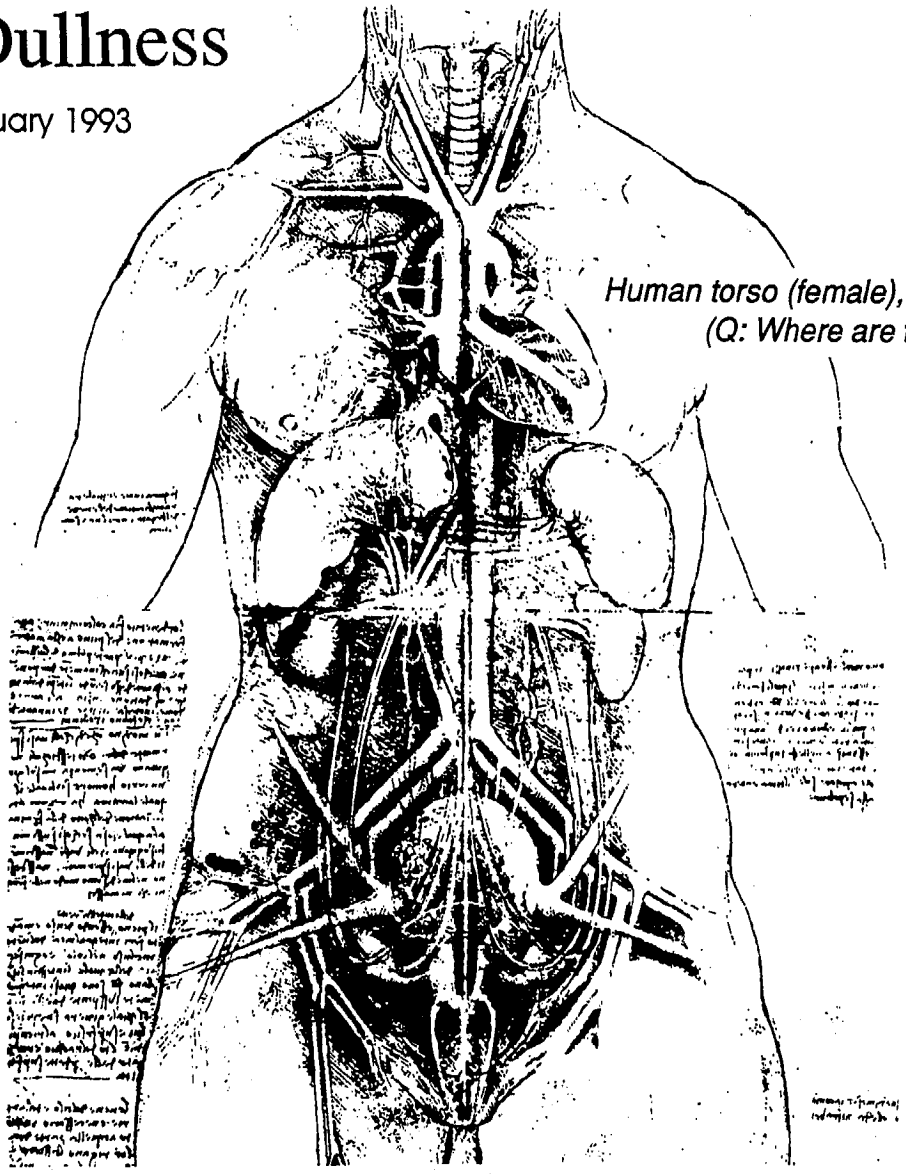
Shifting Dullness

December 1992/January 1993



Human torso (female), by Leonardo da Vinci (Q: Where are the adrenals?).

Duke Student Elected to Administrative Board of OSR

Larry Kelly

As I'm sure most of you remember, the Organization of Student Representatives (OSR) is a division of the Association of American Medical Colleges (AAMC) addressing issues of importance to medical students. Recently, Doug Skarada, Chris Cabell and Larry Kelly attended the national meeting of the OSR, and brought back to Duke a great deal of information that may be of interest to many students.

First, Duke's own Chris Cabell was elected to the Administrative Board, the governing body of the national OSR. Chris hopes to work closely with the issues of medical education and the future direction of the integration of clinical and basic sciences. Please join us in congratulating Chris on his election to the "Ad Board."

Financial Aid

One of the major issues that affects the majority of medical students that was discussed at the conference is financial aid. the major focus on financial aid was the recent signing of the Reauthorization of the Highter Education Act of 1992, that reauthorizes the 1965 law governing loans for higher education. The major changes were threefold.

First, the two year deferment clause for residency training was eliminated, with a grandfather clause covering all those whose first loan is made before 7/1/93. For those borrowing for the first time after 7/1/93, there are 3 categories for which deferment will be allowed: 1) in-school; 2) economic hardship/unemployment; 3) graduate fellowship training. "Economic hardship" is not defined by the law and is to be determined by the Secretary of Education at a later time, but will be defined by a debt to income ratio.

Second, the law creates a provision for an unsubsidized version of the Stafford loan, the interest for which the student will by responsible while in school. This loan may be in place of a subsidized loan if the student does not qualify, or a student may have both subsidized and unsubsidized Stafford loans up to the applicable Stafford loan limit (see below for limits).

