MEDICAL MALPRACTICE FUNDAMENTALS FOR SUPERIOR COURT JUDGES

North Carolina's "Same or Similar Community" Standard of Care

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I. BACKGROUND

1970 NC Supreme Court abandons the "locality rule" in favor of a "same or similar community" rule. *Piver v. Wiggins*, 276 N.C. 134 (1970)

1974 NC Supreme Court decides *Rucker v. High Point Memorial Hospital, Inc.*, 285 N.C. 519, 206 S.E.2d 196 (1974). Accepts a national standard of care for treatment of gunshot wounds in a fully accredited hospital.

1975 Legislature adopts N.C.G.S. § 90-21.12. Standard of health care – codifies the "same or similar community" standard of care

2011 Legislature amends N.C.G.S. § 90-21.12 effective October 1, 2011 – retains the "same or similar community" standard of care.

II. STATUTORY STANDARD

1975 – October 1, 2011

N.C.G.S. § 90-21.12. Standard of health care

In any action for damages for personal injury or death arising out of the furnishing or the failure to furnish professional services in the performance of medical, dental, or other health care, the defendant shall not be liable for the payment of damages unless the trier of the facts is satisfied by the greater weight of the evidence that the care of such health care provider was not in accordance with the standards of practice among members of the same health care profession with similar training and experience **situated in the same or similar communities** at the time of the alleged act giving rise to the cause of action.

History. 1975, 2nd Sess., c. 977, s. 4.

October 1, 2011 - Present

N.C.G.S. § 90-21.12. Standard of health care

In any action for damages for personal injury or death arising out of the furnishing or the failure to furnish professional services in the performance of medical, dental, or other health care, the defendant shall not be liable for the payment of damages unless the trier of the facts is satisfied by the greater weight of the evidence that the care of such health care provider was not in accordance with the standards of practice among members of the same health care profession with similar training and experience **situated in the same or similar communities** at the time of the alleged act giving rise to the cause of action.

Added by Laws 1975 (2nd Sess.), c. 977, § 4. Amended by S.L. 2011-283, § 4.1(a), eff. June 24, 2011; S.L. 2011-400, § 6, eff. Oct. 1, 2011.

III. KEY ISSUES IN THE APPLICATION OF THE SAME OR SIMILAR COMMUNITY STANDARD OF CARE

- 1. National v. "Same or Similar Community" Standard of Care
- 2. The Expert Witness

What must he know . . .

When must he know it ...

and

How can he learn it?

IV. APPLYING A NATIONAL STANDARD OF CARE IN CONTEXT OF THE CLEAR STATUTORY STANDARD

A. Testimony Regarding a National Standard of Care is Admissible

Applying a national standard does not, in and of itself, disqualify a potential expert witness.

Treat v. Roane, 179 N.C. App. 436, 634 S.E.2d 273, disc. rev. denied, 360 N.C. 655 (2006); Pitts v. Nash Day Hospital, Inc., 167 N.C. App. 194, 605 S.E.2d 154 (2004), aff'd, 359 N.C. 626, 614 S.E.2d 267 (2005).

Although [plaintiff's expert] testified that the standard of care for laparoscopic surgery is a national standard, we are not of the opinion that such testimony inexorably requires that his testimony be excluded. Rather, the critical inquiry is whether the doctor's testimony, taken as a whole, meets the requirements of N.C. Gen.Stat. § 90-21.12.

Pitts v. Nash Day Hospital, Inc., 167 N.C. App. 194, 605 S.E.2d 154 (2004), aff'd, 359 N.C. 626, 614 S.E.2d 267 (2005).

Stating that testimony regarding a national standard of care is admissible begs the question . . . When?

B. Rattlesnake bites and frostbitten lungs¹

Rucker v. High Point Memorial Hospital, Inc., 285 N.C. 519, 206 S.E.2d 196 (1974) seems to adopt a national standard of care for the treatment of gunshot wounds . . .

"Sound reason supports the view that gunshot wounds of the lower leg lend themselves most readily to uniform medical and surgical treatment without regard to locality."

Alternative Interpretation: *Rucker* applies only to care rendered in a "duly accredited hospital" by a member of that hospital's staff.

