

Sandy C. Marks, Jr. DDS, PhD

November 16, 1937 - November 27, 2002

Collected Memories from Friends, Students and Colleagues

Remembering Sandy C. Marks, Jr., D.D.S., Ph.D., Professor of Cell Biology, Radiology, and Surgery

The unexpected loss of Professor Sandy Marks in late November is still reverberating through the Department and the Medical School, as well as in labs at other institutions around the country and the world. "When I think of the ideal of what an academic person should be, I think of Sandy," said one faculty member. Another said, "He really was the ideal faculty member. He did research, education, service, and clinical work. He had all the elements we strive for, and he did them all with such excellence."

Since joining the brand-new UMass Medical School as a founding member of the Anatomy Department in 1970, Sandy put a stamp of excellence on everything he did. Perhaps more importantly, he also brought his wide-open generosity, friendship, and positive principles wherever he went.

In December, the Medical School honored Sandy's memory with a Celebration of his life. That event was unique in the history of the Medical School. In the jam-packed Faculty Conference Room, more than a dozen people spoke - faculty colleagues, lab members, students, friends, post-doctoral mentees. All tried to convey the tremendous, positive impact Sandy had on their lives. It was an outpouring of the genuine love and respect he inspired in those around him. Sandy treated everyone as his friend and equal, no matter what position they held, and he had a rare gift for never forgetting people and what made them special. The speakers' remarks from the Celebration and the pictures from the slide show in the School lobby afterward are being incorporated into a booklet that will also include other "Sandy Stories" and pictures contributed by many others from the Medical School. In addition, Dr. Gary Stein has offered a special issue of *Critical Reviews in* Eukaryotic Gene Expression, of which he is editorin-chief, to commemorate Sandy, his life, and his scientific contributions.

Sandy's research program was consistently successful and well-funded over a 30-plus year span. The RO1 grant, "Bone matrix and bone resorption," from the National Institute of Dental and Craniofacial Research is currently in its 17th year and is funded for 5 more years. During all Sandy's years here, his lab and his wife, Julia, hosted a long stream of visiting scientists, postdoc's, and graduate students. Most consider their time with Sandy decisive in setting the directions and standards for their careers, and they have many stories of how he continued to help them long afterward. And it was never all work and no play. There were birthday lunches for all the lab members, dinners with visiting scientists, and lab "field trips" to L.L Bean's, or to Cape Cod to visit his friends, the Morings.

In the course of his research career, Sandy made a series of significant contributions to skeletal and oro-facial biology. During and shortly after his Ph.D. research with Dr. Donald Walker at Johns Hopkins, Sandy established the hematopoietic origin of the bone-resorbing osteoclast. He pioneered the use osteopetrotic mutations in rats and mice to understand normal and pathologic skeletal development. His studies of tooth eruption demonstrated that the soft tissue around the tooth is necessary and sufficient to excavate an eruption pathway through the jaw.

Sandy was pleased to see molecular biology enter the *in vivo* world with the advent of knockout and transgenic mice, as he steadfastly maintained that *in vitro* work must be interpreted with caution. Nowhere was this more evident than in his work on prostaglandins. Sandy and his collaborators showed that, contrary to what had been concluded from in vitro work, PGE1 and PGE2 are not bone-resorbing agents, but rather are the most potent bone forming agents ever discovered. For many years, Sandy's family summer vacations were spent at Bar Harbor, Maine, where he could work with friends and colleagues at The Jackson Laboratories and investigate new skeletal mutations in mice.

His contributions to anatomy were also lifelong and significant. As a teacher of Anatomy, he again exceeded expectations. While many successful researchers prefer to minimize their involvement in teaching, Sandy loved the chance to reach young minds. He created much of the anatomy curriculum and taught gross anatomy for many years. He taught advanced courses on surgical anatomy of the head, neck, and back. More recently, he focused primarily on the head and neck. He always tried to get medical students to think about patients as people, and to consider the anatomical basis for clinical findings.

At the suggestion of our retired deiner, John Santos, Sandy created our Anatomy Museum, a collection of expert dissections which is the envy of the Massachusetts medical schools. He also created the Anatomical Gifts Program and the annual Memorial Service that the medical students put on to honor and remember those whose donations made their education possible. Body donation involves deeply

personal, ethical, and emotional decisions, and clearly Sandy's respect and empathy was key to making the program so successful. The unrivaled success of the Program led to Sandy's spending a decade as the Coordinator of Anatomical Gifts for UMass, Harvard, Boston University, and Tufts Medical Schools.

Sandy was a founder and Honored Member of the American Association of Clinical Anatomists and served as co-editor-in-chief of the journal Clinical Anatomy for ten years. He authored anatomy textbooks and CD-ROMs, including the just-released 5th edition of *McMinn's Atlas of Human Anatomy*. He was also a member of some 30 other professional associations and was an advisor to the American Assoication for the Advancement of Science on dental and craniofacial issues.

Sandy consistently applied his deep understanding of skeletal anatomy and growth to help others. With former Pathology Department member, Dr. Paul Kleinman, Sandy authored a series of papers, monographs, and book chapters on how to detect and diagnose child abuse by X-ray and in post-mortem histological samples. Due to specific weak spots at the joints and within the epiphyseal growth plates of growing bones, children who are shaken or otherwise mistreated have characteristic types of fractures and fracture histories that can be seen in radiographs. Sandy also maintained a part-time periodontal surgical practice from many years and had recently begun volunteering his services at a free dental clinic in Worcester on a bi-weekly basis.



We would be remiss if we didn't mention his work on leprosy. Sandy was born in North Carolina, but grew up in the then-Belgian Congo as the son of a dentist in a mission hospital. Twenty-five years ago, when looking for a place to go for a sabbatical, he thought he would like to go somewhere where his "kids could see how other people in the world live." So the family moved to Malaysia for a year where Sandy worked on oro-facial surgical reconstruction of leprosy patients and also studied the mechanisms of bone resorption in leprosy. Characteristically, he also became deeply involved in wider services to the patients, issues such as housing and accommodations for their familes. The collaboration with his Malaysian host, Dr. Krishnan Subramanian ("Subra" to those who have met him on his visits here) continued over the years, and recently culminated in the completion of a monograph on leprosy. Subra will be visiting the department to put finishing touches on that project.

Finally, all remember Sandy not just for all that he accomplished in his career (careers, really) but for the joy he spread while doing it. We all know the big laugh, the slap on the back, the little nicknames he had for everyone. He was never too tired or busy to do a favor for someone, whether it was serve dinner to mentally retarded adults from the Glavin Center or just to write a postcard to a friend's kid from one of the countless places his travels took him. He was truly one of a kind, and all who knew felt it was a rare privilege to share our time with such a remarkable human being.

Paul Odgren, PhD, for Cellutations

Contributions are welcome to the: Sandy C. Marks, Jr, Medical Education Fund PO Box 670 Westborough, MA 01581

A PDF version of this book is available at: http://www.umassmed.edu/entities/cellbio/sandymarks.cfm

Honoring and Remembering A Celebration of the Life of Dr. Sandy C. Marks, Jr.

Tuesday, December 17, 2002, 4:00 PM Faculty Conference Room University of Massachusetts Medical School

Program

Prelude

Class of 2005

Shaker Melody, Traditional Lauri Bolton, Cindy Su, Taylor Sittler, Heather Young Eulogy in A minor, B. Hyett Brian Hyett

Aaron Lazare	Chancellor/Dean
Gary Stein	Chair, Cell Biology
Paul Odgren	Collaborator, Cell Biology
Steve Popoff	Former Post Doc
John Cooke	Teaching Colleague, Cell Biology
Anne Gilroy	Teaching Colleague, Cell Biology
Carole MacKay	Research Colleague, Cell Biology
Shirwin Pockwinse	Research Colleague, Cell Biology
Saki Santorelli	Director, Stress Reduction Program

Largo, from Sonata for Cello and Piano, Opus 65 Frederyk Chopin Ken Wolf, piano Colleague, Cell Biology Betsy Bronstein, cello Cell Biology

Text from Celebration Speakers Honoring and Rembering Sandy Marks

On behalf of the University and the Medical School, I offer my sincere condolences and my abiding appreciation to Julia and the rest of Sandy's family. I say "appreciation" because, in addition to our profound sense of loss, we are reminded that Sandy Marks' contributions to this medical school were fundamental, and spanned a professional career that was supported by, and shared with, his family, his friends, and his colleagues here and around the world.

The loss of this dedicated and committed individual is a significant loss to our Medical School community as well as to each of us individually. We recall the energy and enthusiasm that imbued our founding faculty members who, like Sandy, came to Worcester from different parts of the country to create a new medical campus. In several ways, Sandy epitomized that cadre of founding faculty whose success in establishing an institution of distinction is so evident.

He took teaching as a calling, and so was known to every medical student we have graduated, including his son, Sandy the third, who graduated in 1992, and to dozens of graduate students and thousands of colleagues here and at other institutions where he visited, lectured or collaborated. He was an active and imaginative scientist, whose research reflected a commitment to using science to alleviate suffering. And he was an open, expansive and curious person, who liked nothing more than learning something new, meeting someone in a different field, or exploring a new avenue of inquiry.

Sandy cared deeply about his work and his profession, and was a mentor to a number of us in this room right now. It is moving to see so many of you here today to acknowledge what Sandy Marks meant to you personally and professionally, and what he meant to the profession of medical education. Please join me in a moment of silence in honor of our late friend and colleague, Sandy C. Marks, Jr.

Aaron Lazare, MD, Chancellor and Dean, UMMS

Solution of the students, faculty and staff throughout the institution and it is an understatement to say that his legacy includes the standards of excellence that he established and fostered in education, science and most important in collegiality. Sandy strongly felt and I quote "family and friends come first, science and careers maybe a distant second". But he violated that rule because the people he worked with were his closest friends. And I think it would be very difficult to really discriminate between those with who he worked with, played with and cared for. They were synonymous.

So Sandy will always be missed but certainly never be forgotten by us.

Gary Stein, PhD, Chairman, Department of Cell Biology



In the past couple of weeks, a lot of people have said to me, "I never realized how many different things Sandy did." Well there's a big reason for that. He didn't do any of it for himself, or for recognition, or to pad his cv, so he never made a big deal of it. But today the cat's out of the bag, and everybody finds out just how far he reached, and what standards of excellence, commitment, and principles he brought to the many facets of his life. He got a bigger kick out of helping people than anyone I've met, and he squeezed more into each day than any workaholic, which he wasn't.

We'll hear today from some of the people whose lives he invaded with his energy and good cheer. I had the great luck to be recruited by Sandy to help run his research lab six years ago, and what a six-year ride it's been. I've decided to try to give a short overview by recounting just the highlights of his last two weeks with us. But I promise you that just about any two weeks we could pick would be just as densely packed.

