



From Over the River and through the Wood by Lydia Maria Child (1802 -1880). Illustration by Brinton Turkle.

Shifting Dullness

November 1991

This Month in Medical History

Chris Tharrington

• John Coakley Lettsom, an English physician, was born sometime in December, 1744 and died November 1, 1815. Lettsom was a singular character, and many colorful stories surround his life. Born in the Virgin Islands and raised on a family sugar plantation, he was said to have been one of the last of seven pairs of twins. After his father's death, Lettsom freed the plantation slaves and travelled far, studying medicine at several locations in Europe and establishing practice in London (he was one of the founding members of the Medical Society of London). There he pursued an energetic career: one tale recounts his frequent habit of prescribing for fifty to one hundred patients before breakfast each day; according to another, the only holiday he took in nineteen years of practice was a single weekend, which he spent traveling by coach on a three-hundred-mile business trip. His brusque but humorous personality was revealed in his motto:

I, John Lettsom
Blisters, bleeds and sweats 'em;
If, after that, they please to die,
I, John, lets 'em.

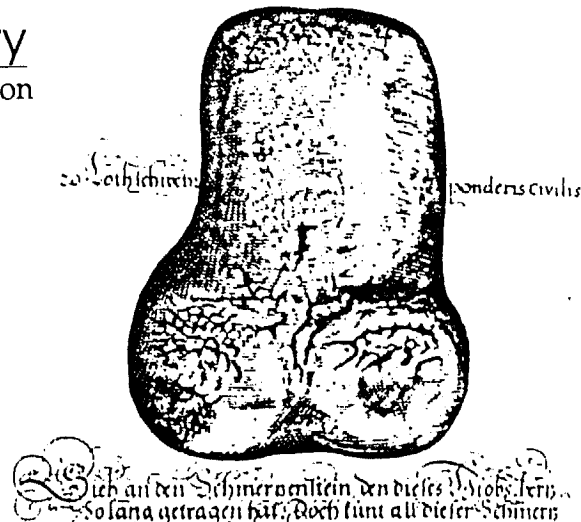
• On November 6, 1880, Charles Louis Alphonse Laveran, a French army surgeon in Algeria at the time, first observed the malarial parasite in human blood. For this and later work on protozoan diseases, he was awarded the Nobel Prize in Physiology/Medicine in 1907.

• On November 9, 1767, the first medical lecture was given at King's College—later Columbia University—in New York City. King's was the second college in the United States to institute a course of medical education.

• Nikolai Ivanovich Pirogoff, one of the greatest figures in Russian medical history, was born November 10, 1810. Renowned as a military surgeon, he also helped reform military medicine by using female nurses in the Crimean War. In addition, Pirogoff was probably the first European surgeon (along with James Syme of Scotland) to use ether anesthesia.

• St. Martin, patron against smallpox and leprosy (he is said to have cured a leper with a kiss), died on November 11, 397 A.D. "Indian summer" is sometimes

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Kidney stone. Engraving of 1644. German Museum, Nuremberg

called "St. Martin's Little Summer" in parts of Europe because of a legend in which St. Martin shared his cloak with a naked beggar, after which a chilly autumn day became a sunny one.

• Leopold Auenbrugger was born in Austria on November 19, 1722. Although largely ignored during his lifetime, his work on percussion of the chest and the location and characteristics of sounds in different types of thoracic pathology later received deserved praise. Legend holds that Auenbrugger, the son of an innkeeper, discovered percussion by tapping wine casks to estimate their contents during numerous trips to the cellar.

• On November 29, 1811, Napoleon closed the medical school at Salerno. Of Hellenistic rather than Roman origin, the school was first mentioned in 848 A.D., and flourished in the eleventh and twelfth centuries. The school was the first to be independent of the Church, was the first medieval school to cultivate medicine as an independent science, and was the first medical school with female instructors. The Salernitan Regimen, a collection of dietetic and hygienic advice in verse, first appeared around 1250 and went through over 200 editions in many languages. An example is:

Joy, temperance and repose
Slam the door on the doctor's nose.

November 1991

Computers Enhance Medical Education

Michael Weiner

Anyone—especially the first-year medical student—who has sat through dozens of hypnotic lectures is bound to ask, "Isn't there a better way to learn?" The nature of medical education is changing, due in part to the rate of growth of biomedical knowledge. Worldwide at least 6000 scientific articles are published every day.[1] To adapt, medical schools have begun to modify the way they teach and examine their students, incorporating more problem solving and independent study. To supplement their programs, nearly all medical schools have turned to computers for educational purposes. As additional medical software becomes available, and as students discover study techniques more efficient and satisfying than just listening, computer-assisted instruction (CAI) will capture more of the spotlight in medical education.

Although today's medical students are already aware of the utility of computers in education, implementation of new systems is fraught with obstacles. A systematic approach to employing CAI has many prerequisites, including ease of use, accuracy of informational content, ability of users to obtain information about available systems, standards of design and use, and most important, benefits that exceed costs. Incorporating CAI into a program of education requires, among other things, a major commitment by faculty. Some schools have emphasized the importance of computing: in West Germany medical informatics is "a compulsory part of the state regulated degree examination." [2] At Dartmouth College, where an estimated 90% of undergraduates already own a computer, every member of the class of 1996 is now required to have one. [3]

Many of the prerequisites mentioned above might best be addressed by an organization dedicated to the use of biomedical technology. In 1983, the National Library of Medicine created the Integrated Academic Information Management System (IAIMS) to enhance the efficiency and effectiveness of the biomedical community by linking information systems into an integrated, shared network. [4] Sixteen institutions, including Duke, have been funded for IAIMS planning, and many have begun testing and implementation.

A new center at Duke may ultimately provide additional assistance, especially in the area of medical education. The headquarters of the Computer Assisted Learning and Instructional Consortium (CALICO) have recently been relocated here from Brigham Young University. [5] This international association's work has

primarily involved learning of languages, but applications can be extended to any system using text, including those employing interactive video and artificial intelligence. [6] Groups such as CALICO could provide medical educators and other professionals with the needed specific means and interfaces to create powerful new computer-based tools.

