New Challenges, New Opportunities

Mary Klotman Takes Office as the New Dean of the School of Medicine

RESEARCHER LAWRENCE DAVID EXPLORES THE WORLD WITHIN US // MED STUDENTS EXPRESS THEMSELVES
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BY ONE MEASURE, MARY KLOTMAN, T’76, MD’80, HS’80-’85, hasn’t gone very far: from the window of her new office in Duke North she can almost see the dorm room where she lived as a Duke undergraduate. But that proximity is deceptive. Since she arrived on campus as a freshman, Klotman has charted a trajectory that has risen through Duke medical school, residency and a fellowship, into leading labs where she conducted life-changing research, to prominent capacities at major national research institutions, through a glass ceiling or two, and now up to the top leadership position at one of the nation’s great medical schools.

Klotman, the R.J. Reynolds Professor of Medicine, professor of pathology, and professor in molecular genetics and microbiology, last summer added another pair of titles when she was named the new dean of Duke University School of Medicine and vice chancellor for health affairs at Duke.
University. She succeeds Nancy Andrews, MD, PhD, who stepped down after a decade as the nation’s first female dean of a top 10-ranked medical school.

Born and raised along with five siblings in Long Island, New York, Klotman graduated magna cum laude with a degree in zoology and then stayed at Duke to complete her medical degree and fellowship training in infectious diseases. She has devoted her scientific life to conducting HIV research, especially as it affects the kidneys. She cared for HIV patients as a resident at Duke and then moved on to study the disease at the National Institutes of Health before spending 13 years as chief of the Division of Infectious Diseases at Mount Sinai in New York, where she also co-directed the Global Health and Emerging Pathogens Institute.

Klotman returned to Duke in 2010 to chair the Department of Medicine, the first woman to hold that position. Among other honors, she is a member of the National Academy of Medicine and president of the Association of Professors in Medicine.

With her recent appointment, Klotman and her husband and longtime research collaborator, Paul Klotman, MD, became the only husband-and-wife pair of deans in the history of the Association of American Medical Colleges; he is the executive dean, president, and CEO of the Baylor College of Medicine in Texas. Despite working half a continent apart, they haven’t missed a weekend together in more than seven years. They have two sons, Alex and Sam.

When DukeMed Alumni News sat down with Klotman in early July, she had barely begun moving into her new office. The bookshelves were bare and the room empty except for a modest desk and computer and a conference table with a few chairs. The only other object in sight: her white coat, hanging on a hook on the door.

**What does your long history at Duke bring to your new role as dean?**

It’s always an interesting question: is it better to go with somebody inside or somebody outside? That’s always part of the discussion during a search like this. But I saw myself as a blended candidate. I started at Duke, but I spent almost 20 years at other institutions, having very different experiences, and then I came back to Duke. I try to take the best ideas from wherever I go.

**How did you come to Duke in the first place?**

My dad was in textiles, and he knew Duke very well from his travels. He brought me on a trip here, and like everybody else I fell in love with the campus. I think that’s how a lot of Northeasterners fall in love with Duke. They come down on a spring day and they say, “Oh, wow, I never want to leave.”

**PATH TO THE DEANSHIP**

- **1976** – BS, Duke University, major zoology
- **1980** – MD, Duke University School of Medicine
- **1983-1985** – Fellow In Infectious Diseases, Duke University
- **1986-1991** – Assistant Professor of Medicine and Infectious Disease, Duke University School of Medicine
- **1994-2010** – Professor of Medicine and Microbiology, Mt. Sinai School of Medicine
- **2010** – Return to Duke as chair of the Department of Medicine
- **2017** – Named dean of Duke University School of Medicine

**When did you decide medicine was your path?**

If you go to Duke and you’re interested in science, it’s easy to get swept up in premed. That was my initial experience, and as I had to seriously consider options, it became the option. My uncle and my grandfather were physicians, so we had some of that in the family.

