GREGORY C. CHISHOLM

b. 1951, SB 1973, SM 1975, PhD 1989 (mechanical engineering) MIT, BA 1992 (philosophy and theology) University of London, STL 1994 Weston School of Theology; member of technical staff (MTS), Bell Laboratories, 1973–1976; mechanical engineer, US Department of Transportation, 1976–1977; consultant in private industry, 1979, 1982–1983, 1994—; entered Society of Jesus, 1980; ordained Roman Catholic priest, 1993; assistant professor of mechanical engineering, University of Detroit Mercy, 1994—; also taught at MIT, Holy Cross College, and Harvard University; member, MIT Corporation, 1974–1976.



I grew up in New York City. I was born in 1951 to Charles Chisholm and his wife Ann. My father was a New York City policeman, my mother, at least for the first part of my life, was just a mother. I was sent very early on to local Catholic schools because we were Catholic people and my father believed that the Catholic schools provided a better education. We lived in Harlem in a place called the Riverton, one of the earliest housing developments in New York. The status was that it was a housing development for black people and it was private, set up by the Metropolitan Life Insurance Company. I think they were catching really the postwar folks who were just coming back and had jobs and all that. They could capitalize on that.

But the local area Catholic schools were also very good. They were run by an organization called the Sisters of the Blessed Sacrament, and they had a lot of experience teaching African-American people. That was their whole mission, really, teaching African-American people. They were all white, as is typical in that kind of situation.

Anyway, my father very early on was primarily concerned that my math and science grades be the best. When I was in fourth grade, I came home with a report card and my report card gave me a 44 in science. I'll never forget. He marched me back up to the school. I don't think I ever remember my father being with me and a teacher before. We sat down and he wanted to find out why the hell I got a 44 in science. And the teacher explained to my father that in the third grade my father had moved me to a new school. He had

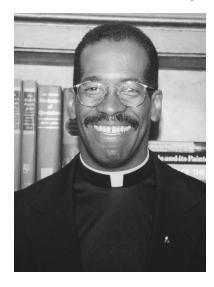
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taken me out of a school in Harlem and moved me into a school that was mostly white. The teacher said, "There are a lot of transitions that he's going through," and that sort of thing.

So anyway, I never failed again in math and science, needless to say. That became the real important thing for my father. By the time I was about eleven years old, my father began talking to me about going to MIT.

That soon?

That soon. I don't know what happened. I would suspect my father had been turned on to MIT by a *Life* magazine article that came out in the late '50s. In it there was a picture of the graduating class from MIT, and it was called the most valued class in America, something like that. And because of the space race and all that sort of thing, my father just sat down and said, "Great area, major



opportunity." He wanted to make sure that, with the math and science, I would be capable of participating in that type of stuff. So when I was eleven, I'll never forget—it was the first serious conversation I can also ever remember having with him—we talked about going to MIT and he really made it something interesting. I got quite enthusiastic about it without ever having seen MIT. My father had never seen MIT. We had never been to Boston.

So anyway, my trajectory was kind of set. Now, that is not to say that I didn't have my own interests. My own interests really did not have a lot to do with math and science. Believe it or not, the first thing that I think I ever wanted to be—and it was when I was about twelve years old that I articulated this—was a priest. Yes, yes. I really always wanted to do that. I grew up Catholic and I was very involved in kind of the standard things that young Catholic men do, the altar boys and that sort of thing. My voice was higher and before puberty I was even in the choir, the boys' choir. I was really attracted to doing that kind of thing, but my father would hear none of it.

One of the reasons we were all Catholic is because of him and his family, but he would hear nothing about me becoming a priest. He really tried to derail that kind of notion in me. Nevertheless, that is what I wanted to do. But I was also very interested in things like languages. When I got into secondary school, I started on the Latin and Spanish and would have taken French and all that sort of thing. But because I was on this math and science thing, I felt limited in the amount of languages that I could take. I always loved languages.