Unfortunately, computer use is sometimes limited by anxiety of potential users. Of 875 medical, nursing, dental, and veterinary students who completed surveys at Glasgow University, one in four felt anxious about the idea of working with a computer. [2] Although the young seem to take to machines more quickly than the old, just about anyone with a little determination and proper instruction can learn to operate a program. Anxious or not, students seem to value these electronic tools, which increase the level of active learning.

In the medical setting, assessments of CAI systems have been made, with a variety of results. CAI's clinical effectiveness has been demonstrated: case simulations have improved diagnostic accuracy in management of urinary tract infection and sore throat, for example. [1] In comparing exam scores, however, of students using CAI to those learning by more traditional methods, at least two studies show that there are no significant differences. [7,8] This suggests that the costs of some systems outweigh the benefits, and careful analyses should be made by teams that include not only experts in medical education, but also students themselves. Many programs remain inadequate either because of failure to consider the needs of the user, or because of failure to push the computer's abilities to its limits. Electronic "page-turners" are costly and unnecessary.

Medical students can play a role in developing the tools for their own education. Last year six first-year medical students at the University of Cincinnati created Medware Design Applications, a group interested in designing CAI systems. [9] Motivated by some disappointing basic-science courses, the students obtained funding from various departments in the medical center. They spent parts of their summer and other free time creating Renalware, a program which teaches renal biochemistry, pharmacology, pathology, and physiology. To do this, they used Macromind Director, a sophisticated Macintosh-based tool featuring the ability to design animated images. Now, following

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Computers (continued from page 3)

many lectures, a brief segment of the system is shown. Students and faculty alike are generally pleased with the work, and their library has agreed to house a copy of the system for individual use.

Utilities of this sort are not restricted to students, of course. Next April, the American Association for the Advancement of Science and the Online computer Library Center of Dublin, Ohio will start a computer-based production, *The Online Journal of Current Clinical Trials*. [10] By eliminating the three to eight weeks normally required for printing and mailing conventional journals, this system could allow physicians to use results of new studies to improve management of critically ill patients.

The National Board of Medical Examiners (NBME) has also expressed an interest in computers: it has developed programs to administer board examinations by computer. [1] Patient simulations have been designed which have features such as accepting orders from the user, producing outcomes based on genuine odds, requiring analysis of videodisk-based images reflecting laboratory studies, and approximating real time by releasing information at calculated intervals.

Evaluating physicians' abilities by computer has been a subject of much debate. Many examinations, both written and electronic, rely on the multiple-choice format. Regrettably, multiple-choice prompting "teaches students to study to pass examinations rather than to enhance their problem-solving skills." [11] In addition, some evidence suggests that multiple-choice tests measure aspects of knowledge different from those of open-ended tests [12] and are poor predictors of performance in a work environment. Furthermore, multiple-choice training "may enhance conformity while stifling creativity, ingenuity, and deductive reasoning.... The trainee does not have to justify the choice." [13] Creative and intelligent students often interpret questions differently, choosing more sophisticated, yet rational, alternatives. Computerized tests can be designed to be open-ended. Using authoring tools such as the Computer-Assisted Socratic Instruction Program (CASIP), instructors can design systems that allow interaction via natural-language input. This permits more flexible testing. Such tests can emulate oral-examinations, assess knowledge better than traditional tests, and identify areas of weakness. [12]

Computers play increasingly important roles in medical instruction and examination. Their use is supported by the Association of American Medical

Colleges, which has issued a report suggesting that medical schools enable students to become proficient in using computers in medical research, education, and practice. [14] As long as we do not rely on them to do too much for us, computers can help us to focus on the most important parts of our work. Critics argue that computers give us blinders, restricting our actions and preventing us from considering all possible scenarios; in reality, computers eliminate mundane tasks and provide us with the time and means to understand complex problems. With an organized approach, and cooperation among students, educators, and administrators, we can reap the rewards of this potent technology.

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Student Viewpoint: Tackling the Boards as an MSII

Calvin G. Gerke, Jr.

Many of my colleagues may be as uncomfortable as I was about being forced by the AAMC to take the basic science portion of the National Medical Boards (which, as of next year, will bear the appellation "USMLE") without the traditional two-year basic science curriculum. As an M.D./J.D. candidate, I was scheduled to begin law school after my MSII year; this would have caused me to miss the USMLE which will be held for my classmates when they are MSIIIs. Well, to make a long story short, I spent last summer teaching Kaplan's MCAT course to undergraduates while studying their national medical board materials. (These are free to staff; they otherwise cost \$1000 for one year or \$600 for up to three months.) I then bravely took NMB part I - which is nearly identical to the USMLE Part I - after only one year of training.

The only Duke students taking the exam in the cramped quarters of a clinical classroom on the fourth floor of the UNC-Ch hospital were an MSTP trainee (doing his Ph.D work) and myself. The test consisted of two 3-hour sessions (200 questions per session) on each of two days. It covered material from pages 12 to 42 of the pamphlet "Part I Examination Guidelines and Sample Questions," which may be obtained from the National Board of Medical Examiners. The test books from sessions 1, 2, and 4 were printed on normal paper and had no photographs. Session 3 was printed on laminated paper and contained approximately 20 high-quality photographs of gross and microscopic specimens undergoing various pathological processes. Each student had the same questions during each session, but the questions appeared in different order in different booklets. Some of the questions were "experimental," but not labeled as such. There were very few A-J or A-U questions in the extended matching format. About half of the questions with 10 or more choices on the answer sheet had only 5 or 6 choices in the question. I would assume this was to facilitate reordering of the questions among test booklets. The timing was very tight (an average of 54 seconds per question), and it was not profitable to spend 4-5 minutes reasoning out difficult problems. I felt particularly rushed during the session with the photographs. As I had expected, there were many tested topics that did not appear in our abbreviated coursework. In particular I noticed a great deal of statistics and epidemiology, and 3-5 genetics questions relating to the "index of heritability," (which

isn't even in our text — I tried to look it up after the first day, only to be retested on it on day 2.) I noticed that some of the material from the first day was also on the second; thus, reviewing those items with which I was unfamiliar proved to be a good idea.

On the whole, I found the test terribly difficult and left thinking I had failed. I called NBME and learned that one had to answer 57-58 percent of the questions correctly in order to pass part I. The passing score for both the June and September administrations of part I was 176, slightly more than one standard deviation below the mean of 200. Combined degree candidates may be interested to learn that NBME currently requires that all three parts be passed within seven years of one another; M.D./Ph.D students and perhaps M.D./J.D.s may be granted annual extensions if they are in good academic standing. After worrying for about seven weeks, I was surprised and relieved to find that I had passed with a fair margin of safety.