In the final two weeks of his life:

He finished a monograph on leprosy, the culmination of a 25-year collaboration that began when he took his family to Malaysia for sabbatical in the '70's. It covers the pathogenesis of leprosy, medical and surgical treatments, and how to care for patients and their families.

As an outside PhD examiner for a South African student, he evaluated a 1000page thesis on medical and surgical treatments available in rural and urban settings in that country.

He received the beautiful new 5th edition of McMinn's *Atlas of Anatomy*, a book he co-authored with two British colleagues, and, typically, had already started making notes toward the 6th edition.

He volunteered his services as an oral surgeon at a free dental clinic in Worcester.

He completed a review on the osteogenic effects of prosataglandin E1, work based largely on his discovery that it's the most potent bone-forming agent ever identified.

He finished teaching his 32nd class of medical students, an intense activity in which he taught them not only anatomy, but how to conduct their professional lives with the greatest respect for human dignity.

He lectured dental students about his pioneering research on tooth eruption in which he disproved prevailing theories and showed that, not the tooth, but the soft tissue around the tooth contains all the information needed to carve the eruption pathway in the jaw.

He collected and distributed articles on academic freedom, university governance, and the dangerous and slippery slope of using business models to run educational institutions.

He helped organize and serve Thanksgiving dinner to a hundred mentally retarded adults at his church.

And we had just received a selection of fine Belgian beers from a grateful colleague in Antwerp for success in publishing our work mapping an osteopetrotic mutation in a rat. Just your typical couple of weeks.

As impressive as all this is, more important to Sandy were the great friendships he made along the way, and how much fun he could have doing it all. His friends are legion, they come from all over the world, all walks of life, and once you were his friend, there was no escape, he never forgot you. In that spirit I'd like to close by giving a special thanks to the people here in our group who make scientific success such a pleasure – Carole MacKay, April Mason-Savas, and Alison Gartland. And thank you Sandy. May your fun-loving spirit, your open-handed generosity, and your high standards influence the thousand decisions, large and small, that we all make every day.

Paul Odgren, PhD, Research Collaborator, UMMS Department of Cell Biology

I first met Sandy Marks in 1974 when I was applying for a postdoctoral fellowship with Ken Wolf. Typical of Sandy, the warmth and exuberance of his first greeting made me feel welcome. With Sandy and Ken as my mentors in anatomy, how could I go wrong?

With all the other speakers here today, I will focus on two areas of Sandy's activities that I know meant a lot to him and a lot to the school, The Anatomical Gift Program and the Anatomy Museum. Sandy served as the first statewide coordinator of anatomical gifts. At that time he asked me to help him by serving as the anatomy department's faculty representative. I was privileged in that position to observe first-hand the passion and the dedication that Sandy brought to that office. As in so many other activities of his life he was always brimming with ideas to make things better -- as Dianne Person, who has worked briefly in that office, can certainly attest. In the early days of the school Sandy recruited John Santos from Dalhousie Medical School in Nova Scotia to become the first diener of the anatomy department in 1974. Always open to new ideas, Sandy immediately embraced John's suggestion that UMass Medical School ought to have an anatomy museum to complement its teaching program. Of course the museum soon became a reality and is now the envy of the Boston medical schools.

I want to finish by reading part of a poem that Sandy received several years ago from a donor by the name of Claire Small. I know the poem meant a lot to Sandy. He selected it to be placed on the plaque that is placed at the entry to the museum.

> "...May that life force that ran in me shine forth once more and pass to you the knowledge and the power that help sustain the miracle of life "

We are grateful to be the beneficiaries of a donor like Claire Small and an outstanding anatomist, teacher, mentor and friend like Sandy Marks. Their gifts are enduring gifts.

John Cooke, PhD UMMS Colleague







Like he was to so many others, to me Sandy was a mentor, a colleague, and most importantly, a dear friend. I first met Sandy in March of 1985 and the memory of that weekend we spent together is as if it were yesterday. I was searching for a postdoctoral fellowship and my wife and I came out to visit Sandy and his lab here at the medical school. Through our various interactions with Sandy over that weekend we got a great taste of New England and Sandy's warmth and hospitality were clearly evident from the beginning. Upon leaving to return to Chicago, I had no doubt in my mind that I was coming to Worcester to do my postdoc with Sandy. In retrospect, that was probably the best decision that I ever made as the impact that he had upon me personally and my career was immeasurable.

Sandy was the mentor among all mentors; the teacher among all teachers. Sandy had a passion for teaching, whether he was in the classroom with a group of medical students, or working with you one on one. And he had so much knowledge to share with others. He always had time for you and truly enjoyed helping you learn; he made it fun. Whether it was writing a grant application, planning an experiment, or preparing a presentation – I learned a lot and the experience was always enjoyable.

Sandy was the scientist among scientists. Sandy's accomplishments in this area are too numerous to list in detail, from his long list of publications, his many grant awards or the hundreds of collaborators with whom he worked around the world. Sandy had a brilliant mind; he wrote in pages and thought in paragraphs. I remember Sandy completing the draft of a manuscript on the flight back from a meeting. He simultaneously managed an extensive research program, a large teaching commitment, his clinical practice in periodontics and a multitude of community service activities – and yet he always found time for others – a truly remarkable feat.

What I remember most are the little things and there were many. Like the road trips to visit collaborators at Dartmouth and Duke; and the trips to meetings to present our work like those to Montreal, Davos, and San Francisco (among the many places we traveled together). Together we ate soft shell crabs in Baltimore and Maine lobster at the Gordon conference in New Hampshire. There were the lab outings like those to LL Bean in Maine for a day of holiday shopping or the annual beach/picnic outing at Moring Manor on the Cape. There were frequent dinners for the entire lab group to entertain guests (usually research colleagues), or for birthdays or other special events. These types of activities were commonplace in Sandy's lab, interspersed between the normal work routine to assure that everyone was having a good time and being rewarded for their work.

After 3 and 1/2 wonderful years working with Sandy, when it was time to move on and establish my own career, Sandy was most supportive of my decision to accept a faculty position at Temple's med school in Philadelphia. In the years that followed, he played a key role in my success moving up the academic ladder. The bond between us that had developed while I was here at UMass got even stronger after I left and our collaboration flourished (of course, I had much more to gain from the collaboration than did Sandy). We published many papers together over the years and I will continue to do so with

the numerous collaborative projects that are currently underway. I frequently turned to Sandy for his advice and support; I remember when I was offered the Chair of the Department of Anatomy and Cell Biology at Temple, Sandy was traveling overseas at the time. I called his wife Julia to find out how I could get a hold of Sandy; once again I needed his advice on some key issues. When Sandy found out that I was trying to get a hold of him, he called me at 5: 30am the next day, figuring that he would reach me at home at that time. Sandy always found the time for everyone, no matter how busy or far away he was.

Sandy was the person among the people. Sandy lived life to its fullest extent and he had a passion for friends and family. Unlike most people who need some space, Sandy thrived by having the people around him close to him and he shared himself freely with those around him. For the 3 and ½ years while I was at Umass, Sandy shared his office with me – He was happy to let me use his office as my own. Sandy's insatiable appetite for people is evidenced by the scores of individuals whom he befriended around the world. One couldn't help but become a friend of Sandy's – He brought out the best in all of us.

Most important to Sandy was his family. He was extremely proud of his family. His wife Julia, his daughter Christine and son-in-law Jeff, his son, Sandy (an alumnus of UMass Medical School) and his daughter-in-law Lisa. He got the greatest pleasure in the time that he spent with them. Most recently, Sandy enjoyed telling stories about his grandsons, Erik and Luke. The one that stands out in my mind is when he was at Chris and Jeff's house in Connecticut doing some work. Erik was entertaining a friend when the friend asked Erik what his Grandad did for a living. Erik responded, "My granddad is a mouse man". Sandy loved telling these and other stories.

Sandy, my friend, there is no question that you left us far too soon. You left something behind in everyone with whom you interacted and it is the fond memories of you that help us cope with the enormity of our loss. What we have to hold onto are the memories that we cherish and that allow your legacy to live on through us.

Steven Popoff, PhD, Chair, Dept. of Anatomy and Cell Biology Temple University School of Medicine







Good afternoon Julia, Christine, Jeff and friends, I met Sandy Marks 32 years ago when he joined the, then, Anatomy department as a founding faculty member. I grew up with him at UMass. I married, had my daughter, went through those challenging teenage years and Sandy was always there with support and wisdom. He was a model of integrity in every aspect of his life.

What energy! And that smile!! He was a beacon of light! Somehow, you always left a conversation with him smiling and laughing. He brought out the best in people.

Before April joined his lab and I was the departmental electron microscopist, Sandy and I spent many hours on the electron microscope searching and recording those elusive osteopetrotic osteoclasts. During one session he related a fall foliage trip with his young children, explaining and exhausting his knowledge of the changing of leaf colors.

His love of his family was always present. You were such an important part of his life.

We worked hard but there was also time for recreation. In those early years, Sandy organized lunch time swimming at the YMCA pool or a quick game of volleyball at his church_and then, of course, we were in the UMass softball league. Now remember, we were the Anatomy department back then. Our team was called the Cadavers. We wore bright yellow t-shirts with the anatomy torso printed on the front and back and bright yellow caps with our insignia: a skull and cross bats. Our motto was... **Cadavers never die!** We actually opened a few games with Kevin Byron playing the national anthem on his saxophone. More recently, 9 years ago, I was honored as UMMC employee of the month for the month of August and from that moment on Sandy called me "Miss August"....it always makes me smile!

Sandy's birthday was the day after mine and we always celebrated that fact. I always received a card with an inspirational greeting from him and when we reached that large decade marker of 50 and 60 years, the Cell Biology department gave us a wonderful surprise celebration.

We loved him, we respected him, and we laughed with him.

Shirwin Pockwinse,

UMMS Cell Biology Senior Research Technician

Istarted to work in Sandy's research lab in the fall of 1980. I had no idea then what an adventure I was about to take. Sandy felt if we all worked hard together we should have some fun outside the lab. We went on what he called our lab field trips to L.L. Bean, Portland, and our annual "life is a beach" trek to the cape to visit Eva and Andy Moring, former members of the UMass family. We were even known to go strawberry picking and then go back to Sandy and Julia's to make numerous jars of strawberry jam. I was never sure how Julia felt about that particular field trip, although Sandy assured us she didn't mind. He brought us back treasures from his trips, he celebrated all of our birthdays, he was interested in everybody's kids. Sandy taught me all about osteopetrosis, bone biology, tooth eruption and so much more. The Monday before he passed away we were sitting at the microscope going over some slides, and he was as enthusiastic and excited about what we were looking at as he was the first time I sat at a microscope with him some 22 years ago. It was his enthusiasm for the work, his extraordinary kindnesses, and the environment he created for us to work in that I will always remember. I am grateful and proud to say I worked in the laboratory of Dr. Sandy Marks.

