

The Foundation of the American Academy of Ophthalmology
Museum of Vision & Ophthalmic Heritage

Conversation Between Morton Smith, MD and Robert Stamper, MD
Chicago IL, November 10, 2012



Drs. Morton Smith and Robert Stamper recorded this conversation on November 10, 2012 during the Annual Meeting of the American Academy of Ophthalmology, in Chicago, IL.



In this excerpt [Drs. Smith and Stamper](#) remember their interview at Washington University. The audio starts with Dr. Stamper speaking. (.mp3 file)

Here, [Drs. Smith and Stamper](#) discuss their mentor, Dr. Bernard Becker. The audio starts with Dr. Stamper speaking. (.mp3 file)

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ROBERT STAMPER: This is Bob Stamper, Robert Stamper, and the date is November 10, 2012.

MORTON SMITH: This is Mort Smith, and it's November 10, 2012.

ROBERT: What an amazing thing, it's the same day.

MORTON: How about that?

ROBERT: Please, ladies first.

MORTON: Well, I'll start off with some sort of generic-type questions. Bob, what interested you in, first of all, going into medicine, and then after that, what made you decide to go into ophthalmology?

ROBERT: Well, nobody in my immediate family was involved in medicine at all. But every Thanksgiving, we used to go visit a cousin to watch the Thanksgiving Day Parade. And her son was a research pathologist. I don't know how anybody could be a pathologist, but that's a different issue. Her son sort of adopted me and, you know, maybe I was 12 or 11, but I really loved him, and even though we saw each other once a year, I sort of wanted to model my life after him. So I knew from an early age, before I entered high school, that I wanted to go into medicine.

And ophthalmology was a different issue. You probably know the story quite well. I was introduced to ophthalmology by a, then, next door neighbor, Miles Galin, and went to work for him as a medical student over a couple of summers doing some research and that's what started me on my way. How about you?

MORTON: Well, nobody in my family was in the medical profession. As a matter of fact, I was the first one in my family who actually graduated from

college. And when I got into college, I did very well in science, got good grades in science and just got turned on about science. And it wasn't the kind of thing where I wanted to be a doctor from age 12 like in your case. I just decided that I would try to go to medical school when I was in college, and I applied, got in and so...

ROBERT: The rest is history.

MORTON: And the rest is history. It wasn't anything like so many people have... are influenced by... like you were influenced by one individual or a member of the family is in the medical profession. So my situation was somewhat similar to yours, just being in the right place at the right time.

As far as ophthalmology, actually, when I was in medical school, my original plan was to go into pathology, because I had externed in pathology while I was a medical student. And when I was a senior, I started to get a little nervous about going into pathology and then, perhaps, finding that after about 10 or 15 years, I missed seeing patients, working up patients, because I really enjoyed working with patients, directly with patients when I was a senior. And in those days, in the early 60s, there was no match program for residencies. There was a match for the internship, but not for residencies, and so I didn't apply for ophthalmology residency until I was in my internship year. And when I was in my internship year at Denver General Hospital in Denver, Colorado, I became friends with some of the ophthalmology residents and they used to take me down to the eye clinic and taught me how to use the slit lamp, and I thought it was kind of cool. And that's when I decided to apply for an ophthalmology residency.

And your history at that point, and my history is quite parallel, because we both went to Washington University in St. Louis for our ophthalmology residency training. And now, I would like to get back to you and ask you about your applying to Washington University in St. Louis and the circumstances that you were accepted into that program.

ROBERT: And you know the story very well!

MORTON: And that's why I'm asking it of you!

ROBERT: That's why the diabolical laughter! Well, as you know, in those days, the Vietnam War was sort of warming up and doctors were subject to the draft. And because of my background, I asked the people that I had worked with, where would they go if they were interested in an academic career in ophthalmology, and pretty much everybody said Washington University. So I went there and I met Steve Podos, who amongst lots of other people there, were part of my formative years, but at that moment he was going to be the chief resident. And so he accepted me into the program and then I got a little notice from my draft board saying "greetings..." So I looked into a variety of alternatives and for me the most attractive was the Peace Corps. I joined the Peace Corps for two years as a public health service officer and then reapplied to Washington University. And I can't remember the name of the guy who was going to be chief resident, who was kind to me, who took...

MORTON: Who interviewed you?

ROBERT: ...who took pity on me. And I think it started with a 'Mort.'

MORTON: Well, if you turn your head directly at me, maybe you will remember who it was that interviewed you!

ROBERT: No, that person didn't have white hair!

MORTON: Okay! I remember that interview very well, because I was so impressed that you had come from the Peace Corps. And in those days, we had very strong political feelings about things, as you remember. And there's no question this guy was going to be my resident.

ROBERT: Well...

MORTON: And then we took you in.

ROBERT: ...that was very kind of you. And then you realized to your horror what you had gotten!

MORTON: No, I wouldn't say that for the least. You were a fantastic resident. You were a great chief resident, too.

ROBERT: You know, that was... sort of coming back to St. Louis. I cannot imagine a more academically exacting, but friendly and nurturing environment in which to be a resident. And you, of course, were the younger faculty at the time. I think they took you when you were 5 years old or 6 years old as a faculty...

MORTON: Yeah, I'd just gone on at the time. I looked that! I looked like I was 5 at the time. I had just gone on the faculty when I interviewed you. I think that was my first year on the faculty. I would agree with you completely about the kind of atmosphere that was at Washington University. And, of course, you've got to say it- it was Bernie Becker.

ROBERT: Yeah.

MORTON: Bernie Becker was a giant. And he created an atmosphere that was very high standards, very high standards. And I think at that time it was pretty well acknowledged around the country that we were *the* academic ophthalmology training program. And the other thing that you mentioned, I think, is very important. It was a very nurturing and warm atmosphere. It was not intimidating and you got a lot of support from the faculty.

ROBERT: I mean, there were other programs that had exacting standards, but I don't think any of them had the people skills, nurturing skills that people like yourself and Steve Podos and Ron Burde and...

MORTON: Ron Burde, yeah.