See Baynor v. Cook, 125 N.C. App. 274, 480 S.E.2d 419, disc. rev. denied, 346 N.C. 275, 487 S.E.2d 537 (1997)(noting that "Rucker allowed an expert to testify because he was familiar with accredited hospitals across the country and that the treatment of gunshot wounds was the same at all such hospitals, not because North Carolina had adopted a national standard of care.")

Rucker v. High Point Memorial – decided before the adoption of §90-21.12... but never overruled

Cited with favor by the Court of Appeals in 2013 in:

Higginbotham v. D'Amico, _____ N.C. App. ____, 741 S.E.2d 668, disc. rev. denied, 749 S.E.2d 850 (N.C. 2013).

¹ Part of the Supreme Court's analysis in Rucker v. High Point Memorial included the following:

Not all injuries are so uniform and the treatment so generally well known and followed. The medical profession in Alaska, for example, would be informed and knowledgeable on the treatment of snow blindness, frozen feet, and frostbitten lungs, but they would be without experience in the treatment of rattlesnake bites. A Florida doctor would know about the snake bites, but not about frozen feet. A gunshot wound would require the same treatment whether in Florida or Alaska.

Trial court granted directed verdict for defendant based on the plaintiff's expert testifying to a national standard of care. The Court of Appeals reversed, finding the expert's testimony "analogous to that of the medical expert in *Rucker*"

The Court of Appeals in *Higgenbotham* specifically rejected the argument that the plaintiff's expert should have been familiar with the "community of Durham."

<u>See also</u> Robinson v. Duke University Health Systems, Inc., ____ N.C. App. ____, 747 S.E.2d 321 (2013), disc. rev. denied, ____ S.E.2d ____, 2014 WL 941986 (N.C. 2014) (citing Higgenbotham)

Question: Do medical institutions like Duke University Medical Center require a lesser understanding on the part of a proffered expert of the actual community where the medical center is located?

C. National Standards of Care Recognized by the North Carolina Appellate Courts

1. Cleary Recognized National Standards

A national standard of care "clearly" has been recognized by the NC appellate courts in two situations:

Bedpan use

Page v. Wilson Memorial Hospital, Inc., 49 N.C. App. 533, 272 S.E.2d 8 (1980)

Taking vital signs

Haney v. Alexander, 71 N.C. App. 731, 323 S.E.2d 430 (1984), disc. rev. denied, 313 N.C. 329, 327 S.E.2d 889 (1985)

2. Recognized National Standards -- Apparently

A national standard of care seemingly has been recognized by the North Carolina appellate courts in two situations:

When the defendants' care meets the highest standard of care anywhere

Marley v. Graper, 135 N.C. App. 423, 521 S.E.2d 129 (1999), disc. rev. denied, 313 N.C. 329, 327 S.E.2d 889 (1985)

When the national standard of care is the same as the local standard of care and the expert witness testimony establishes knowledge of the standard of care in the defendant's community

Treat v. Roane, 179 N.C. App. 436, 634 S.E.2d 273, disc. rev. denied, 360 N.C. 655, 639 S.E.2d 61 (2006)

Cox v. Steffes, 161 N.C. App. 237, 587 S.E.2d 908 (2003), disc. rev. denied, 358 N.C. 233, 595 S.E.2d 148 (2004)

Smith v. Whitmer, 159 N.C. App. 192, 582 S.E.2d 669 (2003)

3. The Rucker v. High Point Memorial National Standards

While the North Carolina Supreme Court in *Rucker v. High Point Memorial* clearly recognized a national standard of care for the treatment of gunshot wounds in a fully accredited hospital, it is unclear whether *Rucker* is limited to its facts. Subsequent decisions call into question the validity of expert testimony regarding a national standard of care based only on the expert's familiarity with the standard of care of treatment rendered in a fully accredited hospital or of testimony based on national standards derived from federal regulations.

Treatment of gunshot wounds?

Treatment in a fully accredited hospital?

D. When Can Testimony Regarding a National Standard of Care Eliminate the Need for an Expert to Be Familiar with the Defendant's Community

Despite the numerous appellate decisions since *Rucker*, and the many opinions since the adoption in 1975 of § 90-21.12, the North Carolina appellate courts have failed to bring any certainty to the issue of when can testimony regarding a national standard of care eliminate the need for the expert witness to offer testimony about specifics of the defendant's community.

In *Hawkins v. SSC Hendersonville Operating Co., LLC.,*² the Court of Appeals specifically asked the Supreme Court for a definitive ruling to clarify this confusion.³ To date no such clarification has been offered.

