AN INTERVIEW WITH LESTER MITSCHER

Interviewer: Pat Kelly

Oral History Project

Endacott Society

University of Kansas
LESTER MITSCHER

B.S., Pharmacy, Wayne University, 1953

Ph.D., Wayne State University, Organic and Physiological Chemistry, 1958

Service at the University of Kansas

First employed at KU in 1975

Chairman, Department of Medicinal Chemistry, 1975-1991

University Distinguished Professor, Department of Medicinal Chemistry, 1975-2011

Adjunct Professor of Molecular Biosciences, 1995-1997

Emeritus Professor, Department of Medicinal Chemistry, 2011-date
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Q: This is July 7, 2011. I am Pat Kelly and I am going to be talking with Lester Mitscher, who retired from KU in May of 2011. He was a distinguished professor in the area of medicinal chemistry. Okay, let’s start at the beginning. When were you born and where?

A: I was born on the 20th of August in 1931 in Detroit, Michigan. You can do the math. This was the depths of the Depression when things were awfully bad. My father was first generation and my mother was an immigrant to the U.S. and Detroit in those days was a magnet for people who hadn’t had an opportunity for a good education and perhaps didn’t have good social skills. They could find reasonable work there then. But when the Depression came, life was very tough for people who hadn’t an education. Mom and dad lost their jobs, so we lived with my grandfather who had lost the farm in Canada, in the Depression. He had a rental home with four rooms in it. My maternal Uncle Gordon and my Grandfather Pounder lived upstairs in the two bedrooms. My mother and father and I shared a day bed in what had been the living room. We also had a kitchen. We had an indoor toilet off of the kitchen, but we didn’t have a bathtub. So when we needed to clean ourselves up, we heated water on a stove and did a sponge bath.

Q: I’ve done that.

A: Things were awfully tough with my parents not able to find work. But my Uncle Gordon worked at Ford and he had been able to keep his job by bribing the foreman with part of his salary. He was able to pay the rent and provide some food, so we weren’t out on the street. It was a number of years before Dad could get work again. The gathering storm of the Second World War was in that sense a blessing for us. My father was able to weld
and as a consequence he was employed doing war work fairly early on and was able to work.

Q: Were you born when they came to the U.S.?

A: I was born after they came. They, in fact, met in Detroit. While we began to be a little more prosperous, Mom and Dad and I still had to share the bed for 10 years. I can’t imagine in retrospect that that was much fun for them. But, you know, you did what you had to do in those days. After Dad worked a regular shift welding tanks in the auto factories on weekends he worked as an auto mechanic for a man who had a little plot of land with a three-bedroom house on it. With that sweat equity Dad was able to afford to buy that in the suburbs. We moved there. I was about 10 at the time.

Q: An only child?

A: An only child. Well, the folks wanted more children, but that was just economically impossible. It took dad several years to be able to pay for my birth, which, by the way, was on the kitchen table. That’s another story. I helped as much as I could with constructing the house, but this was awfully tough for Dad to work two jobs and then to build a house with his own hands. He and I dug a basement (mostly dad did) with shovels. We moved that house on top of that and then Dad added two more rooms and a porch. And ultimately that was the home that I lived in until I got married. So we began to prosper a little bit. The war was a little easier for us than for most because with Dad having an essential occupation, the Army would not take him. He tried to enlist, but they said it was more important to build tanks. But that meant that we had better ration coupons so we could eat a little better than many people. Dad had gasoline so he could
get to work and back. So the war was a little less hard for us than for most of our neighbors. That’s of course a different story.

When Uncle Gordon retired, he moved in with us and he and I shared a bed. The neighborhood that I started out in (in Detroit) was quite ethnic. Detroit was a magnet for people without special language skills. If you came from the Old Country and were used to working hard you could get a job, except for the Depression. So many of us, in fact, didn’t speak English very well until we got to school. The first year or so in school must have been maddening for our teachers. Our street had mainly German speakers along with some Scotts. The next street had a collection of Serbo-Croat speakers. The Irish lived a block over. A few blocks south was Hamtramck (a city surrounded by Detroit) that was almost entirely Polish.

Q: What language did you speak?

A: Mom was Irish-Canadian so English was not a problem. Fortunately, Dad didn’t teach me Czech. He thought German would be more useful. So I spoke German and English. When you are young like that, your mind is like a blotter. You can be accent free in more than one language. So that worked out pretty well. After a few months the kids were all chattering like magpies and we could translate the newspapers for the old folks. Knowing German was very helpful for me later in my scientific career. So that was pretty good. The education we got in grade school was basic and also quite classical. It is a little surprising since that was a very working class sub-community. Later on (high school in the suburbs) we were drilled in Latin and that sort of thing, which seems to me would be difficult these days. None of my students today have the faintest acquaintance with Latin or with classical poetry. For immigrant children, who mostly were destined to
work in the auto factories, this was a bit of overkill. But it didn’t hurt us. I did manage a kind of hobby that stayed with me. I started collecting stamps. Of course you take them off envelopes and people were going to throw them away anyhow. So it didn’t cost anything. But I learned a lot of geography and history out of stamp collecting. It was about the only possessions that I had that were just mine alone (other than clothing).