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Alpha Omega Alpha Announces New Initiates

• 1991-1992 Inductees •

Class of 1992

David A. Axelson
Michael E. Berend
Sharon M. Castellino
Herbert Chen
James Davidson
Andrew I. Fisher
Bruce Klugherz
Karen L. Patton
Matthew R. Smith
Stephanie P. Yen

Housestaff

Gerold Bepler, M.D.
Leslie Lehmann, M.D.
Evan Myers, M.D.

Class of 1993

Kenneth S. Boockvar
Salim F. Idriss
Lisa E. Patterson
Jeremy N. Rich
Michael W. Sicard
George M. Verghese
Christopher M. Watke

Faculty

Joseph Gerald Reves, M.D.

Alumni

Stephen M. Denning, M.D.
James S. Tiedeman, M.D., Ph.D.

Announcements—

Medical Student Scholarship Opportunities (see the Dean's Office for more information)

- ALPHA OMEGA ALPHA ESSAY AWARD: Essays on any nontechnical aspect of medicine are requested for competition for a \$750 honorarium and a trip to a medical meeting. Submission deadline is Jan. 31, 1992.
- ALPHA OMEGA ALPHA RESEARCH FELLOWSHIPS: One student from Duke may be nominated for a \$2,000 scholarship in clinical or basic science research. Endorsement required from AOA chapter councillor. Due 1/15/92.
- AMERICAN HEART ASSOCIATION SCHOLARSHIPS IN CEREBROVASCULAR DISEASE: Stipends of \$1,500 will be awarded for clinical or laboratory work in cerebrovascular disease. Application deadline Dec. 15, 1991.
- AMERICAN OSLER SOCIETY—WILLIAM B. BEAN RESEARCH AWARD: A \$1,000 award is available for research in medical history and medical humanism. A faculty letter and application are due Feb. 1, 1992.
- HARTFORD FOUNDATION/ AFAR SCHOLARSHIPS: Fifteen 3-month \$10,000 scholarships are being awarded for research in geriatric pharmacology. Applications are due Dec. 13, 1991.
- JOANNA F. REED MEDICAL SCHOLARSHIP: Available to residents of Alabama and Northwest Florida, this award is given based on applicant's financial need, motivation, character, ability and promise. Special consideration will be given to those entering primary care specialty. Deadline for application May 15, 1992.
- LOGAN CLENDENING TRAVELING FELLOWSHIPS: Fellowships of \$1,500 are available for three months of travel for the study of any aspect of medical history. Proposal applications are due Mar. 16, 1992.
- WILLIAM OSLER MEDAL: The American Association for the History of Medicine sponsors this honor for a paper on any aspect of medical history. Winner will attend meeting in Seattle. Deadline is Feb. 1, 1992.
- W.K. KELLOGG FOUNDATION FELLOWSHIPS IN COMMUNITY MEDICINE: \$5,000 awards are available to minority students for an eight week rotation in a community health center. Letters and applications due Dec. 5, '91.

Sharon Castellino

October was AIDS awareness month in Durham. The first and third years did a wonderful job of going out to the Durham high schools and middle schools to promote AIDS education and to answer students' questions. Thanks to Katie Moynihan and Andrew Muir for coordinating the MSI's and MSIII's.

In mid-October a group of 15 of us went to the AIDS Community Residence Association (ACRA) and helped with maintenance work around the house. Thanks to the first years for their great turnout to help.

Anyone interested in Habitat for Humanity project can call Sharon Castellino or keep your eyes peeled for upcoming work.

MSIII's Spike and Slug Their Way to Glory

Mark (Gluteus) Backus

Two young and talented medical school teams have recently completed gruelling seasons in IM volleyball and city league softball. Play continued despite the hectic schedules of dedicated third year Duke medical students.

"Sequence This!" was all that could be heard above the crowd as our IM volleyball team stepped onto the court in Card Gym. Led by Andrew Muir and Mike McDougall as fearless spikers, *Sequence This* bumped its way to an undefeated regular season in their bracket. Unfortunately, play got rough with some wily undergraduates in the first round of the playoffs, and *Sequence This* lost in the deciding third game. According to spiker extraordinaire Mike Felker: "It was a nailbiter!"

Ma's Boys was the fearless representative of our medical school in this fall's city league softball. Despite starting out the season relatively strong by splitting double headers against powerful opponents, the competition only got tougher throughout the season. Heavy hitters included Tom Noonan (an MSIV) and Andy (Lou) Kaplan, while consistent hitting usually appeared from Dave Lee and Kenny Boockvar. The strong arm award goes to Brian Bowman for the third year in a row, and in fact Brian is hoping to field a hardball team in the spring (mostly because we did so well in slow pitch).

Congratulations to Dave Scher for winning the Duke 5K contest! Winning time was 15:40 minutes, not even

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Activities Corner

FIRST ANNUAL BRIDGE TOURNAMENT: Come set a vulnerable professor! Davison Council will sponsor a bridge tournament on Friday evening, November 22 for students and faculty. Time and place will be announced in flyers. Please RSVP to Mark at 490-0634 or Mac at 477-2167. A small entry fee may be required.

WORLD HEALTH INTEREST GROUP: Anyone interested in forming a group to discuss disease and health care in other countries, please call Kenny Boockvar at 286-3147. Participation with such a group already formed at UNC is possible.

MEDICAL ALUMNI WEEKEND: Events of interest to medical students include lectures on "Medicine and the Arts" from 9 a.m. to 12:15 p.m. on Fri., Nov. 15 at the Bryan Neurosciences Building, "documentary" videotapes (including one of the 1991 Student-Faculty Show) from 2:30 to 4:30 p.m. on Fri., Nov. 15 in Room D of the Searle Center, and the Hippocratic Oath Ceremony at 9:30 a.m. on Sat., Nov. 16 in the Duke Chapel.



a personal best. Equally impressive was Jeff Hartman running his first marathon on 11/3/91. Finishing time was somewhere around 3:09:00, enough to qualify for the Boston Marathon.

I.M basketball is looking promising for the waning months of 1991. At least three teams are signed up from the MSIII class alone.

