

NINTH NATHALIE BARR LECTURE



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Life on the Road with My Heroes

I've got a story to tell you, a story that has to be told. It might be a little tough because it's from the heart. You know, there are a lot of secrets in there and emotions get a little bare, so I suggest that you all put on your seat belts because there may be a little turbulence ahead.

The first thing I want to do is tell Georgiann Laseter and all of you how much of a sincere honor it is to be asked to give the Nathalie Barr Lecture. I'm very touched by this. I still don't know what I'm doing up here or how it happened.

I want to give you my vision of hand therapy. As I see it, hand therapy can be very neatly divided into two equal and important aspects. On the one hand, we have the art of the game. How do we relate to our patients? What is the compassion that we share with them? How do we help them get through their disabilities? Traditionally, the Nathalie Barr Lecture has reminded us of how well we have mastered that art, and I believe that we do a heck of a job with that aspect of the game.

On the other hand, we have our science—the

theoretical basis of what is supposed to guide the treatments that we perform. It's this aspect that I feel more qualified to speak about. I'd like to discuss this a little bit today because I'm not sure that we've mastered the scientific stuff as well as we've mastered the art of things.

I'd like to give you an insider's point of view from someone who has tried to participate in the scientific process of this society. I know there are lots of you out there who have tremendous ideas, ideas that we would love to hear and share to make this profession stronger and better, but for one reason or another you don't come forth to try to get up here. Maybe you're a little intimidated, or maybe you just don't know how to go about it.

I want to share with you what it feels like to be on the inside by telling you about some of the things that have happened to me along the way, so that you can appreciate just what it is like to be involved in the scientific part of the American Society of Hand Therapists (ASHT). So let's go inside and see what we can find. Some of it will be good and some of it will be a little tough.

First, I want to share with you a very distinct memory I have of when it was first revealed to me that maybe our scientific foundation wasn't everything I always hoped it would be. It happened the first time our little teaching group was asked to go outside Philadelphia, out on the road, as it were. So

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the title of this talk is "Life on the Road with My Heroes."

The first time that we were asked to leave Philadelphia, to leave the home base, it was to visit a big university many miles away. We had to fly there by airplane. The program went on as planned and when Saturday night came we found ourselves doing what has become part of our tradition—seeking out a great Thai restaurant and proceeding to pig out on coconut milk products. We'd start with Tom Ka Gai, then we'd go to red curry chicken, and then, if they had it, we'd go right to coconut ice cream. I mean it was a straight cholesterol hit.

Phil McClure, Gisele Larose, and I had been the faculty at this particular program. When we had gotten down to the coconut ice cream course of the dinner, I noticed that Phil and Gisele were starting to exchange little glances and giggles. I tried to ignore it because I didn't want to interfere. I didn't know what was going on. But after a couple of minutes, I butted in and said, "Hey guys, what's with the giggles? What's happening here?" Gisele said, "What do you think, Phil? Do you think we ought to tell him?" Phil responded, "Shoot. Don't bother telling him. He won't believe it anyway. Don't waste your breath!" Then Gisele said, "Well, maybe we'll have to show him." Phil replied, "Hey, that will work!"

They grabbed me and took me out of the restaurant. They put me in the car and took me back to the university where we had talked that afternoon. By this time it was dark. It was maybe 11:00 PM on a Saturday night. The place was all locked up. But Phil was persistent. He banged and hammered on the door until the security guard appeared. Now Phil is the most honest man I have ever met. He has never told a lie, at least not in my presence. But when the security guard came to the door, he said, "Sir, we were in here lecturing this afternoon, and I believe we've left a few of our slides up in the classroom on the second floor. Maybe you could let us go in and see if we can find them?" The guard, naive, said, "Oh, come on up, you guys, just come right on up."