Q: How interesting.
A: That hobby stays with me today.
Q: Wonderful.
A: So I enjoy that. I will be able to do a bit more with that now that I’m not working every day.
Q: Are you still going into the office?
A: Yes.
Q: What about your grade school experiences? Did you have teachers or anyone who was really important?
A: Probably, but unfortunately I do not remember them, not until middle school. Those early days are a bit of a blur to me in retrospect. I enjoyed school. Fortunately, I was good at it. That then built the possibility of going on later on and doing more and escaping from that segment of society. Not that there is anything wrong with that segment, but it gave me choices that I otherwise would not have had. I recall particularly vividly, an incident. I remember D-Day when the invasion of Europe was on the 6th of June in 1944. When the news reached us in class, my homeroom teacher put her head down and cried. Her husband was in the assault. Of course she didn’t know what was happening to him. It was hard for us kids to cope with an authority figure breaking down
like that. Of course we understood and sympathized. When she got hold of herself we prayed together for her husband and all of the other soldiers in peril.

Q: Did he make it?

A: He made it, thank God. But aside from that we sort of enjoyed each other’s company and I found my studies interesting. Nothing particularly stands out from those days, other that I enjoyed going to school. Then in high school I was a sophomore when my brother was born. Finally, we could afford another child. My parents were quite thrilled. I was not quite as thrilled. Unfortunately being so many years apart, we never had a chance to be as close as we would have been otherwise. I’m more like an uncle to my brother. In any case, I’m glad to have him.

In high school the subjects I enjoyed most were history and Latin, of all things. I always fancied that I might teach. I thought I might teach history in the public schools. My father was not convinced. He thought that history would be a degree in unemployment. So he suggested that I take up pharmacy as a way of earning a practical living without sweat pouring down my back. That worked out rather well, in fact. I still was not totally convinced, but my history professor as a freshman in college was dreadfully dull. That helped me to make my vocational choice. While I was studying pharmacy, I was absolutely in love with science. Particularly chemistry opened all kinds of wonderful vistas to me, that and biology. So I ultimately drifted off in that direction.

I worked as a registered pharmacist after graduation for about nine years. I rather enjoyed that but I didn’t feel rewarded particularly, other than economically, because the work became much more routine after I mastered it. I had always wanted to teach. One of the best things that happened to me in college was in my freshman chemistry course I
ran into this really attractive girl who was extremely bright. We dated for about four years and when we graduated we got married. We have now been married for about 58 years.

Q: And her name is Betty.

A: That’s Betty. She is the mother of my three children. She works with me these days. We do a fair amount of volunteer work with professional organizations in Africa and South and Central America. I lecture on contemporary methods of doing science and she demonstrates in the laboratory. She’s very good at that sort of thing. That enables her to visit some really exotic places with me and to feel good at the same time.

Q: You actually have a degree in pharmacy.

A: Yes.

Q: Did you go to graduate school then or was that necessary?

A: Yes, I soon realized that I was not destined to be a retail pharmacist.

Q: Where did you do your undergraduate work?

A: I did my undergraduate work at Wayne State University in Detroit. That was an interesting place because it was a nonresidential school and almost everyone was working at regular jobs and going to school when they could. Everybody that I knew lived at home and worked extra jobs. I worked midnights in the auto factories and went to school during the day. I wouldn’t want to do that today. But when you are young you do what you have to do. So after I finished my BS degree and we got a few dollars ahead, I went to the medical school to study for a Ph.D. in Physiological Chemistry. In those days a pharmacist was not welcome in medical schools because pharmacy had just become a four-year degree a few years before that, and it was not regarded yet as being very
intellectual. I could teach at a medical school but I could not be a medical student. I enjoyed Physiological Chemistry because it was a blend of chemistry and biology. I actually got better grades in graduate school even than I had in undergraduate training. To help pay my way, I ran the laboratories for the medical students and for medical technologists and graduate students. I rather enjoyed that. We had quite posh facilities.

Q: Where was that?