Stay tuned for more sports...

Cultural Calendar

ART EXHIBITS

- Duke North Display Cases: Works by the Members of Clayworks 11/11-1/10
- Native American Arts and Crafts from the Collection of Terrence Brayboy through 11/15
- Keyan Vessels and Containers Studies of Decoys By Conventional and New X-Ray Method 11/15-12/2
- Works by the Members of Womancraft 12/2-1/3
- Raunch Display Case (1st Floor Morris Building): Dolls by Francis Cagle through November. A potpourri of handcrafted items by Donna Morris and Teresa Scarboro through December
- Eye Center Tactile Art Gallery: Regular Collection of African, Central American, and Egyptian Art weekdays 10 a.m. - 1 p.m.
- Institute Gallery (107 Bivins Building East Campus): "Drawn to Water: Photographs by Diana Parrish and Max Wallace"

MUSIC

- November 17: "From Salzburg to Vienna" St Stephens Chamber Orchestra with Tibor Szaz at 8 p.m. in Baldwin Auditorium
- November 30: "The Public and Private Mozart" Tibor Szaz and Pei-Feu Liu, pianists at Baldwin Auditorium, 8 p.m.
- December 4: Duke Symphony Orchestra at Baldwin Auditorium
- December 12: Chorale Christmas Concert at 7 p.m. at Duke Chapel
- December 13: Student Chamber Music in the Nelson Music Room

SPECIAL EVENTS

- December 3: Holiday Tree Lighting at 5 p.m. on the Chapel steps



FILM

Freewater—All films at 7 p.m. and 9:30 p.m. in the Griffith Film Theater in the Bryan Center. Free to Duke students.

- November 19: *The Apprenticeship of Duddy Kravitz*
21: *A Shot in the Dark*
23: *Teenage Mutant Ninja Turtles II: The Secret of the Ooze* 10:30 a.m.
26: *The Trip*
- December 3: *The Masque of Red Death*
4: *Miracle on 34th Street*
5: *Network*
6: *The Doors*
7: *101 Dalmations*
10: *Frankenstein Unbound*
11: *M*A*S*H*

Quadrangle Pictures—All films Saturdays at 7:00 and 9:30 p.m. and Sundays at 8 p.m. in the Griffith Film Theater in the Bryan Center. Admission \$3.

- November 16-17: *Boyz n the Hood*
23-24: *Terminator II*
- December 7-8: *Bill & Ted's Bogus Journey*

LITERARY LUNCHTIMES

- Fridays at noon in the Dean's Conference Room, M32 Green Zone Duke South
- November 15: Novelist Laurel Goldman will read
- November 22: Open reading. Elegies and the occasional poem.
- December 6: Writer Florence Nash will read.
- December 13: Confessional poetry.

Second Opinions

Curriculum View: The Long-term Perspective

Peter Higgins

In last month's *Shifting Dullness*, first year student Garrett Nichols offered his opinion of the direction of the Duke curriculum after his first set of final exams. After four years here, I would like to offer a different opinion.

The quality of a Duke medical education is being threatened by the students themselves, a group of students who aren't interested in basic science and would like to reduce its place in the curriculum. The rest of the medical world has realized that it is basic science research that drives modern medicine, helping well-informed physicians make intelligent diagnostic and therapeutic decisions. These students are fighting against a curriculum that will prepare them to be leaders in academic medicine because it has more science than they want.

These students feel they've learned too much basic science already, and aren't interested in learning any more. They don't want to learn about any biochemistry or genetics "that Drs. Hill and Nevins have not covered", because their eight weeks of lectures "are more than adequate" to learn everything they think they need to know. In fact, after completing the courses, first year Nichols still believes the genetics of the formation of normal hemoglobin "has little relevance to sickled red blood cells".

When asked to pursue scientific knowledge according to their own interests, they can't, because they're not interested in science. First year Nichols describes this learning opportunity as a "hunt for obscure information on science-based topics," and feels that he is forced to do it, because it "could possibly become an exam question." These students will only think about science under duress.

The science-averse students want non-science topics as a focus during their first basic science year, because these will "stimulate conversation outside of [classes]." For students who are interested in science, science topics frequently generate conversations outside of classes, but science-averse students avoid such conversations because they find them boring.

So there is a subpopulation of students who aren't interested in science. Is this such a problem? It is when
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these students attempt to alter the curriculum to justify their own ignorance. In spite of their position, the importance of science in medicine should be obvious to anyone at Duke:

where the hospital is considered a major research center, winning millions of dollars each year in research grants for basic science;

where the medical center leaders are scientists, from Chancellor Snyderman, who distinguished himself in basic science research, to Dean Graham, who is giving up his administrative duties to return to basic science research;

where the medical school is known for training physicians well-grounded in science, who go on to positions of leadership in academic medicine;

where the unique curriculum offers students a full year for basic science research.

Science is clearly a very important part of medicine, and basic science research is the source of future medical innovations. But there are students here who are convinced that they are being forced to learn too much irrelevant science. They would rather learn something else, so they subvert the curriculum.

Duke Medical School recently made a revolutionary change in the way basic science is taught here, introducing a small amount of problem-based learning to the first year. This method teaches science by igniting student interest in the biological basis of disease, instead of feeding students the information they need to pass an exam. This method leads to more exchange between students and teachers, and a greater depth of scientific knowledge. As medical knowledge grows, physicians constantly need to learn more science. This method teaches students to teach themselves about disease, not how to pass tests by memorizing old exams (the old curriculum). This approach, overwhelmingly endorsed by Harvard and other schools, is the wave of the future in medical education, and Duke is catching up to it.

Unfortunately, this advance is being attacked by the science-averse students, and they appear to be winning. Rather than pursuing a scientific understanding of

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Curriculum (from page 9)

disease, these students reportedly "delve into psychosocial issues" that they have come to believe "were the target of the program in the first place." This experiment of replacing some passive lecture hours with interactive learning appears to be foundering, because, as first year Nichols states, it lacks a sense of direction and defined goals. I must agree if students feel the goal is to build "clinical skills and sociological awareness."