The new law also raises the loan limits. The Stafford loan limit will be $8,500/year for graduate students with an aggregate maximum for undergraduate and graduate loans of $65,500. The SLS loan limit will now be $10,000/year for graduate students, with an aggregate maximum of $73,000.

Residency Match

At the Sixth Annual Forum on the Transition from Medical School to Residency, the issues pertinent to the residency match were discussed. First, the results of last year's match were presented with respect to timing of decision to enter specialties, time applications were required to be completed, programs requiring NBME scores, 4th year elective choices (broken down by specialty choice), and programs that asked students to make a commitment before the match. The study also documented the costs of interviewing and the average number of days spent interviewing for last year's medical school graduates. This information is available for students to review in the OSR notebook in the Dean's office.

Important information to carry away from this meeting includes the fact that many programs continue to ask students to commit to their program before the match, and some programs are guilty of practices (unspecified) that are not allowed by the National Residency Match Program. The most common specialty noted to be responsible for these infractions is pathology. Students should be aware that these requests may come at any program visited, however.

One final note regarding the match. Fourth year students are reminded that the OSR sponsors the Housing Exchange Network, a program in which 4th year students interviewing away may be able to stay over at a student's home at the interviewing school, instead of having to pay for a hotel room. The book listing participating schools/students is in the Dean's office on the shelves above the copier. We hope this can reduce some of the costs of interviewing.

Alpha Omega Alpha Announces New Inductees

The Duke chapter of Alpha Omega Alpha, the national medical honor society, recently chose new members to be inducted in 1993. Selection is based on academic achievement. Around eight MSIII's and ten MSIV's are chosen each year for a total of about 18 per medical school class. Congratulations to new inductees!

Class of 1993

David K. Bright
Marc R. Carruth
Steven E. Day
Susan E. Dorman
G. Michael Felker
Lee C. Gravatt
Mary Landau-Levine
Edward G. Lilly
J. Eric Roddenberry
Frederick G. Wenzel
Glenn L. Zellman

Alumni

James M. Douglas, Jr., M. D.
Warren J. Strittmatter, M. D.

Class of 1994

Kimberly A. Bazar
Robert Dow Hoffman
Kimberly S. Kaufman
Maureen L. Keogh
Barbara Jill McFarland
Alison P. Toth

Faculty

Dan G. Blazer, M. D., Ph. D.

Housestaff

Murray A. Abramson, M. D.
Rex Bentley, M. D.
Michael Dimaio, M. D.

More Medical Students Own Computers

Emile El-Shamma

Stats Update -- Trends indicate that computer ownership, particularly Macintosh, is increasing, with 56% of MSIs owning computers (34% Mac, 19% IBM), compared with 55% of MSIIs (29% Mac, 23% IBM), 51% of MSIIIs (23% Mac, 18% IBM) and 26% of MSIVs (11% Mac, 12% IBM).

Pocket Computers -- As most of you know, the latest trend these days is making everything small - and computers are at the top of the list. Several companies are now making "palmtop" computers that are a lot more than fancy calculators. These devices weigh 10 or 11 ounces, are about 4 X 7", and often can be hooked up to an IBM compatible computer to transfer information. These computers also have no boot up time, run for months on regular batteries and have from 64Kb to 1 Meg RAM. They almost all have some kind of organizer/ memo program and calendar; some have Lotus 1-2-3, modem capability, and data and software cards (instead of disks). For us students, these would be a great replacement for the "peripheral brain" everyone carries around (illegible 3X5s with microscopic print) on the wards. One could conceivably create information databases for medical facts, drugs and dosages, phone and pager numbers, bibliographies, current patient info, formulas and whatever else is needed.

Then of course there's the down side. One of the big disadvantages is the problem you run into with any small expensive thing - theft and breakage. Also, the keys are small and the screens are not lit. Last, but not least, they cost about $200 -500. For more information, refer to "The Palmtop Computer: Medicine's New Peripheral Brain." M.D Computing, Vol. 9, #4, 1992. pp264-268. If you need any computer related information, don't hesitate to call Emile El-Shammaa at 382-0203.

News Capsules

Michael Weiner

• **Inhaled nitric oxide (NO) increased oxygen saturation in newborns with persistent pulmonary hypertension (PPHN).** Six infants with PPHN were studied when severe hypoxemia returned after 1 week of extracorporeal membrane oxygenation. Postductal oxygen tension in patients inhaling 90% O2 increased from 41 to 116 mmHg when NO was added at 80 ppm for 10 min. Preductal oxygen saturation increasedfrom 88%to 97%. Systemic hypotension was not observed. A second study suggests that continuation of as little as 6 ppm NO for up to 24 hr. can sustain clinical improvement. Excessively high NO levels can cause methemoglobinemia, asphyxia, and death. NO's effect most likely reflects pulmonary vasodilation, and researchers postulate that inadequate "NO production by pulmonary vascular endothelial cells" causes PPHN. These pilot studies offer hope for developing new therapies for PPHN (J.D. Roberts et al., Lancet 340, 818 (1992); J.P. Kinsella et al., ibid., p. 819).