A: Wayne State University. The facilities were quite nice and large, but there wasn’t very much going on intellectually with respect to original research, and I became progressively dissatisfied with that. Fortunately I attended an enrichment lecture course (not required) by a brilliant young Austrian immigrant chemist named Carl Djerassi, who had been expelled from Vienna during the war. He got out before the Nazis were able to stuff him in an oven. When I took his course, he was already world famous for discovering the pill, that is you know, the contraceptive steroids that transformed sexual attitudes and society itself. He was (and is) a spellbinding lecturer and brilliant researcher and he agreed to take me on, so I transferred to chemistry to finish my Ph.D.. That transfer really was the makings of me. His laboratories were crowded, they were dirty, and they were old. But there was world class work going on in them. There were students and postdoctoral students there from all over the world doing really exciting things and world famous chemists whose work we were studying regularly visited and lectured. Suddenly I was playing in the big leagues instead of what had been going on before. When I finished my Ph.D. I then went to work at Lederle Laboratories in industry in New York doing discovery research on antibiotics. This was a comparatively new therapeutic area during those days and the work was very exciting. Lederle has
been bought a few times since then, so that name probably no longer exists as such, except in people’s memories. Starting pay there was nearly twice what my best academic offer was. It was impossible for me to resist that. I stayed there for a number of years. They kept promoting me and they kept giving me raises. You know, it is easy to leave a place if you are fundamentally unhappy. But these were velvet chains, particularly for someone who was unused to having any money.

But ultimately I decided if I was going to teach, I’d better do it soon because if I didn’t do it at that stage, then that opportunity would pass me by. Fortunately, I was able to get a professorship at Ohio State University. I stayed there for a number of years and established an independent career. I not only was teaching at the undergraduate and graduate level and doing original research, but I was able to consult with a variety of industrial firms. So I really had vicariously both careers going on in parallel, which was really very rewarding economically and also intellectually, particularly for my students, because I knew at firsthand what important people were doing in significant health-related fields. The external association enriched my lectures and helped the students accept me as being relevant. So that was fine. And the extra finances ultimately enabled me to pay my children’s ways through college. Ohio State was a reasonably prestigious school. But the top school in my profession was and is Kansas, in part because the chairman at that time was Edward Smissman. Smissman was probably the most prestigious medicinal chemist not in industry at that time. Unfortunately, he died quite suddenly all too young in mid-career. The loss devastated the department here. The faculty at KU were first rate. But they were used to strong leadership. Losing Ed was destabilizing, so they set out to search for a possible replacement.
I’m still unsure why, but ultimately they offered me the job. And if you don’t want to be the head of the best department in your profession, then you are making a fundamental decision. So ultimately I decided I would accept and I came here. It’s a difficult thing to follow a charismatic, intellectual giant. But clearly what you cannot do is try to imitate. You have to be your own person. I did and the faculty was generous enough and skillful enough that this worked out. So that’s how I came to Lawrence, Kansas. I have never regretted it.

Q: And that was in what year?

Q: And you came as chair of the department.
A: I came as chair of the department. I did that for a number of years. I stepped down in 1991. I’ve always held the belief that you should not take a significant position for less than five years and for no more than 10. You can’t accomplish anything really significant in less than five years. The problems you haven’t solved by 10 are problems that you are not going to solve. You also have failed if you have not groomed one or more of your faculty as successors. I actually stayed on as chairman longer than I should have.

Q: Very good thinking.
A: One beautiful thing and one of the reasons why I found Kansas attractive was that Kansas had a loose management style in those days. And we could do just anything we wanted to do provided it was not illegal or immoral or got in the newspapers in a bad light and provided that we could fund it primarily through our own efforts. The department has always been extremely successful in getting federal and industrial funds to support its
research because it does high quality work. So everything worked out very well. My consulting activities expanded and with the visibility I had in the department I was elected chairman of the medicinal chemistry division of the American Chemical Society and the American Society for Pharmacognosy. Pharmacognosy is essentially drugs of natural origin, not entirely herbals but things like penicillins and tetracyclines and things of that type that people have heard of. And I chaired panels judging the quality and suitability of grants for the National Institutes of Health and for the American Cancer Society. I began to do the international work in South America and in Africa. The university was quite forgiving of our time, allowing us to do these sorts of things, provided they didn’t interfere with our regular duties. And although I’ve been heavily involved in internal and external affairs, I’m proud to say that in more than 50 years I’ve never missed a class.

Q: That takes some scheduling.

A: Right. Also, interestingly, I’ve never traveled on a dime of university money. So I’ve been able to fund my work externally and in competition with some pretty good people. People have been very generous in their appraisal of what I’ve been able to do.

Q: Now when you are going, are you doing seminars and things? Are you doing research or both?

A: Both. What I do is I collect groups of professors at universities that—I don’t know how to say this without appearing judgmental—there are a number of universities in the Third World—we don’t use that term any more. Low and middle income countries we call them now. They’re often educated well overseas but they are isolated. They don’t have an opportunity to travel very much. And the facilities are often not very lavish by Kansas
standards. So they tend to get a little rusty. So I bring in information about the way things are contemporarily best done and teach the techniques that they can apply without requiring elaborate techniques and technologies so that they can be productive. So it’s intellectually stimulating both for them and for me. And it also is infrastructure building so that they can do more than they would otherwise be able to do.

