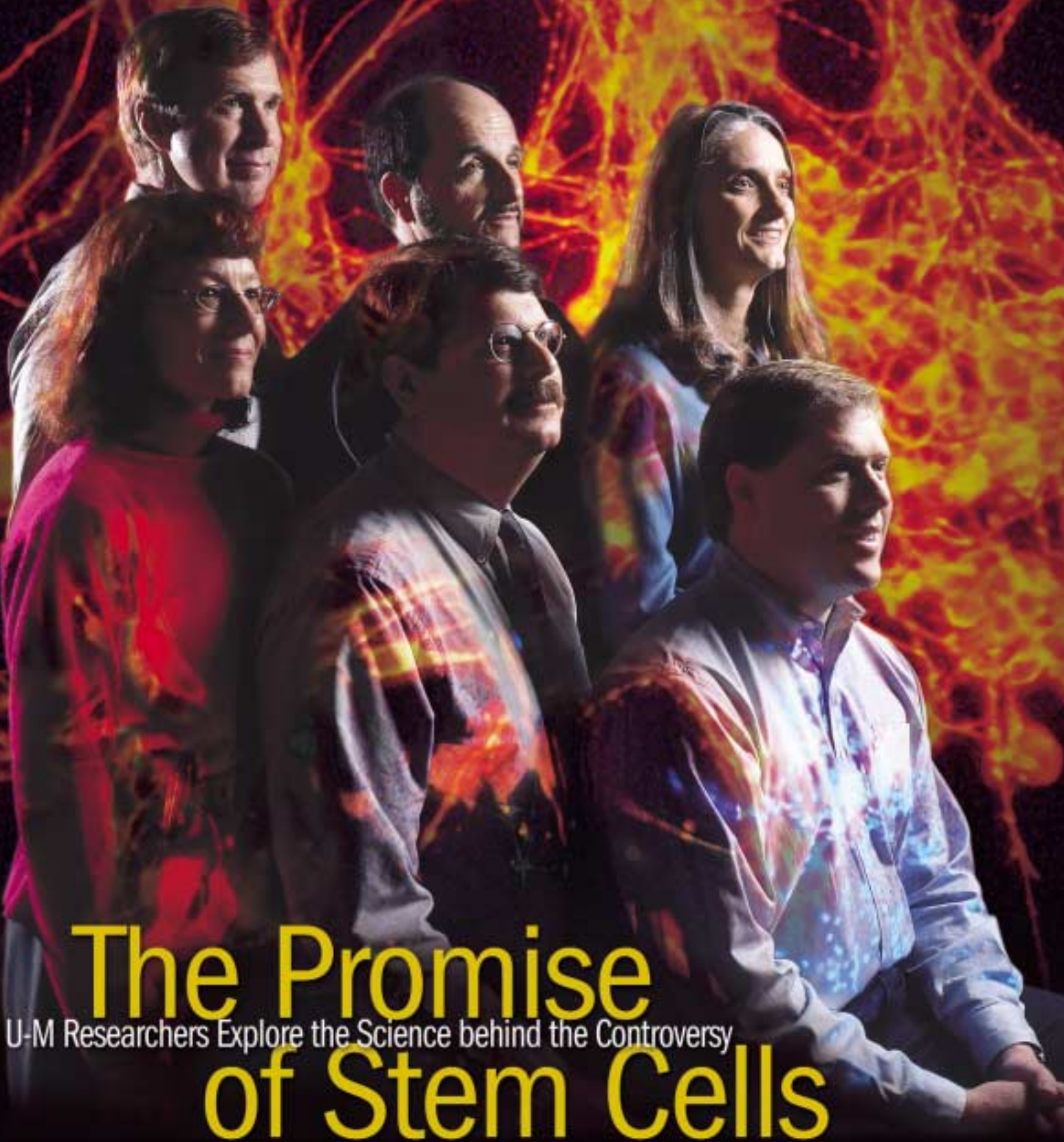


medicine

at M I C H I G A N

Winter 2002

A PUBLICATION OF THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL



The Promise

U-M Researchers Explore the Science behind the Controversy

of Stem Cells

Letters

Student Debt: The Reasons Behind Rising Costs of Medical Education

In the Letters section of the Fall 2001 issue of *Medicine at Michigan*, Dean Lichter replied to a letter from Thomas F. Higby, M.D., explaining how graduating medical students today have such enormous debt, and I think he did a good job of bringing that into focus.