Anyway, when time came to go to MIT, I applied and it was the time, of course, when every major university in the Northeast as well as the country, I think, was looking for black students. This would have been the entering class in 1969. It was right after Martin Luther King's death and so everybody was trying to get black students. It was a buyer's market, really. My board scores weren't bad, but I don't think I was right at the top of MIT's level. There were people in my class who had nearly 1600 board scores. Well, I didn't have 1600. Anyway, I got in and got into a couple of other places.

Do you know the other places you applied to?

Yes. I wanted to apply to Stanford, but my mother wouldn't let me. She said that it was too far and they wouldn't be able to afford to bring me home. Where else did I apply? That's really interesting. I'm drawing a blank here. They would have been other schools with engineering programs. I might have applied to Rensselaer Polytech? I can't really remember. Most of the schools that asked me to apply, I didn't respond to. You remember the late '60s was also a time of emerging black self-consciousness, so people were revisiting black history, really going at it and trying to see what the competing forces were that put us in the position we found ourselves in during the late '60s. So I somehow, in my effort to be politically correct, decided that I wouldn't apply to any Ivy League schools.

And I think that was probably not a very good decision. I think in retrospect I probably would have done very well for myself if I had gone to a school that had both a very strong engineering and science program as well as a very strong liberal arts program, some place like Dartmouth. I fell in love with Dartmouth, actually, during my four years at MIT. Dartmouth would have been a place that I could have seen myself going, or Princeton or Columbia. They would have been real possibilities. Princeton was probably the school that I knew best before I began looking at colleges. We had friends in Princeton, New Jersey, so we would regularly see it. Anyway, those would have been real possibilities and I think I might have been able to respond to several of my talents and interests, really, if I had done that.

In any case, I did get accepted. I had applied to MIT in my junior year, but didn't know of my acceptance. As it turns out, my father was working for Whitney Young at the time and Mr. Young knew a man who was employed at MIT at the time—very tall guy, light-skinned guy. Do you remember him?

Oh, Jim Allison?

Jim Allison. He knew Jim Allison and so called up, and evidently my parents knew that I had been accepted at MIT months before I knew. But anyway, they sent me up to Boston because we had a neighbor who was at Boston University. They sent me up to Boston with him and I visited MIT. Now that was before MIT went on the kind of redecoration binge that they went on. In the fall of

1970, they began repainting things. They let the students kind of do murals on the main hallway. They gave our dormitory paint to repaint the place. When I got to MIT in '68 as a pre-freshman, the walls were all gray and then they were white above the gray. The down part of the wall was all gray and it was just the most boring looking thing. It was all very functional, nothing exciting, none of the stuff that you now see when you go through the main corridor.

Since I was in Boston for an entire weekend, I took a trip around other places. I went to Harvard. Well, Harvard didn't look all that great to me, but what did look great to me was a place like Boston College. Now, there they had a lot of character, those Gothic buildings. They floored me. It could also have been that I went on a Saturday afternoon to Boston College. I was not with my minder. He and his girlfriend had gone off some place and they said, "Why don't you just go out?" So I got on the trolley and went off by myself. I got all the way up to Boston College. It was a beautiful Saturday, fall afternoon. The sun was hitting that place and I said, "This is where I'd really like to go." But I found there was a priest who was walking around the place. I said, "Do you have an engineering school?" He said, "No." I said, "Oh well, I can't come here." Anyway, it was the most attractive of the places that I saw. I eventually, of course, did come to MIT and it wasn't long after that first year that they really began trying to spruce the place up. I mean, it really changed. It's not the place that I saw as a pre-freshman, after that.

Exactly. When you actually came to MIT, in 1969, I would assume that there were very few blacks. Would you describe that to me?

I came and went up to every black person I probably saw. I remember there were fifty-seven in my class.

Fifty-seven blacks? Fifty-seven blacks.

That had to be the largest class up to that time.