Both the instructors and students obviously need clarification of the goals of problem based learning, and the curriculum should be outlined more clearly. Problem based learning requires more effort and interest from the student than the passive lecture system. These students' efforts are only "inspire[d]...[by] examination fear", according to first year Nichols. Their interest level is seen when they find the biochemical basis of diabetes and sickle cell anemia "arcane." This situation is disastrous.

These science-averse students are sabotaging the most

Disdain for Basic Science Is Disturbing

In his article in last month's *Shifting Dullness* ("Curriculum View: MSI Problem Sessions Not Accomplishing Goals"), Garrett Nichols describes his frustrations towards the newly implemented problem solving sessions of the first year curriculum. In doing so, Mr. Nichols presents his views on the purpose of the first year curriculum and the emphasis on basic sciences that I find disturbing. I preface my opinions by stating that because I am a third year student, I have not had the chance to observe or participate in the problem solving sessions of the current first year curriculum. I cannot comment on the effectiveness of standardized patient interviews as a learning aid or on the exact nature of the discussions in these sessions.

However, I react strongly to Mr. Nichols' view on the purpose of problem solving groups. He believes that the original target of the sessions is discussion of psychosocial issues involving patients. Mr. Nichols states that the problem solving sessions lack "a sense of direction" and fail to discuss the "human element" issues of patients, such as psychological status and coping resources. Instead, the sessions become, in his opinion, "student ramblings on the latest in gene therapy treatments." Mr. Nichols fails to recognize that these sessions were initiated to provide an interactive

progressive change in the basic science curriculum in twenty years. This must not happen. The amount of problem based learning in the first year should increase as quickly as instructors can be properly trained to use this method. If more is demanded of students, they will learn more, and most important, they will learn to teach themselves.

But now, with the curriculum moving back in the right direction, what is to be done with these reactionaries, the uninterested students?

They'll get by, but they'll never get what they should out of a Duke medical education. It is unfair to them, the science-averse, that they were accepted here. It is the responsibility of the admissions office, given a science-based curriculum that has more science research time and less science lecture time than any other program, to select students with a strong interest in science. Science-averse students won't benefit from problem based learning, and they'll benefit even less from a full year of research. Duke Medical School cannot be all things to all people, but it can train outstanding physicians with a deep interest in science.

Yoshi Murata

approach to the basic science topics of medicine.

Before this year, the first year curriculum was composed predominantly of lectures. Students have been somewhat dissatisfied with this approach, since it is passive, not active, learning. Many, including myself, have had difficulty in learning the vast quantity of basic science knowledge by simply attending lectures. The new first year curriculum was initiated to enhance the learning process by combining lectures with discussion sessions in which students actively discuss the material presented in lectures. Student presentations, which Mr. Nichols disdainfully calls "Scientific Book Reports with Facilitator Supervision," are a part of the active learning process, with the idea being that students will learn more effectively if given the opportunity to actively seek information. I do not concur with Mr. Nichols' call for more lecture time since it will lead to a return of passive learning.

The other, and in my opinion, more disturbing notion that is present throughout in Mr. Nichols' article is his disdain for learning the basic sciences. One of the reasons that he gives for failure of the first year curriculum is the presence of "maligned...science hungry gunners" who hamper discussions on patients'

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November 1991

Ishmael in the Alps

E Bach—Greetings from a pied-a-terre somewhere in the Tyrolean Alps. You and Mr. Anagram and your buddies from Interpol and the OAS have convinced me that the Durham service industry is best examined from abroad, skippingly. Nothing has come of your misdirected efforts save for a bump in sales of “Cliff’s Notes” and cleaner bathroom walls. Better to direct your energies towards locating a concordance for *The Whale* and looking up the word “waterproof.”

The tone of your response indicates that you think I deserve these things. I would argue that they search me out, accost me in the laundromat parking lot (the one on Chapel Hill Rd., just before I fled) in the form of lipid-laden women wearing fiberfill shin-length blue K-mart parkas (forgive me, but ever since the two hour in-service on shoplifting during my sojourn as a *Target* employee—automotive section, outerwear discordant with prevailing temperature makes my eyes squinch). I have some socks to kill and thirty minutes before LAST WASH—8 p.m., so I’m a bit discomfited by the managerial “we’re closed” purposefulness with which this particular one is approaching my car. (Oh, get this: One time during a sale we were out of motor oil until I went over to the paint department and started mixing up black flat latex.) She’s like every diet center’s ideal “before” picture. “Hey, are you gonna do your own laundry?”

I realize this rhetorical device is more effective in speech-making than letter-writing, but I’m going to repeat her question, not only because she did (I quickly realized she was an agent trained in interrogation, and was attempting a Fourier transform of the situation before responding), but to help precipitate this encounter, adding the seed crystal of my confusion while scraping a glass rod on the bottom of the flask monotonously, just like her cadence. Damn you—she accented no words in this entire sentence. “Hey, are you gonna do your own laundry?”

My mind is rapidly, violently being depleted of all neurotransmitters. Has she caught a number of customers doing other people’s laundry? Does she want me to do her laundry? Will I have to demonstrate a working knowledge of every item in my basket? I want to respond, but I don’t know how, short of pouring something on her and hoping she melts. I emit a low, guttural moan and feel myself passing out. Mercifully,

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she doesn’t wait for an answer, but launches into her pitch. “I’ve been here since 6:30 this morning—got popped in the eye. Some guy wanted money and when I told him I didn’t have any, he popped me. I wash, dry, and fold—see the sign?” She points my head towards the fine print underneath OPEN 7 DAYS (thank goodness I’ve hit one of them) which indeed reads “Wash • Dry • Fold”, ellipsis apparently serving not as imperative potential—(You can) wash... (You can) dry—but instead completed with “all performed by a woman who served as the model for the *Play-doh* Fuzzy Pumper, working free lance.”

Although she has violated a number of rules of successful salesmanship—pretend that you’re competent, save the personal injury report until after making the deal—I want to weep and throw my arms around her (mostly to see how many stolen items she’s got under that parka), since I realize she is only crazy, not a product of the Bene Gesserit, and easily dispensed with.

“How much?”

“\$3.50 for a small basket, like yours. \$6.00 for a large sack, like a garbage sack. Plus the cost of the machines. If you want, I can provide hangers.”

“Well, I would need everything washed, dried, and folded separately, including the basket, and would require that the hangers be die-cast, and of a high tensile strength, non-allergic metal alloy. Do you have any detergent with goat’s milk?”

