

Eulogy for Mark Shirliff

By Jim Kaper

Good Afternoon.

I am honored but nonetheless deeply distressed to be here talking about Mark's passing. He was so full of life that it's impossible to imagine him gone. I'm speaking on behalf of the SOM and the UMB Microbiology & Immunology community but also as a close personal friend. This won't be easy so please excuse my stumbling through these remarks.

First, a little history. I first met Mark in 2003 when he applied for a faculty position in the SOD. Ron Dubner was the department chair then and had asked me to serve on the faculty search committee. Mark gave a terrific seminar and I immediately told Ron "you should give this guy a job". With apologies to my colleagues, I remember that day very vividly, much more clearly than most other recruitment seminars. Ron was similarly impressed and so Mark started his faculty career here with a primary appointment as assistant professor in the SOD and a secondary appointment in the Dept of Microbiology & Immunology in the SOM. The Microbiology & Immunology community here at UMB is broadly based across multiple departments and multiple schools. Mark was a hugely important figure in this community for his research, teaching, mentoring, service, friendship and passion. As one colleague said after his death, "*I've never known anyone more passionate about life, science or teaching*". His death leaves an enormous hole in our community and we are all devastated by this loss.

Research Mark was a terrific researcher. He was an internationally recognized expert on biofilms and in infections due to *Staphylococcus aureus*. For those unfamiliar with the term, biofilms are collections of microorganisms in which cells stick to each other and become embedded within a slimy extracellular matrix and adhere to a surface. They are common in the environment but also play an important role in many infections. Mark and his students and colleagues made particular contributions to studying the interface between biofilms and the immune system. He developed a vaccine for *Staph aureus* based on a novel approach of using antigens expressed while Staph was growing in biofilms, which are different than the antigens expressed when the organism is grown in a broth culture. There have been many decades of unsuccessful vaccine attempts against this important pathogen. As is true with vaccines developed against so many different pathogens, we've saved the lives of thousands of mice with vaccines developed for *S. aureus* that were ultimately unsuccessful in humans. Mark's vaccine has a real shot at being a successful and efficacious vaccine for human use, rather than just saving the lives of mice.

Mark was very creative in his research. He wasn't afraid to take risks in trying new approaches and new techniques. Although he enjoyed tremendous success with his research, he had not yet reached his scientific peak. Hopefully, his novel vaccine will provide a lasting legacy for him.

Teacher Mark was a tremendous teacher and mentor. He was dedicated to his students' success and he inspired so many to pursue a career in research. He accepted some students in his lab who were ready to abandon graduate school based on their prior experiences. But Mark turned their careers around to become highly successful scientists. Some of his former students are with us today and they will speak about the tremendous impact he had on their lives.

I would like to quote the eloquent comments of a recent MD-PhD graduate, Jeff Freiberg, who unfortunately can't be with us today. But Jeff was out in Montana last week and spoke these words at the riverside memorial service for Mark. *“As a graduate student, I would frequently refer to Mark as my mentor. That is a perfect term for him, but still the word feels too small. Few people have mentors that can live up to Mark's example. He epitomized what it meant to be a mentor. I often felt that he thought mentoring others was his most important job. Helping to advance other people's careers came before his own research or career.*

Friend is another word for him, but again it has too small of a meaning. He was the type of friend where you knew it was going to be a lifelong friendship. He genuinely cared about you, your family, and how you were doing. He was always quick to do anything he could to help. I now wish I had taken him up on his offer to help me move out of my house in Baltimore, only so that I could have spent a little more time with him.

Mark showed me how you could have a successful career but still keep your family your number one priority, how you could be an outstanding researcher but still put your trainees first, and how you could be a brilliant scientist but still be everyone's favorite person to get a drink with. “

Mark had a whole 'nother cohort of students and collaborators in China, particularly in the city of Guangzhou. He kept in touch via Skype, or visits to China or hosting students and investigators in Baltimore. He organized a biofilm meeting in China in 2017. When they learned of his death, nearly 20 Chinese students and faculty assembled a Powerpoint presentation with photographs of Mark and heart-wrenching sentiments of their feelings of loss. Some of their comments:

*“you are one of the most motivated teachers I have ever met. Your optimistic attitude towards **life** deeply affected us. No matter where you are, your wisdom, optimism and open-mindedness will always be with us.”*

“you seem to enjoy every moment in your life, which makes me want to be a person like you”.

Another paraphrased the words of the poet Kahil Gibran and wrote *“it takes a minute to find you are a special man, an hour to appreciate you, a day to admire you, but then an entire life to forget you”.*

This presentation, organized by his first Chinese student Zhenbo, will be shown outside in the atrium during the reception.