ROBERT: You know, just almost everybody I can think of...

MORTON: Andy Gay.

ROBERT: Yeah, right...the faculty were...

MORTON: Wonderful teachers.

ROBERT: ...dedicated to teaching, dedicated to making sure you were the best that you could be. And I think that is a tribute to Bernie's ability to choose the people around him and to set up the atmosphere.

MORTON: You just said something I think is really important. You said that there was this atmosphere of teaching, really good teaching. And don't you think that that really influenced you in staying in full-time academic ophthalmology, that you wanted to teach because you were taught in such a way that it was such a pleasure. You got such a reward. That was the case for me. I mean, I just said, 'I have to be a teacher because this is a great way to have a career.'

ROBERT: The microphone can't see my head nodding in vigorous agreement. But just for the record, it was doing so, and, absolutely, I think that whole atmosphere there, particularly, as you say, the teaching atmosphere, was what influenced me to stay in academia my whole career...

MORTON: Which segues us into... why don't you start off telling us about your career in academia and then I'll follow up with my career.

ROBERT: Well, since you're the... you were my teacher, my mentor, my model, don't you think we ought to start with you?

MORTON: I was your mentor and tormentor?

ROBERT: Well, that, too, but I didn't want to say that for the record!

MORTON: Well, I took some time out in the middle of my ophthalmology residency, did a year in the pathology department at Washington University under Ackerman, the man who was really the father of surgical pathology in this country. And then the year after that, I went to the AFIP, the Armed Forces Institute of Pathology, and did a year of pure eye pathology with Dr. Zimmerman. And then I came back. I was chief resident in ophthalmology at Washington U, and I stayed right on the faculty right after that.

I want to go back in time and tell you an anecdote which I think has a little bit of humor, but is important about my career. As I mentioned to you, I was thinking of going into pathology originally when I was in medical school.

When I got into the ophthalmology residency program at Washington University, the first thing I realized right away, because of Ted Sanders... you remember Ted Sanders? He was doing the eye pathology at that time. The first thing I realized was that eye pathology in the United States and actually throughout the world was really being done by ophthalmologists who took extra training in pathology. The overwhelming amount of eye pathology was done by ophthalmologists who took training in pathology, rather than general pathologists. And so I realized right away that that would be my academic gimmick, so to speak.

And so I was in the beginning of my second year of residency, and I went to Bernie Becker and I said, 'I would like to pursue ophthalmic pathology' as kind of going back to my first love of pathology. 'I would like to pursue ophthalmic pathology,' as my academic gimmick or academic shtick, so they say. And I'm sitting in his office and I had just started my second year of residency in ophthalmology and told him this. And Bernie Becker got on the phone and he calls Dr. Ackerman in the pathology department at Washington University, and he's talking to him while I'm sitting there in his office. He hangs up the phone, then he picks it up again and then he calls Dr. Zimmerman at the AFIP, hangs up the phone then turns to me and says, 'Okay, next year, you'll spend a year in the pathology department here at Washington University with Dr. Ackerman, the following year you'll go to Washington DC and spend a year in eye pathology with Dr. Zimmerman, then you'll come back and you'll be chief resident in ophthalmology here, and then the following year you'll go on the faculty and you'll do the eye pathology and anything else you want to do as a full-time faculty person.' And I sat there and didn't say a word! I went home and I said to Paula, I said, 'I think Dr. Becker just mapped out my life for me.' And she turned to me and she says, 'Does that mean we have to live in St. Louis?' She didn't like St. Louis at that time. And as we've said today, the rest is history, and I stayed there for my entire career. I would take little fellowships here and there and a sabbatical here and there, but Washington University was my home base and I stayed there.

ROBERT: Well, you did more than just teach pathology. You were a role model and a friend, and a fabulous teacher to several generations of ophthalmologists who came out of that program. And the other programs that you... that you got invitations to speak at.

MORTON: How about your career, after you left St. Louis?

ROBERT: Okay. Well, my leaving St. Louis was a little traumatic, in part because Becker did offer me a full-time position. And at the time, there were five people on the glaucoma faculty at Wash U, all of whom were, you know, world-class people and I just pictured myself as being the kid in diapers for the rest of my career. I had met Bruce Spivey and a couple of other people, actually, because of you. I met Bruce Spivey because of your interest in ophthalmic education, and I toyed with the idea of maybe getting a degree in education. You suggested I talk to Bruce Spivey, who at the time I think was the only individual in the United States – an ophthalmologist with a degree in education.

MORTON: That's right. He went back to school and got a Masters in Education.

ROBERT: So I actually sought him out at an Association of the American Medical Colleges meeting in Cincinnati and over a hot dog and a beer he told me I'd be dumb to get a degree in education, that he thought it gave him a credential, but that he wasn't sure that it gave him much else – although I think he probably underestimated the effect on his career of having that degree.

Then when I was chief resident and waiting in a line, I think at ARVO for a rental car, I happened to be standing in front of Bruce, and Bruce said, 'You know, I just accepted a position as Chairman at a budding new medical school in San Francisco. Would you be interested in looking at a position there?' So I went out... I also looked at Wisconsin and they made a terrible, terrible error, because I really liked both the city of Madison and the people that were there. And at the time, as you know, George Bresnick was there. But they invited me back... my first look was in November on a nice crisp fall, football weekend. It was lovely. They made a mistake of inviting me out for a second look in February. And the wind chill factor was 65 below zero and I had to walk from the parking lot to the clinic backwards because it was not possible to walk forward. And, you know, St. Louis winters were cold, but this was *cold!* And then the next week, I flew to San Francisco and I'm afraid the contest was won by the weather in that circumstance.

And so I was at California Pacific Medical Center, which was supposed to be the University of the Pacific Medical School but never quite got the funding that it needed to get off the ground. But we built a really good residency program there. In fact, three of the last five Academy presidents came out of that program.

I was chairman there for about 10 years and then about 15 years ago, got an offer from the University of California that I couldn't turn down, so I moved across town to the competition. It's been a very rewarding, satisfying career.