• **Alzheimer amyloid beta protein (BAP) is produced in normal cells, and is stimulated by activating muscarinic acetylcholine receptors.** Human mononuclear leukemic cells transfected with a construct bearing BAP released a protein, detected through immunoprecipitation, that is "essentially identical to the BAP deposited in Alzheimer's disease" (AD). A similar protein was also detected at autopsy in CSF from 5 of 7 patients with AD, as well as in 3 of 7 patients without AD. Carbachol-induced stimulation of 2 subtypes of muscarinic receptors expressed in human embryonic kidney cells increased release of amyloid precursor protein (APP) derivatives. Thus, errors in APP processing likely contribute to amyloid formation in AD. Researchers hope that these studies will eventually lead to more effective prediction and diagnosis of AD (M. Shoji et al., Science 258, 126 (1992); R.M. Nitsch et al., ibid., p. 304; G. Cowley, Newsweek 10/5/92, p. 66).

• **Frequent or persistent vaginal candidiasis may be an early sign of HIV infection.** Although most occurrences of vaginal candidiasis are not associated with HIV, "recurrent or stubborn cases ... are the most frequent initial clinical manifestation in women." In one study, 38% of women diagnosed with HIV-caused immunosuppression suffered recurring or persistent vaginal candidiasis as their first symptom (FDA BBS, 11/16/92, ref. P92-33).

• **Overweight adolescents have an increased risk of subsequent morbidity from coronary heart disease and atherosclerosis.** A study of 508 lean or overweight (BMI > 75th percentile) adolescents 13-18 years old from 1922 to 1935 was conducted. Risk of colorectal cancer and gout was also increased among men, and risk of arthritis increased in women. The risk of death from all causes increased only for men. Predictions were independent of adult weight after 55 years of follow-up, but overweight adolescent males are more likely than females to be overweight in adulthood. About 25% of today's U.S. adolescents are at higher-risk weights. The effects may reflect central depositions of body fat (A. Must et al., NEJM 327, 1350 (1992); G.A. Bray, ibid., p. 1379).

• **Immune responses are induced in patients with B-cell lymphoma, following injection of autologous, tumor-derived immunoglobulin.** Nine patients with non-Hodgkin's B-cell lymphoma were studied, following chemotherapy and remission. Immunoglobulins (Ig) were purified from tumor cells fused to Ig-secreting hetero-hybridoma cells. Ig was then conjugated to keyhole-limpet hemocyanin, an immunogenic protein. Following emusification with an adjuvant, the mixture was injected SQ. Three patients prduced anti-idiotypic antibodies and 5 had CD4 T-cells that proliferated in culture with autologous lymphoma Ig. Tumors in the 2 patients "with measurable disease regressed completely." The key to this therapy is the specificity of the immune response for the lymphoma's idiotype (L.W. Kwak et al., NEJM 327, 1209 (1992); R.S. Schwartz, ibid., p. 1236).

• **Injectable medroxyprogesterone (Depo Provera) is approved for contraception.** Developed in the 1960's and used to treat some endometrial and renal cancers, this drug has been approved for contraception in the U.S. Each 150 mg injection provides contraception for 3 months. Effectiveness, estimated at "more than 99%," requires regular interval dosing; discontinuation restores fertility. The most common side effects are irregular menses and weight gain. Contraindications include acute hepatic disease, pregnancy, undiagnosed vaginal bleeding, breast cancer, and thromboembolic disorders. Long-term use "may contribute to osteoporosis." The contraceptive formulation of Depo Provera is expected to become available in January (FDA BBS, 10/29/92, ref. P92-31; AMN 11/16/92, p. 2; PDR 1990, p. 2223).

Who Has the Right to Know if You Have a Genetic Defect?

White Plains, N. Y., Sept. — The majority of Americans bileve that if a person is a carrier of a defective gene or has a genetic disease, then the information should not be completely confidential, according to the nation's first survey of public opinion on human genetics.

In a survey of 1,000 adults conducted for the March of Dimes Birth Defects Foundation by Louis Harris and Associates, 57% of Americans answered yes when asked, "If someone is a carrier of a defective gene or has a genetic disease, does anyone else, besides that person, deserve to know that information?" Forty-one percent answered no; 2% were not sure.

Of those who answered yes, virtually all (98%) say a spouse or fiance deserves to know; 70% say other family members deserve to know; 58% say their insurer deserves to know; and 33% say the individual's employer deserves to know.

Doctor Obligated to Tell Husband

Seven in 10 Americans (71%) say that if a doctor of a woman who plans to have children finds through pre-conception testing that her children might inherit a serious or fatal genetic disease, the doctor has an obligation to tell the woman's husband.

"Genetic defects can be frightening and confusing to people," said Dr. Jennifer L. Howse, president of the March of Dimes. "The March of Dimes is interested in seeing information from genetic tests properly interpreted and put into context for individuals or families at risk for inherited disease.