“No.”

“No problem. Gasoline works just as well. Oh, and you will fold everything into the shape of a paper hat, won’t you?”

“You want me to use gasoline?”

“Just with the track spikes. I like to use flint-containing laundry softener.”

People are at their most vulnerable when laundry-laden, and as she teeters off with that unbalanced load look, I kind of wish she hadn’t, since like every other ergonomically designed laundromat, this one has a self-closing entrance door weighing 500 pounds, which opens out. Unlike every other laundromat, however, the placard Musak looks hand-lettered and ingenuous. Some unexplained force, mainly impending incontinence, draws me to a plaintive cry coming from

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Ishmael (from page 11)

the hallway leading to the restrooms:

DO NOT
LEAVE
UNNATTENDED
CHILDREN

When I see this (note the deft utilization of the non-standard "double the final consonant of a negating prefix if it precedes a vowel" rule), my knees start to shake. Pretty much the whole building starts to shake, because the laundromat has been built with a false floor, so that every spin cycle sets off a seismic wave.

Which explains why I'm here in the Alps, chamois hunting and searching for that frozen man's family. The American press, while enraptured by the significance of

the discovery, appears to blame the guy for being up so high, as if he somehow got what he deserved. We are a nation that allows others to eat rocks and stuff hay down their pants with impunity, but not to die unless they have a good reason. Of course, it was only after I arrived that I discovered the man was over 4000 years old, and that his children had long since moved to warmer climates (mistake my own).

—Ishmael

P.S. I was reading that Tennessee Ernie Ford also passed on, and that he was well-known for his "mischievous grin highlighted by an ever-present moustache." What are the latest data on entertainers afflicted with TMS—Transitory Moustache Syndrome?



Disdain (from page 10)

psychosocial issues. In addition, he claims that discussions on "arcane biochemical details" of diseases leave no time for "clinical skills or sociological awareness." He belittles the importance of the molecular basis of hemoglobinopathies because they have "little relevance to sickled red blood cells," a dangerous assertion that is absolutely false.

What Mr. Nichols fails to understand is that the first year of the Duke curriculum is dedicated to learning the basic sciences that are necessary for the clinical training in the subsequent years. I agree without reservations that the psychosocial issues surrounding a patient are very important in patient management. But even with the complete understanding of these elements, one is at most an emotional supporter and not a competent physician of the patient if one is without basic science knowledge. The "human element" of medicine that Mr. Nichols longs to learn is part of the second and fourth year curriculum. By learning medicine on the wards, students interact directly with patients and are confronted with issues that knowledge of basic sciences cannot solve.

Although I strongly disagree with many of Mr. Nichols' ideas, I sympathize with his frustrations that he is experiencing during his first year of medical school. Learning all of the material that is presented during the first year is a Herculean task, as I and many others have found out. Although the problem solving sessions are intended to make this process slightly easier, formidable effort is still required to learn what is needed to become a physician. I hope that Mr. Nichols sheds his misconceptions and learns the basic sciences this year so that he can perform proficiently on the wards as he learns the "human element" of medicine.

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What's Cooking in Durham: The Dog House

Hillsborough Road could very well be one of the ugliest byways in the U. S. Its five lanes of unadorned concrete, peppered by a string of unsynchronous traffic signals, seemingly lead from elsewhere to nowhere in the incomprehensible labyrinth of streets that course through the Durham area.

But like so many of America's interstate highway feeders, Hillsborough Road is nirvana for the fast foodoholic, reading like a Who's Who of Dietary Disasters in the midst of our "City of Medicine"—Burger King, Del Taco, McDonalds, Taco Bell, Wendy's, Arby's and Bojangles dot the strip with their 12 meter, 12,000 watt signs; Porky's BBQ cooking adds a little hometown cooking to the cornucopia.

So why would anyone patronize The Dog House?

Perhaps it's the appearance. The facade is almost comical, an enormous plastic yellow and red and white and black structure that approximates the dog houses of Tom and Jerry fame, matched by yellow and red floral landscaping at the entryway. Trashcans are red and yellow firehydrants. A large sign in the window refers all questions and comments to a hot (dog) line: dial 1-800-HOT DOG1.

Or perhaps it's the menu. Hot dogs are, of course, the main offering, but you'd be surprised at the number of delicious ways a dog may be prepared in a kitchen for two. The "puppy" comes plain, and may be topped by any of a number of condiments, but die-hards reportedly swear by the "Ol' Yallow", complemented nicely by cheese sauce, mustard and bacon bits, or the "Collie", smothered in slaw, mustard and chili. Baked beans and french fries serve as fitting side dishes, and who could pass up the conclusion to this All-American meal—a hot apple turnover.

Or maybe it's the mystery and intrigue that hovers over the place. The Dog House is managed by SE Foods; it is owned, however, as a family corporation. But despite repeated calls (under quite different pretenses), SE Foods would not reveal the identity of the Hot Dog King (or queen, as the case may be).

Why? Is the owner illegally squirreling away BCCI money into wieners? Could the chain be associated with the Moonies or some other underground cult? Could the Dog House even be linked to the recent reports of Satanic cult activity, notorious for their penchant for animal and human sacrifice?

Ewww—what's in those hot dogs, anyway?

"100% beef and pork," swore one employee.

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W. Garrett Nichols

"I'm not so sure," confessed another.

Maybe the customers know.

"I'd never eat one of them burgers from across the street," said one Dog House regular, who averages 4-5 Dog House dogs per day. "At least with a hot dog, you know what you're getting. I wouldn't say the same about a Big Mac . . . You know, you really ought to try that 'Ol' Yallow'."

Thanks, three's my limit.

While it seems out of place among the big boys of the fast food business, The Dog House is a throwback to another age of U. S. history, when A & Ps populated the sides of highways before the building of the major interstates during this half of the decade. With its simple product and window service, it is actually more reminiscent of the first generation of roadside chains—Dairy Queen, which catered to the American family and its soft-serve-suckling urchins.

There was something wholesome about those restaurants then. Not so now. Lax zoning regulations have allowed dense neon-lighted, cholesterol-peddling areas of urban sprawl to spring up along the highways, zones with the unabashed and unaesthetic purpose of attracting the traveller with quick, preprocessed and prepackaged foods. With urban renewal "out" and city expansion outward along the main arteries that were intended for distance travel (not commuting), virtually the entire eastern seaboard is marred by this candy coated blight. Mom and Pop stores on the edges of this expansion cannot help but be forced out of business.