In *Hawkins v. SSC Hendersonville Operating Co., LLC.*, a case involving allegations of nursing home negligence, the plaintiff's three expert witnesses were all excluded because they offered testimony based on a national standard of care without testifying to any familiarity with the community where the defendant nursing home was located.

Interestingly, all three of the plaintiff's proffered experts testified to the existence of standards that apply to all licensed nursing homes in the United States based on federal OBRA regulations -- testimony that is strikingly similar to the testimony permitted in *Rucker* because the care was provided in a fully accredited hospital.

Pitts recognizes that "[t]here appears to be some conflict concerning what testimony sufficiently obviates the need to show an expert's familiarity with a defendant's community under N.C. Gen.Stat. § 90–21.12. Nevertheless, *Pitts* stated that "*Henry* requires some level of familiarity with a defendant's community even if an expert testifies the standard is the same across the country."

Then in a footnote following this language, the Hawkins panel asked the North Carolina Supreme Court for help:

We recognize that this issue has yet to be fully addressed by our Supreme Court and we are therefore bound by the holdings of this Court. We nonetheless further recognize that this issue is ripe for a definitive ruling by our Supreme Court and therefore urge our Supreme Court to grant discretionary review.

² 202 N.C.App. 707, 690 S.E.2d 35 (2010), disc. rev. denied, 706 S.E.2d 248 (N.C. 2011).

³ The Court in *Hawkins* stated that:

V. THE EXPERT WITNESS – WHAT MUST HE KNOW, WHEN MUST HE KNOW IT AND HOW CAN HE LEARN IT?

A. How Can He Learn It?

North Carolina's appellate courts have avoided prescribing exactly how an expert witness must gain familiarity with the defendant's community:

[O]ur law does not "prescribe any particular method by which a medical doctor must become 'familiar' with a given community." Book or Internet research may be a perfectly acceptable method of educating oneself regarding the standard of medical care applicable in a particular community.

Crocker v. Roethling, 336 N.C. 140, 675 S.E.2d 625 (2009), citing Coffman v. Roberson, 153 N.C.App. 618,624, 571 S.E.2d 255, 259 (2002) (holding medical expert demonstrated sufficient familiarity with applicable standard of care when that familiarity was gained in part from "Internet research about the size of the hospital, the training program, and the AHEC (Area Health Education Center) program"), disc. rev. denied, 356 N.C. 668, 577 S.E.2d 111 (2003).

At least four approaches have been successfully utilized:

Internet Materials Information Provided by Counsel The Defendant's Deposition and Other Depositions Independent Investigation

While the appellate courts have approved use of internet information as a proper method for an expert witness to gain knowledge of the defendant's community⁴, the appellate courts have not addressed what is considered reliable internet information. Unless and until that issue is addressed by a higher court, the determination of reliability falls within the discretion of the trial judge.

⁴ Coffman v. Roberson, 153 N.C.App. 618, 571 S.E.2d 255 (2002), disc. rev. denied, 356 N.C. 668, 577 S.E.2d 111 (2003); Crocker v. Roethling, 336 N.C. 140, 675 S.E.2d 625 (2009).

Some sources of information from the internet that should pass a reliability test include:

UNC Sheps Center

Cecil G. Sheps Center for Health Services Research

AHEC Information

Area Health Education Center

NC Medical Board

U.S. Census Date

City/County Chamber of Commerce

Official City/County websites

Physician/Hospital Sites

JCAHO Accreditation Information

NC State Agency Information

NC DHHS

NC State Center for Health Statistics

B. What Must the Expert Witness Know About the Defendant's Community?

In order to testify to knowledge of the standard of care in a "similar" community, the expert witness must know a sufficient amount of information about the defendant's community in order to compare the two. Unfortunately, the North Carolina appellate courts have given only general guidance as to what knowledge on the part of the expert is required.

In *Pitts v. Nash Day Hosp.*⁵, *Inc.*, the Court of Appeals stated and the Supreme Court affirmed that:

[T]he critical inquity is whether the doctor's testimony, **taken as a whole**, meets the requirements of N.C. Gen. Stat. § 90–21.12. In making such a determination, a court should consider whether an expert is familiar with a community that is similar to a defendant's community in regard to physician skill

⁵ 167 N.C.App. 194, 605 S.E.2d 154 (2004), aff'd 359 N.C. 626, 614 S.E.2d 267 (2005).

and training, facilities, equipment, funding, and also the physical and financial environment of a particular medical community.

