would much prefer to receive a "negative" comment such as "this course was way too hard for an undergraduate and the teacher expected us to think too much", than a "positive" comment that says "I liked this course because the professor let us know exactly what we needed to learn." Below is an admittedly biased sampling of some recent student written evaluations, chosen primarily because they are the types of comments I strive for.

- "Dr. Baumstark is a great teacher. She makes learning genetics fun."
- "Dr. Baumstark's lectures are very interesting. She is one of the professors that makes you think therefore sometimes you get frustrated in her class but you learn a lot."
- "Dr. Baumstark has a quirky personality that made the class interesting. She tells little stories that seem like a tangent but they're really very much related to the material. And it's the stories that I know I'll remember years from now."
- "Dr. Baumstark is one of the best professors I have ever had. She is the only teacher who actually smiles when they lecture. I understand now why she is so well known @ Emory and the CDC where I came from (Everyone knows + adores her). Great teaching style."
- "I liked this class (NSCI 3003) and Dr. Baumstark's approach to biology. I will miss Dr. Baumstark's gorgeous Powerpoints. She modeled how a teacher should engage the student (even in college) with visuals and frequent hands on experiences."

• Dr. Baumstark has shown us many wonderful examples of approaches to teaching science in the middle grades. Her wit and humor only add to the love of learning she inspires in us which will surely be passed on to our own students."

Sometimes it is not the student evaluations *per se* that help me maintain my commitment to education, but unsolicited letters like the one below which I received earlier this month (January, 2005). Ms. Ciblak never actually took a course from me, but her comments serve to remind me that promoting learning doesn't end at the door of the classroom, but is an integral part of our entire academic experience.

Date: Tue, 4 Jan 2005 06:11:34 –0800 (PST) From: Meral Ciblak <ciblakm@yahoo.com To: biobrb@panther.gsu.edu Subject: Thank you message from graduate of 98

Dear Dr. Baumstark,

I was a graduate student at GSU Biology department between 1996-1998. I had come to Atlanta with my husband for his PhD studies at Gatech. I spoke no English at that time. I tried so hard to learn the language, but I never thought I could go back to school to get a higher education with little English that I knew and with so little money I had. I took TOEFL and got a good grade however, I still was not able to speak properly. I applied to few schools for graduate studies but did not get accepted because the financial aid was limited to US citizens. Then I found your name in the GSU book and decided to call you. The tone of your voice, the way you sounded and encouraged me to apply for graduate studies at GSU changed my life for ever. I was a TA there and completed my MS degree in two years in Dr.Ahearn's lab. Up on completion I was offered an ORISE fellowship at CDC. I worked there for three years. Then transferred to Emory University. Living in Atlanta for 13 years changed me completely. I became an international person, a better person, a person with commonsense, with more tolerance. I owe you these because you gave me the chance to pursue my dreams. I always wanted to come to your office in person and thank you for being such a kind person, somehow I could not do it. We returned back to Turkey last summer.

Thank you so much again and please keep your kindness. World needs kind people, peace promoting people. I try to do the same. If you ever plan to come to Turkey or if there is anything I can do for you please let me know. We live in Istanbul now. Best regards,

Meral Akcay Ciblak