Oh yes. It was something that MIT had never seen before. Of course, I didn't know that they had never seen it before, but I know that we constituted all the black people that there were. There were about ten in the class ahead of us—people like Warren Shaw and Ahmad Salih, folks like that. There were a couple of other folks I didn't know as well. But they were in the class ahead of me, and

then ahead of them there were vanishingly few people. Maybe Ahmad Salih was one year ahead of them, actually. He might have been two years ahead of me. And then, of course, you had at that time some folks who had gone into graduate school. You had Shirley Jackson, who had gone to graduate school. Linda Sharpe, she was in graduate school at the time.

What was that like? How was that like, I mean, when you reflect back? Here are fifty-seven, largest class of black students ever to come into MIT. How did all of you fare, as you look back on that? How did you make out? Well, it's an interesting question. One could look at it objectively and say we didn't make out very well because less than half of us graduated four years later. It's clear that there were things driving, I think, the selection of our group that had less to do with making sure that we got the education that we needed and more to do with the university fulfilling its own kind of needs or interests. I was watching a film last night, where there was an educational institution and there were kids who were getting abused, basically. All of the efforts went into protecting the people who were running things, and the kids who were being abused just continued to be abused. I don't want to say that we were abused, it's just that I think in hindsight—and that's always clearest—I don't think that all of the best thinking went into deciding who would come and how they would fare once they got here. Now, nevertheless there were still some fine people here waiting for us, people who seemed genuinely interested in us-John Mims, and there was a man who was a psychiatrist.

Don Palmer.

Yes, right. He was here at the time. Jim Williams was here at that time. Ron Mickens was here. He was a wonderful fellow and very interested in us. Jim Bishop was here. You know, it wasn't necessarily a big happy family, but whatever—however I might have disagreed on one issue or another with any of those people—I know that they were genuinely interested in our success. Of that, I have no doubt. They would have very much liked to have seen us all succeed.

I think a very good person I liked to have around at MIT at the time was a dean in the student affairs office. She was actually the mother of one of the people in my class.

Mary Hope?

Mary Hope, yes. I just thought having a kind of matronly female around was probably great. We were only eighteen or nineteen years old and she was just a mothering type. You wouldn't go to her to fix up your physics problem set, but you might go to her just because it had gotten to be a bit too much. And she would hear you and speak in a way that Mims couldn't or didn't. There were those kinds of folks to help us.

But you know, to be honest, in spite of the fact that my father always wanted me to be an engineer, wanted me to go into math and science, I didn't know a lot about engineering. I didn't know what to expect, what it would really call for. I had not much of a sense. And because my interests were ambivalent, I didn't go off and just pursue all of those types of interests and finding out what engineering was like and all that sort of stuff. I relied a great deal on the advice of advisors. My freshman advisor was in the economics department. You know, it was largely on the basis of what he was suggesting to me that I determined my program. I wish in some ways that I hadn't had him. I wish that perhaps I had had someone either in an engineering discipline or non-engineering who knew a lot about engineering—just to kind of help me through it and help me think, because I really didn't know a thing. My father was a cop. He didn't know much about engineering either. I think I suffered from that.

In my class you had some very bright folks among the black students, as well as people who, although they may have been bright, had no discipline at all—no self-discipline.

Who are the folks who stood out in your mind as really being very outstanding?

In my class, I think you would have to say people like Mike Fant and Jim Gates. They were very serious students, you know. They took the academic stuff very, very seriously. Let's see. Who else was very outstanding in my class? Walter Gibbons. Walter was really sharp. Karen Scott. Karen Scott was very bright and William Scott, Bill Scott.

Yes, I think that's right.

Yes. And they were even married for a time, I think.

Yes.

They were very good. Among people ahead of us, a year ahead of us, there was Richard Prather. He was a great person, I think, to have as a kind of older student. He was just a really fine man. Who else outstanding? Anyway, they were some of the bright ones, I think, in the class.