Breaking down the language of the court, one sees six general categories of information about a "particular" [i.e., defendant's] medical community that the appellate decisions have deemed to be pertinent to the sufficiency of a proffered expert's knowledge:

physician skill and training,
facilities,
equipment,
funding,
physical environment and
financial environment of a particular medical community

No decision to date has defined exactly what the court means by each of these categories of information.

The physician [defendant's] skill and training has little if anything to do with the particular community in which (s)he practices. That information can readily be obtained from the defendant's *curriculum vitae* and/or from the North Carolina Medical Board. Additionally, N.C. Gen. Stat. §90-21.12 specifically address the requirement of "similar training and experience." As such, "physician skill and training" seems unrelated to the "same or similar community" standard of care determination.

The five remaining categories seem to have much overlap, and are perhaps five ways to say two things. Funding and financial environment seem largely to address the same issue, while facilities, equipment and physical environment all seem to be part of a larger category that could be described as "available medical resources." The categories of information may be thought of as:

AVAILABLE MEDICAL RESOURCES

Facilities Equipment Physical environment

AVAILABLE FINANCIAL RESOURCES

Funding Financial environment

What specific acts the expert witness must know about the defendant's community must be gleaned from various appellate decisions affirming or reversing the trial court's decision to admit or deny specific expert testimony based on the amount of knowledge the expert had about the defendant's community.

Treat v. Roane⁶ offers an example where three expert witnesses tendered by the plaintiff were excluded for lack of familiarity with the defendant's community based on their testimony of a national standard of care. As to one of the excluded witnesses, the Court related the things in her deposition that the witness did not know about the local community:

[S]he did not know the total number of beds or the number of labor and delivery beds in the hospital, the number of deliveries performed a year, or anything about the nurse staffing for labor and delivery. Furthermore, [plaintiff's expert] said that she did not know the size of Raleigh[the location of the alleged negligence], or how many hospitals there were in Raleigh. Additionally, she stated that she could not compare WakeMed to any of the hospitals in which she had been employed.

In *Pitts v. Nash Day Hospital, Inc.7* – the treatment in question took place in Rocky Mount — the Court of Appeals reversed the trial court decision to exclude the testimony of the plaintiff's expert witness where the expert testified that:

^{6 179} N.C. App. 436, 634 S.E.2d 273 (2006)

^{7 167} N.C.App. 194, 605 S.E.2d 154 (2004), aff'd 359 N.C. 626, 614 S.E.2d 267 (2005).

[He] was licensed in five states, currently practices in West Jefferson, North Carolina, and has also practiced extensively in other locations throughout North Carolina including Albemarle, Boone, Elkin, Lenoir/Hickory, Mount Airy, and Wilkesboro. At trial, [the expert] specifically cited the population and median income of Rocky Mount and testified that Rocky Mount is similar to communities in which he has practiced in terms of population served, rural nature, depressed economy, and limitations on resources. Additionally, prior to testifying, [the expert] not only observed the community of Rocky Mount but also noted the size of Nash Day Hospital. [The expert] also testified that he deduced from medical records and [the defendant's] deposition the type of equipment and techniques [the defendant] used in [the plaintiff's] surgery. [The expert] was familiar with the equipment because he used similar to equipment in other communities in his medical practice.

No appellate opinion has given clear guidance on how much is enough in terms of the sufficiency of an expert's knowledge about the defendant's community. The North Carolina Supreme Court, however, has addressed how the trial court should handle a "close call" in context of a paper record.

C. When Must the Expert Witness Become Familiar with the Defendant's Community?

Motions to exclude expert testimony often arise prior to trial with a decision to exclude the expert's testimony resulting in summary judgment for the defendant. Such motions to exclude testimony typically are decided on the basis of expert witness discovery depositions which often are supplemented by an affidavit from the expert.

1. Handling a "Close Call" - Crocker v. Roethling - Voir Dire

In the 2009 NC Supreme Court decision in $Crocker\ v$. Roethling, the court – apparently⁸ -- held that:

When the proffered expert's familiarity with the relevant standard of care is unclear from the paper record, our trial courts should consider requiring the production of the expert for purposes of *voir dire* examination.