"This survey also tells us that Americans actually know little about genetic testing," Dr. Howse emphasized, "so it's possible that people don't understand the potential for misuse of the information from tests."

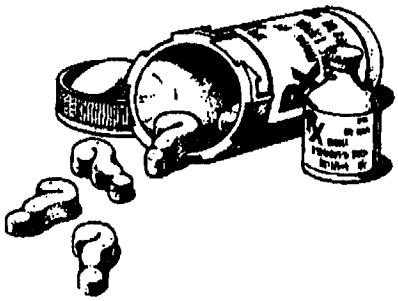
Split on Government Regulation of Access

Public opinion is divided as to whether the government should be involved in regulating who has access to the infromation from tests about a person's defective genes and genetic diseases: 55% of Americans surveyed oppose such government involvement, while 43 % are in favor.

However, the majority of Americans (59%) say new types of genetic testing should not be stopped until the privacy issues are settles; 38% oppose new types of testing until the privacy issues are settled; 6% are not sure.

The survey was conducted by telephone between April 17 and April 30, 1992 among a randomly selected, national cross section of Americans 18 years and older. The sampling error is plus or minus 3%.

The March of Dimes is a national voluntary health agency whose mission is to improve the health of babies by preventing birth defects and infant mortality. Through its Campaign for Healthier Babies, the March of Dimes funds programs of research, community services, education and advocacy.



Shifting Dullness accepts letters of opinion from all members of the medical school community. Opinions expressed do not necessarily reflect those of the editorial staff. *Shifting Dullness* reserves the right to edit letters for length and style. Mail to *Shifting Dullness*, PO Box 2865, DUMC or drop them in the *Shifting Dullness* box in the Candy Alcove (Dean's Office) or in the Duke North student lounge (6th floor).

Account of A Death: Pediatrics Ward, Muhimbili Hospital, Dar es Salaam, Tanzania

by David Ting

One humid evening in Dar es Salaam, sometime after the English service of the BBC had completed its world-news report, my housemates and I at the Duke Mansion gathered around the dining room table to trade stories and play bao. As the smooth round bao-balls flew around the hand-carved playing board — Deb Weaver had just purchased the set from a local craftsman — the conversation turned to the phases of culture shock.

Bill Miller leaned back and assumed the erudite posture of a sage, then spoke: "There are four stages in culture shock. First, you arrive totally naive, and everything seems wonderful and exciting. Then, reality sets in, and you realize — in the midst of missing home — that things aren't so rosy here. Third, you become cynical, seeing only the ugly and the difficult. Finally, if you survive the first three phases, you become resigned to the reality of your environment: it is then that you are over the shock. Many people never get over the first three phases." Silence moments, then Nathan Theilman assumed a likewise erudite pose, beads of sweat condensing on his chin, his eyes fixing on some distant point miles away ... (or was he staring at the mosquito aiming to dive-bomb Elizabeth Bearer as she flipped through a two-month old USA Today). "Well," Nathan mused, "I don't know if I'll ever be resigned or used to what we see on the wards at Muhimbili."

Heads nodded in serene agreement as the power went out, shutting off our cooling fans; and down the hall Gordon our cook dropped a metal cooking pot with a bang on the kitchen floor.

Death and Pain, the Tanzanian Perspective

I too, may never be comfortable with what I saw on the wards at Muhimbili. First, even getting to the hospital can be a traumatic event: the dirt road leading to this, the major medical center in Tanzania, is so riddled with ruts and holes that one visiting dignitary once proclaimed, "I am amazed most patients aren's killed by the ride to the hospital!"

Having survived the triage of getting to Muhimbili, patients are then challenged to find a space to lie down. In Tanzania, health care is universal and free; hence, anyone with a problem — from simple colds to advanced AIDS — is encouraged to seek admission. As a result, there are simply not enough bed spaces or resources to provide adequate care to those who need it. Yet, the Tanzanians have attempted to cope.

On my first visit to Ward 5, the male medical ward, I was immediately impressed by the serenity. Here was an open ward designed for thirty beds; but, between cots, on the floor, were strewn dozens of mattresses — and upon each mattress lay one or two patients. In one corner of the ward, the nurses had grouped a half-dozen victims of TB; along another wall (and in the stairwell) lay patients with AIDS; inbetween were those with active GI bleeding, anemia, ascites, lymphoma, and malaria. Yet, amidst the suffering, I felt a strange sense of serenity.

Perhaps that feeling eminated from the Tanzanian outlook on life, death, and suffering, which is quite different from ours in the U.S. To wit, we in the U.S. seem to have a gripping fear of death and loathing of pain. Our expensive technolgy, extraordinary life-saving measures, and armamentarium of analgesics and anaesthetics testifies to this. Tanzanians, on the other hand, apparently look on death and suffering as granted and commonplace — part and parcel of life. Hence, they approach difficulties such as living with AIDS or lying on the floor of a medical ward with much more grace than the typical American patient. This grace pervades the medical ward and lends it the air of serenity.