At that time, every Duke undergrad who applied to medical school automatically got an interview. Mine was with a six-person committee. They fired great questions at me, and it was fun and engaging, and it all just clicked. I walked out of that interview and went back to my room, and I said to my roommate, “I just got into Duke Medical School.” She said, “How do you know?” and I said, “I just do. It just worked.” It was like magic.

**Did you know at that time what you wanted to focus on?**

No idea. That’s why Duke is so influential. It’s very different than most. You’re exposed to a physician-scientist career as a beginning student. The third-year research curriculum, which was considered novel at the time, put me on the academic medicine path. That, and one influential role model after another. It was just the culture of science in medicine on the wards. At the time, the idea that you would talk about evidence as you’re talking about a patient was unique. That was when I started to understand what academic medicine was. I loved it.

**Then you decided to go into infectious diseases.**

I started out thinking I would go into cardiology, until I realized that I really didn’t like reading EKGs. But I loved reading about infectious diseases. Every new outbreak, every new entity, I thought, “Wow, that’s really exciting.” And then HIV hit the wards, and I said, “I want to be a physician-scientist studying a very challenging disease,” and that was HIV.

**Can you talk about your research?**

When I was a resident, I cared for some of the first HIV patients at Duke. It was an epidemic that just hit and exploded. So I went up to NIH and worked in Bob Gallo’s lab, which was one of the labs that first isolated the virus. Once I learned molecular virology, I wanted to use that basic science to answer some key questions. I studied HIV nephropathy, which was a devastating complication in which patients...
would get end-stage kidney disease and usually die very rapidly. I worked with my husband, who was a nephrologist. Our team worked out most of the molecular biology of that epidemic. We figured out how the virus was doing damage to the kidney.

What lessons did you draw from that experience?
HIV research moved at a record pace. From the discovery of the virus to the first drugs was no more than 10 or 15 years. That example is the best argument for the value of academic institutions and the partnership between academic institutions and the NIH. That relationship supported the labs, the scientists, the funding, and the training programs. And then you bring in the third partner, which was industry. It really worked. That paradigm can be brought to bear on a lot of challenges, and in fact that’s happening today, as we deal, for example, with Zika.

The funding climate is very different now. How do we make sure the science that needs to get done continues to get done?
Stories like HIV need to be told over and over again to make the case for the value of research and how it translates into public health. We need to articulate that to our politicians and to the public, to convey the real value of discovery science. I’m not sure we’re always as articulate as we should be.

How does Duke stay on top of the rapid changes in science and medicine?
Quantitative science is the power right now. You can generate massive amounts of data, but if you don’t have the quantitative skills to analyze it, that data is just data. To stay in front of that curve, we need to partner with the university and all of its strengths in quantitative science. We just created a center focusing on data science, which is being led by Rob Califf, MD, a Duke faculty member and former FDA commissioner, for example. We’ll use this center to engage Duke’s quantitative computational scientists in teams with our biomedical scientists to solve big problems.

You mentioned the importance of cross-disciplinary collaboration. How do we encourage that?
The success of an institution like Duke is in partnerships. As chair, I built partnerships with anybody I thought could help facilitate the success of my faculty. I take the same approach as dean. I’m fortunate that we have great partners on campus. You develop personal relationships. Then we start sharing visions, and ideas come from that, and then we develop programs to realize those ideas. I consider the whole campus to be potential partners for the School of Medicine.
What do you see as the school’s main strength?
Without question, our biggest strength is our very deep base of talented faculty, across the board. And we have an extraordinary group of chairs. Dean Andrews spent 10 years appointing twenty-some chairs, so I won’t have to spend all my time doing searches. That allows me to focus on thinking about how to apply all that great talent to new programs.

What are the biggest challenges in doing that?
Of course, we’re all a little bit worried about what happens with funding. We might think we’re offering great stuff, but if the faculty doesn’t know about it, or how to access it, it doesn’t matter. So one challenge is communicating information and access about resources. And, of course, staying competitive. We have to continually ask ourselves, how do we remain the institution of choice for talented faculty? How do we attract the top minds coming out of the best programs?