A significant part of this work involves the search for suitable and affordable medications for the treatment of AIDS and tuberculosis. For this work, I am on the scientific advisory board of the Bill and Melinda Gates Global Alliance for TB Drug Development.

Q: Sounds fascinating.
A: It’s very exciting. To carry out these responsibilities I’ve been on every continent except Antarctica.

Q: Oh my.
A: I’m probably not going to make that one now.

Kansas University in ’75 was a smaller place than it is now and it was not as heavily bureaucratized. The graduate school consisted of Billy Argersinger and a secretary. He was first rate. He knew what everybody was doing. He was very supportive. I’m not saying that there’s anything wrong with the way things are now, but there are many more characters between us now and decision points.

Q: I’m sure.
A: That’s what managements do, they metastasize.

Q: Now when you traveled, were you getting grants for some of this research?
A: Yes, I’ve always traveled on grant monies and supported the work on external grant monies.

Q: That’s quite a distinction for a university too, the amount of grant money that comes in for our research. Is that a criteria?

A: We are both lucky and unlucky in that sense. In Germany, for example, even in Canada, a professorship usually carries research funds along with it. It doesn’t mean that you can run a big program. But you have no excuse for not running a program. That works relatively well, except that it’s a kind of entitlement. It does not require competition with the best people in your field. In the States we don’t generally have those kinds of endowments. So zero-based funding is something we are quite familiar with. But on the other hand there are pockets of money available in industry and with the federal government that you can apply for. You are in competition now not just with the people in your immediate vicinity but everybody in your profession. So you have to put forth your best effort. You have to hit a home run every time. Until recently there have been relatively few upper limits on the amount of funds that you could bring in. If you have enough energy and time and facilities to do the work, you can support it, providing you can write convincing grant applications.

Q: What was your major interest?

A: The work I’ve done has been primarily in naturally occurring drugs, particularly antiinfective agents and anticancer agents. A subset of that work is on antimutagenesis. Resistance to antibiotics and anticancer agents is all too common these days. There are a number of reasons for that. That would be a whole other lecture. Let me leave it at that. But fortunately Del Shankel was here at KU and Del was one of the founders of the field
of antimutagenesis, that is the ability to suppress mutations. And mutations are the basis for resistance. Del and I struck up a collaboration that is extremely fruitful. We’ve developed methodologies for inhibiting development of antibiotic resistance. That work has been very popular. It also is a kind of illustration of the KU environment in that collaborations beyond departments are common and even can involve people who are very high in the university. Del, for example, has been chancellor. Del is essentially Poobah, Lord High everything else. Yet he was able to carry on a first-rate research program on top of all his teaching and administrative duties. So the university characterizes overachieving. The legislature has gotten a terrific bargain in that they have always underfunded us, much more so in recent years than in earlier years. But they have by and large not interfered much with what we could do, provided we could find a way of getting it done. Although most of us have had many opportunities to go elsewhere, often for significantly more money, we’re so productive here and we enjoy our colleagues so much that we tend to stay anyhow.

Q: That’s a plug for KU.

A: I don’t want the legislature to hear me say that, but nonetheless I think that explains why Kansas is the bargain that it is. It is the top of so many fields and requires such a comparatively small commitment by the legislature.

Q: Have you had students or people coming up that you have been influential with who have done significant things?

A: Well, I’ve been very proud of many of the students who I have had the good fortune to work with. Some of them have done very well. Dan Flynn, for example, is a Ph.D. graduate from my program who’s founded a local firm here called Deciphera working on
modern drugs for treating cancer and making excellent progress. Hollis Showalter is a professor at the University of Michigan. Robert Fecik is a professor at the University of Minnesota. Segaran Pillai, who I shared with Del Shankel, is actually in the White House as coordinator of civil defense against bioterrorism. You may recall a number of years ago there was a scare because of anthrax spores being sent through the mail to various people. Well, Segaran was the one who figured out what was going on there and how to deal with that. There are quite a number of others, but these names pop into mind. I’m particularly proud of those who have elected to teach. That means that one is not a nonrenewable resource. On the other hand, I’ve had some people really excel in industry. Annabella VillaLobos, a Panamanian student, is a vice president at Pfizer Laboratories. That’s the biggest drug house in the world. She was a Fulbright scholar from Panama who stayed in the States and has risen rapidly in industry. There are quite a few others. I’ve had students from all corners of the world who are sort of following along the footsteps of Carl Djerassi, for example. Carl, by the way, is retired from Stanford University now. He wasn’t at Stanford when I was with him. He was at Wayne State then. But now he writes plays.