The Tanzanian approach to hardship is reflected even in daily greetings. In the Swahili culture (the predominant culture of Tanzania), you always greet another person by asking how he or she is doing. Culturally, the response to any greeting must be a positive response, no matter how miserable one might be in reality. To illustrate, if I approach you and say: "Jambo!" (which means "Do you have a problem?"), the correct answer is "Sijambo!" ("I have no problems"). Also, if I ask, "Habari yako?" ("How's your news?") the response is invariably, "Mzuri" ("Good"). It always struck me that whenever I approached a patient who was obviously racked in pain and asked: "Habari?" he would always answer "Mzuri," with a feeble smile. Built-in cultural grace.

Another striking example of the Tanzanian approach to life and death is an event I experienced while rounding

(see Tanzania, next page)

Tanzania (from p. 6)

on the pediatrics ward with David Habel, a Duke Med/Peds resident. As we examined David's patients, we came upon a male nurse holding a portable suction line to the mouth of a young child. "What's going on here?" we asked.

There was no urgency in the nurse's voice as he replied, "This child is not breathing."

Dumbfounded, David asked, "Why are you simply suctioning her mouth? We need to start resuscitation!" As the nurse looked on, David checked the pulse and began chest compressions as I positioned the child's head for mouth-to-mouth. A green ooze gurgled from her mouth and nose as David compressed; and in anticipation of putting my mouth over the child's face, I hesitated.

"No, don't put your mouth on her," David assured me. Then, to the nurse: "Get us a bag and mask, now!" The nurse looked around, as though he had never before worked on that ward. He turned to another nurse and questioned her in Kiswahili.

"What's happening? Where's the bag?" yelled David.

After a few minutes, a mask and bag set appeared. Someone had walked over to an adjacent ward to look for it. "This child needs to be on a ventilator. She needs to be in intensive care," David announced. No one moved.

"Sir," one of the nurses finally announced, "We must ask permission from the chief anesthesiologist."

"Then ask for it!"

A nurse walked off the ward. After an eternity, she walked back, slowly. "I'm sorry, Dr. Habel, you must write an official request in the chart."

David, steaming with frustration, pulled out a pen and scribbled in the chart. The nurse again sauntered out, then returned. "I'm sorry, this is not a proper note."

"What's a proper note?"

"You did not specifically write: 'To the Chief Anesthesiologist' at the beginning of your note."

I thought David would explode. Instead, he announced calmly: "Don't worry about it. The child is dead."

It turns out that the child's mother had been part of the small crowd that had gathered to watch the spectacle of two foreigners pumping away at a baby's dying body. She had been perfectly collected during the ordeal. But as soon as David and I left the ward, she filled the air with a piercing scream that resounded through open windows and out into the hospital campus. I realized that I had heard similar wails many many times before. (And have since heard it many times.)

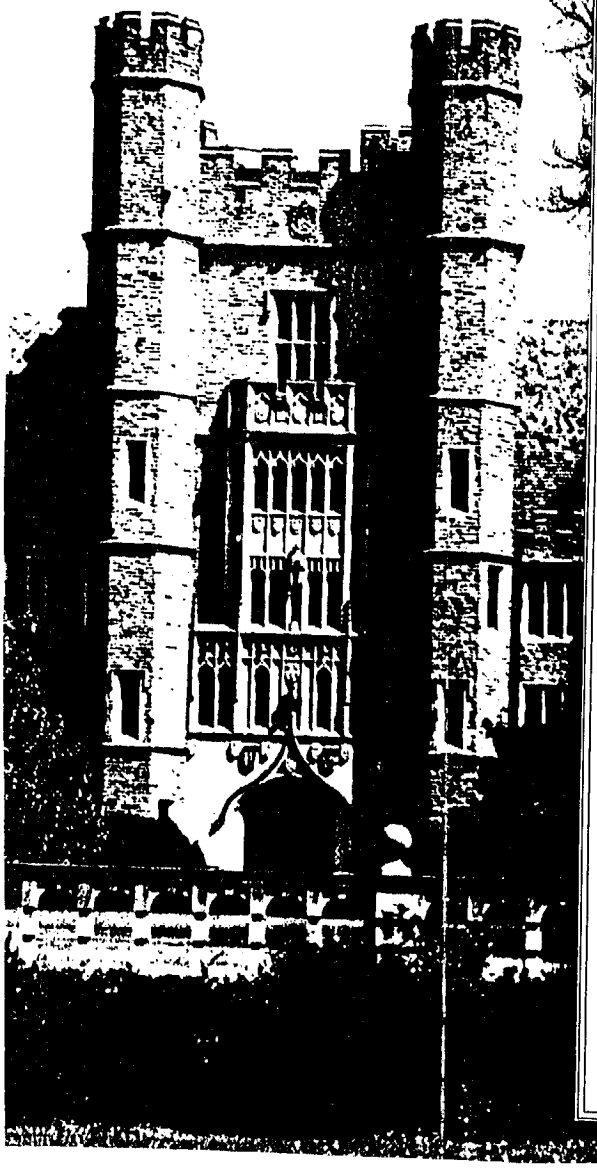
Later, as we attempted to understand what had happened, we were assured by Dr. Rupa Lallinger, the Duke pediatrician attending at Muhimbili (and my research director in Tanzania): "You've got to understand that it was probably the first code the Tanzanians in the ward have ever seen. In Tanzania, we simply don't take extraordinary measures to resuscitate people, because there's no ICU to send them to, and there's only one mechanical ventilator for the entire hospital. And this week, that ventilator is broken. There's just no reason to resuscitate anyone here."