⁸ Crocker is a long, involved decision which includes separate opinions from Justice Martin and Justice Hudson along with a dissent joined by two other members of the court. According to a footnote in the dissent, because the opinion of Justice Martin had the narrower holding, it was the controlling opinion. It is Justice Martin's concurring opinion that requires the *voir dire* examination of the expert witness.

The plaintiff's expert had been excluded by the trial court based on the expert's lack of knowledge of the defendant's community (Goldsboro) and his application of a national standard of care. Summary judgment was then entered for the defendant. The Court of Appeals affirmed. The Supreme Court remanded to the trial court with instructions to conduct a *voir dire* examination of the expert to determine the sufficiency of his knowledge of Goldsboro.

The controlling concurring opinion by Justice Martin made it clear that *voir dire* examination of the proffered expert is not necessary every time opposing counsel challenges proposed testimony, but only in "close cases." Beyond the facts of *Crocker*, Justice Martin provides no guidance on what constitutes a close case.

2. Becoming "Sufficiently Familiar" with the Defendant's Community AFTER Forming/Giving Opinions

The expert may gain his "sufficient familiarity" with the defendant's community AFTER the expert has formed his opinions and AFTER he has been deposed. As the Court of Appeals has stated:

To the extent defendants are challenging the fact that [plaintiff's expert] acquired most of his information regarding the community after reaching his opinions and having his deposition taken, this Court has already rejected the argument that such an approach disqualifies the doctor's testimony.

Day v. Brant, ____, N.C. App. ____, 721 S.E.2d 238, disc. rev. denied, 366 N.C. 219, 726 S.E.2d 179 (2012), citing Roush v. Kennon, 188 N.C.App. 570, 576, 656 S.E.2d 603, 607 (2008).

3. Discovery Deposition Testimony and Supplemental Affidavits

A common issue regarding when an expert must become "sufficiently aware" of a defendant's community relates to the testimony of the expert during a discovery deposition. The issue arises both in context of a pretrial motion to exclude the expert's testimony, which if successful may require that the court then grant summary judgment

for the defendant, and in context of an expert witness attempting to provide trial testimony that expands upon the discovery deposition testimony.

The North Carolina appellate courts have shown a willingness to allow an expert to supplement his/her deposition testimony via affidavit – even when that discovery deposition testimony focused on a national standard of care.

In Robinson v. Duke University Health Systems, Inc., ____ N.C. App. ____, 747 S.E.2d 321 (2013), disc. rev. denied, ____ S.E.2d ____, 2014 WL 941986 (N.C. 2014), the Court of Appeals reversed summary judgment in favor of the defendant which was based on the trial court's finding that in his discovery deposition the plaintiff's expert had testified to a national standard of care and that he lacked sufficient familiarity with the defendant's community. In his discovery deposition the expert knew nothing about Durham and offered opinions based on a national standard of care. In a later affidavit the expert explained that since giving his deposition testimony, he had confirmed his opinion with Internet research regarding Duke University Hospital and had confirmed that it is a sophisticated training hospital such as the other ones with which he had personal familiarity.

In her opinion in $Crocker\ v$. Roethling, Justice Hudson addressed this issue in great detail. Justice Hudson wrote that:

- > The trial court may not automatically disqualify an expert witness simply because the witness indicates reliance on a national standard of care during a discovery deposition.
- > Where, as here, the basis of the opinion and the expert's familiarity with the same or a similar community is undeveloped, the proponent must be given an opportunity to establish the witness's competency. However, the proponent does not have the duty to do so at the discovery deposition.

Justice Hudson concluded her opinion in Crocker with the following directives:

- 1) gaps in the testimony of the plaintiff's expert during the defendant's discovery deposition may not properly form the basis of summary judgment for the defendant;
- 2) the trial court should consider affidavits submitted by the plaintiff or his witnesses in opposition to the defendant's motion for summary judgment in accordance with Rule 56;

- 3) to determine whether the plaintiff has presented evidence admissible to meet his burden under N.C.G.S. \S 90-21.12 and Rule 702, the trial court should apply the test set forth in *State v. Goode;*
- 4) to determine whether an expert's testimony satisfies the third prong under *Goode* of familiarity with the "same or similar community" standard of care, the trial court should apply well-established principles of determining relevancy under Evidence Rules 401 and 701; and,
- 5) once the plaintiff raises a genuine issue as to whether the defendant's conduct breached the relevant standard of care, the resolution of that issue is for the trier of fact, usually the jury, per N.C.G.S. § 90-21.12.