Q: Oh, really?
A: He’s a remarkable man. He could be anything he wanted to be, except perhaps a professional player in contact sports. We will never know how many brilliant persons never realized their potential due to the religious and ethnic hatreds of the Nazis. America was a haven for those who were able to get away. I hope that it will always be such.

Q: How wonderful. People like that are fun to know, aren’t they?
A: Oh, yes. Well, America was tremendously enriched by Hitler and the Nazis. They drove out of Europe an enormous number of extremely talented people who found a welcome here in the States and worked to reestablish themselves. Our ancestors came here so people like myself would have a chance for a better life if they got an education, applied themselves, and had a bit of luck. I wish they were alive today so that they could see what their sacrifices have led to.

Q: Now let’s see. Let’s digress from that a little bit. You said that you met Betty in graduate school?

A: In undergraduate, actually, in freshman chemistry.

Q: I see.

A: That’s the best thing I got out of freshman chemistry.

Q: Wonderful. And you have three children. What ages are they and who are they?

A: Well, my daughter Katrina, unfortunately, is deceased. She was killed in a farm accident. She graduated from KU in music therapy and was a very talented flute player. My oldest son Kurt is a civil engineer. He graduated from KU and designs stadia and sewage systems and all kinds of major projects.

Q: Essential things.

A: My youngest son Mark is just now 50. Mark graduated from KU in Administration of Justice, although he seemed to have a major-a-month for a while while he was in college. He turned out to be an exceptionally fine salesman. He sells electronic communication equipment, not individual systems but systems for cities and states, that sort of thing. He is doing very well. I am very proud of the three of them.

Q: Do you have grandchildren?
A: Yes, I have five grandchildren, the oldest of which just graduated from college. I have five great-grandchildren. Amazingly, they all live within an hour’s drive of Lawrence. It’s almost unprecedented in contemporary America.

Q: How fortunate you are.

A: Oh my goodness yes. There’s not enough money in the world to get me to move away.

Q: That’s good. You’ve retired from eight to five, but it wasn’t eight to five essentially.

A: I have never had a forty-hour workweek in my academic career and rarely was able to stop at eight hours a day. I don’t work now on Sundays as much as I used to.

Q: I’ll bet you still go to the lab and the office, whatever.

A: Yes. I still love my work. I would not have retired, even though I’ll be 80 next month, if I didn’t have to. But it is time to get out of the way and make room for younger people with fresher ideas and more energy.

Q: Well, they need the sunlight.

A: They need an opportunity.

Q: Kind of like trees in the rain forest. There has to be something go down so there can be a shaft of sun for somebody to grow. They tell me that sometimes those trees sometimes can wait for years. They have been started but the minute there is a break up there they shoot up in record time.

A: That is an interesting way to look at it. I’d hate to think of myself as an obstacle but I understand that’s not what you’re trying to say.

Q: No. What countries did you mainly find interesting to go to?

A: I particularly enjoyed lecturing in Kenya. Betty and I had an opportunity to go on safaris during breaks in our work. I spent a month in Saudi Arabia with Betty and the society
there is so different from here that that was very enlightening. I’ve been to Japan 15 times. I had a joint professorship for a while in Australia. That was great fun. The Aussies live life to the fullest. They work hard but they play hard too. I have to go once a year to France because of some of the charitable work I’m doing. Of course it’s tough, but somebody’s got to do it. I couldn’t expect my faculty to do things I wouldn’t do.

Q: You probably are not really going to slow down.

A: Of course time passes by and there are younger, better players who come on board.

That’s as it should be. But for the moment I am still in demand for a variety of things. Particularly, one thing I am doing that’s quite interesting and rewarding is I’m an expert witness in a number of patent disputes. That’s fascinating work to see the interface between law and science, which is something that we are normally relatively unexposed to in graduate work in university life. So that’s been fine. In fact, I came here from such a phone conference this morning.

Q: Oh, really?

A: That requires one to interpret what intensely complex technical things mean to individuals who are quite bright and energetic but untrained in the field, which is an interesting way of teaching. They reward one for being able to do that.

Q: Very good.

A: So you can do good and do well at the same time.

Q: So many times when we talk about retirement, people are now going to have a chance to travel, but then of course you and Betty have had those chances, haven’t you?

A: The only inhibiting factor in our travels was in my teaching schedule. Since I’m not now regularly teaching, we’ll be freer to travel than we have in the past. In the past we’ve had
to find a block of time that would permit this, often in the summertime. We should be able to do that now with greater freedom. We should in part be able to travel for pleasure as much as for professional things, although much of the costs will now have to come out of my pocket. There is that. I haven’t been retired long enough to really know what it’s like to be retired.

Q: It’s lots of fun.