Carole MacKay, Senior Research Technician



Review article

The origin of osteoclasts:

Evidence, clinical implications and investigative challenges of an extra-skeletal source

S.C. Mans, Ju.

Department of Periodontology, Tub's University School of Denial Modizino, and Department of Austromy, University of Massachusetts Medical School, Worsteiler, Massachusetts, USA

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copted for publication September 28, 1982



To Carde -a logal, hard-wonding friend who had the tomorge and foresignt to declare we ar OSTECCUST EXPERT before my time o



Itaught Gross Anatomy with Sandy Marks for 14 years. He was one of my instructors when I was a student in the anatomy course here 15 years ago. When I joined the faculty the following year he became my mentor and colleague and of course, my friend.

Sandy was a big part of my becoming an anatomist. He was almost wholly responsible for my introduction to the international community of anatomists through his affiliation with the American Association of Clinical Anatomists of which he was a founder. He continues to be one of their most respected and honored members. I certainly will continue to enjoy the benefits of his support for the rest of my professional life. But he also brought distinction to the Dept of Cell Biology and the University with a stream of visiting collaborators. He even succeeded in hosting the annual meeting of the AACA here at UMass in the early 90's.

Some of my best memories come from those annual meetings. I remember standing next to him on a stage in Waikiki learning to hula dance!...can you picture that?

They say that everyone you meet has some influence on you. I hope that's the case because I have a great respect for Sandy's personal philosophy.

He believed in the basic values like generosity, kindness, and friendship.

He believed that people were good, unless they proved themselves otherwise.

He believed in being part of the solution even if it were he who created some of those problems.

And he believed that life really was simple if you just remembered your priorities. He was particularly fond of a wonderful book called "*All I Really Need To Know, I Learned In Kindergarten*" by Robert Fulghum. One passage he often quoted is really just a list of simple wisdoms – share everything, play fair, don't hit people. But today I want to read a different passage that I know he also liked and that reminds me of him: It reads:

I believe that imagination is stronger than knowledge. That myth is more potent than history. That dreams are more powerful than facts. That hope always triumphs over experience. That laughter is the only cure for grief. And I believe that love is stronger than death.

It was a wonderful treat being his friend and I am honored to share in this celebration of his life.

Anne Gilroy, Teaching Colleague, UMMS Department of Cell Biology



I first met Sandy nearly 20 years ago when he was a "patient" / "participant" in the Stress Reduction Clinic. Over the years, he participated in several other Stress Reduction Clinic courses I taught for people who have completed our basic clinic course. I also taught with him in the Medical Humanities program on Dissection that he and the other Sandy - Sandra Bertman - developed here at UMass.

The last time I saw him was in late October. His long-time colleague and old friend, Jon Kabat-Zinn, and I were having dinner together at a local Indian restaurant. Sandy came through the door like a "whirlwind" – literally the word we used to describe his entry. He saw us, we asked him to join us, he then pulled up a chair, spoke with us for thirty minutes nearly non-stop and then just left! No food in hand, no immediate reason for being in the restaurant...In and out...just like that!

He sent this note the next day:

"What a treasure to talk with you and Jon last night...The best nourishment for my soul in a long time. Thanks for your example and your friendship."

Sandy was a soulful person. He wasn't afraid to ask the questions, "What does it mean to be a human being?" and "How can I best serve the common good?" He engaged these questions through his dedication and engagement in that visible, outer sphere of knowledge we call **scientific understanding** AND simultaneously through that less visible – but no less tangible, inner sphere we call **self-knowledge**. He understood the critical, interdependent relationship of "self" and "profession," the tangled, constraining webs of self-aggrandizement we are all too often subject to, and the necessary interior work required to understand and hopefully diminish, this persistent force in our lives. He seemed determined to explore and cultivate what Socrates called, "the inner harmony of mind, body, desire, and will that create the necessary conditions for outer harmony." Given his enduring commitment to these twin ways of knowing, Sandy was a true scientist. He cared about his inner life because he knew that a certain kind of deliberate interior work has much to do with what we do and more so, HOW we do what we do in our everyday lives.

He loved this place. He rejoiced and ached about this Medical School. Without inflation, I'd call him a "patriot" of UMASS. He was concerned, loyal, and engaged. Like Thomas Jefferson, he challenged the very place he had a huge hand in building and, while difficult, I suspect that this was good for all of us. He took seriously the ethical responsibility of *speaking up* rather than sliding into silence and the attendant cynicism that is often the result of such a stance. He cared about the Soul and Spirit of UMass and I, for one, will miss his presence in the halls and corridors of this fine institution. I hope that we have the courage and fortitude to continue to honor his spirit *by speaking up, working together, and doing our best to serve the people of this region*.

Saki Santorelli, EdD, Director, UMMS Stress Reduction Clinic





Thave known Sandy and Julia for about 30 years, the friendship catalyzed by a shared vision of a world full of peace and social justice.

I found the title for my comments this afternoon in Sandy's often uttered statement, "Remember to keep your priorities straight. Family and friends come first. Science and career are maybe a distant second." As we ponder Sandy's life, with its excellent contributions to science (even though he relegated it to "maybe a distant second" in importance), and his activism for social causes, it is clear that these efforts are for the world at large. So his "family and friends" means everyone on earth. Sandy and Julia are truly friends of humanity and the earth.

Sandy actively supported Physicians for Social Responsibility, whose single purpose was to prevent the catastrophe of nuclear war, and is now broadened. He actively supported Physicians for a National Health Program, whose goal has been to replace the ills of our so-called health care delivery system with something like Canada's single payer system, aka "Medicare for all." At the earthier grassroots level, Sandy and Julia were regular protest demonstrators in Worcester during the first Iraq war. Their dignified, friendly presence added immeasurably to that effort and numerous others over the years in various venues. During Sandy's two-year tenure at NIH, while he was a naval officer, Sandy and Julia participated in the protest March on poverty in Washington. A bit risky when on active duty.

What emerges here is the picture of a dignified southern gentleman and scholar of superior intellect who lives a life of service guided by love and lofty ideals, keeps his humility, as a true scientist does, and, braced by the strength of his convictions, speaks truth to power.

Again, in Sandy's words, "Remember to keep your priorities straight. Family and friends come first. Science and career are maybe a distant second."

Thank you, Sandy, for your life, your work and your friendship. And thank you, Julia, for all you had to do with it. We love you both.

Ted Conna, MD, Physicians for Social Responsibility



October Normber 1985 UMASS MEDICAL CENTER

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A Goodwill Mission to Nicaragua

There are insights an ordinary cidion can offee about his station, culture and problems arrangles that years of revesting networats from distant lands cannor.

That's what anatoms professor facedry Marke, D.D.S., Ph.D., discovered atworks a match ange when its travelad to a Neuragnam harris to help build a bualth classe for its imposeriabad residers. He energed from the experiments and accuse? "of his life-waith an suffergulate constantion work for press in the travelod segion. Marks insued Varies, a local mean

Morela pensed voetso, a tousi gramcost homanistrian project, at the unng of a Cambridge Hend. The Manichnetts columners were arong a rough of takespecific, clergy, and there-more and woman who has





Four Nicaraguan youths pause from playing their homemade version of soccer to pose for Dr. Marks.

On behalf of 2400 alumni who had the privilege of studying here under Sandy Marks, I offer these words of thanks not only for his expert teaching of anatomy, but even more importantly, for his inspiring example of integrity, kindness, and active caring for others. Every graduate of this fine school carries within him or her a portion of Sandy's extraordinary character.

We all know that Sandy studied and taught bone metabolism, among other things, but lab work was not exactly my strong suit when I walked in here 27 years ago after a brief career teaching high school English. Unlike most of Sandy's students, who took about 2 minutes to figure out the histological differences between his beloved osteoblast and osteoclast, I took...well...I won't tell you how long I took...just to figure out what end of the microscope to use!!

Suffice it to say that without Sandy's unfailing patience and many hours of one-on-one help, I might still be struggling to make sense of those tiny blue specks in that ocean of who-knows-what. When I finally did get over that rough patch, no one was happier than Sandy, and he kept an eye out for my progress right through graduation and beyond. Even for his less troublesome students, he did much the same.

In later years---when I was a medical resident and then a member of the Emergency Department faculty here---meetings with Sandy were infrequent, but always a great pleasure. Each conversation reminded me that character counts more than anything, and that---contrary to the old saying---nice guys like Sandy do not finish last, especially when their high intelligence and dauntless dedication are guided by a steady moral compass, leavened with a great sense of humor.

Sandy has left a splendid legacy, no part of it finer than his own

exceptional family. A number of years ago Sandy's son spent some time in our ER during part of his training, and I had the pleasure of working with him a little. But you know, he and I somehow never talked about dad's favorite little blue cells. Needless to say, the young Doctor Marks did a very fine job in his important role. It was no surprise to find that an exemplary father had produced a sterling son.

Another vital part of Sandy's legacy are the unsurpassed standards he set for what a U Mass Medical School professor ought to be, both didactically and by example. He will be a very tough act to follow. This school does have teachers who share many of Sandy's wonderful qualities. And it is my hope that any new potential appointees to the faculty be judged by the Sandy Marks model. I hope this is true throughout the basic sciences and clinical sciences as well. This will then be a legacy that will endure as long as this school exists.

Finally, the alumni thank Sandy again for helping to turn 2400 kids into doctors. His salutary influence lives on in all who were blessed with his guidance. We learned from him not only about osteoblasts and osteoclasts, but also about perseverance, responsibility, and honor. Sandy certainly honored all whose lives he touched.

Irv Heifetz, MD, President, UMMS Alumni Association

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Sandy Marks, PhD, Professor of Cell Biology

"A house on Marsden Way was home to most of the first class — one of them had to sleep in a closet! The living room chandelier became the first casualty of indoor frisbee games. At the Shaw Building, the dissection room floor tiles



were laid just hours before the first cadavers arrived from Tufts. On some Fridays there were eight hours devoted to anatomy."

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express sympathy in the loss of your loved one and to let you know Rycaus that many thoughts are with you nt to evidend air your college for the basso and fries 2006 UMMS CLALS steph. Mite



When we were deciding how the class of 2006 would contribute to this memorial service we were a little puzzled. After all, we've only been here for a few months and many of us have only worked with Dr. Marks for a month or so. But then we thought about the reactions of each and every member of our class when we heard the news that Dr. Marks had passed away. We were devastated. Our reaction to Dr. Mark's death speaks volumes about the type of person he was. In a very short amount of time, he was able to reach each and every one of us on a personal level. As a testament to the impact that Dr. Marks made on our class, a poem will now be read by Nicole Lebeouf Tsat in tears and you told me about dying.

I watched in horror as you took the death from another's body.

I lost myself on my way to your office, but when I got there,

you had found me.

Knowledge, you offered us. Humor, you provided for us. Humanity, you required of us. Stability, you granted us. Instant, unwavering stability.

We watched, listened, spoke, heard, laughed, feared, cried, refused, overcame, denied, and responded.

