The Woman behind Pseudostratified Ciliated Columnar Epithelium with Goblet Cells

An Interview with Dr. Ameae Walker

By Mark Sueyoshi, MS I

I had the recent opportunity to interview Dr. Ameae Walker, a long-time faculty member with the UCR/UCLA Thomas Haider program and the UCR School of Medicine. Dr. Walker has recently taken on new responsibilities as Vice Provost for Academic Personnel at UCR, leaving behind a long-held teaching position at the medical school. I was sad to learn she was leaving, but grateful I could sit down and learn more about the woman who had helped generations of medical students (literally) appreciate the unique qualities of pseudostratified ciliated columnar epithelium with goblet cells.

Tell me about yourself. Where did you grow up?

I grew up in Kent, in England. Kent is southeast of London and most known for the white cliffs of Dover, even though I was quite some distance from Dover itself. Nevertheless, that’s what people know it for. I wasn’t actually born there, I was raised there.

Did you know what you wanted to do going to university?

My undergraduate major was biochemistry. I knew that I was interested in science and in the British system you focus, or you did in those days, at age 16. So between the ages of 16 and 18 I left regular school and I went to what’s called a technical college, which is sort of like community college in the States. I focused on botany, zoology, and chemistry. From that I chose to study biochemistry at the University of Liverpool while an undergraduate because that was considered the up and coming brand new thing.
Was this normal for students to go onto a specialized college-like setting at age 16?

It would kind of depend. I was at a girls’ school that did not have science beyond a certain level. In order to pursue science, I had to leave school. So, if I had studied history I could’ve stayed in that school. It was a godsend as far as I was concerned. I could get out of school and actually go to college at 16.

Tell me a little bit about your family.

Let’s see. For most of his adult working life my dad was a tax inspector. He was a little too young to fight in the Second World War, but was in the army and then left and joined the post office before starting his own education. He moved to the tax office and then eventually became a lecturer of taxation, teaching other tax inspectors how to do their job. He’s a great example of self-improvement and self-education. I’m the second of seven children and the oldest girl. There were 5 of us who grew up together then my father remarried and had 2 more. When the youngest of the original five was old enough to go to school, my mother went to a training college and qualified as a teacher. She taught high school biology.

How did you end up in the US?

Well, my PhD advisor was contacted by someone with whom he had done a sabbatical at Rockefeller University in New York and asked if he had any good PhD students who might be interested in a post-doc at Yale. He came to me and asked “Are you interested in this opportunity?” And I said, “I think so.” At that time that was probably the top cell biology department in the world. So I had to finish my PhD very quickly. I wrote my dissertation in 3 weeks from beginning to end, including all hand calculations of all the statistics. Obviously you had to give your committee time to read it, and go through the oral defense and so on. The actual writing was 3 weeks. At Yale I made some fantastic friends and we’re still friends to this day. When I finished, I looked for faculty positions in both the UK and here. I was lucky enough to be offered 6 and this was the one I chose.

Why did you choose Riverside?

I chose Riverside for lots of reasons. Biomedical sciences was a new program. The faculty were young and excited and they all had a passion for both teaching and their research. Not one or the other, they were just very special people. And that was very nice to be around. I was also impressed by the University of California itself. It’s a prestigious institution and I very much wanted to be part of a university where you were evaluated on the basis of merit. Basically, based on the quality and quantity of the papers you published, what grants you bring in, and the quality of your teaching, you will be moved through the system and promoted appropriately. That was very attractive to me. And because I really enjoyed teaching as well as research, I wanted a good balance between the two.

Is that how you started getting involved with the medical school?

I’ve taught medical students from day one (in 1979). When I first came, I taught histology and a biochemistry course. We called it biochemistry for medical sciences or something. I can’t remember. But anyway, it was a biochemistry lab course, and I also taught what in those days was called “clinical correlates.”

What was the medical school like back then?

We were a young, lively interactive faculty that used to do a lot of social things together and many of us had children at the same time. One thing that stands out is we’d go camping at Joshua Tree National Park during Spring Break. All the families would get together. All of our kids remember those camping trips and how many people scraped their knees on the granite
rocks out there. I still keep in contact with some of the faculty who’ve moved on, on a regular basis, at least a Christmas letter every year.

What motivates you in your profession?

I started off fascinated by science and I’m still fascinated by science. Someone not so long ago asked me what I do for fun, and I said “science.” Where I think my talents lie are in being able to read and think and make connections and by always asking, “Why?” In terms of teaching, being able to spark that level of interest in other people. And I’m not happy unless I feel as if I have done a really good job, or at least a reasonably good job. Some days are better than others, it just depends, because there is a performance aspect to it and there’s also an interaction with the class aspect. So if nobody gets the joke then… you know. Classes are different and have different personalities. Some things work with one class and not another.

How was the transition to your new position as Vice Provost for Academic Personnel?

It’s very interesting because I’m learning a lot. I think one of the reasons you go into academia is because you really enjoy learning. It’s a people-oriented position, which I enjoy. I really want to do a good job and move things forward and make everyone as happy with the system as I am.