I think at that point, I gained valuable insight into why Swahilis view death and disease with a sense of resignation. And I began to wonder if that realization of impending and inevitable death has led over centuries to their joyous approach to life. Perhaps we in North America — particularly we who practice medicine — would do well to recognize the Tanzanian experience and evaluate our own.

Shifting Dullness Staff

Editors	Kenny Boockvar Greg Lucas Ben Yeh
Business Manager	Hussein Elkousy
Writers	Kenny Boockvar Larry Kelly Steve Mass Fred Rimmele David Ting Michael Weiner
Comic	Fred Rimmele
Photos	Amir Mehran
Calendar	Ben Yeh
Graphics and Layout	Kenny Boockvar Greg Lucas Ben Yeh
Computer Consultant	Andrew Mellin

Shifting Dullness is a publication of Duke University medical students.



Duke Medical Alumni Association

We're on your side. Now, and after you graduate. The Duke Medical Alumni Association:

- sponsors social events around the country
- produces the Medical Alumni Host Directory
- keeps you posted with the medical student bulletin board
- hosts our annual Fall Pig Picking Party
- offers our "Preparing for a Residency" workshop
- issues "Davison of Duke"
- publishes *Perspectives* medical alumni magazine

We're behind you all the way, right down to our candy jar that welcomes you every day.

The Medical Alumni Association
110 Swift Avenue
Durham, NC 27705
(919)286-5557

Cultural Calendar

MUSIC

December 9: Randall Love, hammerklavier recital at 8 pm. In Nelson Music Room.
December 10: Chorale Christmas Concert at 7 pm. At Duke Chapel.
December 12: Duke Precollegiate String School, director Dorothy Kitchen. From 12:30-5pm. In Baldwin Auditorium.
January 20: Bruce Berg, baroque violin recital at 8 pm. In Nelson Music Room.
January 21-24,27-31: Godspell, at 8pm. In Sheafer Theater. Call 684-4444.
January 23: Music of Hungarian Inspiration for Cello and Piano. At 8 pm. In Baldwin Auditorium.
January 24: Gerre Hancock Organ Recital at 5 pm. In Duke Chapel.
January 27: Zvi Meniker, harpsichord at 8 pm. In Inaugural Recital, Nelson Music Room.
January 30: Ysaye Quartet at 8 pm. In Reynolds Industries Theater. Call 684-4444.

THEATER/DRAMA

December 12: A staged reading of "Crisis at Trinity," by John Merrit. At 8 pm. Call 681-ARTS.
January 24 & 25: Lend Me a Tenor, at 8 pm. In Page Auditorium. Call 684-4444.

FILM

Griffith Film Theater, Bryan Center. The following films are shown at 7 & 9:30 pm.
December 5-6: Boomerang.
December 8: Gaslight.
December 10: Yanks.

DANCE

December 12: "Ancient Myths/New Music," with flutist Patricia Spencer at 8 pm. In Ark Dance Studio.

ART

Museum of Art current exhibits: Until December 20: Old Master Drawings from the Collection of Joseph F. McCrindle. Until January 3: Late Medieval Illuminations: Manuscript Leaves from the Collections of Jeanne Miles and Dr. Robert Parsons.
January: "Flights of Fancy," Color Abstracts by David Page. In 107 Bivins Building.

ANNOUNCEMENTS

The Methodist Home for Children, located at 808 Knox Street by the Northgate Mall, provides a residential environment for academically troubled youths 10-18 years old. Its aims are to improve learning and provide scholastic encouragement. The teachers running the program are looking for tutors in chemistry, biology, and Spanish. Time commitment is approximately ninety minutes per week. If you are interested, please contact the home at 683-2490.