And with a wink and a nudge of your elbow, you calmed the eruption of emotional chaos.

We learned.

And with a wink and a nudge of your elbow, you made it clear why.

Nicole LeBoeuf, UMMS Class of 2006

Leo Doherty, UMMS Class of 2006







One morning in anatomy lab Dr. Marks tapped a couple of us on the shoulder and asked us if we would be interested in helping out with an event he was organizing. It was to be an exhibition of photographs depicting the humanistic side of studying anatomy, and he needed some students to help with the presentation. I told him I'd be happy to help, but found myself wondering why he decided to ask me. I tend to jump at every chance to explore humanism in medicine, but Dr. Marks hardly knew me. Had he chosen me at random? Or had he somehow divined in the two short weeks we'd been working together that this was exactly the sort of thing I'd get excited about?

An anatomy lab is an interesting place. At first glance, the experience is cold and sterile, as gowned, gloved, and goggled students probe lifeless, partially shrouded bodies amidst the smell of formalin. Look a little deeper, however, and you might be surprised by what you can see. The way we choose to approach this experience illuminates our unspoken goals and fears. How we relate to each other and our anatomical donors reveals tenets of our character that may have been obscured in any previous setting. And in the degree to which we are willing to acknowledge the conflicted emotions we encounter, we discover

fundamental truths about who we are and what we believe. I think Dr. Marks saw all this and more. He shared with us his own struggles with questions about life and death, and how he had been changed by the experience of dissecting a human body. He understood that anatomy challenged us both intellectually and emotionally, and appreciated our struggle to find a balance between our desire to learn and our desire to feel. He met us where we were, and helped guide us as we took our first steps towards becoming doctors.

I no longer wonder if Dr. Marks saw the humanism in me. With his unique perspective, and his willingness to look, I believe he perceived the humanism in all of us.

Matthew Logalbo, UMMS Class of 2005

Dr. Marks was a wonderful man. He had a great spirit and educated us within and beyond the classroom. He always had a wink and a smile for you in the hallway. He was a true gentleman and his goodness and kindness overflowed his soul, that we could all share in it. To celebrate Dr. Marks' life I wanted to choose a poem with a wink and a smile in it. Here is an abridged version of Knee-Deep in June by James Whitcomb Riley.

Tell you what I like the best--'Long about knee-deep in June, 'Bout the time straberries melts On the vine,-- some afternoon Like to Jes git out and rest, And not work at nothin' else!

Orchard's where I'd ruther be--Needn't fence it in for me!--Jes' the whole sky overhead, And the whole airth underneath-Sorto' so's a man kin breathe Like he ort, and kindo' has Elbow room to keerlessly Sprawl out len'thways on the grass Where the shadders thick and soft As the kivvers on the bed

Plague! ef they ain't somepin' in Work 'at kindo goes ag'in My convictions!-- 'long about Here in June especially!--Under some old apple-tree, Jes' a-restin' through and through, I could git along without Nothin' else at all to do Only jes' a-wishin' you Wuz a gittin' there like me And June was eternity! Lay out there and try to see Jes' how lazy youkin be!--Tumble round and souse yer head In the clover-bloom, er pull Yer straw hat acrost yer eyes And peek through it at the skies, Thinkin' of old chums 'at's dead; Maybe smilin' back at you I' betwixt the beautiful Clouds o' gold and white and blue!--Month a man kin raily love--June, you know, I'm talkin' of!

March ain't never nothin' new--Aprile's altogether too Brash fer me! and May -- I jes' 'Bominate its promises,--Little hints o' sunshine and Green around the timber-land--A few promises, and a few Chip-birds, and a sprout er two,--Drap asleep, and it turns in 'Fore daylight and snows ag'in!--

But when June comes -- Clear my throat With wild honey! --Rench my hair In the dew! and hold my coat! Whoop out loud! and throw my hat!--June wants me, and I'm to spare! Spread them shadders anywhere, I'll git down and waller there, And obleeged to you at that!

Jamileh Jemison, UMMS Class of 2004



"Everything I did in my life that was worthwhile, I caught hell for." US Supreme Court Justice Earl Warren.

Dr. John Walsh,Faculty Colleague, UMMS Department of Physiology



The Faculty Council acknowledges with sadness the death of L our colleague and friend, Dr. Sandy Marks, and wishes to express the greatest respect and appreciation for his extraordinary contribution to U Mass Medical School. During his 32 years here since the founding of U Mass Worcester, Dr. Marks exemplified the ideal of a faculty member who excelled at all three aspects of the medical school's mission: teaching, research, and service. As detailed in his obituary, Dr. Marks was an international leader in bone research who ran a continuously highly productive and well-funded research program. He was widely respected throughout the world for his leadership in professional organizations and as the editor of the leading journal in his field. At the same time, Sandy was exceptionally committed to and involved in the teaching mission of the University, through both his own contributions in teaching and through his vocal support of the priority of our educational mission. His outstanding abilities and extensive contributions as an educator were acknowledged last year when the medical students selected him as "Outstanding Teacher of the Year". Sandy's contributions were no less in the arena of service, both within and outside the University. Among his many contributions, Sandy established and ran the U Mass Anatomical Gifts program, was coordinator of Anatomical Gifts for all the Massachusetts Medical Schools, worked on a regular basis at a free dental clinic, and was a leader in service through his church, responsible for such accomplishments as building a clinic in Nicaragua.

Perhaps most important, Dr. Marks' countless unselfish contributions, his energetic and cheerful persona, and his strong spirit of international collaboration, have earned him the love and esteem of colleagues not only at UMMS, but throughout the world.

Jeanne Lawrence, PhD, and the UMMS Faculty Council

Every couple weeks, I'd find a new quote or a cartoon on my desk – complete with a note from Sandy sharing his amusement, expressing his outrage, or commenting with some particularly atrocious pun. But none of those quotes can top Sandy's own words to live by. We've been collecting Sandyisms in the department, and I'd like to share some of our favorites:

Remember to keep your priorities straight. Family and friends come first; science and career are maybe a distant second.

The best thing a father can do for his kids is love their mother.

Working with students is both an inspiration and a perspiration.

Always look in the mouth.

The best way to help someone is to get *them* to help somebody else.

Lead by example.

and finally... Work hard and play hard.

Sue Gagliardi, PhD, Faculty Colleague, UMMS Department of Cell Biology This has been a heart-warming tribute to a truly great person! Aren't we all *lucky* to have known Sandy!

When I came into the Medical School Lobby today, I was immediately struck by the poster with Sandy's picture in full color. No one yet has commented about what a good-looking guy he was! What a great smile he had! Sandy's face just radiated goodness.....and generosity...and good humor...and friendliness...and integrity. Saying hello to Sandy always gave me a lift, even if we were just passing in the corridor.

Which is exactly why it's *so* hard to lose Sandy, so suddenly and unexpectedly! When I first heard of Sandy's death, I had trouble believing that it was true. Not Sandy!!! He always seemed so vigorous and strong, with so much life yet to live.

And I thought it was a particularly cruel irony that he died the night before Thanksgiving. However, it occurred to me (much later) that we should all be profoundly grateful for Sandy's life...and what better time to give thanks for Sandy's life than Thanksgiving!

Sandy celebrated his Thanksgiving early this year. According to Paul Odgren, the Thanksgiving meal at Sandy's church was held the Tuesday evening before Thanksgiving. It was a meal for the needy. Naturally, Sandy was there. He helped prepare and serve the food. He cleaned up and mopped the kitchen floor. He took home the garbage and brought it all to the dump on Wednesday morning before coming in to work. How typical of Sandy's whole life that evening was! He always found his deepest satisfaction from helping others.

I had the privilege of knowing Sandy for over 30 years. He was one of the founding faculty. He joined UMass at a time when it was quite a risky career choice. There weren't many of us, and everybody knew everybody else. We were like a family. And Sandy was the best-natured, most friendly and most idealistic member of that family.

Sandy was also one of the pillars on which UMass was built. He was a devoted teacher and a real team player. He did whatever needed to be done. Most especially, he established the gross anatomy program, overcoming all the legal and administrative and ethical challenges of obtaining cadavers and preserving them and using them responsibly. He not only taught our students anatomy, he also taught them to have respect for the dead. It was an invaluable introduction to the practice of medicine.

Woody Allen has a famous line to the effect that he isn't afraid of death, he just doesn't want to be there when it happens. Woody Allen is like patients of mine who have told me that they hoped their death would be sudden and quick and painless...and unannounced. They would consider a death like Sandy's a blessing. No long lingering illness. No protracted pain. No progressive loss of function and dignity.

But I doubt if a sudden, unexpected death is what Sandy would have wanted. I think that he would have wanted the chance to say goodbye, to say thanks, to say I love you. He would surely have said all those things, if he had the chance. But I'm sure his loved ones know that anyway. And his loved ones would also have liked their own chance to say goodbye, to say thanks, to say how much they loved him. Somehow, I think Sandy knew that too.

The majority of the world's people regard death as a transition of the spirit to another place. I have had patients with near death experiences who are quite convinced they have actually seen that place. Who knows? We live in a universe full of mystery.

Paul Odgren wrote me that Sandy always seemed quite comfortable with the "big mysteries". He quoted Sandy to the effect that: "Faith takes care of itself. It's all that belief stuff that gets people in so much trouble." Doesn't that sound like Sandy!

I think that Sandy worked out a comforting faith in which specific beliefs and dogma weren't all that important. Sandy's faith had a lot more to do with living your life according to high ideals and "giving to others". And I don't think Sandy was afraid of dying.

Recently Sandy remarked that if he knew he was going to die, he'd give a party! Today I feel we're all at Sandy's party. If he could be here, I'm sure he'd laugh and tell us to lighten up! He'd want to see more smiles. He would want us to laugh at his foibles. He'd want to see us finding joy from celebrating a life well lived, a generous life, and a happy life. He'd doubtless be touched if we said that we were inspired by his life. But above all, he'd want us to get on with our own lives.

And I like to think that Sandy is getting on with his!

I'll close with a quote that I've always liked from the Indian poet, Rabindranath Tagore. He wrote:

" Death is like snuffing out a candle, at the first light of dawn."

May it be so for Sandy.

H. Brownell "Brownie" Wheeler, MD, Founding Chair, UMMS Department of Surgery

Recollections of Sandy Marks from Students, Friends and Colleagues

S andy story # 3028.

In January, 1997, after having been in the lab for only 3 months, I was in a serious car accident that put me in the hospital for 17 days and housebound in a wheelchair for two months. Sandy rounded up the lab members, drove to Shrewsbury St. to get some good Italian food for lunch, and drove up to my house in Princeton to hold lab meetings every week in my kitchen. One week I said something about the wires that were holding my jaw together cutting into my lips, and he dashed off to Westborough, picked up some dental implements, and drove back to my house in Princeton to bend and rearrange the wires. Another in an endless series of random acts of kindness.