We trotted up to the second floor. Something had happened in this one classroom where Gisele and Phil had been running a lab. I had been running a lab in another room, so I was not aware of what had happened. I was anxious to see what had caused all the giggling. We got to the door and the guard unlocked it. We flipped on the light switch and I looked around. I said, "Hey, it's just a classroom. What's the big deal? It looks like every other classroom. What's happening here?" Phil replied, "Now wait, Ken, look. Look around the outside of the room on all the windowsills. What do you see there?" I looked and there were about 75 teddy bears sitting on the windowsills all around this classroom. These were handmade teddy bears. I said, "Phil, what's with the teddy bears? I don't understand this. What's the teddy bear thing?" Gisele said, "Come here, Ken." She walked me up close, where I could see. Next to every teddy bear there was a sheet of computer paper and on that computer paper were listed ten things that were the attributes of the teddy bear, such as

overall appearance, proper color coordination, and tightness and straightness of seams. At the bottom of the computer paper there was a big square containing a grade, such as A, B, C, or D.

As it turned out, these teddy bears had been the final exam in some course that these therapy students had been taking. Can you imagine, teddy bears! The students had stitched these teddy bears. I couldn't get over this! I was thinking to myself, what does this have to do with science? What's going on here? What were these people doing to get three credits when they were messing around with teddy bears? What course weren't they taking when they were sewing their teddy bears? I hoped it wasn't chemistry, anatomy, or statistics, which I think they should have had instead. Phil said, "Ken, look at this one bear." He showed me a bear that was the sorriest piece of junk you would ever want to see. I mean its ears were flopping down, its eyes were crossed, its seams were loose, and there was stuffing sticking out of it. It was just horrible. I didn't know what it was! I picked up the computer paper and discovered that this bear belonged to the one guy in the class! I think it was Jim King. This guy had a D on the bottom of his paper. So there's some poor sucker walking around with a college transcript, carrying three credits of D in teddy bear. It was sad. But this was an awakening for me.

When I first tried to get involved in this scientific thing, I was at Valley Forge and had collected a bunch of data about string wrapping and swollen digits. It took me maybe two years to get enough patients in the study so that the n value was up and so that if we got some statistics at the end, they would be meaningful. It took about two years because, as those of you who have been there realize, Valley Forge Hand Rehab is not some mecca of big-time hand therapy. Two butcher-block tables and a heat gun are all we have. But we do have a lot of what Heidi talked about last year—passion. We don't have a lot of equipment or a lot of patients, but we care a lot.

It took me two years to get this research together and then I submitted it. It was accepted and the day came for me to give my paper. It was my first time and I was a little nervous. You see, back in those days, you weren't supposed to talk to your critiquer, that was a no-no. So, consequently, you didn't know whether the critiquer liked your paper until the day you presented it. Of course, we have since corrected this. Now we encourage people to communicate with their critiquers so that there are no surprises on the day of the show. This makes for better papers.

I gave my paper and then I sat down. Donna Reist was my critiquer. I didn't know Donna very well and we hadn't talked beforehand, but it turned out that she liked my paper. She said a lot of good things about the study and had a very legitimate criticism to offer. She called me Mr. Flowers. You see, it was very formal back then. We did not use Ken or Donna; it was Mr. or Dr. Anyway, she said, "Mr. Flowers, you have shared all this diagnostic information with us about your patient sample, but, you know, you didn't tell us anything about the demographics. We would like to have known the

ages and the gender distribution of your patients." I had 60 seconds to rebut this comment, but I didn't know what I was going to say. I was happy that she had liked it. I said, "I'm really sorry that I don't have this demographic information. I certainly should have, but I don't have it. But I do remember about one patient. One patient in the study had swollen hands due to pregnancy, and I believe that that patient was a female." That's about all I could think of to say.