MORTON: Since we're here at the Academy, I guess we ought to talk about our involvement with the Academy. I know both of us have been involved with the Academy for a long time.

ROBERT: Well, for me, not more than... 40 years? In fact, this is my 43rd straight Academy meeting.

MORTON: What was the first area you got involved with? Was it one of the committees or what?

ROBERT: I think it was, yes, it was on the earliest basic and clinic sciences committee.

MORTON: The BCSC.

ROBERT: The BCSC.

MORTON: That's what I thought.

ROBERT: And I started out in the general ophthalmology section, and then moved over to the glaucoma section, and then eventually chaired the glaucoma section. And then I got involved in education for allied health personnel and developed what used to be called the home study course – now I think it's called a self-study course, or something like that. And let's see, what else have I done? Those are the ones that come immediately to mind.

MORTON: And, of course, you did a lot of courses over the years.

ROBERT: Oh, yeah. Yeah, I did get a Lifetime Achievement Award, but I'll bet you have one of those too.

MORTON: Yeah. Yeah. We did pathology courses. For years we had that CPC with Zimmerman and Ray Font and Dick Greene, Dan Albert and myself, all the old-timers, who trained with Zimmerman in the 50s and 60s. We did that for so many years. And then I gave the pathology course for so many years.

But like your career in the Academy, I started off with the BCSC. I started off with the path section on that. And the other thing, as you did, with allied health, I was with the first committee for medical student education. And, recently, I found a photograph that I sent to the Academy, a photograph of the first medical student education committee of the Academy. Were you in involved in that at all? I don't remember if you were a involved with medical student, because I thought you were mostly allied health.

ROBERT: I don't think so. I think I ended up chairing the Allied Health Committee. The first... the Academy had never had an Allied Health Committee. That whole interest in allied health had sort of been inherited from the old American Association of Ophthalmology. And it took a few years to get people interested in allied health education. And then I chaired that first committee, and we did the unthinkable thing of inviting a couple of allied health people onto the committee, and it was a heretical move in those days. But I think the Academy still runs that self-study course and has a very active role in allied health education.

MORTON: Yeah, the first committee on medical student education... and I refer to that photograph that I found... in the front row... I'm sitting in the front row, and there's Bill Spencer and Ron Burde. I think Bruce Spivey's in there and David Parke, Jr. is in there, who is now the head of the Academy. And he looks like he's about 14 years old in that photograph.

ROBERT: He doesn't look much older now!

MORTON: And it was eight of us, and I can't think of who the others are in that photograph, but it was interesting to find it. And I think that was our first meeting. It was back in the 1970s.

Our careers also have been parallel – exactly parallel – with the American Board of Ophthalmology.

ROBERT: That's right.

MORTON: Because you and I went on a board at the same time, and did our eight years and went off at the same time.

ROBERT: Weren't you also on the Residency Review Committee...?

MORTON: Yeah, so were you.

ROBERT: Yeah! So both of us...

MORTON: Yeah...

ROBERT: ...I think they took the people who were interested in education and sort of sent us all there...

MORTON: Yeah, they were all on the Residency Review Committee, too. I remember you and I and Paula went bike-riding in Key West at one of the meetings.

ROBERT: Oh, yes, that's right. But, also, I remember the meeting in Jackson Hole.

MORTON: Oh, yeah.

ROBERT: I have a photograph of that meeting still sitting on my bulletin board in my home office.

MORTON: George Bohigian is in that?

ROBERT: That's right and Judie Charleton.

MORTON: That's right, yeah.

ROBERT: And I'm trying to remember who else.

Anyway, I'm reminded every time I go back to Jackson Hole. Every year. And every time that plane lands in Jackson Hole, I think of that meeting, because it was such a beautiful place, and it was a very congenial meeting, and we got a lot of work done. You know, I loved being on the Board. It was one of the highlights of my career. I do not miss those piles of stuff that used to come by Fed Ex to my home and... I would take one look at that and realize that it was a weekend out of my life.

MORTON: It was a lot of work, but it was a wonderful group, and we felt that we were doing something. We were streamlining the process. We were trying to make the Board questions relevant to the lives of ophthalmologists...

ROBERT: And one practice lifetime rule, I want to say. Anyway, that was a... I certainly think of that as perhaps the apex of my career. It was a true pleasure and a privilege and an honor to serve in that organization.

MORTON: So here we are, invited to do this history and we're called the 'senior ophthalmologists.'

ROBERT: What's this 'we' business?

MORTON: Yeah, anyway... I don't like that term. I think it's very condescending and patronizing...

ROBERT: But outside of that, what don't you like about it?

MORTON: I'll accept it for the purposes of this interview situation. What does that mean to you? You're one of the... oh, all right, you're one of the more mature... let's use that term, one of the more mature ophthalmologists – as I am. I'm not that much older than you are, but I'm a few years older than you are. What does that mean to you, as far as your career is concerned? Have you slowed down? Do you have different interests or are

you still involved in the same things? Or has it shifted? What's been going on for you?

ROBERT: Well, I've always been a clinician, and clinical ophthalmology has sort of been a passion... I can't think of much that I'd like to do better than that. I have slowed down just a little bit. I still am employed, but I work 80% of time now. I have started recently to start thinking about some other projects that I have thought about for many years, but didn't have the time or the mechanisms to do them. One of which is coming back to my interest in international ophthalmology. From a scientific point of view, to look at the problem of how do we manage glaucoma in the resource-challenged parts of the world? The sort of typical American approach or British or Canadian or what have you, or German, whatever, approach of finding glaucoma at its very earliest stage and then throwing all of our pharmacologic and surgical technology at it to try to make sure that no further loss occurs in that person's lifetime. Maybe that works in our kind of systems, but for sure in the developing world, that can't work. And you see the devastating effects of advanced glaucoma, about which there's nothing you can do. If somebody walks in blind from glaucoma, you can't do anything, unlike cataract surgery, where they can walk out under their own power. Glaucoma patients still have to be led by their grandchildren or somebody, so you lose two economic-producing people with an irreversible blindness. So I think the trick is to find glaucoma at some stage between earliest and too late, and then find a cost-effective way of dealing with it, and certainly pharmaceuticals aren't going to be it. So we need to develop some surgical procedures that maybe aren't perfectly effective, but if they can delay the onset of severe vision loss for 5 or 10 years, I think we will have made a huge step forward to allow somebody to take care of their sheep, or grow their corn, or whatever it is for 10 years longer is a major economic plus for them and the family. So I've finally gotten the funds together to start looking at this from a scientific point of point of view. So I'm kind of morphing into a bit of an epidemiological economic clinical project.