In the photo, Sandy's measuring the sitting height of my wheelchair. Because of my hip fracture, the permitted angle of flex was limited. When I returned to work, I found that Sandy and my wonderful lab mates, Carole MacKay and April Mason-Savas, had got me a new chair for my desk, adjusted the height properly, and put a little plaque on the arm that says "Odgren Chair of Fracture Repair."

"Remember to keep your priorities straight. Family and friends come first, science and career are maybe a distant second."

"The best thing a father can do for his kids is love their mother, right?"

"We're all born with a fatal illness. It's just a matter of the timing."

Paul Odgren, PhD









There are so many "Sandy" memories I could write about like how I always knew when he had a lobster dinner at home because he would always bring the claws in for me to fill with paraffin so he could have "New England Paperweights" for his faraway visitors. Sandy, Erik Larson and myself went out to Millbrook Rabbit farm where Bob McCallister was raising our OS rabbit stock. Bob was so gracious as we turned his living room into a rabbit egg cryopreservation lab. We worked along with two experts from the NIH to harvest the fertilized eggs from these rabbits. We worked well into the night the first day we were there, but later in the week we had time for dinner out and lots of laughs. That is one of my fondest memories.



Having a birthday five days after Christmas I was never used to birthday celebrations, that is until I started working for Sandy. I had two milestone birthdays, when I turned thirty, the men in the lab gave me a hunk of the month calendar and Sandy thought it would be great fun to put the male members of the lab on the cover as the "in residence" hunks! We went out for a birthday breakfast and then we had a going away lunch for our department secretary (the reason for the birthday breakfast) then we had a cake celebration in the afternoon, we partied all day long! When I turned forty, Sandy really outdid himself by throwing a surprise party at the Old Vienna Coffeehouse. He, along with all the lab members, planned a wonderful time and he invited all my favorite people. I was totally surprised. Sandy was always so thoughtful and he really took time from his busy life to plan these extra special times.



Carol MacKay









t's difficult to express the gratitude I have Ltoward Sandy, who has had such a major impact on my life. I met Sandy in 1982 when I came to work in the department of anatomy. The four years I spent at UMASS had such an impact on my life, as did Sandy. If it wasn't for Sandy's encouragement and support, I never would have become a doctor. One of my fondest and most treasured memories of Sandy was turning around at my wedding that took place in San Diego, CA and seeing Sandy! He hugged me so hard, he ripped my wedding dress. But it was a small price to pay to have someone so dear to me to take time to come to my wedding across country, six years after I left UMASS. Sandy will always be in my heart as my mentor, friend, and colleague.

Tesha Piotcowski, MD

Gary and I will never forget the deep, sincere laugh, the hikes along Maine coast, Jennifer in a backpack, and all he pointed out on the shore and in the water; the times we sat and shared joys and sorrows at your back picnic table, near the rabbit cage. The warmth of his hug, the gleam in his eye, the strength of his handshake – these realities will stay with us forever. Peace be with you.

Much love, Barbara Schneider

Tremember starting work with Sandy in July of 1970 and teaching the first class of 16 students. My memories of Sandy are pleasant, enjoyable memories. I will miss him greatly. He was truly one of the rocks our medical school was founded on.

Frank H. Chlaposki

Dr. Marks was and is one of the warmest and friendliest people I've ever met. I can only imagine that if I had known him longer, I would be saying all of the wonderful things about him that were said today. He was truly amazing.

Member of Class of 2006



Sandy punctuated my 20 years at UMMS with the light of his smile and his warm personality. My collaborations with Sandy, though small, were among my most cherished. I will never forget Sandy and will always think of him when I think of the <u>best</u> of UMASS, science and humanity.

Dr. Stephen Baker

The medical school's equal opportunity office was genuinely blessed by having Sandy as a friend and supporter. His commitment to fair and equitable treatment mirrored the office's mission.

Jim Wells

I was supposed to sing at the ceremony, but somehow got left out. From LeAnn Womack's "I hope you dance"...I hope you never lose your sense of wonder/get your fill to eat but never lose that hunger/ may you never take one single breath for granted/God forbid love ever leave you empty-handed/I hope you still feel small when you stand beside the ocean/whenever one door closes, I hope one more opens/promise me that you'll give *faith a fighting chance/and when* you get the choice to sit it out or dance, I hope you dance/I hope you dance.

Nicola Smith, Class of 2004

Dr. Marks used to sit behind me in the back of the lecture hall during the anatomy lecture. Every few minutes, I or one of my friends would get confused and turn around to ask him a question. At first he would just answer them, but soon he got to make jokes every time we turned around. Not much later was he making jokes and laughing every time we saw him. I only knew Dr. Marks for a few months, but that is what I remember most about him...he was always smiling and spreading his excitement and enjoyment of being involved with teaching those around him. Thank you for fun in anatomy at UMASS.

Garreth Giegun, Class of 2006

Sandy Marks enriched the professional and personal lives of students, faculty and staff throughout our institution. Among his legacies are the standards for excellence he established in education, research, and collegiality. Sandy will always be missed but never forgotten.

Gary Stein, PhD, Chairman, UMMS Dept. of Cell Biology



Thave been and always will be inspired by Dr. Marks. My hope is that we may all choose to live our lives as he lived his.

Anon

Dr. Marks "touched" so many students with his knowledge and never shied away from "touching" us on a shoulder with a reaffirming grip. I remember many an afternoon when his touch helped to dissipate the frustration and stress that often accompanies scientific exploration. I thank him dearly for his helping me to achieve my potential in anatomy.

Sean Reed, Class of 2004



Dr. Marks was the first teacher I had when I came to medical school. For an anxious and overwhelmed beginner, he was patient, kind and always had a sense of humor about him. I will remember him as a gentle man, a skilled doctor, and a spirited teacher. In only a short time, he taught me, I believe he gave me a great many gifts, the most important of which is the lesson that happiness is invaluable.

Anon

S andy was such an important part of my first year of school at UMASS. He was in my anatomy room for the first block – I remember him being so gentle and encouraging when I was terrified. His presence made the whole experience so much more humane. We would always say, "Dr. Marks is the best" and such things after lab and one day a friend of mine said, "Have you ever noticed that Dr. Marks always smells so good?" And we all laughed and agreed. That became our joke – anatomy lab may smell bad, but at least we have Sandy & can smell him!

Anon





As a first year medical student, I learned some great lessons from Dr. Marks. The anatomy lab, to me, was something I needed to "get through" and learn as many "facts" as possible. Dr. Marks taught me about the perspective of the donor- a person that was giving his or her final sacrifice in order to teach future physicians about the human body, knowledge that will eventually lead to saving lives and alleviating pain. In addition, Dr. Marks taught me a lesson that will stay with me throughout my life and career – that in facing death, we must acknowledge it. He told us of his own problems with ignoring all of his feelings about death, especially in the lab. He encouraged us to recognize and accept those feelings instead of hiding and pushing them away. He told us that it was okay to feel sad or scared, and reminded us of the great lessons we were to learn.

Anon

I remember a Friday going into a long weekend of studying before an anatomy exam and Dr. Marks saying to a few of us in the lab, "Don't spend the whole weekend studying. Make sure to take some time off, get a cappuccino or something." It was really nice to have our teacher tell us that it was okay to take a break. That is unusual in medical school.

Anon

Dr. Marks was a great friend to the Lamar Soutter Library as UMMS. He regularly donated journals to add to the collection. He served on the Library Committee and was a great advocate for the Library.

On behalf of the Lamar Soutter Library. Barbara Ingrassia, Associate Director for Technical Services

Dr. Marks was a wonderful addition of humor, wisdom and warmth to the sometimes very cold anatomy lab. His dedication to teaching and perfectly timed jokes were always appreciated. I am grateful to have learned from him.

Julie Guilbert, Class of 2004

From the day I arrived (in 1978) as a young physiologist, Sandy embraced and encouraged me. It was not easy for a black man in those days to thrive at UMASS. Sandy Marks, along with Moe Goodman, more than any others, made things bearable. Since then, I have never had a day when I saw him and he didn't "throw a smile" at me. I will always miss him. He was not only a great man; he was also the greatest of human beings.

John Fray, PhD, Physiology Professor, UMMS

Dr. Marks was one of my favorite teachers, not only in medical school, but throughout my education. He was a warm, generous person, always willing to take the time to answer your questions, or just to stop to talk and ask you about your day. You could tell he was a man who was passionate about medical education, which we as students recognized and appreciated. He will be sorely missed.

Anon

I ran into Dr. Marks only a few short weeks before his passing, in the medical school elevator. I jokingly asked him if the new first year class was treating him okay. He laughed and said that they were a great group of kids. He told me that they had just taken their head and neck exam and that they did well. You could tell by the way he spoke of his students that one of his greatest passions in life was being an educator.















Many of us experienced Sandy Marks' qualities as teacher, researcher, and advocate for social justice. Fewer of us experienced Sandy as a clinical periodontist. My wife Emily and I both had that experience.

In the early 1980's, Emily was diagnosed with moderately severe gum disease which threatened all her teeth. She required several consecutive operations, including at least one gum graft. Sandy's gentle compassion made her ordeal almost bearable, and his meticulous and exact work ensured that her gum disorder was not only corrected at the time, but has <u>stayed</u> corrected ever since.

About 10 years later, I had a receding gum problem involving only one tooth. My primary care dentist believed I, in my turn, would need a gum graft. Sandy took a look at my mouth, and pointed out that an aberrant tiny bundle of facial musculature was exerting traction on the bad place in my gum. Just cutting the abnormal muscle bundle would stop the gum from receding any further. Thus, Sandy's anatomical viewpoint - keeping an eye out for deviations from the normal - and his uncommon quality, which we call "common sense," provided a simple and almost painless solution to what looked like a complex problem.

Ken Wolf, MD Cell Biology Colleague and a Patient of Sandy First block of anatomy lab I had the privilege of working with Dr. Marks. The four of us were still too tentative to do any real dissection. The girls in our group decided to make up questions in order to attract Dr. Marks. His fervent dissecting method soon rubbed off on us, "elbow deep" we called it.

Anon

I was very saddened to learn of Sandy's untimely death. He was a wonderful anatomy teacher. I will never forget his patience with us as we became accustomed to the rigors of med school and to the act of dissecting a cadaver. He had a wonderful twinkle in his eye and a love of teaching that made us feel like we could master the material. There are very few professors who have Sandy's talents and gifts and I am forever indebted to him.

Allen L. Smith, MD, MS UMMS '85

Sandy Marks was a special friend to all at L.B. Wheaton Camera; all will miss him. Sandy always had a wonderful smile and a warm, kind word to say. We looked forward to his visits to the store for he would make the day a little brighter. He would invite us out to lunch and if we were too busy to join him he would make sure to bring lunch to us. His generosity was never ending. Yes, he certainly will be missed.