But MIT presented you with such a different life. It was a whole different culture, I guess, and a whole different set of expectations. A lot of people just couldn't run with it, I don't think. There would have been a lot of card-playing and stuff like that. I stopped playing cards when I got here. I mean, I just knew I just couldn't be playing any cards because those games would go all night. So I just never played. In high school I even played cards, but I just couldn't do it at MIT. Again, my father suggested something—wouldn't it be nice if I got involved with rowing?

You may have been the first black to ever be on the crew team.

That's right. I might have been, I don't know if I was.

I think that you were.

Yes, yes. I got into it because it was a sport where, at MIT at least, it didn't attract a lot of people who had ever done it before. So anyway, I got in and I did pretty well. I really liked the coach. I liked the varsity coach. He was a wonderful guy. He was fun, he was just so much fun. I really, really admired him. Anyway, I got involved with that. That took up time. I also got involved with Pete Buttner. Peter Buttner was, I think, the man who directed the Freshman Advisory Council. He got me involved in student organization stuff. Between the academic student organizations and rowing, I was probably more involved with non-academic things than I should have been. I mean, I was really doing too many things.

Part of it, as I look back at what was going on for me, I think I was at war—I mean, in my own self. It was nice to be at MIT, but I wasn't really all that interested in being an engineer. That was becoming obvious, and I wanted to do some other things just to keep myself happy and interested. Then sophomore year, I think, it really got particularly tough. Being away from home, my father wasn't there, so there was a lot of independence and a lot of things that I wanted to do, but in some ways I couldn't still because he was paying the bills. I had even begun a process in my second term, freshman year, of trying to transfer. I was thinking of spending a year away from MIT at another university because I was just feeling this wasn't going to work.

It was tough.

It just wasn't interesting, no. I was getting grades that were reasonable. I certainly wasn't a straight A student, but I was a B student. It wasn't that difficult, but it wasn't right somehow. It wasn't all that great a fit. I met some wonderful folks there, certainly enough. Coming from a black background and a kind of Catholic ghetto background, I met Jews and I met Asians and I met people from Europe. You know, that was exciting. I met some very bright folks at MIT. It was just great to have that.

Also, I guess on that crew team, for example, a lot of bonds were tied.

Oh yes. Those guys I still see. They call up and we still exchange Christmas cards. There are still meetings. There was a big meeting at MIT in '94 of the guys I rowed with. Yes, you're absolutely right. I would never have given up crew, no matter where I would have gone. But I might have, if I had gone to another place, given up engineering. I'm sure I would have had to tell my father, but I probably would have done that.

Anyway, the way that I got into mechanical engineering was really kind of ass-backwards. I fell into it, really. I took a freshman course, a computing course, that was sponsored by the mechanical engineering department. I liked it and liked the teacher, so I just went into it after that, but not for any reasons that I think would have been good ones. A good one might have been if I really found something within the department that interested me as work. But I had no help thinking that far.

That goes back to your freshman advisor who could have been more helpful.

Yes, yes. I had no help really thinking that far. For instance, now with my own advisees, I'm pretty aggressive at getting at the root of what motivates them. I mean, "What do you want? What are you looking for? What do you really hope to get? Are you really interested in motors or engines, like you say, or would you rather do something else? Are you unsure?" That kind of thing is so important in talking to an eighteen-year-old because there are all sorts of reasons why they may have come to college. It's good to get at the root of them, so that you can help them move through where maybe they need to get a sample of some things so that they can make a good decision.

When you look at our freshman year, I assume we still do it very much the way we did it in '69 with pass/fail, and in terms of a year of physics and a year of math.

That's right. I had a year of physics and a year of calculus. I placed out of chemistry because I had some college chemistry before. What else was there? There were freshmen seminars which you could take. There was a humanities requirement that you had to take.

But still, it doesn't get to the point you were making in terms of heading into mechanical engineering or Course VI or other engineering fields. You still didn't get a sense of those things that you needed to lead into them.

No, that's right. I didn't know really what was available and no one really got me thinking about, "Well, why are you here? What do you want?" That's the essential question. What do you want? What are you looking for? All that I was looking for is what my father wanted, which is no reason at all. But still, that's the reality. If you have strong parents, they are going to be like that.