MORTON: That's interesting. Your discussion started off with your attitude about many countries, where obviously access to medical care leaves a lot to be desired, but I guess it's still a problem here in the States, isn't it?

ROBERT: Well, resource-poor parts of the world are not limited to Asia, South America, and Africa.

You've got some areas in the United States... and I'm sure that's true of other developed countries... where there are pockets, at least, and sometimes unconscionably large pockets, where there either isn't adequate access to care or the care that's provided is suboptimal.

So the idea is that, as far as I know, nobody else has put forward an effort... and I've built a team now that includes an economist, an epidemiologist, people who fought conditions like AIDS and trachoma in the developing world, and so who have some feeling for how do you prove concepts, how do you cost-account those concepts. You know, you can't go to... I'm making this up, so don't take it as fact, but you can't go to the Minister of Health in a country like Ghana, and say, 'Well, I've got this great project. It's only \$150 million, and we can take care of glaucoma in your country,' when his whole healthcare budget may be \$20 million for everything.

MORTON: Right, yeah.

ROBERT: So you've got to put cost-effectiveness into the mix.

MORTON: You're forced to get involved with politics, whether you like it or not, aren't you?

ROBERT: I'm afraid that's going to be an issue.

MORTON: Well, you started your discussion with saying that you're slowing down. It sounds like what you're describing is that you're not going to be able to slow down!

ROBERT: Well, it may mean that I have to devote more of my energy in that direction and away from patient care.

MORTON: In a different direction, yeah.

ROBERT: I hope, you know, to... I still get a great deal of satisfaction in patients I have taken care of for 25-, 30 years, children that I took care of

that are grown-ups now and have children of their own. So those kinds of relationships are hard to dismiss with the snap of a finger...

MORTON: Your last last statement I can relate to. You know, I was not only responsible for eye pathology in Washington University, by my clinical practice, as you may recall, was oncology. So I took care of a lot of kids with retinoblastoma over the years, and now... and that's been turned over to others on the faculty, Bill Harbour and Greg Lueder. And every now and then I'll get a call to come over and say hello to this 25-year-old person in the other office and they will tell me that 'you took care of me 23 years ago and took out my eye for retinoblastoma, and I'm living a perfectly normal life.' And that's... that's a good feeling when you do that. And I can relate to your story of seeing patients that you saw when they were young and they're still there.

Yeah, there is a lot of satisfaction in the practice of clinical medicine. And I think both of us would agree that teaching that... about taking care of patients and keeping up with things and doing it right... with younger ophthalmology residents and medical students, you get a tremendous amount of satisfaction in that.

I've slowed down considerably now. I'm not going to mention how old I am but, as you know, I'm getting up there. So I took what I call working at a semi-retirement pace. And Paula asked me what that means, and, basically, it's working 60 hours a week instead of 90 hours a week.

ROBERT: Yeah, that's what my wife says!

MORTON: But I don't have certain responsibilities anymore, and that's a big relief. I don't have private patients anymore. I'm still very much involved with the eye pathology, but I do have someone who was my fellow in eye pathology and he stayed on faculty. So he does the nitty-gritty and the sign-outs and dictates... but I'm involved with all the cases. And I'm still teaching medical students, so I'm still doing what I really like.

ROBERT: Do you still do your dean work...? You were Associate Dean for awhile.

MORTON: No... I was Associate Dean for several years, but I'm not doing that anymore. That was a lot of work, and I enjoyed most of it, but I will be honest with you and tell you that it did involve some politics and I did not enjoy that. And I see you smiling over there...

ROBERT: I've been there, done that. Do you want to see the scars?

MORTON: Yeah, right, yeah! I'm not cut out for that. I don't think you are either. There are certain types that really do well in political positions and I didn't particularly like that. The other aspects of the job were fun and I enjoyed that. Yeah, but I have slowed down.

Like you're doing other things, what I've become involved with at Washington University is... as what most Emeritus people do, and I have Emeritus status now, is you get involved with fundraising. And that's more fun than I thought it would be. I thought I wouldn't like it, but it's been a lot of fun. We write letters and make phone calls and meet with people and if you do it right, they come forth. The alumni come forth with some money. And a private school like Washington University, we rely so much on, you know, fundraising.

ROBERT: I'm a recipient of a fair number of those phone calls, and letters...

MORTON: Yeah. You probably receive some of those letters from me...

ROBERT: But then, again, of course, I turn around and do it on behalf of UCSF, so...

MORTON: Yeah, that's right. You have to show loyalty to at least one place.

ROBERT: Now you were mentioning retinoblastoma, so what's changed there? What did you say you were in practice for – eight years now, nine years?

MORTON: Well, I started residency in '61, so that's half-a-century. Yeah, I saw the melanomas and the retinoblastomas for over 25 years.

ROBERT: So what's changed?

MORTON: Well, you know, not a lot has changed. We have better chemotherapy agents, and there's some new things coming up like Dave Abramson in New York is the one who introduced the idea of localized chemotherapy treatment, but the jury is still out on that. But in most cases of retinoblastoma, especially unilateral retinoblastoma where there's no family history and it's strictly a unilateral case, and the retinoblastoma is pretty much filling up the globe, that's still the same old treatment, and that is you have to do an enucleation, get a long optic nerve, and the prognosis is still pretty good in that circumstance.

Now, with familial cases that are bilateral, it's a different story, but still in the unilateral case with no family history, enucleation will... you can rely on a better than a 95% cure rate. So it hasn't been a lot that's changed.