It's this loss of personality that is most tragic. Greasy spoons were places where the townspeople, truckers and tourists could gather and, if not exchange views, at least exchange glances over a cup of coffee. Books such as Kerouac's *On the Road* and Pirsig's *Zen and the Art of Motorcycle Maintenance* were all but written about such places. Nostalgia and soul-searching seems different in a Burger King.

The Dog House has no such personality deficit (although with only outdoor service, it may develop one in the coming winter months). The employees wolfed down chili dogs, haggled over the latest in the Clarence Brown saga, and laughed hysterically at the possible business effects of the major chains' "lite" menu additions in the face of increasing health concerns.

I guess the Dog House faithful aren't too concerned about their health either.

The "Itstory" of Thanks 'n' Stuff-ing

Franco Recchia

The so-called Pilgrims were a group of rich nobles who formed their own club in early 17th-century England. As good young lords of the day, they did absolutely nothing useful for anybody and squandered their inheritances at the racetrack, incurring large debts.

The club decided to put its dwindling resources on the 16-20 favorite Mayflower. Their hopes were nipped in the bud, however, as she wilted in the home stretch. This loss would nag the Pilgrims, as well as history (herstory? itstory?) students, for another 400 years.

Fleeing from creditors and bored with the dull routines of upper-class life, the good old boys wanted something "new"; but also, having been to Oxford and become Communists (the Marx brothers had started their world tour there), they wanted to make a "world" of difference. (You can see where this led them.) Dressed as common labourers, in plain stark clothing now resold on Ninth Street, they rented an old Plymouth and set sail.

Once on land (and twice if by sea), the British invaders immediately wished to see the chief attraction, the so-called Indians. But they were playing an away game against the so-called Yankees.

The first night came, and the Pilgrims were forced to sleep outside, with no blankets or servants. Some remained standing, in protest, and refused to shave, to give validity to their protest; they evolved into the Royal Guards who stand outside Westminster Abbey, motionless, for ten hours, with fifty pounds of fur on their heads.

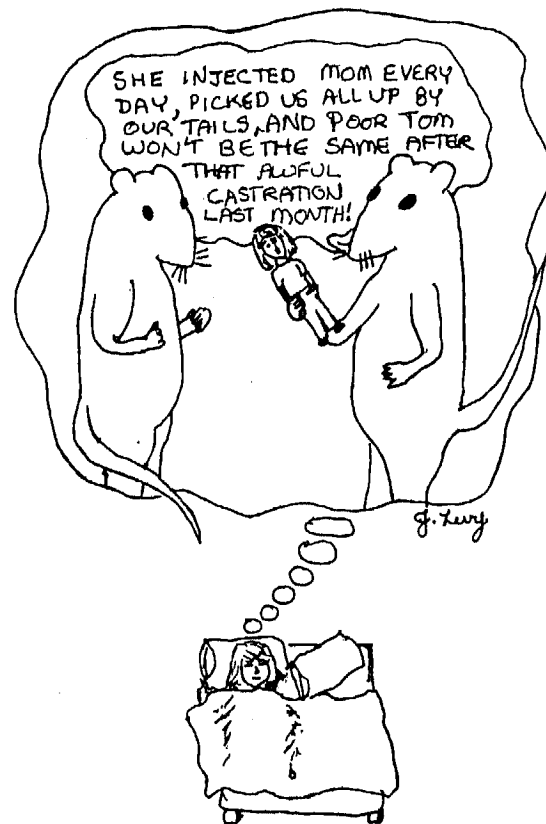
The first winter came, and provisions had to be made. The bitterness of cold and reality set in — work had to be done. Half of the nobles, unable to withstand this foreign way of life, died before spring.

The newcomers to the area soon made friends with their neighbors and the indigenous vegetation, smoking a commemorative Green-Peace-Pipe and introducing them to art, literature, science, and oppression of all kinds, at their first dinner party. (Reservations were made for all guests, in compliance with federal quotas.) In return, at the next wigwam-warming party, the Pilgrims were introduced to maize (*they* called it Puritan corn oil), to warpaint, and to a group of visiting relatives known as Native Americans. This exchange of festivities gave rise, of course, to the two-party system.

The Pilgrims soon became prosperous, living off the natives and their land as they had lived off the peasants

and *their* land in England. Some, who remembered their gambling college days, proclaimed this the workers' pair-o'-dice; others hailed the good climate as an Indian summer; still others, not so bright in history, thought they had found the Orient.

But all were wise enough to give thanks for whatever they had found, and they feasted on 97%-fat-free turkey slices and cran-apple juice.



THIRD YEAR NIGHTMARES



Dear E Bach

Dear E Bach,

After one year of suffering, I have finally decided to step out of the closet and make it public. You see, I am a gunner. Throughout the first year, fellow classmates shunned me in fear of contracting gunneria. I kept telling them that it was politically correct to be inflicted by this psycho-virus in order to succeed in medical school and get into tight-butt residencies such as Duke Surgery. But they never believed me. As they indulged themselves in sinful activities at Chapel Hill, I read and reread all the required and recommended chapters in the textbooks. When they were busy flirting at Davison Council parties, I was watching the previous weeks' clinical arts correlations videotapes. I skipped lunch every day during the first three blocks to read *Zinsser* from cover to cover... twice. My vision deteriorated from looking at slides every night and I got prostatitis from sitting all the time. I did not even waste my four hours of nightly sleep as I listened to PD's heart and lung tapes, subconsciously memorizing the etiology of all murmurs and rales. My efforts paid off as my H's and P+++++'s broke curves and forced many to retake exams. Eventually they all passed, thanks to Duke's substandard grading system, but I passed higher every step of the way. Revenge was indeed sweet.