A: The world seems to be full of people who think that I have an endless supply of time and am eager to apply it to their problems. But I do now have the luxury to say no more often than I was able to do before. I always felt an obligation before. Sometimes if a job needed doing, well, okay, I said I will do it. But now I can say, “Well, get somebody else.” I will have to get better at saying no.

Q: I was fascinated with the talk you gave at the Endacott Society on the natural medicines and was astonished at where some of these things come from. Are we discovering all the time more uses for things we live around but don’t appreciate?

A: Yes. I have an active program still in Panama, for example. Panama has a very diverse flora in a compact area, so it is a wonderful place to do research. We’re still plowing through that and trying to find interesting new things to apply to human medicines, particularly to what we call orphan diseases. There are diseases like Chagas Disease or Blackwater Fever and the like that are endemic to these low and middle income countries where they have a severe public health problem but they don’t have the expertise to deal with it by themselves. In the States we have the expertise but we don’t have the problem. It’s hard to raise money to do that kind of work effectively. A better way of dealing with it is to do what Betty and I do and that is to try to teach people in those areas how they
could apply their skills to local problems rather than try to compete with the Merck’s and the Pfizer’s of the world in trying to deal with problems that exist in comparatively wealthy countries such as the states. I think that that’s an important activity that’s not done as often or as well as it should be.

Q: What do you see for the university at this stage of the game with financing and such and specifically your department? What department?

A: Medicinal Chemistry.

Q: It is a department?

A: Yes.

Q: You did say you were chairman. I should have remembered that. Are things going to hold the status quo? Are we going to get better? Are we getting worse?

A: Well, you know when you’re number one, you have a target on your back.

Q: Right.

A: That’s as it should be. You are always feeling the intellectual lash of the competition which impels us to do our utmost to do well. One important thing, if I had a legacy to pass on, it’s just to restate the obvious, that first rate people hire first rate people. Second rate people hire third rate people. If you want to be number one and you want to stay being number one, every hiring decision is crucial. You have to hire people who are going to be better than you and you must take pride in that and be a facilitator. We have had the great good fortune of occasionally adding new faculty to the Department, people like Brian Blagg, Emily Scott, and Tom Prisinzano, for example, are recent hires in the department who are doing exceptionally fine work. We are really proud of our young faculty. As long as we are able to attract and retain people like that, then the future looks
good. They don’t come here because the facilities are terrific and the money is great and that sort of thing. They come here because this is an environment in which they can excel. Other young folks who have been here a bit longer and who have become world famous are Jeff Aube, Barbara Timmermann, and Blake Peterson. We lost Gunda Georg, Bob Wiley and Jim McChesney to chairmanships at other universities but we managed to retain Bob Hanzlik and Gary Grunewald who have always been standout scientists. When we lose a star, we have often been able to reload!

Q: And you say hopefully that things are going to stay that way?

A: I’m modestly hopeful. There are always threats to being able to continue something like that. As long as you are aware that there are threats and you lay plans in advance to deal with those, then you have a chance. As long as we have a chance, that’s all we ask for.

Q: It sounds wonderful.

A: I went to college with having the great good fortune of having Wayne University at the other end of the bus and streetcar line. It didn’t cost very much. I could not afford to go otherwise. At the same time I was there with a big influx of returning veterans from the Second World War, who had benefited from a government program called the GI Bill. These were people who were bright but like my parents had modest chances, if any, for further education. The war had torn a hole in their lives. When they came back after the war, The GI bill was their chance to better themselves and they weren’t about to fritter it away on nonsense. So the competition was really severe. You really had to play your best game every day if you were going to survive in that context. So that was very helpful. We are just about to have an influx of returning vets from Afghanistan, Iraq and
places like that. This is a precious resource, if the government has wit enough to take advantage of it.

Q: Do veterans still get the equivalent of the GI Bill?

A: I’m not sure that they have fully parallel chances, but there are still opportunities available that were not available in 1940, shall we say. I think that’s a crucial thing not to be so penurious as to fail to take advantage of this opportunity. The other thing I hadn’t realized at the time, in fact I just realized it fully just now, when I was in high school my teachers were by and large people who had been educated many years before, when it was not common for people to go on for higher education. They were classical scholars. So they gave us a really rigorous grounding in language and geography and history, mathematics and science, because the younger people who had been more recently educated were off serving in the war effort. So we got a better education than we otherwise would have anticipated. I’ve been the beneficiary of a lot of people whose names I wish I could now remember who had taught us things, not because they thought they were relevant and we could use them every day, but because they were interesting and important.