I went to sit down and there, sitting at the corner of the table, was, of course, the scientific chairperson for the year, my hero, Pegge Carter. I've got to tell you how Pegge Carter became my hero. It was back at one of those early Philadelphia meetings. Those meetings were some of the best things that ever happened in hand therapy. More knowledge was passed down and more inspiration was generated during those meetings than during any other educational event. The record will never be broken, Ev. Anyway, it was at one of those early meetings that I first heard a talk given by a hand therapist. The therapist was Miss Pegge Carter from Phoenix, Arizona. She gave a talk that just knocked me out. It was great. It was scientifically based. The slides were just gorgeous. She had a tremendous voice. The talk was well organized, and I just sat there in amazement. I thought to myself, I will never achieve the competence that this woman from Phoenix, Arizona, has. I just didn't know how I would ever do that. Another thing that impressed me was that she obviously had tremendous rapport with her referring physician. He had given a talk right before Miss Carter. He was Dr. Robert Wilson, also from Phoenix, Arizona. Now see, at the time, I didn't know that they were married, right? I was just so impressed by that talk that Pegge instantly became my first hand therapy hero.

So now we're back to the time when I was walking back to the table and saw Pegge sitting there. I knew she didn't know me from Adam. I was a name on the roster that she had to introduce and that was that. As I walked past her, she looked up at me and gave me the biggest smile and a little wink. She said, "Way to go, Kenny! Great talk!" It felt so good that my hero had recognized me. I didn't know whether she did this with everybody, but I just felt so good.

Well, somebody else must have liked that talk too, because the next year I was asked whether I would be interested in doing a critique of a paper. I said, "Would I be interested." When someone is offering me the microphone for three minutes, you bet I'm gonna be interested. Sure! There's no way I'm gonna say no to this. I've always been that way. I can remember in first grade the teacher would ask, "Now class, who would like to lead the pledge of allegiance?" I would say, "Oh, me, me, me!" You give me that microphone and I'm going to say yes.

So, the paper came in and I was excited. This was my first chance to do this. I was enthusiastic. The first thing I saw was the authors' names. They were some of the big guys. They were people who were at the top of the society! I thought, I'm gonna love doing this paper. I started to read it and found that the literature search was out-of-sight! I mean it

was great. This thing was well organized. I liked the premise. I was getting into it.

Finally, I got around to having to go through all the numbers and things. As I did, a little dew fell off the rose because it occurred to me that the numbers, statistics, and data weren't as strong as the conclusion that the authors intended to present. I thought, I've got myself a problem. The more I dug into it, the more I realized this was a good paper, but it was not as strong as the conclusions would have led the audience to believe. I wondered how I was going to deal with this. After all, I was a nobody and these were the big guys! How was I going to get up there and criticize the paper without stepping on any of those big toes or hurting anybody's feelings?

The day came when I had to get up there and do it. I did a dance around that paper that would have made Fred Astaire proud! I would pick out a good point, give a criticism, and then jump right out of that criticism back to a good point. I just kind of slipped those criticisms in there subtly. When the three minutes were up, I walked off and said to myself, "Whew, this is over. I finessed this baby. I didn't step on any of those big toes. I didn't embarrass anybody. Whew! I'm glad this is over!" And I was dry!

I'm a little dry right now, but then I wanted a drink of water. As I approached the back, I saw sitting in the very back row my hero, Pegge Carter, and her buddy, Georgiann Laseter. I was remembering that smile from last year and was thinking I could use another hit of that right about now. So I kind of sauntered up to Pegge. I looked down at her, but there was no smile. She had a scowl on her face and when she looked me in the eye with her blue eyes she said, "Kenny Flowers, you don't believe a word of that bull, do you?"

Well, that was not what I had expected. All that dancing up on the stage hadn't fooled Pegge and Georgiann for a minute. They saw right through me and they were right. I hadn't done my job that day. I just hung my head, walked back to my seat, and tried to listen to the rest of the papers. But I couldn't concentrate. All I could hear was Pegge saying, "Kenny Flowers, you don't believe a word of that bull, do you?" I just couldn't shake it. Finally, the papers were finished and it was time to give the award for the best paper.