Goals for the future?

I want to continue to contribute to the university that has given me so much and allowed me to do a job that I love, while at the same time having and enjoying my family and living in beautiful southern California. When I’m not doing science I like to hike and camp.

Any favorite hiking or camping spots?

We go to Joshua Tree quite a lot, although I haven’t been able to join my husband this past year because no moon days have not been weekends. My husband really likes astronomy and it’s a perfect place to see the stars. We have a cabin up in the mountains so we do a lot of hiking on trails up in the San Bernardino Mountains. Every year we have a family camp at El Capitan Beach around July 4th. So the children all come back that week, if they can, and we all camp together. We usually get 3 out of the 4 and associated partners, grandchildren and so on… grandchild, I’ve only got one.

Anymore grandchildren along the way?

Not so far. You could say I have ambitions to have lots more grandchildren, but that’s not exactly within my abilities to arrange.

What other activities do you enjoy?

I read a lot. My tastes are eclectic. I like the Harry Bosch novels by Michael Connelly. They’re crime fiction. So things that challenge the brain where you’re trying to figure out what’s going on from the clues, but in an entertaining way. I also just finished reading Atul Gawande’s On Being Mortal, and that’s really good.

What are three words that describe your character?

That’s hard to know. The me that’s inside my head? The me that people see? I think you should ask other people because I might be delusional. Somebody in the class used the word sass-said they were missing my English sass. I was looking something up online yesterday and you know that rate your professor website? I have looked on there for myself before and never found anything. Well, if you don’t spell my name correctly, you can actually find me on there. I found three entries: One of them said, “She’s very scary” and gave me a very low rating. Another one said, “I’ve met her, I’ve never had her (presumably in class) and she seems nice.” And then one was a very good rating. So I guess some people think I’m scary. 3 words isn’t enough. I’m too complicated to come across in 3 words.
Any advice for the students?

Let’s turn it around by saying, “By doing the very best that you can, you and others around you will be happy.” Happiness in life is the best thing you can ask for or the best thing you can attain. So I think life should be fun and whatever you’re doing should be interesting and fun. Not every minute, but a fair proportion of it. At some point in your career you are probably going to have to give horrible news. But you’re going to try and do it in the best possible way. Doing everything that you can in the best possible way is a good way to move through life.

Hitting the Streets: UCR SOM holds 2 community health fairs in November

AMSA Health Fair. By Diana Tran, MS II
The American Medical Student Association Chapter at UC Riverside SOM is dedicated to serving the Inland Empire, with a focus on serving those who come from a low socio-economic background and therefore lack access to health care. The chapter hosted its 2nd annual health fair (sponsored by UCR SOM and the Inland Empire Health Plan) on November 8, 2014, at Delmann Heights Community Center in San Bernardino.

The fair provided basic health screenings, flu immunizations, blood pressure and glucose checks, eye exams (by Western School of Optometry), hearing exams, foot exams, 100 free prescription glasses, fresh fruit, and exercise classes, as well as a variety of community resources and programs to nearly 200 health fair attendees. With the help of sponsors and volunteers, they were able to give out over $500 in gift certificates to supermarkets, 100 sports jerseys and soccer balls for children, 100 books, sunscreen, and gently used clothing. Third-year Students from the Haider program also came back to volunteer, and residents and physicians from the local community volunteered their time to help. Covered California was present to help provide information about health care. Michelle Tom (MS1) was the Heart Mascot for the American Heart Association. She pranced around entertaining children and parents and directed them to get information regarding cardiac health.
Health to Hope Homeless Health Fair [pictured]
By Christina Guest, MS II

On November 17, 2014, the Street Medicine Interest Group, led by MSIs Christina Guest, Esther Zarecki & Jennifer Han, participated in the Health to Hope Homeless Health Fair.

UCR SOM Street Medicine interest group students banded together to provide a blood pressure and vitals check station, information about addiction resources, a compilation of food resources available in the region, and a table that offered attendees information about nutrition. Students handed out socks to attendees, and offered hundreds of non-perishable food items that students in the group had collected from the community during a very successful “trick or treat for cans” event on Halloween.

The students also did Needs Assessment Surveys to see how they can make an impact in the health care of this underserved population in the future.

UCR SOM students reaffirm their oath at the Tomás Rivera Conference   -Scope staff

On Friday, February 20, UCR SOM students closed the 27th Annual Tomás Rivera Conference by reaffirming their oath. The theme of this year’s conference, held at UCR, was **Community and Wellness: Latinas/os, Medicine, and the New Health Humanities**. Dr. Paul Lyons led more than 70 medical students as they reaffirmed their oath, initially recited each year at the White Coat Ceremony. The UCR Medical Student oath is adapted from the Hippocratic Oath and aligns with the mission of the school to advocate for the underserved.
On Being Vulnerable
By Ashley Stone, MS II

E.B. was my second patient at the daylong clinic in the desert. The twenty-three year-old had just had teeth pulled at the dental clinic; his speech was muddled by the gauze wedged on either side of his mouth. “What brings you in today?” I began. “Wellllll. It’s been a long time since I been to the doctor,” he replied. “Is anything bothering you?” I asked. “I been feeling pretty fatigued. My back hurts, too, and I have some blisters on my tongue that keep coming up,” he garbled. My brain immediately began assembling knowledge and experiences with the keyword “fatigue.” Someone had done a diagnostic algorithm for fatigue in PBL last week. Oh, that was for myasthenia gravis. He is not a middle-aged woman. I felt slightly overwhelmed, trying to think of the various possible etiologies of fatigue that may or may not be connected to musculoskeletal pain and tongue blisters.