We were being educated in a civilization. Most of us had family traditions outside of the U.S. We were being educated in government and the way things worked, so to speak. That served us in good stead if we were clever enough to apply them. There were relatively few people in the environment I grew up in who frittered away their educational opportunities because if you did, you knew that you were right back at the bottom of the heap. Nothing wrong with that. People were doing honest work. They had pride of it. We were poor but, gee, the streets were spotless. You could have eaten off
the sidewalk if you had wanted to. It was just different. Society was more cohesive in those days. We had the feeling that we were part of an enterprise that was larger than ourselves and that we had a role to play in this. We didn’t necessarily expect anything to be given to us, except that we thought people wouldn’t stand in our way. We also did not feel that if people were successful that this was to our disadvantage.

Q: Right.

A: I’m not so sure that youngsters today have the benefits of that environment. There are an awful lot of students, not so much in a field like pharmacy where there is a definite objective at the end of an educational experience, but there are a number of students who seem to be here without a clear idea of why they’re here. I think that’s sad because it is a wonderful opportunity. It’s a chance for social mobility and it’s a chance to build a country at the same time. Of course I’m denigrating too many people. We have some really brilliant and highly motivated people here. That’s one of the real pleasures of teaching here. But scientists are problem-oriented people. We tend to focus on things that aren’t right and try to fix them and take for granted the things that are good that don’t require fixing.

Q: What about the shortage of pharmacy people? Why do we happen to have a shortage of pharmacists? Has that not been an attractive career?

A: Pharmacy has been an attractive career throughout the whole of my professional life. There’s no problem with that. It’s not an easy subject to master because you have to be good at a number of contributing background fields. You have to be flawless in your performance because if you make a mistake, you could hurt somebody. Drugs are
complicated things. The proper application of drugs is complicated. So it’s not a subject that everyone could take up successfully simply by wanting to. So that’s one thing.

The other thing is there has been a massive change in population dynamics. The baby boomers are starting to retire now and are reaching an age when they need more drugs and medical assistance to have a good quality of life. So the number of prescriptions is going up. The complexity of the medications is going up as technology improves and that sort of thing. So there’s an increased demand for pharmacists. This, I think, is a temporary thing. New schools are springing up and pouring out graduates. It takes six years to train a pharmacist and they will be employed for 50 years. So you can see that you could fill up the hopper and it will be harder for future generations to find work as pharmacists that it is just now. But I think that is part of a free society. Things tend to correct themselves. People will flock into pharmacy when there are good jobs available and they won’t flock into pharmacy when there aren’t.

Q: True. And if there are an abundance of pharmacists, they are not going to want to go to a small town, many of them.

A: That may be true. On the other hand, you know, it depends on psychic satisfactions. In a small town you could be one of the better educated and one of the opinion leaders and you could be able to translate complex things into terms that people who haven’t had the same educational opportunities can appreciate.

Q: Be a big duck in a little puddle.

A: Remember what Caesar said, he’d rather be first in a little Iberian village than second in Rome.

Q: Right.
A: Well, there are people who feel that way.

Q: I see.

A: On the other hand, there are people who cannot imagine not living in New York City. So you have to decide who you are and where you are going to be happy.

Q: Right. I just found it interesting. Of course that holds true of pharmacists as well as nurses. There are just more of us needing more, aren’t there?

A: Well, you have the opportunity in professions of this type, to serve other people and be rewarded for it. That’s really unbeatable. There’s more to life than simply acquiring goods. Getting the satisfaction of doing good work that people value is not trivial.

Q: One of the questions we frequently ask is whether you are going to be involved in volunteer work and such? But you always have been.

A: I always have been. I’m thinking that once I get used to living at a different pace I’ve often thought I might like to work in a hospital as a volunteer or in a nursing home or something like that.

Q: It’s very rewarding.

A: Until my turn comes.

Q: Then you won’t want to be there.

A: Smissmann had been the chairman here for a number of years and had assembled a really spectacular faculty, Matt Mertes, Bob Hanzlik, Bob Wiley, Gary Grumwald, Jim McChesney, all were well known in their own right. A person like Ed could well have created a cult of personality and hired relatively unknown people to do routine work and kept all the glory for himself. But he was the kind of person who was comfortable being surrounded by really good people. That served to sharpen his own abilities. He was a
facilitator of their work and helped them to excel through his example. Having that legacy enabled me to think that maybe this would be a good place for me to be. They were very welcoming to me. They knocked some of the rough edges off me and taught me how to be a chairman. Overall, I’ve been quite content with the way things developed. We haven’t always been able to keep some of the best people that have come, people like Dale Boger, for example, and Gunda Georg, world famous in their own regard, began their educational careers here. We are sorry that they did not stay as long as we would have liked, but we are extremely happy with the years that we did have them as colleagues. KU just did not have the economic resources to compete when others wooed them.

Q: You were telling me that Betty wasn’t getting the same figures as some careful Swiss workers were when making scientific measurements using complex instrumentation.