What are your first priorities?
One is to focus on the operational parts of the strategic plan that Dean Andrews started two years ago, and another is assessing and investing in our core resources to keep them on the front edge of technology. A third priority is organizing genome science in a way that makes the most sense. The old model is to have an institute in genome science. Now genome science is in every part of medicine. I’ll be taking some time to determine how we can best capitalize on that.

How do you balance the School of Medicine’s three main missions of research, education, and clinical care?
In an ideal world, they’re all seamlessly integrated. But in the real world, there are a lot of stresses that pull those missions apart. Our faculty are here because they believe in the three missions: they want to be in a place that does incredible research, is one of the best schools in the country, and delivers outstanding clinical care. If we separate those parts from each other, we lose that pull. So we have to put a lot of effort into keeping them integrated. We have an incredible health system that generates data every day. That data helps advance our research mission. And then you add trainees on top of that. If you get it right, all the areas support the others. That’s the magic sauce. It’s challenging, but that is clearly an area where Duke can excel.

Are there ways to take some of the burden off the faculty’s clinical mission so they have more time to give to research and education?
Certainly facilitating the success of our faculty to gain research funding is critical. We also need to make it easier for them to succeed in the clinic, so that they have time to breathe. For example, we’ve been doing a lot of work to make the Epic electronic medical record system a tool and an opportunity, as opposed to a burden.

You were the first woman to chair the Department of Medicine, and now you’re the second woman to serve as dean. Is that meaningful to you?
On a personal level, yes. Even before I became chair, I’ve had women, especially young women, tell me they were inspired by what I was doing. I never thought of myself as particularly inspiring, but hearing them say that means a lot. It’s not about me. It’s about demonstrating that women can assume major leadership roles. I’m still surprised at how few there are. We have a lot of extraordinary women coming up, and if my being here can inspire some of them that they can do the same thing, then I’m all for that.
Do you have much contact with other alumni?
My engagement in the Duke medical alumni organization is why I’m now a dean. For about 10 years there, I wasn’t connected. I was at NIH, and then I was in New York, working hard and  raising my family. Then a couple of people said, “Why don’t you join the Medical Alumni Council?” and I thought, “OK, I could probably work out two visits a year.” So I became active in the council. It was great, and before long I became Medical Alumni Council president, and that’s how I met Nancy Andrews. We hit it off, and the next thing I knew, I was chair of medicine at Duke, and now I’m dean. All because I re-engaged with the alumni association.

What role does philanthropy play in the school’s success?
It makes a huge difference. Endowed professorships help us stay competitive. Research support helps us do important research that traditional sources don’t cover, and philanthropic resources support scholarships and financial aid and help us build great facilities. It’s critical to the success of the school. Our financial model has to include philanthropy, and it’s the dean’s role to be a leader in that regard.

Can you elaborate a little bit on your family’s role in your career?
My husband and I are two deans, and before that we were two chairs. He was chair for eight years before I became chair, and he was dean for seven years before I became dean. I feel like I’ve had an apprenticeship for both jobs. When I took this job, we started out on one of the long walks we like to take, and he said, “You know, I never like to give you advice,” and then for the whole five miles he gave me advice. Of course, he takes some of my best ideas as well. It’s mutually beneficial and fun, and never competitive. We never miss a weekend. You work hard all week, and on the weekends you decompress. We walk and talk, and then you start Monday and you’re ready to go. We didn’t plan it this way, but it works remarkably well, so we’re sticking to it.

Is there anything else you’d like to add?
I’m approaching this job with two main principles in mind. The first is the idea of “One Duke.” The opportunity to align Duke across all its missions and leverage that to do big things is enormous. The other is the concept of service to the faculty. If you can facilitate what they can do, that’s the magic of an institution like this. I will be very disappointed if I can’t facilitate greater success for them. I always say I’m not the smartest person in the room, and I like that. My job is to give them the opportunities to allow their skills and leadership to develop. If we can do that, that’ll be a successful deanship.