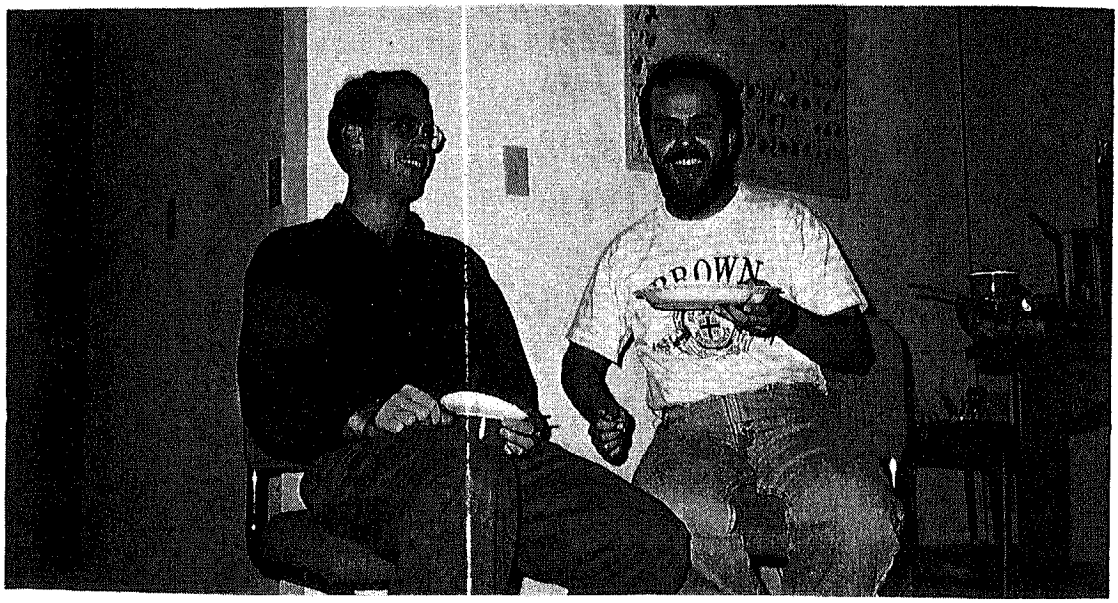
The William Osler Medal of the American Association for the History of Medicine is awarded annually for the best unpublished essay on a medico-historical topic written by a student enrolled in a school of medicine or osteopathy in the United States or Canada. The writer of the winning essay will be invited to attend the 1992 meeting of the Associates to be held in Louisville where the medal will be conferred. Reasonable travel expenses will be defrayed. Entries must be submitted by February 1, 1993. Contest admission forms must be obtained from Professor Peterson, Osler Medal Committee Chair, Dept. of History, Indiana University, Ballantine 742, Bloomington IN 47405.

There is an excellent opportunity for Duke medical students to do an elective rotation with the Alaska Native Health Service. This branch of the U.S. Public Health Service, funded by the federal government, provides health care to the entire native population of Alaska. Opportunities for general and family medicine rotations are available in the smaller villages, and more specialized electives are offered at the larger hospital in Anchorage.

The Alaska Native Health Service *pays for round-trip transportation to Alaska, and room and board while you are there.* Furthermore, the clinical experience is quite good. Since there are no residents, medical students are generally given a high degree of responsibility and autonomy. There are excellent outdoor recreation opportunities available as well. *Apply early,* especially if you would like to be there in the summer months, as places fill up fast. One and a half to two years lead time is suggested.

Interested students should contact: Christine Gutierrez, Medical Student Coordinator, Alaska Native Medical Center, 250 Gambell Street, Anchorage, AK 99501. Ed Lilly, MSIV, will be happy to try to answer any questions about possible locations, time to year, or type of elective.

Gunning medical students finally come out of the closet in paint pellet war this Fall



MSIII Pals enjoy some holiday cheer

MSIII Hoffman quells local violence

Steve Mass

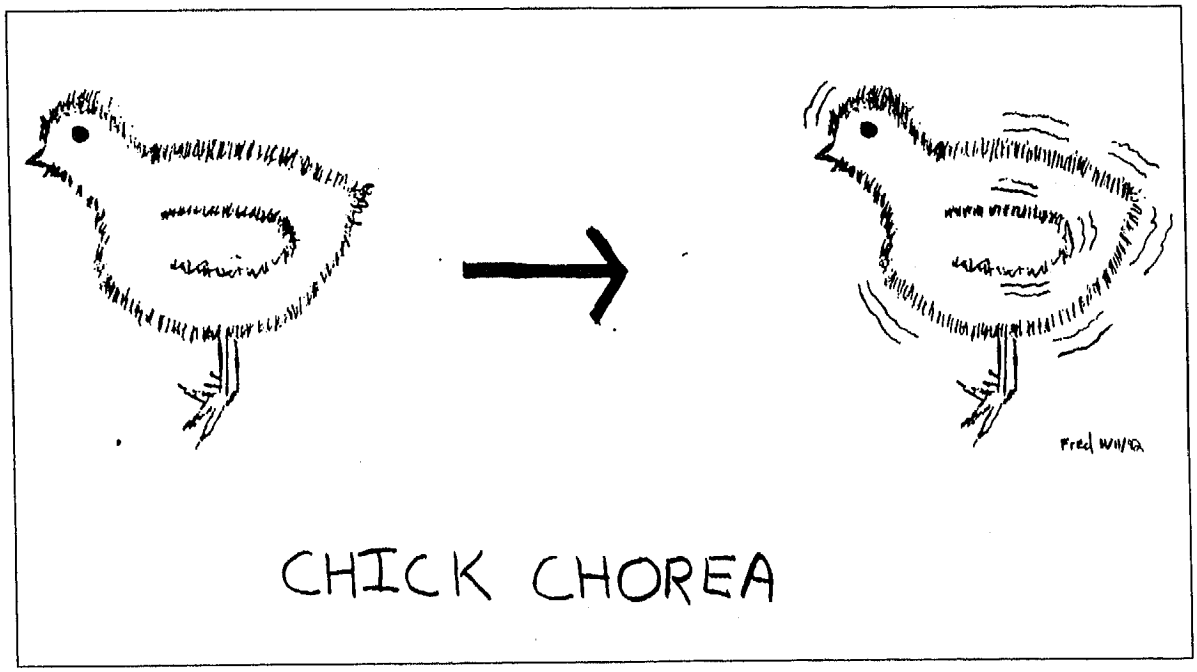
Editor's Note: the following is a true story, only the facts have been changed to protect the innocent.