I never managed to convert my classmates to gunnerism and that always saddened me. But no more.... Recently I have been overcome by a deep sense of happiness and pride. My preachings may have fallen on deaf ears last year but it seems that the new first years don't need any. I cannot help but cry when I see rows and rows of them at the library every night and every lunch hour. They proudly admit to studying for the midterms and finals weeks in advance. Whole weekends are spent on studying for physiology quizzes and many have already cracked the next block's books. Some even resist being forcefully removed from the gross anatomy lab at 5 p.m.: "Please let me stay, I have not yet finished tracing S2,3,4's nerve endings...." The first years' continued absence from Davison Council parties and departmental open houses just lightens my heart. Thank you Class of '95 for undoing the damage my class did to Duke's reputation. Rest assured that you will enjoy "cutthroating" throughout the rest of your first year as well as during the surgery rotation. Keep on

gunning and show your big sibs what a real Duke medical student is supposed to be like. I am just so proud of you....
—A. Gunnermeister, MSII

Dear Gunner,

I hear your plea, but I can only lend you a parable that may bring to light your narrow view.

THIS IS THE STORY OF THE LITTLE GUNNER WHO DID EVERYTHING AD NAUSEUM

There once was a little gunner who was raised in a polite, politically correct household by two loving parents. Little gunner did everything to completion; in fact, little gun did everything past completion and beyond to assure getting everyone's approval. Little gun decided to pursue the noble career of medicine, and he enrolled at Duke.

But gunny boy didn't find that professors delighted in his endless recitation of facts. In fact, they reprimanded detail in favor of conceptual grasp. And the gunny lad didn't find comradery in relentless studying, but rather was labelled with the ignominy of one who cares not a whit for peership and fun. He found little solace in the occasional SNL distraction, but he grieved over the virology he could have learned in that time. Moreover, the little gunny lad didn't shine during second year rounds, but wrestled instead on rounds with "Is HIV an RNA virus-single or double stranded-and what was that capsid protein's geometry?" No, little gunny couldn't swim out of the horrendous mire of facts, factoids, fables and fantasies that were legion in his so-called mind. And no, little gunny didn't earn the respect of his peers for knowlege, but rather their enmity for avoiding social interaction completely.

During clinical rotations second year, the little gunner boy did not amaze the attendings with his skills, but delayed and waylaid the expecting women on obstetrics until he had remembered the precursor to progesterone in the biosynthetic pathway. He could not treat patients with heart disease until he had successfully drawn the cholesterol molecule in Lewis dot. And our good little gunner man did not rest peacefully before his

(see E Bach, back page)

E Bach (continued from page 15)

examinations, but tossed and turned fitfully with visions of Krebs cycle intermediates dancing in his so-called head.

One night, a particularly sweet woman named Mrs. X was to receive a diagnosis of malignancy with a poor prognosis. But this good little boy did not spend the evening talking and comforting Mrs. X and her family in their time of greatest need. No, the good little boy gave the diagnosis, walked out of the room and was heard to mutter "Sorry, I gotta read."

During a mysterious case presentation on rounds one day, the attending asked his opinion of a patient who had clinical, CT, spinal fluid and brain biopsy findings consistent with periarteritis and chronic granulomatous meningitis in a man with altered mental status. The good little boy was seen to tremble, and he was heard to equivocate "Well...I really don't know. Maybe we should look further into this issue of NIDDM in his second cousin in law twice removed. There was an indication of failure to use seat belts, too."

When it was all said and done, the gunner did not look the picture of erudition and wisdom, but ended up taking more vacation than the average civil servant because of an ulcer, headaches and flashbacks to CPCs.

And the good little boy, who had garnered every boy scout award imaginable, surprisingly did not fare as well as we would hope. He became estranged to his colleagues, burned out on arduous call nights, and was last sighted as a plaintiff on "People's Court."

THIS IS THE STORY OF THE BAD LITTLE BOY

There was once a bad little boy who gained entrance to Duke Medical School. He was not the envy of his peers, insofar as his subpar dress code of shorts and T-shirts was concerned. He arrived late for many classes. He relied too heavily...yeah, solely...on the note service that he wasn't even part of by sleazing the pages from his roommate. This blow off did not feel any regret in leaving gross lab promptly at 3:30, nor did he suffer when it came time for the practical exam which was a farce. Indeed, this recreation worshiper waltzed out of the Bell building, pronounced the weather "perfect for some hoops" and whistled all the way home.

During second year the bad boy could not draw steroid hormone structure or describe in detail the ion antiport mechanisms operative in the kidney. He did not

fail in clinical skill, however, when he could hear wet lungs and evaluate the need for a loop diuretic. In fact, he excelled in clinical performance after clinical performance by virtue of his ability to see the horizon from the detail of the landscape. Our bad boy did not find his nights sleepless nor lonely. Rather, the wayward son of students everywhere reveled in his classmates' company, swilled a few imports, and slept like a stone until it was again time to do his calling. Awaking refreshed, he did not immediately rush to the library to collect articles on his classmates' patients. Instead, he enjoyed nine holes of Chevy Chase golf on the historic greens of Washington Duke.

And the bad little boy did not receive the censure of his residents or attendings for having failed to read during his seldom spare time. Instead, they praised his handicap and scheduled a tee time for the following day. And the bad little boy's patients did not wait for hours while someone tried to map out the distribution of the spinothalamic pathway before prescribing an analgesic. On the contrary, the bad little boy enjoyed many quiet evenings on the wards for quickly and efficiently providing his patients with medical care.

And what of poor Mrs. X, who was spurned by the little gunner boy in favor of articles? Why our bad little boy spent the evening of her diagnosis with her and the family talking. In fact, after a few hours the mood became quite jocular, and laughter could be heard emanating from the room well until midnight. Mrs. X slept soundly and fitlessly that night.

During the perplexing rounds in which the little gunner boy surprisingly faltered, the bad little boy was asked his opinion. "What do you make of this case of a 32 year old man with changed mental status, multiple intracerebral lesions and the findings we have described?"

Instead of drawing a blank or trying to fabricate something, the bad little boy correctly stated "This is a case of tertiary gummatous meningeal syphilis, I am sure. I recommend VDRL antibody test." The attendings and residents were duly impressed with the bad little boy, and he did very well.

The bad little boy went on to live happily ever after. He now resides in Sunnydale, California as part of a flourishing practice, and one of his sons is being highly recruited by Duke basketball. Allright, maybe that's a bit much. He's gonna walk-on at Cornell.

Letters to E Bach are actual submissions from members of the Duke Medical community. Send letters to Eric Bachman at PO Box 2704-DUMC or drop them in the Shifting Dullness box in the Alumni Affairs office (candy room).