Instead, I relied on my instincts and turned this problem solving assignment back on my patient. “What do you think is causing your fatigue?” I inquired. He smiled a mischievous grin; I smiled back and let the silence draw out a response. “I guess...” he began, proceeding to remove the bloody gauze from his mostly-clotted gums. “Ah, much better. I think maybe it’s ‘cause I been drinking a lot lately.” To my straight-faced question of how much is “a lot,” E.B. replied, “maybe 5 or 6 beers a day.” I mentally doubled this amount, having been taught the tendency of problem drinkers to underreport their alcohol consumption, but I realized whether or not he was giving me an accurate count of his beer intake was largely irrelevant: at 35 – 42 beers a week, he was already comfortably in the “problem drinking” zone. He looked ashamed, like a little boy who broke a lamp while illiclly playing ball in the house, and I did not want him to stop talking to me. I was conscious of my facial expressions, my body language, and the words I chose to say next. “What’s going on, E.B.?” was the question I settled on. He visibly relaxed, probably thankful that I did not scold him.

We fell into an easy rhythm. He told me about his drinking, and how it had increased in the six months since he had been out of jail. He winced and looked at me skeptically after he said the word “jail,” probably expecting me to react with fear or judgment. Instead, I asked why he was in jail. He seemed relieved that I was asking him this question and not skirting over this life experience. “Assault with a deadly weapon. I know it’s bad, but the guy really eff-ing pissed me off,” he said. My heart sped up a little bit, a visceral reaction to being in a small space with a man who just admitted a violent past. Then I looked into his tired eyes, took in his slumped posture and the Ziploc bag filled with pink and blue antibiotics from the dental clinic he held in his lap. This was not a scary situation. He was there to get help and I was there to try my darnedest with my limited skillset to help him. Our goals were perfectly aligned.

Who is the vulnerable one here? My knowledge of medical sociology and bioethics tells me the patient is the one who has been rendered vulnerable by illness and navigating a confusing healthcare system; but the image of a young female professional alone in a room with an unknown man who has recently been incarcerated offers a more visceral portrait of vulnerability. Yet, in the 25 minutes I spent with E.B., I did not feel unsafe. I don’t think he felt unsafe or threatened, either. He divulged more to me than I expected he would. He asked me why his friends liked marijuana but he didn’t seem to get a good high; I told him people react differently to drugs and that he maybe shouldn’t fight to correct this problem. We talked about diet changes, and how eating Carl’s Jr. every day was probably not a good course of action. He agreed to cut down by one
beer a day to see if that would reduce his fatigue.

After I presented to the attending physician, he asked me to return and ask E.B. about intravenous drug use, based on his experience in jail and a potential increased risk for HIV. E.B. told me he’d never used needles, but he does do cocaine from time to time. I told him why I was asking and asked if he had ever been tested for HIV. “No,” he said, looking down at his hands, “but maybe that’s a good idea. I was bisexual for awhile.” I asked about condom use (he doesn’t really use them), about where he got the mural of tattoos on both of his arms (mostly at a clean tattoo shop, but some he did himself), and again about I.V. drugs (he swears, he has never used anything but coke and pot). He agreed to confidential HIV testing after he saw the chiropractor for his back pain.

I will never know the results of E.B.’s HIV test. I will never know if he becomes a recidivism statistic. I will never know if the blisters that sometimes emerge on his tongue are from herpes. I don’t know if he will heed the advice I gave him or if he will continue on his current path. “You’re really good at your job, Ashley,” he said as I left him in line to see the free chiropractor. “Thank you,” I said, shaking his hand and quickly walking away as I fought back tears of appreciation at the gift of his trust this man, only four years my junior, had given me.

The Funnies  
By Raj Mehta, MS II

A patient comes to her doctor for back pain. She reveals that she has a family history of kidney stones. Her doctor sends her to get a CT scan to check for any stones. The results come back negative. The doctor instead diagnoses her with a lower back strain. The patient asks how difficult it will be to deal with the pain. The doctor responds, “Not too hard at all. It’s not calculus.”

A patient comes to his primary care physician for a suspicious-looking mole. The primary care physician refers him to a dermatologist for a shave biopsy. Upon arriving at the dermatologist’s office, he sees two queues, one for shave biopsies and one for punch biopsies. The nurse directs him to one and the patient waits his turn. After a few minutes the patient is at the front of the line. However, right as he is about to enter the exam room, the nurse returns and says, “Oh I’m sorry! I put you in the wrong place! This is the punch line.”