Jumping back just for minute, you mentioned something about how you actually came in contact with MIT. I think for the record it's important that you say something about that. Who was the first person you came in contact with?

It was Warren Shaw. And MIT also had the Educational Council. They had a reception downtown in New York City. That was also part of it. I remember the reception very well, but I primarily remember Warren Shaw. What was nice about him, he was a normal person. He wasn't a nerd or anything like that. Warren was someone you could be proud to say, "Well, I go to school with this guy." That was really what was fine about it. Warren was black and he was from about a half mile away from where I was living.

That could make a difference.

Yes, that made a lot of difference to me. That was very encouraging. And Warren was well spoken. I think that would have made a big difference to me and my parents. In my family, I think language has always been important. To be able to speak well is very important. It would not have worked at all if Warren had come across in another way. That wouldn't have worked at all. Warren was the perfect ambassador.

For MIT.

Yes. And it wouldn't have worked as well with someone white, frankly. I went to a predominantly white high school. So those were my first contacts with MIT people.

Who would you say are the memorable role models or mentors in your studies and career and so on?

Jim Williams, I think, was very important to me. I had a course with Jim in my sophomore year, and Jim was the only person at MIT who said to me, "You'd better stop fooling around with a lot of stuff and get your work done." Jim could cut through stuff and just sort of lay it out. He said, "Well, this is what you need to do." And nobody else at MIT ever did that. I remember that conversation. Jim was a contact because he was a teacher of the course that I was taking. It was not part of the course for him to do that. He was giving me advice. So I'll never forget him.

You were just by luck able to be in a professor's class who happened to be black.

That's right, that's right. But I remember that. So Jim was very important to me. My mechanical engineering advisor was someone I liked. Tom Lardner was his name. Now he didn't get tenure so he didn't stay, but I thought he was a great teacher—that's first of all—and I thought he was very good with math. He was very helpful to me. The coach too. Without Pete Holland, I'm sure I would not have gotten through MIT.

Is that his name?

Yes, Peter Holland. He was fun. He was a relief from the burden of the rest of the campus. To go over to the boathouse, really you're punishing your body, but he made it fun. It was great. He was also a very practical guy. He was no fool. He was a Dartmouth grad. He was a bright man. And the guys were fun. I liked the guys. Pete was a good match, and so were Tom Lardner and Jim Williams. I can't think of other people. I remember Mary Hope.

Mary Hope, yes.

I liked her. I just liked her. I thought she was really good. I didn't go in and talk to Mims, but it always seemed like there was another agenda for Mims. It was never all that comfortable. There was always something else going on. Jim Williams was just memorable for me. I always trusted his opinion. I would always trust him and even in graduate

school. I never thought that he would lie to me. I never thought that he would misrepresent to me.

He was a real straight shooter.

Yes, a very straight shooter and I admire that to this day. Mary Hope, Peter Holland, and Tom Lardner. I also would say that I got to know Carola Eisenberg. She was someone I found extremely sensitive to the person here. Actually, I got to know her because I went to her for counseling when I was a sophomore. Things were just getting tough and I went to her to talk to her. She was just assigned to me randomly. It was a lucky move, it was lucky. And we saw each other outside of the context. They were only given a certain time they could see you, but she continued seeing me. She would ask me questions that nobody would ask. I still remember that. She was really wonderful.

I liked her a lot. She's a great person. Yes, yes. She was excellent.

Why did you decide to go to grad school?

You know why. MIT is an infectious kind of place. I got caught up with all of the honor of it. I mean, once you get into the culture, the only thing that is valued at MIT is education. The only thing that seemed to be valuable was a Ph.D. in science or engineering. If you didn't do that, you were no one. So here's a guy, me, who always did what his father wanted, always did the thing that his father felt was the greatest thing in the world. Well, when MIT began defining what the greatest things in the world were, I just followed right along. It's a terrible way to live your life. I would never recommend it for anybody, but that is the way that I was coming along.