Personality These sentiments indicate that beyond his accomplishments as a researcher and a teacher, it was Mark's personality that really made him special. To say that he had a big personality would be an understatement. I can use words to describe his research accomplishments, but words seem inadequate to describe his personality. It had to be experienced. He was loud, boisterous, funny, vibrant, honest, direct, outrageous... and so many other things.

One could feel the full force of Mark's personality in a one-on-one situation or in a large happy hour gathering. He would make any event better just by being there. He was a great organizer and nucleus of professional and social events – any excuse to get people together to talk and enjoy each other's company. One memorable event was a Saturday morning curling outing where he instructed us non-Canadians in the finer points of this somewhat baffling game. On a

more regular basis, he would organize outings to Pickles Pub, which served as his off-campus office where he came up with some of his best ideas. Students might come away with bar napkins depicting experiments and projects sketched out by Mark.

No one could welcome a new student, faculty member or visitor like Mark could. Bill Jackson, who joined our faculty about three years ago, tells a story of one of his first weekends in Ellicott City where he was shopping at the local CVS. Bill had his bag of purchases and suddenly hears someone call out "*Jackson!*". He turned and saw Mark who, as it turns out, lived nearby. Mark comes up to greet him and then grabs his bag, saying, "*let's see what you got here*".

In a less dramatic comment, another colleague, Tanya Webb, said that "*Mark was an advocate for diversity and inclusion. He made sure that everyone felt comfortable and welcomed and focused on the good things in life.*"

But more than just a fun guy to have a drink with, Mark was a dear friend to me and to so many others. Mark was a great confidant, with whom you could speak about so many personal issues and experiences. He genuinely cared about you and whatever may be on your mind. We had a strong core group of friends here at UMB and we would often get together at the end of the day in one of our offices or at Pickles for a drink and conversation about a wide range of topics. In Montana last week, I met a group of Mark's neighbors who came out from Ellicott City who similarly counted Mark as among their best friends. And I met others who lived in Bozeman or lived elsewhere who also spoke of the deep friendships they had with Mark. Former students talk about their close and enduring friendships with Mark long after they left his lab. He had more good friends than anyone I know, and we will all feel this enormous hole in our lives now that he is gone.

Mark touched so many lives across the widest spectrum of people, from the housekeeping staff to the Dean of the Dental school. One administrative assistant told me that "*he made coming to work fun*". I'm afraid there will be a lot less fun for all of us.

As part of his big personality, he had a big heart. He was so generous with his time, his advice, and his money. I remember many dinners with him where he would give huge tips to the server. Mark grew up in very modest circumstances and knew what it was like to barely get by on minimal income. I can remember some ridiculously large tips he gave. In the future, whenever I'm about to pay my dinner bill and am considering giving the server a big tip, I'll think of Mark and his generosity.

And his giving of himself extended to the heroic. During his time in Galveston, he was a volunteer fireman, putting himself in danger to help others. And on his last day in Montana, he was raft fishing down the Yellowstone river with his son Everett and Robin, his best friend in Bozeman. For reasons that are still not clear, the raft turned over while passing through some rapids and they all ended up in the water. Mark grabbed Everett's life jacket with both hands and shoved him towards the shore. But he was unable to make it to shore himself and was swept away and disappeared around a bend. They found his body the next day.

Montana was the most fitting place for Mark to spend his final days. He grew up in Alberta, just across the Canadian border from Montana. After grad school in Galveston Texas, he went to Montana State Univ. in Bozeman for his postdoctoral training at the Center for Biofilm Engineering. After he started his faculty career at UMB, he continued to return to MSU during the summers to work and teach. He would take his family with him and enjoy the rivers,

mountains and wide-open spaces of Montana. This environment was surely a much better fit for him than the cities of Galveston and Baltimore. As his wife Birthe said so aptly, "Montana is Big Sky Country for a wonderful man with a big heart and a big personality".

To Birthe, Breanna, Everett, Sarah and Sophie, you surely know that he was enormously proud of you. His family was so important to him. We send our deepest condolences to you and our sincere offer to help in any way over the coming days, weeks, months and years.

Mark lived life to the fullest whether it was his personal or professional life. I've known many people who might have one or more of the characteristics of being very smart, very funny, a great researcher, an inspiring teacher, wonderful mentor, a dear friend, trusted confidant, and a true character. But I've never known anyone else who possessed all of these characteristics like Mark did. He was truly one-of-a-kind and we will never know someone like him again.

Jim Kaper, July 25, 2018