For Dow Hoffman, the afternoon of November 16, 1992 was indistinguishable from any other of his third year. Having completed his duties in the lab by 2 p.m., he sought to fulfill those which began at home. Positioned in front of the television, he polished off the remnants of a bag of Doritos, drained a 2 liter bottle of "Big-K" soda and unbuttoned his shirt. "Screw the diet," he muttered to himself.

Dow's solitude was interrupted by a frantic pounding on the door of the apartment next to his own. Dow turned up the volume on his T.V., but the the pounding grew in intensity, until it reached a crescendo that loosened pieces of plaster from his walls. Thoroughly roused, Dow climbed out of his easy chair and headed toward his neighbor's apartment with determined alacrity. By the time he had gotten outside his front door, the pounding had been replaced by the grunts and groans of a scuffle. The neighbor's door was ajar and through it, Dow sighted two figures grappling with one another on the living-room floor. While Dow would be the first to acknowledge that such activities may be fun, he was also aware that the risk of losing an eye is enormous. Despite his admonitions, the two continued to wrestle with great vigor. Because Dow is relatively fond of his neighbor, he decided to take his side in the quarrel. After a well placed roundhouse kick and a Conan-like vise grip, Dow and his neighbor succeeded in pinning their foe face down on the floor in utter submission. More importantly they had avoided getting bitten, which was their greatest concern given the gentleman's poor dentition. Positioned on top of the invader, they had only to wait for the police to arrive, who Dow had prudently notified before leaving his apartment.

The assailant, it seems, was a vague acquaintance of Dow's neighbor, who had recently escaped from an out of state mental institution (the assailant, not the neighbor) His resume' was padded with convictions of IV drug abuse, battery, burglary and voting for Bill Clinton.

So hats off to Dow Hoffman who heard a heroic opportunity knock at the door next to his and answered it fittingly.



Purely Purulent

Fred Rimmele

Mention the adrenal glands to most medical students across the country, and they'll likely think of suprarenal pyramid-shaped organs responsible for the production of glucocorticoids, mineralocorticoids, catecholamines and a teasing whiff of sex steroids. Not me.

Despite my extensive Duke medical education, I still persist in thinking of the adrenals as sponges, sopping wet with nothing but catecholamines. "But what of the delicate electrolyte balance those organs maintain through exquisitely controlled production of aldosterone? What of the intricate bodily effects of cortisol?" you say looking over your shoulder to make sure that none of the endocrinology attendings nearby have entered into conniption fits.

"Pish," I say. Have you ever felt your cortisol levels fluctuate? Ever noticed your aldosterone levels plunge after eating a super-size bucket of popcorn at the Rialto? (pause) Ha! Didn't think so. But have you ever experienced a massive surge of epinephrine? Like when your attending saw it fit to pimp you on the pathophysiology of beriberi in the midst of your routine presentation of a cardiac cath.

I understand the effects of catecholamines, having directly experienced them many times. I understand the pathology of *Salmonella* infections, having had some poorly prepared Thai seafood once. And I understand how ethanol directly blocks the production of ADH, resulting in a dramatic rise in . . . well, you know that one too, I'm sure.

My point is this - the adrenals are an organ whose time has come and gone. Sure, a million years ago, when one sluglike being crawling around in the oceanic ooze was menaced by another sluglike being with big teeth, a primitive precursor of adrenal tissue might have come in handy. With the evolutionary advantage of a hemodynamic nitro-booster, millions of adrenal toting slug-beasts could proliferate across the sea bottom with relative impunity (that is until the predators realized that adrenals were almost as nifty as big sharp teeth.)

Several million years later, everybody has adrenals, and the whole system has canceled itself out. Let's face it, adrenal are *passe'*. They don't work worth a damn anymore in the fight mode (as evidenced by the proliferation of taxidermy in the twentieth century). As for the flight mode, have you ever watched a squirrel in traffic? With a car 200 feet away, any squirrel should be able to use its raisinette-sized brain to get out of the way. But what happens? One huge bolus of catecholamines and the squirrel's rational abilities are abolished, its brain cells bathed in jitter juice. Twitch right, dodge left, fake right, break left, stare at headlights. *Skish*. Roadkill. No advantage at all.

Things are worse in humans. In today's world, one can hardly get the opportunity to engage in a fight or flight situation (ie, burying a meat cleaver in an attending's forehead or running screaming from radiology rounds, is frowned upon as unprofessional) The result? Stress . . . and lots of it. And stress causes bad things: heart disease, stroke, loss of libido.

My solution is simple. Just whack the adrenals out of everyone. The surgeons will love the new business, people will be happier and healthier, and no significant evolutionary advantage will be lost. Except for the production of glucocorticoids and mineralocorticoids, which nobody notices anyway.