Sincerely, Steve Pond, Owner, L.B. Wheaton Camera





There are many, many stories I could relate about Sandy taking place over the 19 years I worked with/for him, but the one that stands out most is one that demonstrates his kindness and generosity.

One Friday morning in the early 1980's I returned to my office after attending a department meeting to find that all my money (the week's grocery money) in my purse had been stolen. Naturally I was very upset.

Later in the afternoon when I returned from lunch an envelope had been placed on my desk. In it was a sum of money from "anonymous". After much prodding, etc. I found out that "anonymous" was Sandy! Just one of the many kindnesses over the years!

Elsie Larson Secretary Cell Biology Sandy , My friend of 32 years, we are here, not to say good bye, but to remember the good times we shared together over the years.

Andrew and I started to work at the Worcester Foundation of Experimental Biology in 1957, when we arrived to this country after fleeing from a communist regime in Hungary.

One July day Andrew comes home saying; "I met a young scientist who will work at the new medical school in Worcester. He had his pretty wife with him, two little kids and a few cages of rats in his car", as he was laughing.

"So what so funny about that?" said I.

Andrew replied; "He has a tiny VW bug, and he is 6' 4" tall! You should have seen them all getting out from that car!"

We both laughed, and said,... oh, scientists are funny creatures. Andrew also stated, that his rats looked kind of sick, and he told the young man, they needed some carrots, and lettuce. A couple of months later Sandy's colony of black-hooded rats were happy, and healthy. Doing some research, Sandy found out, that his rats needed vitamin A in their diet.

This was the first time we heard, that it will be a Medical School in Worcester. That year I applied for a job as a histologist for the Anatomy Dept.. Dr. Sam Clark the chairman of the department, hired me, and I did start work there, in September of 1970. The whole department was housed in one laboratory at the WFEB. The famous "Shaw" building was not ready to be occupied by the 150 employees and the 16 medical students. Our department had 3 professors, a secretary, and 3 technicians. Oh the good old days!!! What wonderful times we had together. We all worked hard, but played hard too.

We had picnics in the summer, skating parties in the winter. Oh, can't forget all the Christmas parties either! What fun we used to have! We were like one big happy family. We even played volleyball at Sandy's church with some med students during lunch hours. Oh, yeah, we were young once!

We were collegues, playmates, we were friends.

Andrew and I will miss you Sandy on the annual summer get together at our house on the Cape for the last 15 years.

Somebody said, once you were Sandy's buddy, he never let you go. His friendship was, and is forever.

So, we are not saying good bye to you my friend, just thanking you, for being partakers in your life. We are all a better people by knowing you, and the world is a better place, because you were here.

Farewell my friend, until we meet again!

Eva and Andrew Moring



One phrase that Sandy used which made a lasting impression on me is his comment that went something like this: "Everyone is an expert 50 miles away from where they work". I believe he used this phrase in recognition of the fact that we sometimes can feel underappreciated at the place where we work, while people from outside look at us with so much more respect and admiration. While it sounded so obvious, it gave me a different perspective on the daily routine at UMass which sometimes can be less glamorous than our dreams.

André van Wijnen, PhD, Cell Biology Colleague

Thank you for getting the word out to us about this terrible loss! I remember Dr. Marks' broad smile and wonderful teaching style---little did I know how accomplished he was in so many areas until I just read his biography! What a loss for our medical community.....and my sincerest condolences to his family who will surely struggle with the "reason" such a gifted, kind and sensitive soul was taken at such a young age. May happy memories of him help keep his spirit alive in your hearts and help you get through this difficult time.

Anna Sarno Ryan, MD

Like many others, I knew of Sandy Marks before I met Sandy in 1992. We had both shown some years before that particular prostaglandins had biological effects that flew in the face of received wisdom, and we both had been subjected to much criticism by the "authorities". We often laughed about how the world had finally caught up with us, since there was now general agreement with our findings. You know that laugh. I can hear it still.

Bob Zurier, MD, UMMS Colleague

I was very sad to hear of Sandy's unexpected demise. He was one of the very few people who have been here longer than I and was a constant source of energy and good humor in the early years. He was particularly instrumental in developing the positive atmosphere towards teaching in this Medical School, at its inception and throughout its development. His academic achievements are all the more remarkable given his commitment to these and many other issues graced by his infectious enthusiasm.

He is sorely missed.

Donald Tipper, PhD, MGM Dept

o write a little story about Sandy, seems a L bit strange, as he was always the one with one amazing story after the other. Whether it was about his childhood in Africa, about racial issues, or about politics, Sandy would broaden my horizon by illustrating difficult topics with a fun story and a smile. That smile is what I remember most. Whenever I would run into him in the corridor, no matter how busy he was, he would always have time for a friendly word. And now words seem not enough to describe and capture the exceptional person that he has been. Someone who would stand up for what he believed in, regardless of the consequences. Someone who would make the most of each day, regardless of difficulties he encountered. And someone who would be there for everyone around him, with warmth and a genuine interest. And I haven't even mentioned his sense of humor and originality. As a way of preserving the GeneChip arrays, he converted them into necklaces for the ladies. So now I can always treasure that technique and fond memories of the giver.

Caroline VanderMeijden Cell Biology Ph.D. Student



My colleagues and I will miss Sandy. He was a generous contributor to our Endocrine Research Conference series. His reach truly extended throughout the University.

Charles H. Emerson, MD, Professor of Medicine

Theard yesterday of Dr. Marks' death and I wanted to send a note of sympathy. He was a skilled educator and a good guy. His thoughtfulness, humor, and gregarious way will be missed around here.

Joe McLaughlin, Class of 2005

Sandy always seemed to be beaming. He had this smile that was contagious. I will always remember Sandy as a genuinely warm and kind man who always took the time to acknowledge me no matter how busy he was. A smile and a friendly greeting may not seem like much, but it was and is, and I thank him for that.

Carol Johnson Cell Biology Colleague





Tam surprised and shocked to learn of this news, and would like to extend my feelings of sympathy to Dr Marks' family and friends.

What I remember about Dr. Sandy Marks from beginning classes in 1975 are his enthusiasm as a teacher and researcher, his compassion for students pursuing a challenging course of study at medical school, and his pragmatism.



Sandy was kind enough to offer me an after-hours job, helping out with tissue processing in support of his bone metabolism research with his osteopetrotic rats. Why do I remember this detail from over 25 years ago? I think that with Sandy's classes, the job, and structure-function relationships that were emphasized by him and many of the UMMS faculty during those first two years of basic sciences, I got interested in histopathology. When I completed an internal medicine residency and pursued a gastroenterology fellowship, I trained in GI pathology, doing light microscopic pathology and reseach electron microscopy. I ultimately moved on to other areas, from an academic position at the University of Washington in Seattle to my present position in a pharmaceutical company, where structure-function relationships are still very much important in drug discovery and development. And at one of my most recent meetings, our main topic of discussion was metabolic bone disease, and its relationship to inflammatory bowel disease and corticosteroid use. This meeting occurred just last week, before I received this email. But the meeting prompted me to think about Sandy and the issues of bone disease he tackled in his research.

Sandy was one of several excellent teachers and mentors who have guided me during my training and career. He was one of the special ones, and I regret that I only got to see him once after graduating medical school several years ago. I would have liked to have told him how happy I have been in my career, and that he was a definite part of becoming a successful participant in the medical research profession. I would have told him that I like to take the best parts of the teachers I have had, and try to integrate them into what I do each day.

I regret that I cannot personally be present for the December 17 celebration. I trust these words are consistent with those of the many other students and colleagues who count their relationship with Sandy as a valuable one, and a memorable one.

In all sincerity, Doug Levine Executive Director, Clinical Research Gastrointestinal Therapeutic Area

Classmates and friends,

I was saddened to hear of Dr. Marks' death this past weekend, as he was a truly instrumental piece of my first year at UMass. I first got a chance to work with him while working on the Head and Neck component of 1st year anatomy when he taught our table how to instruct our classmates in the procedure of the day for the next morning. We worked late into the night and, in lecture the next day, he referred to Andrea Marvin, Kristen Perras, Christopher Marshall and myself at Table 9 as "an inspiration and a perspiration". We've joked about that as a group for the many months since then. He took it a step further at the physiology final exam later that year when he passed us a note in the middle of the exam, which I've kept, urging us not to fail the test despite the distraction. It was a light moment in an otherwise long day.

Whether helping us to navigate the various intricacies of the Terrible-Palatine fossa, or jesting the existence of an "illusive" 13th cranial nerve that the 3rd year class knows well, he served as a brilliant educator, diligent anatomist, and close friend.

I mentioned his name at a basketball game yesterday and a fan behind me alerted me that his father had been friendly with Dr. Marks through the church and that he had died suddenly. The gentleman spoke highly of Dr. Marks and his words spoke to Dr. Marks' presence as a person and in the community.

Most respectfully, John Kalin, MSIII

> OSTEOCLAST BIOLOGY IN THE OSTEOPETROTIC (op/op) RAT S.C. Marks, Jr. and S.N. Popoff

There once were some scientists in France who saw dense skeleton by chance. They thought it was thymus but others thought this not primus so 'twas tougher than at first glance.

These mutants, designated op have more 1,25 than need be, but the 24 form and calcium aren't norm unless normal bone marrow they see.

Osteoclasts are far fewer and TRAP activity less sure. So this gives them more bone which appears like a stone but in bone gla it is poorer.

Bone shape shows resorption is down but the problem is in the surround of the osteoclast which with too many 'blasts is unable to get off the ground.

We hope you will come see our data which we'll have a lot of, but later, in Davos to show you that this problem's not new and needs answers from those who're greater.

Department of Anatomy, University of Massachusetts Medical School, Worcester, MA, USA I wanted to express my sincerest condolonces to the family and friends of Dr. Marks. As a medical student he always treated me with the utmost respect. He was a wonderful teacher and I appreciated his presence. Though I'm far away in Houston, TX, I feel the pain of his loss but am comforted by the wonderful memories of a great man. God bless you all.

Gilberto Sustache, Jr., MD

"Always remember to look in the mouth"

James Gammie, MD Cardiac Surgeon University of Maryland



ear Cell Bio Colleagues,

I just wanted to say that Sandy was a terrific colleague and friend and I and my whole lab will miss him and his spirited and energetic presence. I remember he had a session once with Sandra Bertman about death, and Sandy expressed an "upbeat" attitude about death...as he did about most everything. I recall that he said something about death being a transition or adventure, and that if he knew he were going to die, he would want to "have a party".

I don't mean at all to make light of the difficulty of this, which is especially hard for those left behind. To those of you who work directly in Sandy's lab, we realize you are particularly hard hit by his loss... but don't feel alone, because you have many friends and supporters in our department, as well as throughout the university.

Warmest regards, Jeanie Lawrence, Ph.D.

 \mathbf{F} or as long as I can remember, I wanted nothing but to be a physician. For as long as I anticipated medical school, I wanted nothing but to get to the anatomy lab. I couldn't wait. That most important of things for me happened soon after starting at UMass Med in the fall of 1975.