A: You need a bit of background in order to appreciate this story. Betty had gotten her B.S. in education at Wayne State and was teaching elementary school science in the Detroit public schools when I was a graduate student. She was extremely supportive of my desire to continue my education. After all, normally I would have expected a person like her to want me to continue to have a fairly lucrative life as a pharmacist, not to go back to school. She became pregnant with my daughter Katrina. And once she began to show, then she was not allowed to teach any more. So Professor Djerassi hired her as a laboratory technician to perform technical measurements. And I knew she was an exceptionally careful worker. And the results she was getting with some of the measurements we were making in order to investigate a particular phenomenon weren’t matching the results some other careful workers had gotten. They couldn’t both be right.
So there had to be an explanation for that. As so often happens in science, when something doesn’t fit, then either the work is not being done properly or else there is a phenomenon that explains this that you haven’t perceived yet. That’s how discoveries are often made. You know, we have a digression, I guess. You often hear the phrase, “It’s the exception that proves the rule.” This, of course, is nonsense. That’s a verbal shrug that means if you’ve got something that doesn’t fit, ignore it. If you trace it back, the original saying is, “It’s the exception that probes the rule.” It’s just easier to say “proves.” The original statement is a call to investigate and is quite helpful. Misstating it is rather similar to the current misstatement about duct tape. Nobody tapes ducks. But it’s hard to say “duct tape.” So many people say “duck tape” without asking themselves if this makes any sense at all!

Q: Right.

A: So, you know, things get corrupted. Well, to get back to the story. I found out ultimately with some experimentation what was going on there. The solvents being used by Betty and the others weren’t identical. And that was the explanation for the disparity. Once we found that to be the case, we understood why the particular composition of the solvent played that rule. And that revealed a whole new range of science. Once we understood what was taking place in interactions between the solvent and the compounds in it, a simple and yet powerful new way to determine the chemical structure of complex molecules became possible. So here’s an important scientific discovery that took place primarily because I had confidence in Betty. I’ve always had confidence in Betty.

Q: I figured that. That’s wonderful.
A: We were talking about the role of women in science. Women have always had a role in science but they have not always had the opportunities that they have today. Gunda Georg was happy to join us because first of all we welcomed her and it was a good department. But she didn’t go back to Germany because her opportunities in Germany would have been much less than they have been here. She has not suffered by having been with us nor we by having her with us.

Q: Wonderful. Do you think KU as a whole is going to survive all these cuts and everything?

A: We’ve been cut periodically over the years and we’ve always survived. It doesn’t mean we always will. But it means that the possibility is there and that’s all we ask for is a chance.

Q: We hope so, don’t we? I’m a KU, actually a Lawrence native.

A: Really?

Q: So you don’t have any particular travel plans at the moment. You are just recovering from having the time to do it.

A: As a matter of fact in two week’s time Betty and I are going on a cruise to exotic lands.

Q: Oh, you told me you were leaving. You told me we had to do this interview.

A: Right. We are going on what should be a really exciting trip. We’re going on a cruise that will go from Boston to Europe with intermediate stops in Quebec, in Newfoundland, in Greenland, in Iceland, in Scotland, in Holland and Belgium. We are really looking forward to this. We can afford to take a longer trip now because I don’t have so many pressing duties here that I can’t put off. Secondly, with so many electronic assists, one isn’t really away.
Q: No.

A: The good news is that you are never out of touch. Of course the bad news is that you are never out of touch either.

Q: There is both good and bad, isn’t there? That sounds wonderful.

A: We are certainly looking forward to that. You know, when the old folks came over from Europe, in the early years of the last century, they didn’t expect to ever go back. They never expected to see their relatives again and they didn’t. With the wars that came later, that made things even worse.

Q: Your family came from Czechoslovakia?

A: Well, it was Austro-Hungary in that day. Mother’s family came from Ireland to Canada. We are a nation of immigrants. We have a tendency theses days to forget that.

Q: We think just the ones from south of the border are immigrants.

A: One of the problems that one encounters is people who don’t have the right attitude, that is, what I consider the right attitude. They have a tendency once they have gone one or two steps up the social or economic ladder to pull the ladder up after them. That’s just plain wrong. The thing that made this country what it is is its competitive spirit and the belief that we could do anything we really wanted to do. Not the attitude that seems so prevalent today in some segments of society that we’ve reached our limit. Too many people think that we can’t do any more, that we can’t afford to do things, that sort of thing. That’s a prescription for mediocrity. Give people hope and they’ll find a way to take advantage of it. Not everyone who has come to this country is a bum and a loser.

Q: Right. I like that attitude. If you have any thoughts that come later, you can add those when you edit.
A: I think I’ve said too much and gone on too long already.

Q: This is Pat Kelly again with Les Mitscher and we’ll be talking later.

A: Thank you.