Your father had to be just so happy when you got your first degree from MIT.

He was. The irony, of course, is that I didn't even go to the graduation ceremony.

Oh, really?

There was a crew meet on exactly the same day. The biggest race of the year was that day. Now I knew it was going to be that day six months in advance and I began telling him, "Look, I'd like to go to the crew meet." And I really did want to go. Now my father, of course, is ambivalent here. My father is a bit of a sports fanatic. He wanted me to go into rowing to begin with, so after about three months he says, "Oh, okay." My mother, of course,

never forgave me for not going to my graduation. But the entire family—aunts, uncles, everybody—marched to Syracuse, New York, and saw me race that day.

That was like the graduation there.

Yes, exactly. My whole family came there. So anyway, it wasn't until I got my master's degree that they ever saw. But my father never saw it.

Oh, no.

Wait a minute, is that true? I got my master's degree in '75. He *did* see it. He saw the graduation in June, and died not long after that, in October of that year.

So he did see the graduation. That's wonderful.

That's right. But anyway, that's why. I mean, once I got to my senior year, and I was doing reasonably well, I said to myself, "Well, there are some interesting things within mechanical engineering." I hated all the lab stuff. I wasn't interested in building machines and all that sort of thing. What interested me were the mathematical things. Those were kind of curious and so I went into acoustics because I had no acoustics courses when I was an undergraduate. I said, "This is interesting because I don't know a thing about it, so it looks good"—all the wrong reasons for sort of moving ahead, but I did get ahead and always moved ahead. In graduate school I ran into John Turner.

In the graduate school? Yes, John Turner.

He was just great. A great thing, just real help. And also Steve Crandall, who was my advisor. He was a great teacher. He was probably the best teacher I've ever had in my life. His classes were wonderful, just so well organized. When I think of patterning myself after anybody, I think of him. But he was also a good advisor. I mean, he was friendly, he was accessible, he seemed interested in me. But there was a level of distance. He came from kind of the old school.

You know he was Jim Williams's mentor. I do know. I know that.

It's interesting that he also was your advisor.

Yes, yes. When I got to graduate school, I knew that he was Jim's mentor. I didn't know as an undergraduate. But anyway, I continued there and I found the path of least resistance. I liked Boston and thought that it would just be good to stay there. In retrospect, I shouldn't have. I should have

stayed, gotten my degree, and then moved on. Even my father—this is going to sound really crazy—when I got my degree at MIT, my bachelor's degree, he said, "Why don't you think now about going to law school?"

It was really very crazy, but true to me—true to my father—about three years later, I at least applied. No, I didn't apply. I took the LSAT's, but then I just said, "I'm not going to apply, I'm not going to go through all this stuff. I'm not really all that interested in being a lawyer." The first thing that I did that I really wanted to do—actually, I did it within a year of my father's death—was to begin talking to someone about becoming a priest. That was the first thing that I did that I just said, "I'm doing this not because anyone has suggested to me that I should do it, but because I just want to."

But, back to MIT, I went through the Ph.D. program, and it was tough. I knew why it was tough. It was tough because my heart wasn't all there.

Wasn't in there.

I spent six years in the program. Part of that time I spent here in Detroit teaching, while I was doing it. I know that I had come here and was sort of shuttling back and forth between teaching here, University of Detroit, and going to MIT. I was teaching mechanics, vibrations, acoustics—things that I knew very well—but I just was not into doing it. I was not into doing that, that degree. So it just was painful. It was a struggle. And I'm sure Crandall understood somehow my desire just wasn't there.

And it's a real lesson because, as I told you, I ended up repeating the mistake in coming back here. I have determined that I am going to resign from the tenure track effective next year here, just because I know I can't continue this madness anymore. But I won't resign from the university. I'm probably going to get another job within the university. What that will be is yet to be determined. I know what is most clear to me is that I need to get out of spending eighty percent of my day doing engineering. What will probably end up happening and what would be good for me is that I would spend more like twenty percent of my day or less doing engineering. I have a consultancy that I have continued here with General Motors, and actually I rather like it. I like the problem that I have been working on. If I could do that one day

a week for a couple of hours a day, that for me would be exciting.