Sandy Marks made a permanent impression on me. His influence showed me that reverence for the cadaver and patience in dissection could coexist with my unbridled zeal for anatomy. His constant availability in the lab made the experience so much more efficient and educational.

I have often thought of my teacher, Sandy Marks, as my career has progressed. I have often thanked him for the time and energy spent on educating me in human anatomy. I am a better orthopedic surgeon for my time spent with Sandy. I hope I am a better person too.

Thank you. Dr. Kevin Mabie, UMMS '79

Iwas a graduate student...in the laboratory next door to Dr. Marks for 5 years. I have an amazing story of Sandy's generosity that I have never forgotten.

I was one of three graduate students ... Our advisor [at one point had] no money to ... cover our stipends. Dr. Marks did something that I believe no other professor at UMass would have considered - he stepped forward and picked up our salaries ... I believe that he did it because he cared about us students. He knew how hard it would have been for us otherwise. To be perfectly clear, he took his research money, money that he could have spent on his students, his work (over \$36,000) and gave it to us. I will never forget him. On one of the first days of medical school, a day that many of us remember well, Dr. Sandy Marks got up to speak to us about the class we were about to begin, Anatomy. He gave us a handout that contained a collection of poems and writings, including this quote from Norman Cousins,

"Ultimately, it is the physician's respect for the human soul that determines the worth of his science."

Sandy Marks had an immense respect for the human soul. That was evident to all of us from that very first day of class. He exemplified what a physician and scientist should be:

First, he taught us to appreciate the humanity of our work. He never let us forget to be grateful for the gift we, as students, have been given.

Second he made us laugh. With that characteristic wink and nudge, Dr. Marks cracked us up during exams and in the lab.

Finally, he cared for us. Some of us wouldn't have made it through those first weeks of medical school if it weren't for Dr. Marks. He believed in us and made us believe in ourselves.

I feel like it's Sandy Marks voice I hear when I read this poem, also from the handout he gave us. It's called "Anatomical Gift to a Medical Student."

"May that life force That ran in me Shine forth once more And pass to you The knowledge and the power That help sustain The miracle of life."

Thanks, Sandy.

This attachment is something I wrote when I heard of Dr. Mark's death. He was such a wonderful person-- I will always be so grateful that I had the chance to know him as my teacher.

Lara Antkowiak, Class of 2006 UMMS Medical Student

Sincerely, Cindy Sparks, Ph.D. **32**

My name is Scott MacKinnon and I graduated in the class of 1988. I distinctly remember Sandy Marks, not only from his lectures but from his personality "off the field". He had a great sense of humor. His son, like me, went on to become an anesthesiologist. I can remember Sandy Marks and I once joking about how his son went into anesthesiology because his lecturing put him to sleep, too.

Not to be inappropriate, but I feel Sandy Marks probably still chuckles at this one. At the end of our second year, in the class show, the ol' joke came up: What happens when you have sex on the beach without a blanket? You get Sandy Marks!

Sandy was a great, and a proud one for UMASS!

Scott 88'

I'm a first year student. We had Dr. Marks in our lab room for the first block of anatomy and really liked him. We kept asking him when he was coming back to our lab room. He had a great style of teaching that really helped put us at ease. He had a great perspective, good sense of humor and kind, caring manner of teaching. He didn't put us on the spot, and there was no thread of humiliation at all. Every one of us in the group totally loved his teaching. This is such a shock, such a huge loss, and way too soon. I'll really miss him.

Maria Gallo, Class of 2006

I graduated UMMS in 1982. I remember Sandy's passion about the osteoclasts and osteoblasts. I remember his showing EM's of osteoclasts, and the awe he shared in the workings of these little machines. I also remember his sense of humor.

I am currently an orthopaedic surgeon, with very little understanding of the moment-tomoment workings of the the osteo-cells. But I thank God they work, and I am grateful that people like Sandy try to figure them out.

I wish Sandy feels the warmth he shared with so many of his students, 1,000 fold, to keep him warm in the cold New England winters.

Warmly, Richard Lenson, MD



Thank you so much for letting me know. Unfortunately I will be unable to attend as I am in Southwest Virginia. Please extend my sympathy to his family and let them know he was one of a very special group of teachers at UMMS whose contributions to my career are deeply appreciated.

Dr. Maureen Fay McCarthy. ('87)







Once upon a time, in Chancellor Bulger's era, I was volunteer faculty and education director of the newly forming Palliative Care Service at the Medical Center. As flies drawn to light bulbs, the two Sandys were destined to meet. The other Sandy is a man of action. In no time we were conducting brown-bag lunch colloquia on death and dying—standing room only.
It's still too impossible to believe my friend Sandy, colleague, soul mate of sorts, is not going to call to chat about the big questions, or reprimand me for not moving

not going to call to chat about the big questions, or reprimand me for not moving quickly enough on our article, book, legacy project: a wall-hanging composite of decades of medical students' images and commentary about facing dissection. So creatively expressed, their reflections—evocative, honest, funny, profound—reinforced our shared belief that medicine is a deeply spiritual profession. Nancy Long '98 puts it as well as any first-rate poet in "One Breath Apart":

You came to take me for a walk with you. I was afraid at first To meet you To take your hand. I pretended you were here To teach me the details— Muscles, arteries, nerves— And I held on tight.

Then I saw your face, And I knew You came to take me for a walk with you— On the edge You on one side, Me on the other We are one breath apart

My dear Sandy, we remain but "one breath apart."

Sandra Bertman, PhD UMMS Colleague



I am very sorry to hear this sad thing. He is my inspiring mentor on eruption biology. I have intended to be in professional contact with him. I am so sorry. God bless you and give you unlimited patience. I hope that you believe in reincarnation. That you can see each other in another life...

With my best wishes Sibel Yildirim, Ph.D. Selcuk University, Faculty of Dentistry Department of Pediatric Dentistry Konya Turkey

To all of Dr Marks' family-both immediate and "extended" please allow my sincere and heartfelt condolences. Although I graduated in 1979, I remember (like it was yesterday) Sandy's calm, friendly, upbeat and reassuring demeanor that so helped us get through the rigors of the first year. In fact, even my wife remembers his kind and welcoming warmth. We, UMMS Family, have lost a bit of our soul and spirit. **C** andy Marks was a good person.

JI will remember him personally because he would often drop into my office with a word of wisdom, a nugget of truth about the ways of the world, a comment on the injustices he saw, some words of encouragement, camaraderie and friendship. I respected and valued his honesty, directness and courage. He was always available. And most of all he was always ebulliently alive. I miss him now, more than I could ever have imagined, because of the many things I have discovered about him since he died. His goodness and kindness, his immense energy and enthusiasm for life, his sense of justice and his efforts to see justice done. His friendship and help to so many, and his optimistic and positive outlook on life. He was a much bigger person than I had ever realized.

I regret that I knew so little of him and am grateful for the piece that I knew.

Roger Craig, PhD, Cell Biology Faculty Colleague

I will not be there for Dr. Mark's memorial. However, I wanted to echo the other students feeling about him. Dr. Marks was a patient, and understanding professor. Dr Marks was always available to us. He always was able to make the most difficult concept appear so simple. It is true that Umass has just lost one of its most valuable assets. Dr. Marks will be missed by me and the other medical students in many ways. He was more than a professor; he was someone who cared about us.

Thank you for allowing me to share my feelings.

Souki Adolphe



Memories of Sandy

9t's hard to think of only one memory of Sandy. He was so passionate about people, and had such a lust for life. We had so many conversations, and 9 always learned so much from him. Every moment was a teachable moment to Sandy; however he loved learning as much as he loved teaching. We discussed so many subjects, from his world travels to the people he met, to science and the art 9 was creating at the time.

Sandy was particularly supportive of my crazy ideas. When I wanted to create photograms of butterflies, and was searching for a source he purchased them for me. Now it seems particularly fitting that he would support my interest in butterflies, because like a butterfly he was so vibrantly alive, and his life was ephemeral. We were so lucky to have him, although it was for much too short of a time.

> Jeannette C. Landrie Cell Biology Photographer 1995 to 2000

There were so many wonderful things about Sandy. He was very interested in what you had to say. But the one thing that I knew about Sandy was when to speak and not to speak to him when his mind was busy.

One day he came running to my room. The girls had told him I had two black eyes, that I had fallen on the ice. He wanted to take me to the Emergency Room right away. He was great!

Pat Early – Cell Biology Colleague



Forsythia's in bloom buds forced early in the March cold Through your hands long stemmed golden flowers would appear like magic one week later A gift of gold that would last many days as spring blossomed indoors This gift you shared with me, and I will renew it every spring!

I'll think of you often Sandy, but I'll see you when the Forsythia blooms!

Wendie Cutting January, 2003 Cell Biology Colleague

I took the position as Sandy's secretary and coordinator of the Anatomical Gift Program in January 2000. It was a stormy day in February and I arrived to work in my winter gear. An hour or so into the morning, Sandy noticed me trudging around the halls in my winter boots as I explained to him I forgot my shoes at home. Moments later he appeared in my office with a pair of clogs. They were his clogs and he offered them to me. I thought, how generous and candid of this man whom I barely know to offer me his shoes to wear for the day. Later on as we passed each other in the halls I asked Sandy, "So, is this what it is like to walk in the shoes of Sandy Marks?" His reply was, "And what is it like?" "Very comfortable", was my answer. The remainder of my relationship with Sandy Marks continued in this way – very comfortable.

Dianne Person Cell Biology Colleague











I was so shocked when I heard about Sandy - he was such a truly lovely man. I'll miss him very much. I don't really know what to say other than that he was an absolute pleasure to work with and I had so much fun doing the atlas with him. I loved the fact that Sandy was always so excited when he saw one of my prosections and would give me a big slap on the back that always ended up unbalancing me, so that I would stand there rocking on my feet and feeling so happy that he truly appreciated the anatomy he was seeing. I thought he was a great anatomist and one of the very few Professors who was quite happy to be in his scrubs and help with every aspect - even down to helping lifting specimens, scrambling around on the floor during photography and even cleaning up. I really enjoyed my time in UMASS with both you and Sandy - it was always a lot of work but so much fun. I'm really going to miss him.

Lynette Nearn Anatomy Text Collaborator



To all members,

In Memory of Sandy C. Marks, Jr. DDS, PhD Loving husband and father, a man who practiced his dental profession with care, concern and compassion. A Scientist, scholar and educator, Honored Member of the American Association of Clinical Anatomists for his service and stewardship as an officer, president and American Editor of Clinical Anatomy, the Journal of both the American and British Associations of Clinical Anatomy. A man who brought honor and international respect to himself and the American Association of Clinical Anatomists because of his personality and intellectual acumen. For all of us who had the honor to know him, we will not forget him, he will always live on in our minds and in our hearts. One of the great privileges in my life is that I could call him my friend. I know many of you feel the same. He was a rare man for all seasons and a gentleman for all gentlemen. There are not enough superlatives to describe Sandy Marks. I will miss him.