In *State v. Goode*, 341 N.C. 513, 461 S.E.2d 631 (1995), the Supreme Court held that the trial court must assess the admissibility of expert testimony based on three considerations: 1) the reliability of the expert's methodology, 2) the qualifications of the proposed expert [NCRE 702] and 3) the relevance of the expert's testimony.

V. THE REMAINING COMMON LAW DUTIES

In *Wall v. Stout*, the North Carolina Supreme Court held that § 90-21.12 did not abrogate the common law standards of care that long had been established by the Court.

In Wall the Supreme Court stated the following:

We wish to emphasize again, however, that compliance with the "same or similar community" standard of care does not necessarily exonerate defendant from liability for medical negligence. The doctor must also use his "best judgment" and must exercise "reasonable care and diligence" in the treatment of his patient. If, however, the plaintiff proves a violation of the statutory standard of care which proximately caused her injury, this is sufficient to establish liability on the part of the attending health care professional for medical negligence. It would similarly be sufficient to establish liability if the plaintiff were able to show that the defendant did not exercise his "best judgment" in the treatment of the patient or if the defendant failed to use "reasonable care and diligence" in his efforts to render medical assistance.

Wall v. Stout, 310 N.C. 184 (1984).

APPENDIX

SMITH v. JONES, M.D.

INFORMATION FOR RALEIGH/WAKE COUNTY, NORTH CAROLINA IN FEBRUARY 2003

SUMMARY

North Carolina follows a same or similar community standard of care. North Carolina General Statute § 90-21.12 provides:

In any action for damages for personal injury or death arising out of the furnishing or the failure to furnish professional services in the performance of medical, dental, or other health care, the defendant shall not be liable for the payment of damages unless the trier of the facts is satisfied by the greater weight of the evidence that the care of such health care provider was not in accordance with the standards of practice among members of the same health care profession with similar training and experience situated in the same or similar communities at the time of the alleged act giving rise to the cause of action.

INFO ON DUKE HEALTH RALEIGH HOSPITAL

Mr. Smith's surgery was performed at Raleigh Community Hospital in Raleigh, North Carolina on February 3, 2003.

DUKE HEALTH RALEIGH HOSPITAL (formerly called "Raleigh Community Hospital"):

- 150+ beds
- · Over 500 physicians on its medical staff
- Offers full range of health care services including Orthopaedic, General and Thoracic surgery
- Part of Duke University Health System
- Part of Duke University Health System since 1998
- According to the CEO of Duke Health Raleigh Hospital, the hospital offers "the world-renowned care and resources of Duke" to the Raleigh community...

Our hospital has served Wake County for more than thirty years and has been an important member of the Duke University Health System family since 1998. We are proud to offer the world-renowned care and resources of Duke conveniently located here in Raleigh in a warm, friendly setting. Doug Vinsel, CEO

For the year 7/1/03 thru 7/1/04, Duke Health Raleigh Hospital reported the following:

Admissions	6863
Inpatient surgeries	2844
Outpatient visits	90,940
Outpatient surgeries	15,320

Raleigh/Wake County is served by two other major hospitals: Rex Hospital (appx. 400 beds and 900 physicians) and Wake Medical Center (Appx. 750 beds and 1000 physicians).

FACTS ABOUT RALEIGH/WAKE COUNTY, NORTH CAROLINA

Raleigh is located in central North Carolina in Wake County. Two highly respected university medical centers are located with thirty miles of Raleigh – Duke University Medical Center and UNC Health Care. The between Raleigh-Durham-Chapel Hill is known as the Research Triangle and is home to numerous high-tech employers.

Wake County had a population of app. 7000,000 in 2002-03, with 43% of its residents over age 25 having a bachelor's degree or higher.

DR. JONES

Private practice since 2000

Board Certified, American Board of Orthopaedic Surgery 1994
BA Purdue University 1981
MD Georgetown University 1985
General Surgery Residency University of North Carolina 1985-87
Orthopaedic Residency University of North Carolina 1987-91
Director, University of North Carolina Sports Medicine and Shoulder Fellowship
Program 1992-2000
Director, University of North Carolina Sports Medicine Center 1995-2000
UNC Hospitals, Division of Orthopaedic Surgery 1992-2000