Melanoma is going through some new things with gene expression profiling and so forth, but not tremendous amount of advancements as far as treatment is concerned. You guys in glaucoma have done a heck of a lot more than we have in oncology.

ROBERT: Somehow the pace... I think the pace is sort of maddeningly slow, but it's true. I actually watched Becker do the first trabeculectomy in St. Louis while I was chief resident, or during the year that I spent in his office. And so I actually came out to California having done several... I watched him do one and then I did a few... I was actually able to do them. It was still a new operation. Many people were still doing the Scheie procedure and full thickness filtering operations with their high incidence of hypotony. Often patients coming out of the surgery having worse vision than when they went in.

Of course, we also had a whole bunch of really nasty medications... eye drops that we used for glaucoma—epinephrine and pilocarpine were the mainstays of glaucoma treatment when I left St. Louis. Then shortly thereafter, timolol came along which was, at least from an ocular side effect point of view, was a much better-tolerated medication than any of its predecessors. And then over the years, we've had the prostaglandins and the alpha-adrenergic agonists and the topical carbonic anhydrase inhibitors. But

when I was resident, we had pilocarpine, epinephrine and Diamox, and a lot of unhappy people from one or more of those agents. I think the surgery has changed, too. We have the anti-fibrosis agents that have improved the success rate, although maybe at a price of increasing complication rate a little bit. The tube shunts have come in since then. And now I think there's a very exciting new trend towards these micro-invasive surgeries where you operate directly on the Schlemm's canal or do internal anterior chamber shunts, all of those, I think hold out some promise for the future.

So, Mort, it's been said that ophthalmic pathology is dying or at least is a diminishing ophthalmic subspecialty. What are your comments about that?

MORTON: Okay, well, that was the gist of my Zimmerman Lecture about three years ago that I gave here at the Academy. And I opened up that lecture by quoting Mark Twain who said that 'the reports of my death are greatly exaggerated.' And I feel that way about ophthalmic pathology. At the time that I gave the Zimmerman Lecture, there had appeared many editorials in various journals about ophthalmic pathology dying, and that's why I used that as my theme or my launching pad to give the Zimmerman Lecture. I basically wanted to point out in my lecture that ophthalmic pathology is not dying. It's just that the grandchildren, the academic grandchildren of Zimmerman have taken over the role. The spots that those of us who were Zimmerman's children – who trained with Zimmerman, have been relinquished for age or illness or death or whatever, and they're all covered. At your institution, Michelle is doing a fine job, even though Brooks Crawford retired. And I have someone that I trained as a fellow and he's taken over the job of Director of Eye Pathology at Wash U, and I'm now the consultant. So all areas are covered, but it's going to take a few years before these young people get their name up there and start publishing some papers. And everybody that's doing clinical ophthalmology around the country realizes that it's being well covered.

But there are some changes that have to be made. For example, ophthalmic pathology fellowships are kind of rare. And one of the problems is that there is no funding to pay for someone to go into ophthalmic pathology as a fellow, and there's no guaranteed future to do ophthalmic pathology. It has to be done at an academic center. It has to be an academic pursuit. But we're working on that and I think things are being changed. The American

Association of Ophthalmic Pathologists, which I played a major role in starting with a few others – Myron Yanoff and Dan Albert and others – has now expanded, and it's now, instead of the AAOP, it's AAOOP, because we have brought in ocular oncologists. So it's the American Association of Ocular Oncologists and Pathologists. And so these are the little things that we're expanding and I don't think the discipline is going to die.

ROBERT: Well, I agree with you, but I do think we're going back to the future. So in the bad old days, ophthalmic pathology was a labor of love, and ophthalmic pathologists made their living by being general ophthalmologists or something like that. I think for a while there ophthalmic pathologists were being paid for the work that they did, and that was threatened by a need for them to be Board-certified in pathology as opposed to ophthalmology. And I think at that point, many ophthalmic pathologists started going in dual directions with either ocular plastics or comprehensive ophthalmology or some other clinical role in order to continue their role as ophthalmic pathologists. Or working, maybe, in a general pathology unit.

MORTON: Yeah, but there are different ways to handle that. For example, at Wash U we are part of the Department of Pathology, and all the specimens are put through in Pathology, so there's no duplication. It's a big, big economic saving. To have an autonomous eye pathology laboratory within the Department of Ophthalmology, in my opinion, is the thing of the past. What we have shown at Washington University is that it can work very well. I've always had a joint appointment in the Department of Pathology and my protégé, George Harocopos has a joint appointment in the Department of Pathology. We all get along fine and that's one of the ways to do it. There are other ways... if somebody wants to give a lot of money to set up a lab, that's another way. We all have to rely on outside sources of funding now, and we've just got to work on that. But I'm not as concerned as some people were a few years ago.

ROBERT: Part of the solution has been the Residency Review Committees', sort of, demand that ophthalmic pathology be an integral part of an ophthalmologist's training. And I think without that pressure, when things looked gloomiest, I think the subspecialty may have gone off the cliff. With that insistence, every training program had to offer some exposure to ophthalmic pathology.

MORTON: Yeah, I, agree with you. And I remember when you and I were on the Residency Review Committee we really pushed for that. Whether or not the current members of the RRC now continue to do that, I don't know. But that's a very important point you're bringing up – that's one of the ways that you do it. You say, 'These are the standards. And you have to abide by the standards.'

I want to get back to one thing that you mentioned about glaucoma. You have convinced me today, although I knew this, that early detection is crucial when you're talking about glaucoma. Early detection really plays such an important role, because, as you say, some of these people that are blind from glaucoma, there's nothing you can do about it. So you're really getting in to political and social problems with this early detection. What are some of the ideas that you and your colleagues have about getting people seen early? Is it routine exams, teaching our internal medicine colleagues to make sure that they use an ophthalmoscope on every patient and recognize glaucoma's cupping... what can you do about early detection?

ROBERT: I think you've opened up a Pandora's Box. It's got a lot of political issues.

MORTON: Aren't we supposed to today?