If you had to give a brief summary, an analysis of your perspective on the MIT experience, what would that be? I think that MIT was a very exciting place to be. My horizons were broadened incredibly during my several years there. What an opportunity to experience intellectual ideas, people, activities—certainly an experience I didn't have in the rather narrow experience of home. Perhaps as black neighborhoods go, Harlem wouldn't be considered narrow, but it doesn't provide the opportunity for encountering the broad range of possibilities that our world offers that MIT provided. I think that was a wonderful thing.

However, as I look back on my own time at MIT, I feel that I probably should have gone elsewhere. I think that because I probably needed a place where I could exercise some skills that I know I had, but that were perhaps not skills that were valued by my father at the time. I probably should have gone to a place where there was a broader range of possibilities. It may have been that I wouldn't have ended up getting a bachelor's degree in engineering. I might have, however, done a minor in mathematics or even some more applied science like engineering, but might have majored in another discipline entirely. For that, I would have probably needed a different sort of program.

In terms of how prepared I am for life, I don't think that I am unprepared because of my experiences at MIT. As a matter of fact, I think I am quite confident I can provide myself with the wherewithal to live by all of those sorts of things. I think I have a solid background. My comments really concern my own spirit—my own sense of what motivates me, what drives me ahead. As I reflect on that issue, I find that it probably would have been better for me to have gone elsewhere. But, one never knows when you look back. I can say, though, definitively that MIT was a magnificent experience. I have to say that I encountered things that I know I never would have encountered elsewhere.

Based on your own experience, is there any advice you might offer to other black students who are entering or planning to enter MIT at the present time?

I would say that the desire for success or money is insufficient motivation for making a decision on one's profession, on where one would get an education for that profession. I think it is much more important to be driven in your professional aspirations, in the choice of educational institution, by your own desire—your own desire to find something or learn something or do something. If you have an issue or an interest to which you are drawn, I would say pursue that interest. Take the interest seriously. That is not to say that you put blinders on and narrowly pursue the interest, but I'd say let that be the center around which you create other interests or find other motivations. Let your interests be at the center and maybe success, money, and honor or whatever other things there might be as possible motivation, let those things be surrounding your interests. I would believe that if you have the intelligence, if you're gifted enough, that interest will carry you through and give you a satisfactory life—whatever it is, whether it's something having to do with technology or something having to do with literature. If you have the interest and the ability, you would be able to find opportunities and satisfaction in your life.

So as a consequence, in thinking about a place like MIT, I think one needs to consider that MIT is not a university that is broadly based. It has a range of things that it offers its students and that range is, as the literature suggests about MIT, polarized around science. The things that are offered are polarized around science and technology. As a consequence, in considering a place like MIT, one should have a very central interest in science and technology. I would further say that is distinguished from having an ability in it, because often the Lord has provided the human race with people who have multiple abilities. It doesn't necessarily mean that those are your interests. Because you can do something doesn't mean that you want to do something, or that you will do it, or that you even need to do it. So it is important to identify what it is that you want to do and, if you want to do something that has at its center science and technology, you can probably find no better place to study than MIT. And I really mean that. I don't think that you would get most of your support and practice in your interest from the classroom. I think you will get it from your associations with a top-flight faculty and some extremely bright students, your fellow students. I think they will help you move your interest along in a direction that will achieve the aims that you desire with that interest.

I think a lot of secondary school students probably don't know what they want. They have a set of interests, and so it behooves the institution to really help the student find out how best to help that person achieve his or her desire. I think advising for any academic institution is extremely important and it should not be—cannot be—perfunctory. One cannot presume that if a student is in your office, then that man or woman is ready and willing to follow the same course that everyone else has followed who comes through this institution. I think every case, even in a place like MIT, must be unique. I think the advisor, the freshman advisor particularly, really does need to spend time trying to identify with the student what he or she wants. What is his desire? What is her interest? Then build a program that would enable the person to follow through on that.