The paper that I hadn't done my job on happened to win the award that year. It did so because I hadn't done my job. It was not a bad paper, but it wasn't the best paper and I hadn't said squat about it. I felt bad. I sat there and said to myself, "Today, Ken, you let down the motto of your university, which happens to be 'The Truth Shall Set You Free.'" I hadn't told the truth that day. I guess I'm still not over that. I said to myself, "If I'm ever put in this position again, I'm going to tell the truth and none of this dancing stuff."

Well, of course, I figured I was never gonna get another chance. I thought Pegge and Georgiann would blackball me and I would never have another opportunity to do anything. But it didn't work out that

way. I got lots of other chances and it was several years later that I found myself virtually in the same position again.

This time the paper came in and I was to do a critique. The author wasn't one of the big names. But I did recognize that the author was friends with the big names. This was a younger therapist who was well connected to some of the really big names, bigger than the last ones, in reputation. The topic was more important because it was about something that we deal with every day; the previous paper had been more esoteric and perhaps not as important.

Well, the same thing happened again. The numbers weren't there. The numbers just didn't justify the conclusion, not at all. I remembered having said to myself, "If I ever get the chance, it's not a chance like an opportunity, guys. It's an obligation. If I'm ever put in that situation, I'm gonna tell the truth." And lots of you remember what I said that day. There were a lot of heads that went snapping back when I gave my critique. A lot of people had whiplash the next day. I said, "This paper demonstrates some of the best and some of the worst in clinical research design. Here are the good points . . . and then here are the weak points. . . . And audience, we cannot allow this message to go home and we cannot accept these conclusions the way this paper reads right now, because the data just don't support it. More work will have to be done before we can accept it." That day the audience went home with the right message because I had done my job. It wasn't a pleasant job. It hadn't turned me on to have done that, but I knew in my heart I had done the right thing.

I walked off the podium and to the back of the room to get my drink of water, but Pegge Carter wasn't there that year. Out in the lobby I was greeted by an ad hoc committee of the friends of the author. They let me know that I had been a bad boy. I had roughed up their friend pretty badly and I really just shouldn't have handled it that way. But I respected them because they confronted me right to my face and told me exactly the way they felt. They were sincere and professional about it. I didn't argue with them. I figured that we had a difference of opinion and that that was that.

But it turned out that that wasn't that! Several years later, at least three or four years after this incident, I was at a national meeting. There were committee meetings taking place and I happened to be on a committee. I don't recall what the committee was, but it was one of those elite ones, where everybody in the room is somebody. You would know all of the people who were in the room. Somehow the topic turned to how we should handle our critiques of scientific papers and to the journal. The chairperson of that previous ad hoc committee was there. She stood up and delivered a very impassioned speech about how our critiques needed to be kinder and gentler and how no author should ever feel the remotest sense of rejection. I knew that the speech was for me. It was being given professionally. No names were mentioned and no fingers were pointed. It was sincere.

Well, the meeting ended and I saw Roz Evans

sitting near me at the end of the table. We often sit together at meetings. Once everybody cleared out, Roz looked at me and said, "Hey, man, you really got slammed today, didn't you?" I said, "Yeh, yeh, but that comes with the turf." Then Roz said, "Ken, don't you change a thing that you're doing. Don't you stop doing what you're doing. We need to hear about it when we don't have our science right. We're supposed to be big boys and girls and when we present our papers for peer review, we have to be prepared to accept the criticism and go back to the drawing board until we get it right."

Roz validated me that day. I know that a lot of you out there agree with us when we say that *when it comes to our science, we have to be vigilant in our pursuit of excellence; we have to set a high standard and we just can't accept anything less*. The same thing came up yesterday in a meeting and it seemed to be the consensus. I was very glad to hear it said at this particular meeting that we can't accept anything less and that it has got to be quality.