ROBERT: First, I think the context has to be described. If you find somebody in a small village in Central America with three ganglion cells gone from glaucoma, what's the point? They're not going to be able to afford medication and nobody's going to operate on somebody who's got only minimal damage. So I think there are going to be two contexts in which we look for glaucoma. In the developed world, an ideal world, where money is less of a concern, there can be a multi-pronged approach. Volunteer organizations can go out into communities that perhaps don't have access to or aren't used to getting routine exams – non-government agencies can go out and screen. We actually do this in Northern California with a volunteer organization. We actually send out a crew of volunteers who do visual acuities, frequency-doubled perimetry – which is a one-and-a-half minute per eye visual field substitute – and then they do fundus photography. Photographs are then placed “in the cloud” or sent by email to

volunteer ophthalmologists who can be quite remote from where the screening is taking place. And between those three tests, we're able to pick up diabetic retinopathy, cataracts, and glaucoma, and maybe a few other things, but those are the biggies. Our volunteers are also skilled in getting those people funneled into the public medical healthcare system.

MORTON: So you used the word 'volunteer' about 12 times. Okay, so that's the operative word here. You have to have volunteers. That way you don't have to worry about big, big, big bucks. But to set up the program... I mean, there are a few expenses? You have to have transportation and people...nurses or some type of health practitioner?

ROBERT: Actually these are laypeople.

MORTON: Laypeople who volunteer?

ROBERT: Who volunteer. They are trained to take fundus photographs. You know, some of the fundus cameras today are so automated...

MORTON: Yeah, right.

ROBERT: ...they don't take a huge amount of training to function. The photographs aren't perfect, I'd say about 85% of them are useable to say 'no glaucoma' or 'suspicious for glaucoma,' or 'definite glaucoma.' You just need to get into the healthcare system.

MORTON: So it's a screening program, but it's certainly better than zero. It's certainly better than nothing.

ROBERT: That's right.

MORTON: So you need a few funds to pay for the gasoline and so forth.

ROBERT: Right.

MORTON: Is that private money or is it from the state?

ROBERT: It's all private money.

MORTON: Private money. So you don't have to rely on the state and the state legislature arguing about supporting this.

ROBERT: Our state legislature is so dysfunctional... he's nodding... that I wouldn't want to go to them for anything!

MORTON: Do we need to remind our listeners that you're talking about California? I don't think we need to remind them, do we?

ROBERT: Probably not, although I'm not sure there are too many states that have functional legislatures.

MORTON: I don't think we're going to go there today! At any rate, states used to get involved. Do you remember the POB program in the state of Missouri?

ROBERT: Yes.

MORTON: POB stood for Prevention of Blindness. And that's what they did. They sent us residents from Washington U...

ROBERT: Down to the Ozarks!

MORTON: ...down to the Ozarks, down to the boot heel of Missouri and they rounded up 250 people in the gymnasium of the high school or the basement of the church, and we screened those patients, and we did a lot of good.

ROBERT: Absolutely.

MORTON: Found patients with cataracts, brought them back up to St. Louis, took out their cataracts. They were very happy patients. But the state supported that at the time. But like you're pointing out, the state doesn't support that anymore. You have to have volunteers to do this.

ROBERT: Think of the fight the Academy had getting glaucoma screening paid for by Medicare, and only in a limited population. And still, if you're

Caucasian and don't fit certain criteria, the screening for glaucoma is not paid for by Medicare. So we have a long way to go to convince the public sector that it's a valid thing to do. You know, it's very gratifying, at least for the doctors, to find somebody with moderate glaucoma. Knowing that you can intervene and that you've actually saved this person from a life of blindness.

MORTON: Now, you're describing Northern California. Is the same thing going on in Southern California? Is the state of California being covered by this?

ROBERT: No, unfortunately, our unit only covers Northern California. We go right up to the Oregon border, to some of these very rural towns, but we do not go into Southern California, and I don't know what processes are available there. I think Illinois has another affiliated program like that, part of the Prevent Blindness North America Program, and different states have their own volunteer organizations. And, to me, that is how we're going to get vision screening done in the resource-poor parts of the world in the long haul – to find a school teacher or a nurse, who can learn simple screening techniques. Again, that's part of what we're studying in this project of mine, to find which of those techniques work the best and what stage of glaucoma are we looking for – not too early, not too late, sort of the Goldilocks principle, it has to be just right. The better we get at managing glaucoma and turning it into less a chronic disease like hypertension and so forth where people have to take medication every day, I think, the more effective our screenings are going to be.

MORTON: That sounds admirable. Good luck on that.

ROBERT: Thank you. I'm sure it's going to be an unsolved problem long after I'm gone, but hopefully we'll make some headway.

MORTON: You and I have been so involved with medical education at all levels—the medical students, residents, fellows, colleagues, through the Academy, the ABO—that's really been a major part of our careers. Do you think ophthalmology is doing a good job? Maybe there are some areas where it could do a better job in teaching? I mean, present company

excluded—you're the best teacher I know, and I'm the best teacher you know...

ROBERT: I believe in the latter. I'm not so sure about the former...!

MORTON: Having said that, do you think, as a specialty and within the practice of medicine, we are doing a really bang-up job in teaching our medical students to get turned on to ophthalmology?

ROBERT: I don't think any of us, present company included, are doing as good a job as we might do. I think ophthalmology, for all of its incorporation of high-tech clinical stuff has been a little bit slower in picking up the revolutions that have occurred in education. We've been relatively slow at picking up, for example, surgical simulations. There are a few sporadic things here and there, but I think we could do a much better job with that. Colleges and universities are moving towards more interactive online learning-type experiences. Maybe selfishly, I don't believe that the teacher will ever be taken out of medicine, because I think you need the modeling that your teachers provide. I do think that we could do a better job at the resident and fellowship level, in utilizing the technology of education and adapting it for our use.