I wish, however, he also would have explained why there has been such a tremendous increase in the cost of educating medical students in this period of time. I know that the cost of supplying medical care has increased much faster than the rate of inflation, most of which is blamed on the cost of the higher technology needed and used, but I am not sure how that applies to the actual teaching of medical students.

*Gerald Meier
(M.D. 1962)
Cleveland, Ohio*

Dean Lichter's response to Dr. Higby's letter regarding scholarship support was interesting and outlined very well the difficulties facing today's medical students — and potentially all of us as patients.

While the figures Saul Hymans presents are enlightening, the response deals only with the staggering increase in the cost of medical school education and not with the underlying reasons for it. I am sure many of us would like to understand which individual costs associated with medical education have led to a rate of cost increase more than double the rate of inflation in general. More information may allow a firm diagnosis and subsequent cure for the problem rather than treating the symptoms and allowing the process to continue.

Congratulations on the continued rise in the rankings of the Medical School!

*Randall D. Johnson
(M.D. 1975, Residency 1977)
Asheville, North Carolina*

My thanks to Dean Lichter for showing the error of my logic in thinking that inflation accounts for most of the increased debt of the modern medical student, when, in fact, tuition has far outstripped inflation. He could have gone a step further and explained and justified that increase in tuition.

*Thomas F. Higby
(M.D. 1958)
Fowlerville, Michigan*

I was very pleasantly surprised to see in the Fall 2001 issue of *Medicine at Michigan* that Dean Lichter and others at the Medical School are making student debt a primary focus for alumni giving for the future.

Family circumstances made it necessary that I pay for my undergraduate education by working summer jobs and earning scholarships. My desire has always been to serve other people in my vocation, and training in medicine seemed like a natural fit. Unfortunately, summer jobs are not adequate to cover the costs of my medical education. Equally unfortunately, there seems to be a dearth of scholarship opportunities. My parents have been a great support — more than I ever could have hoped for.

*I was surprised that it can
be so hard for a good student
to find financial support*

My father, a retired schoolteacher, paints homes in an effort to help support the high cost of my living in Ann Arbor. I live as frugally as I can, sharing housing with 31 other medical students in a cooperative housing arrangement at the Phi Rho Sigma Medical Society, driving an old, underinsured car, and working during my breaks. And still it is not enough. I will graduate owing an enormous amount to the government, as well as to my parents from whom I borrowed along the way.

I don't mean to sound ungrateful. I realize the tremendous opportunity I have been given to study at the U-M Medical School, and I'm thankful for it. But indeed I was surprised that it can be so hard for a good student to find financial support (other than loans) from within the Medical School — particularly at a school with as much pride and tradition as ours.

So thank you to Dean Lichter and everyone at the Medical School for taking the lead in advocating for what might be seen by some as an unpopular cause — but one that is so vital to assuring the future of our ability as an institution to attract the finest students from all walks of life. I, as well as many other present and future students, genuinely appreciate your efforts on our behalf.

*Eric D. Achtyes
Class of 2003
U-M Medical School*

Dean Lichter replies:

The reasons behind the rising costs of medical education are myriad and involve a complex set of interconnected social, economic, technological, educational and scientific factors.

As medicine has become more and more specialized, and discoveries have pushed the frontiers of knowledge to new limits, the infrastructure supporting that progress — laboratories, equipment, materials and staff — has grown more specialized and expensive as a result. Just the cost of supplying the infrastructure to run our curriculum and serve our students approaches \$7 million annually, a cost we incur before compensating any department for the thousands of hours of faculty time and effort involved in teaching.