Dan Graney, AACA President Professor Dept. Biological Structure University of Washington School of Medicine

TAT ith a rush of swirling air, a smiling Sandy would breeze into my office and drop his tall frame into a chair. We would talk about the latest projects we were working on, the current lecture he was presenting, digital photography, his grandchildren, recent trips, world politics, the medical school and even Harry Potter. He was so passionate about everything he did you couldn't help but get drawn in. One of the big projects we worked on together were new photographs for the Fifth edition of McMinn's Colour Atlas of Human Anatomy. It was challenging work but Sandy made it fun and was into everything. He always wanted to learn the whole process and his documentation was incredible - if you could read his writing. I will always be glad that he saw the fruits of his efforts in the recently published book.

Sandy was a generous person – the twinkling smile, little gifts, postcards, cup of coffee were always fun to receive but I was especially touched when Sandy and his entire lab brought lunch to my home when I was recovering from major surgery. I shall miss Sandy and all his adventures. I can still hear his laughter echoing down the hall. I am comforted by a quote he loved by Albus Dumbledore, a character in *Harry Potter and the Sorcerer's Stone*, "To the well organized mind, death is but the next great adventure."

Charlene Baron , Cell Biology Colleague





hirty years ago this week, I received a telephone call from the founding dean of UMass Medical school, Dr. Lamar Soutter, inviting me to join the first year class. The circumstances surrounding that December call were a little bit unusual. It wasn't for early admission to next year's class; it was for late admission to the class that began in September, four months earlier. Dr. Soutter explained to me that one of the students had become depressed, and needed to take the rest of the year off, and I would fill that slot in a class of twenty-four. There would be a lot of make-up work to do, particularly in anatomy. After meeting with Dr. Soutter early the next morning in the Shaw building, he personally escorted me to the Gross Anatomy Lab, where I first met my new classmates and my first UMass faculty member, Dr. Sandy Marks. He was tall, thin, bearded, athletic appearing and extraordinarily friendly in a flannel shirt He seemed more like another student, as he moved from dissection table to dissection table. As the apprehensive newcomer, late on arrival, I needed to bond with something or someone fast – and that person was clearly Sandy Marks. Over the next two months, I was on double time to catch up with Anatomy, spending most of my time with Sandy and Sam Clark, the then Chairman. I will never forget their many kindnesses to me. In the Anatomy Lab, I quickly learned about the dignity of death as a continuum of life. I gained a tremendous respect for the cadavers we dissected through whose sacrifice for our scientific studies we learned so much about the human body and in turn about ourselves. It was the tone of dignity and respect that emanated from and was exemplified by Sandy Marks that so enormously impacted myself and all my classmates, as well as those who had gone before us, and all of those who have followed since.

For me personally, this was a time of considerable self-doubt. The volume of work was enormous and playing catch up was a daunting task. Sandy Marks, however, had a gift of instilling confidence when you needed it most. He was a great coach. He had a way of letting you know that he thought a lot more about you and your abilities than sometimes you might feel about yourself. It had a soothing and comforting effect, yet prompted in you your greatest effort so as to live up to his great expectations.

At first I thought this was a special effort that Sandy was making for me. I quickly realized that this was the way he responded to all of his students. My roommate, Willie Pitts, here with me today, and I discussed this at length this week – Sandy Marks was a mentor, a role model for personal integrity and great strength of character, and a great friend to all of us, then and since. He truly cared, and had total respect that set a tone for each of us in the first classes of UMass Medical School and all the classes since. Whether you were a man or woman, a young, recent undergraduate, or an older, post-graduate, he had no favorites, because we were all his favorites – totally caring and respectful from Jim McGuire, the Alpha student, the first student to be accepted to and walk into the new medical school at the Shaw Building in 1970 to the most recent to enter this year. We all felt it.

Recently, I had the unexpected opportunity to speak to a nurse whose father had donated his body to UMass Medical School. This man was a scientist and had hoped that through his death, scientific advance through the education of the medical students could be realized. She described her family's initial uncertainties when his body was first delivered to the medical school. She then described the family's feelings that followed the end of year ceremony in which the students and staff honor and pay tribute to those who donated their bodies that were studied that year. She reflected upon their respect, the great knowledge that they gained and the great sense of satisfaction that she, as a nurse and her family had about accomplishing everything their father could have possibly hoped for when he donated his body. Again, this tone of respect and the success of this program gave me an enormous sense of pride, but not surprise, as its director was Dr. Sandy Marks who always set the tone for excellence in everything he did.

Over the years, I have been fortunate to see Sandy Marks at a number of medical school functions and to maintain our bond of friendship. I know how deeply the death of our mutual friend, Jim McGuire affected him now over five and a half years ago. Without knowing his exact thoughts, I know he would have enormous concern for those who he left behind and would want to comfort them at a moment like this. I recently came upon these words of Francis Scott Holland, a Canadian writer which strike me as something that Sandy might want us to know, Holland writes:

"Death is nothing at all, I have only slipped away into the next room. I am I and you are you. Whatever we were to each other that we still are. Call me by my old familiar name; speak to me in the easy way which you always used. Put no difference in your tone; wear no forced air of solemnity or sorrow. Laugh as we always laughed at the little jokes together. Play, smile, think of me. Let my name be ever the household word that it always was. Let it be spoken without effort, without a trace of a shadow in it. Life means all that it ever meant. It is the same as it ever was. There is unbroken continuity. Why should I be out of mind because I am out of sight? I am waiting for you for an interval, somewhere very near, just around the corner. All is well!"

Dr. Michael Foley, UMMS Alumni For the Memorial Service – December 8, 2002 Sandy, my friend Sandy I miss you

I cry, but I sing I sing from time spent with you I sing from my home I sing from Montreal I sing from the cornfields and orchards of Quebec I sing from the mountains of Malaysia But I cry in my heart, and I miss you again So I sing of your warmth, and your thoughtfulness I sing of your energy, and your positivity I sing of your kindness

But I still cry today, and I will cry tomorrow But I will always sing I sing because you sang to me

I will remember always Your happiness, your kindness, and your friendship

Love, your friend Marc

Dr. Marc McKee, Research colleague from Montreal





Farewell my Friend

I am writing this as I sit overlooking the ocean On a sandy white beach on the Malaysian east coast. As I admire the rising sun, I hear the roar of the sea And am entranced by the becoming waves and shimmering waters. A hypnotic feeling makes me feel close to bliss. I start recollecting vividly my wonderful friendship with my dear friend Sandy, Our experiences during an alliance spanning over a quarter century. Sandy, you too enjoyed sitting on this same beach in the east coast. You had also told me that being here was absolute bliss.

It is amazing that we shared so many things together And strived for the same ideals. When I first met you in 1977, There was this magnetic attraction that bonded us like brothers. And this bonding strengthened over time. Oh Sandy, why did you have to leave us so soon?

Your special patients inflicted with leprosy remember your kindness. How much you cared for them when few would even go near them. They are all shedding a tear for you from their homes or hospital beds For loss of their great American friend and healer. One who was oblivious to words like class, color, caste or creed. You were a special breed indeed.

I remember your special friendship with Kamaruddin, the Poor Indian lad who sold curry puffs in the medical school – And you loved curry puffs. I remember how you used to send him tons of stamps to enrich his hobby. I remember him inviting you for dinner in his dark and dingy tenement flat And how you were so thrilled and excited by the invitation.

You preferred to eat a modest meal with his poor family Than dine in style with the pompous and garrulous academics. How humane you were my friend.

As the years went by and I got married and had kids, Our families became even closer. You were like a godfather to my children. How they looked forward to your company, Not forgetting the wonderful gifts from Sandy Claus. Ravi and the children miss you so much Why did you leave us so suddenly?

I remember you as a committed and wonderful teacher. Many of the students whom you taught have now become teachers themselves. You were my teacher, my mentor and my shining light. Without your guidance, I would not be what I am today. Thank you so much for being my great academic and guru We will all miss you.

You always remembered the people who meant so much to you And made it a point to send them postcards From all corners of the world you visited – from Machu Pichu to Malacca. Sandy, you will always be in their hearts Because you were so special to all of them. Will they ever be reconciled to the fact that you are forever gone? You never said NO to any act of kindness From assisting a total stranger to contributing for a worthy cause Or helping the community. You could also never say NO to good food and drink. Whether it was chili hot fish head curry or fish roe soup. Sandy, you enjoyed life to its fullest.

More recently, we went off to Mulu, just the two of us, Away from our families and the rest of the world. To be with nature, In one of the most majestic rainforests and the caves of the world. To be with God's creatures – the bats, hornbills and monkeys. It was close to bliss again. Little did I realize that that would be our last reunion. I can only recollect memories now.

There is the unfinished business, Our yet to complete treatise on Leprosy. Your efforts will not be in vain. Rest assured I will take over and complete it. I know how much you wanted to see it in print, And to launch it in style with the Ambassador. Remember, it is our Silver Jubilee celebration. How many collaborations last that long? This monograph will be special as you will not only be the author, It will also be dedicated to you in your memory, So that our children and their children Can learn how great a person you were.

My bosom buddy Sandy, You have left us to be in the kingdom of God You are now in total peace with yourself and in eternal bliss. May God bless your soul And give peace to those you left behind.

FAREWELL MY FRIEND

Subramaniam Krishnan 5th December 2002



Personal Reflections by Dr. Sandy C. Marks, Jr.

As someone who is privileged to teach with such anatomical gifts, my own thoughts at the moment are about 2 things: One is the theme of a common investment that we all have in education that has essentially been completed recently by the donation of the individuals who contributed by their death to our corporate education. The second are some things about the effect that such a gift or gifts have had on me personally. First of all, I look at teaching as essentially an investment that's part of me, a part of my energy, a part of my time and the students and other people that I'm privileged to come in contact with through the years, and I know that having been a student, and actually, in a sense, being a student now, that one looks on one's education as a similar investment, not just in terms of money and time, but also in terms of one's emotional resources. That common investment has been completed in a sense by the mutual investment of teachers, students and human body donor. Our total educational experience is one in which this common investment in education and human welfare has been a part of all of us, and I think that's a very good thing that's happened in medical education in the last decade.

The second thing is more personal. In my own conversations with donors and with their families, basically trying to see how they might help other people in making such a donation, I have learned a lot about myself. What I've learned about myself is that one must take the time, and it's important to take the time, to listen to others and to listen to what is basically deep inside oneself. I'm amazed at how often I don't take the time to really find out what my innermost feelings are on certain issues and so, I know, from personal experience that having dealt with people who are attempting to make a positive contribution out of their very dying, I have become a much more sensitive person and, I think, a better human being, and I'm thankful for that.

June 6, 1980 From the Anatomical Gift Memorial Service