I think, present company exempted, that we're doing a rotten job with the medical student education. Less than a third of the medical students at UCSF graduate with any experience in ophthalmology at all. They are taught direct ophthalmoscopy by people... with all due respect to my internist colleagues – that are not particularly good with the direct ophthalmoscope. You and I know of Bruce Spivey's attempts at producing simulation devices way back when. I was involved in that, in the development of that modality. And I think we've dropped the ball. We haven't been as good advocates in the medical schools for our specialty. When a medical student graduates and becomes a primary care doctor and he or she can't tell the difference between an ophthalmologist and an optometrist, I mean, I don't want to get too much into that issue, but just that they don't know.

MORTON: Do you know of specific examples like that?

ROBERT: Oh, yeah.

MORTON: That's disturbing to hear that.

ROBERT: And I think there was a poll done some maybe 10 year ago that touched on this... so I just think we're not teaching them our skills. We're not exposing them to the benefits of our profession. And, you know, it's nice we still attract very bright people and get very capable people. I don't think we're losing out in terms of getting the best and the brightest, but they come to us from maybe not always the right circumstances. So I think we need a little stronger advocacy in the halls, in the dean's offices, and in the curriculum deciders to make ophthalmology a higher priority.

MORTON: I agree with you completely. That's where it has to start. It has to be somebody from ophthalmology has to be an advocate and has to sit down with the curriculum officer, the dean of curriculum and the dean of the medical school and just go over what's been going on in most medical schools, I agree with you.

Now, I'm spoiled, I have to admit, that I have had tremendous support from the Dean and from the Dean of Curriculum at Wash U and I have been lucky. We have excellent exposure in ophthalmology for all medical students, but that's not the case in many schools. And you do a lot of visiting professor travel and I do a lot of visiting professor travel, and I can tell you that I have medical students who have come to my pathology sessions and ask me about the exposure to ophthalmology at Wash U, and I rattled off all these things that we do, and they said, 'We don't get anything like that.' So I'm spoiled, but I know what's going on in most medical schools and you're absolutely right, there has to be somebody from ophthalmology that goes to the dean of curriculum and the dean, and just nag the hell out of him and point out that this is wrong.

ROBERT: I'm going to change the subject just a little bit here to raise an issue about dealing with difficult people. As a dean, as a long-term teacher, as somebody who's been intimately involved in the educational process, can you maybe comment on some of the most challenging situations you've found yourself in and how that got dealt with?

MORTON: Well, I will preface my remarks by telling you that, as I said earlier, when I was associate dean, the thing I didn't like about it was the politics and dealing with people that are difficult to deal with. Let's take a hypothetical, but a good example. Obviously, no names shall be mentioned, but you've had this experience. I've had it, everybody's had it, who is a full-time faculty person in the Department of Ophthalmology: the resident that is the problem resident. First of all, we can dispense with the problem medical student, because that's a headache for the curriculum office and so forth. And all they'll do with the problem medical student is I'll get an email... No, come to think of it, they won't send an email anymore. It cannot be traceable! I'll get a phone call about such and such medical student and how were they if they took the ophthalmology elective. And I'll just tell them. Usually, I'll say something like, 'I'm not sure how this person got through the interview process.' That's all you have to say. You know, you don't have to document anything more than that, because they already have documentation.

But let's get to the resident, and we've all had problem residents. I think that they have had set up ways to do this, to protect themselves from lawsuits and things like that. Years ago, when we were residents, there was nothing like that. You took a resident aside and you say, 'You're not working up to par, and here's what you're doing, and this is what you're not doing.' And you intimidate. I don't know, when we did it, it was not very formal and it wasn't very well thought-out, but that's how we handled it, and it was kind of rudimentary. Today, we do things with a set pattern because the lawyers tell us this is what we have to do. But doing it is not easy. It's very difficult to confront a resident, but you have to bite the bullet and you have to do it. And it comes down to the chairman of the department that's got to take that responsibility. So I'm going to punt here and say although I was very much involved with all of these things, the ultimate decision had to be made by you, because you were a chairman of the department.

ROBERT: All right.

MORTON: How about that for squeezing out of it!

ROBERT: I think you did that very diplomatically and with some finesse, but not a lot! Well, I'm going to give you two quick anecdotes that actually

were two of my three most difficult residents. I've only had a few so that was lucky for me. And these two were people who were just clearly not reading. Their knowledge base was way too small and it became fairly obvious by well into their first year that they weren't team members. They just weren't doing the job, or if they were doing the job, it was half-hearted. And with both of them, I sat them down and I tried very hard not to make it confrontational, just to go over the facts. This would be a week or so after due process and all of the legal things, but just sort of an informal, 'you know, you've been in the residency for six months and there's a feeling amongst the faculty that your heart isn't in it... what's the story?' And actually in both cases, it turned out that they were seriously questioning whether they wanted to do ophthalmology. And so sometimes, you know, they don't realize it themselves.

So I think if you give them an opportunity to think about it, in a non-threatening, non-confrontational way, sometimes the situation resolves itself, because in both of these instances, without getting too specific, they each had different loves than ophthalmology. And actually in one case it was totally outside of medicine. It was in the software development world. And in the other case, it was in pharmaceutical research.

I'll tell you this story. I was out walking in the hills in Berkeley one Sunday, and there was a screech of brakes about two years after one of these confrontations occurred and the resident finally decided to resign. And there was a screech of brakes and a car kind of pulled over right in my direction. I thought, 'Oh-oh, you know, somebody's after me,' or something like that. And it was this particular resident who had pulled over to thank me, and said, 'You know, I would've muddled through three years of the residency, but my heart wasn't in it. That's not what I want to do with my life and I just did it because I thought I had to do something substantive. And, you know, I've been doing this pharmaceutical research for two years and I love it. I found what I want to do with the rest of my life, and I wanted to thank you.' And here I thought he was going to kill me, you know. So sometimes these difficult situations do work out, although, not always.

MORTON: I was just going to say... now that has a happy ending.

ROBERT: That's both of those two.

MORTON: But there must be some stories where...and come to think of it, I can think of one situation...

ROBERT: You know of at least one...

MORTON: ... of an unhappy ending. Do you want to tell me your unhappy ending?