Vast changes have taken place in how we educate our students, including sophisticated computerized instruction in anatomy (see the article on page 34); the utilization of digital photomicrographs in histology and pathology; a full clinical assessment exam with 15 separate stations supervised by senior faculty members, complete with standardized patients to ensure that students graduate not only with knowledge that can be tested on written exams but also with clinical skills that can be tested only by one-on-one student-faculty interaction; and computerized patient simulators to teach students about emergency care such as resuscitation before they have to perform this on a living patient. These and many more expensive additions have contributed

to increased medical education costs, but they are also critical to the education of our students and to our competitiveness as a top medical school.

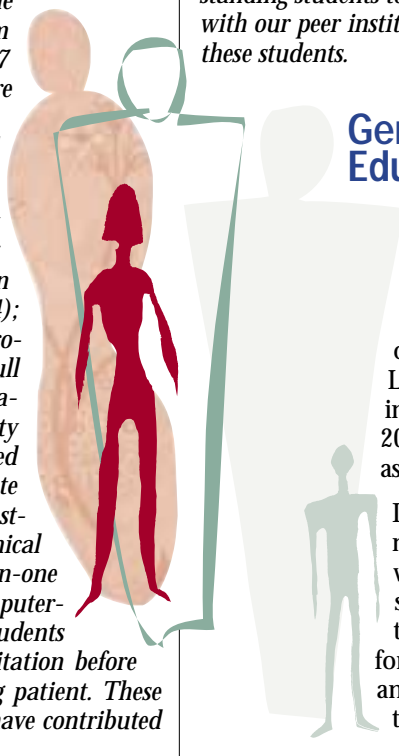
There can be no doubt that greater scholarship support is absolutely essential, and we are eager to raise scholarship funds.

Despite these ever mounting costs, we have held our tuition increases to three percent annually for the last three years, the smallest increase in tuition of any school or college in the University. This increase barely covers our inflationary costs to say nothing of our increasing program costs. We are trying to avoid passing these increased costs to our students and adding to their debt burden even further. There can be no doubt that greater scholarship support is absolutely essential, and we are eager to raise scholarship funds. Without such funds, we simply cannot continue to attract outstanding students to the field of medicine and compete with our peer institutions for the best and brightest of these students.

Gender-specific Education Reflects Fragmented Society

The rationale for the Women's Health Program at the University of Michigan ("Bitter Pills: The Long Struggle to Achieve Equality in Women's Health Care," Spring 2001) is based on many false assumptions.

If you were a Martian and journeyed to earth and found that women out-live males by almost six years, which gender would you think was not appropriately cared for? Which gender is encouraged and, for the most part, obtains routine yearly examinations (paps ➤



Letters

and mammograms) and accounts for almost 60 percent of physician visits? For more information read the chapter "Sisterhood and Medicine" in *PC, M.D.* (Politically Correct, M.D.) by Sally Saltel, M.D. Gender-specific education is yet another example of victimology and separatism which have become all too common in America's increasingly fragmented society.

*Richard F. Lockey, M.D.
(Residency 1970)
Tampa, Florida*

Timothy R. B. Johnson, M.D. (Residency 1979), chair of the Department of Obstetrics and Gynecology, replies:

Gender battles! In my specialty, male physicians are starting to feel intimidated by the large number of women choosing the specialty and the many women patients who prefer a female provider. Medical students are asking faculty about career choices with gender issues in mind. Encountering discrimination for the first time is a very uncomfortable — and very illuminating — experience.

I do agree with Dr. Lockey that there are many health disparities where men appear disadvantaged. In Russia, women outlive men by almost 12 years and the gap is widening.

It is important to do the gender analysis to identify the disparity and try to understand it. It is my hope that gender-focused research will lead to improved understandings that will benefit both men and women (and sometimes men even more than women).

Interested readers should check out the recent Institute of Medicine report, Exploring the Biological Contributions to Human Health: Does Sex Matter? (Wizemann and Pardue, editors, National Academy Press, Washington, DC, 2001).