I also, of course, want to leave open the possibility that students come in not being very sure. They need to be given the space to find what it is they would like to do, with a bit of structure. I think MIT has enough supportive services where perhaps some specialist help can be brought to bear in helping the student identify what he or she might be good at and want to do.

Is there any other topic or issue that comes to mind that you can reflect on?

Yes. I think that I have come to appreciate over the last ten to fifteen years-more of the last ten to fifteen, I think—the importance of traditions. I've had an opportunity, primarily through my own speaking and preaching, to reflect on the history of my immediate family, of black New York, and black people across the country, and have appreciated that there are things that have happened to us that we carry with us, that are important to carry with us, that perhaps have seen us through difficult times. And there have been difficult times. I mean, the migration north was a very difficult time for black people. The wars have been difficult times for black people. We've had periods where diseases like tuberculosis have affected us in dramatic ways. But I think that there are ways in which we have learned to survive those things that I think need always to be held onto.

I believe that we are a people of faith. That is not to say that we are a people who haven't practiced, who have just knelt down and let God kind of wash over us in the midst of trouble. I mean that faith has been a motivator for doing some very concrete things in our history. Some of the very strongest institutions—they are not the only strong institutions, but some of the very strongest institutions—have come through the church. Institutions that have been built from churches—business institutions, educational institutions—have come out of efforts that are primarily religious. I think that it is important for us to not eschew that. I am not, however, arguing for any kind of sectarian position. I'm not suggesting necessarily that all black people have to be Baptist. I'm certainly not suggesting all black people have to be Catholic. That would be a rather up-hill battle. But I'm not even suggesting that all black people need to be Christian. I have come to admire, from my own reading and meeting people, the intensity in which non-Christian blacks have gone about their faith. I think there have been Muslims I've met whom I have every bit of respect for, given the intensity of their faith.

So I think those things are important. But the reason I bring up the issue and all those sorts of things is at times they have gotten our people into thinking about the need for communal action. I think that faith has often been—not always been, certainly not the only thing but has often beenthe rallying point for communal action for people deciding that it is important to bring their talents and interests to bear on the problems that affect us all. Another way to look at this or to talk about it is to say that faith has often been, although not exclusively been, a motivator for getting people to serve—black people to serve other black people in need, to serve black communities in need. I think that it is worthwhile recovering our tradition of faith, and I would hope that that faith would always issue into a desire to be of service.

I find it sad that very often, when on a college campus there are opportunities for volunteering, we don't get a kind of ground swell of support for volunteering in one thing or another from African-American students. I teach in a place where one could justify that lack of involvement in service in college on a number of levels. We have a lot of students who are working class, who have families, for whom going to school is one-third of their responsibility and so they don't have a lot of free time to do it. Nevertheless, I think it is important for us while we are learning to also involve ourselves in serving other black people. I

think you need to get used to bringing the history that you're learning, the math that you're learning, the computer science that you're learning, the engineering that you're learning—bringing that somehow to bear on the problems of black people.

There is no one way to do that, there are multiple ways to do that. It may not be that you can find the perfect fit between mechanical engineering and service to black people, but a mechanical engineer has such training in science and math that perhaps there is something in the training that can be brought to bear. Some of that could be direct classroom instruction, some of that could be helping out on building projects, some of it could be helping out on other training projects, or it could be working for a private firm that is doing some work that would be of benefit to the community. It could be something to do with environmental concerns or something to do with housing concerns, something to do with social system concerns, delivery of care, delivery of goods to people, or making technology available to people who because of their backgrounds and income-because of their race-just don't have access to it.

I think all of those things are possible for people who have a particular interest in areas that are polarized around science and technology and people who are learning those things now. Those people need to draw on the faith traditions of black people and see their role in our history as being at least partially having something to do with service—service to other black people, to the black community. I would say that's what I would like to see more of on college campuses around the country.