ROBERT: Well...we did find a resident who was using drugs, and so that one was kind of a no-brainer in a sense that we couldn't allow that person to continue. The residency had a substance abuse pathway, offered through the medical center, but this particular individual was not interested. And I think that person personally and professionally went downhill thereafter and we lost contact after a couple of years, but it was a sad situation.

I've had two difficult faculty encounters that both ended badly. And I don't know if I could have handled it better. I'm trying very hard to make this not identifiable. One of these was somebody who I think became almost catatonic, and was clinically treating people with very strong medications that had profound side effects. I'm not going to quantify it or qualify it any further. But they were ignoring panic phone calls from the patients and the patients' families. We had several discussions about what the responsibilities of a physician were, and we finally specifically outlined that all phone calls had to be returned within 24 hours, etc. When that wasn't lived up to I finally had to ask the person to leave the faculty because we couldn't... there were lives at stake here, more than just the usual ophthalmologic issues. Again, in the process, this person was offered help and the help was refused. And I think, ultimately, the person went home and didn't leave their home for two years and, finally, was committed to an institution. So I don't know what I could've done differently.

The other one was just a very difficult situation that dragged on for several years of a faculty member who wasn't pulling the load, refused to cover call, and that was a confrontation that extended over a long period of time that ended badly.

MORTON: We had a situation where a resident was, for lack of a better term at the moment, just inferior, just wasn't doing the job, making excuses and so forth. But it was very difficult to document, and you know, the lawyers tell you you have to document everything nowadays. The chairman of the department confronted this individual and explained that, 'you're not doing the job.' The resident denied everything and it was very difficult to document things. So we tried to have mentoring sessions, because the resident wasn't reading and so forth, and just delaying it, and delaying it, and delaying it. And then there was a complaint registered by a patient's family that this resident actually... didn't exactly hit the patient—the daughter of the patient was in the room—but was very rough in handling the patient, putting the patient at the slip lamp or whatever. She wrote a note to the department of how this resident in question handled her mother. And we had that and that was the piece that finally allowed our faculty to say, 'You are not allowed to take the second year.' This resident left, and, interestingly, started as a second-year resident in another program. That's another story. No phone calls were made that should have been made. Our department got a letter from this resident's lawyer, that we were being sued because we fired the resident without...

ROBERT: Due process.

MORTON: ...due process or whatever. Our University lawyer... now we have a lot of lawyers. You're talking about a big, wealthy university, it has plenty of lawyers! Our lawyer got in touch with that resident's lawyer and read the letter from the patient about how this resident had mishandled the mother – just read that letter. The lawsuit was dropped. They realized they didn't have a case. So that's how that particular situation was handled. But, I think neither of us have a really good answer that you could use to teach others what to do. You have to take each case on its own merits and demerits.

ROBERT: I think my experience has been both with employees and physicians that if you can try the non-confrontational, low key approach first that at least occasionally may lead to some soul-searching and solving of the issue. If that doesn't do it, then you have to go through the usual offering mentorship and offering medical care if that's indicated, counseling, whatever.

So maybe we ought to discuss [Bernard] Becker.

MORTON: Yeah, he played such an important role in our lives.

ROBERT: He was such a giant in my life. Do you remember some stories?

MORTON: Well, my favorite story is the one that I already told you about, that he just mapped out my life for me, and that's the one I usually tell. That's just so much in my mind when I talk about my career. I told that one. Why don't you start off and then I'll think of another one.

ROBERT: I have two anecdotes. One is that, as you know, Becker was probably the most widely read individual that I've ever met in my life. And, you know, he knew the interests of everybody at the department.

MORTON: Oh, yes, yes.

ROBERT: So, for instance, I would get a copy of the *Egyptian Journal of Obstetrics* with a note from him, 'Do you think this might have some application to glaucoma?' or something like that, or with a little bit of an annotation from him. It was a constant stream of copies of articles that he had read from as far afield as, literally, the *Egyptian Journal of Obstetrics*. Even people who didn't think that he even knew they existed would occasionally get letters saying, 'I know you're interested in X and Y. You might be interested in this article.' It was, sort of, the first acknowledgment that our chairman actually knew they were on the planet.

And then the other story may be a little bit more personal. When I finally had to go and tell him that I was not going to stay in St. Louis, that I was going to leave. For the next two months, he didn't speak to me at all. I think I really hurt him, and I felt very, very badly about it. We, of course, have since mended those fences.

The last thing I might mention about Becker was he cared so much more for us than we ever knew. I'll never forget when the ABO met in St. Louis at the Botanical Gardens, he was a guest, and he got up. And at the time it was you and I, and Al Kolker and John Keltner – I mean Washington University

graduates made up about six out of the 16 members of the American Board of Ophthalmology. You know, it was just an incredible statement about the effect that he had had. And he got up and he said, ‘You know, I look at all of you as my professional children.’

MORTON: I remember that well.

ROBERT: You know, he said it with emotion, and it really struck me that he really cared about us, he followed our careers...

MORTON: Oh, yes. I agree with you completely, and that’s one of the other things that impressed me so much. He knew about our interests, and he would find these articles, not only in medicine and ophthalmology, but our personal lives.

ROBERT: Absolutely.

MORTON: If he found something interesting about art, knowing that Paula was an artist, my son is an artist, he would send me an article about art. Or theater, because Paula and I are interested in theater. He just knows that stuff! You’re right, he took a personal interest. And what was really delightful about it is that Bernie never came across as an extremely warm type of person. He was a little bit aloof, but yet he was interested in you.

ROBERT: I don’t think he was so much aloof, as I think he was shy.

MORTON: Good point. You’re right.

ROBERT: I think he didn’t have the personal skills to interact with people and so didn’t. But that didn’t mean he didn’t care.

MORTON: That’s right.

ROBERT: I owe my whole career to him and his children, so I have a very fond and great, big place in my heart for him.

MORTON: And I agree with you 100%. And he was a hell of a poker player!

ROBERT: Oh, really, I didn't know that!

MORTON: Yeah, we invited him to our poker games and then after about four of them where he won all the time, we disinvented him!