Concerning the comment that the author should never feel any sense of rejection, well, I suppose that that is an idealistic goal. However, I don't know that I necessarily agree with it. I think all of us have been rejected in one way or another somewhere along the line. I can recall a distinct time when I was rejected. I was a junior in college and I came back to Philadelphia at Christmas time. One of my friends had put together this big party at a major Mainline country club and I was determined to go. This was going to be a great party, the best one of the season. I had to call 17 different girls before I got a date for that party. Talk about rejection! But I think I had a better time at that party than anybody else did because I knew how hard I had worked to get there.

The coup de grace to this scientific story happened to me last year in Kansas City. Paul LaStayo and I gave the TERT paper, and it was a big thing to us. To me it represented a lifetime's worth of work. We won the award and it was a great day. Just imagine, all of your friends coming up to you, shaking your hand, and patting you on the back. Some of the women kissed me on the cheek. It was real nice. Everybody was recognizing our work, and that really felt great.

However, it turned out that once again the wrong message had gone home with too much of the audience. A lot of our friends and colleagues came up to us and said, "Oh, thank you guys for validating the use of serial casts for PIP flexion contractures." The paper hadn't been about serial casts at all. We had chosen serial casts only as a model to study a much broader phenomenon—the relationship between end range time and passive range of motion. We had failed to get that point across to a lot of people, and perhaps it was our shortcoming. The message hadn't gone home right, and it had reached almost tragic proportions in one case. A therapist wrote to us and said, "You know, you guys are trying to take credit for the concept of serial casting. And serial casting is Dr. Paul Brand's idea. And you're plagiarizing Dr. Brand." Well, anyone who knows me knows how I feel about Dr. Brand and knows

about the millions of times I have given him credit for all the things he's taught us. We had given him credit on the first page of the paper. In this case, the analysis had been way off base. Take it from an old baseball player, if we get picked off base too many times, we may not win the game, and I don't like to lose.

Now what game is it that I'm talking about? I'm talking about the reputation of this profession as one that is based in science, and the stakes in that game have recently gone way, way up. The thing that has made the stakes go way up is the *Index Medicus*. It used to be that when we gave a paper here or published it in the journal, not too many people paid a whole lot of attention to it. It was only us. Not many other people had access to it. But now that we have the journal in the *Index Medicus* listing, everybody's going to see it. And we're going to have access to everyone else's work. It's very much a two-edged sword. On the one edge, our good work is going to be recognized by all sorts of people, and that's great. On the other edge, if we put out sloppy science, that's going to be seen, too. Therefore, we may be exposed if we don't get our science right. So the stakes have gone way up.

Any discussion that brings up *Index Medicus* brings up Evelyn Mackin's name. I've got to talk about Evelyn for a minute. Evelyn has always been there for me. Back in the old days, you had to have a sponsor to get into the society. The society was quite elite at the time. Evelyn was my sponsor. She was

always there, offering me encouragement, opportunities, and responsibility. Evelyn, if it weren't for you, I wouldn't be here today and you know that. But just as Evelyn has always been there for me, she also has always been there for this hand society. Always! She was one of the original founders, and she was one of the first presidents. She was the first Nathalie Barr Lecture speaker. Evelyn, as we all know, was one of the powerful forces behind that Philadelphia meeting and still is. Not too long ago, she created the wonderful *Journal of Hand Therapy*. Last year, Evelyn almost single-handedly drove the journal into the *Index Medicus* lobby and said, "Here we are, look at us." They responded, "We like it." That's Evelyn Mackin and that's what she has done for us.

Because Evelyn has always been there, we have a tendency to take her for granted. We just assume that Evelyn is gonna run the journal forever. But it is my suspicion that Evelyn doesn't intend to run it forever. There are other things that she wants to do, too. So the day will come when we will have a challenge in front of us. We will have to name the next generation of leadership to the journal. I hope that we will have the wisdom to choose science and not to turn back to teddy bears. I think that we really can't afford to turn back. Dealing with our science is not like dealing with our patients. When we deal with our patients, we have to be kinder and gentler. When we deal with our science, we cannot afford to relax our rigor, not if we are going to win the game.