The Respect They Deserve

The celebration of the excellence of animal care at Michigan attending Dan Ringler's retirement (Winter 2001) reminds me that it was not always so. I grew up as a teacher in medical schools in the old days beginning in 1941 when the only creatures treated worse than the medical students were the animals. Animal quarters were usually cared for by failed farmers or otherwise unemployables sent by the personnel office, and the quarters were the sink-holes of creation.

In the 1950s the National Institutes of Health recognized the problem and began a program to correct it. Veterinarians, preferably those with experience in education, were given special training and then sent out to medical schools accompanied by substantial grants with the mission not only to improve animal quarters, but to see to it that animals used in teaching and research were legally acquired and maintained in good and healthy condition. Bennet Cohen was one such veterinarian. He had a Ph.D. in physiology from Northwestern University, and his first job was at UCLA. I knew Ben as I evaluated his research grant requests when I was on the physiology study section and I had appointed him chairman of the American Physiological Society's Animal Care Committee when I was the Society's president.

I inherited management of animal quarters when I became chairman of Michigan's Department of Physiology in 1956. I was not good at the job, and every so often a faculty member pointed that out to me. When dogs were needed, great iron cages were sent to the Detroit pound in a truck hired from Godfrey Moving. The cages were accompanied by the man who took care of the animal quarters and by a bottle of whiskey provided by David Bohr to lubricate the good will of the Detroit pound keep-



Bennet Cohen

Photo courtesy of ULM

ers. When the cages returned the dogs were let loose in the dog runs on the roof of East Medical Building. Members of the faculty rushed to claim the better dogs for their acute experiments. No one could do a chronic experiment, for even an originally healthy dog would soon die. Rats bought from the Charles River Company were housed in dirty cages in a windowless room.

One Monday morning in 1961 I received a letter from Ben Cohen. He was unhappy at UCLA. Was there a job for him at Michigan? Thus began the progressive era of animal care at Michigan.

Dean Hubbard used \$50,000 to build a structure to Cohen's specifications on the back of Med Sci II, and Cohen soon had his Unit for Laboratory Animal Medicine going. Dogs collected by Dan Ringler from pounds all over southern Michigan were washed, wormed and immunized before they were turned over to an investigator, and dogs used in the student laboratory were clean. I could do long-term experiments on healthy dogs prepared with Heidenhain pouches by Max Bree, a big, bouncy veterinarian hired by Ben Cohen to help him. Calves were ready for surgeons to practice heart transplantation. Monkeys and pigs were supplied as required, and rat cages were washed on-schedule. Each department's animal quarters were staffed by someone appointed, trained and supervised by ULAM. I'm proud to say that animal care at Michigan has been exemplary ever since, and I'm happy to have been there when animals began to get the respect they deserved.

*Horace W. Davenport, D.Sc.
William Beaumont Professor Emeritus of Physiology
Birmingham, Alabama*


Essay Recounts the Scientific Contributions of James V. Neel

The Winter 2002 issue of *Perspectives in Biology and Medicine* (volume 45, number 1) contains an essay, "Perspectives Fulfilled: The Work and Thought of J.V. Neel (1915-2000)," by Kenneth M. Weiss and William J. Schull, that may be of interest to many members of the Michigan community. The authors, who are longtime friends and colleagues of Neel, have written an interesting and informative account of Neel's scientific work — from his research with the Atomic Bomb Casualty Commission to his studies of indigenous populations in the Amazon — and of the world view that motivated and informed his research.



Perspectives in Biology and Medicine is an interdisciplinary scholarly journal published by the

Johns Hopkins University Press. Members of the Michigan community can access the journal in electronic format via project Muse — <http://muse.jhu.edu/journals/pbm> — the electronic publishing project of the Johns Hopkins University Press.

*Robert Perlman
Editor
The University of Chicago* 

Correction

Medicine at Michigan's listing of 2001 faculty and student awards in the Fall 2001 edition (page 43) inadvertently omitted the MCAS Scholarship Service Award, presented to then-third-year medical student Jeff Angobaldo.

Letters