IN THE STATE COURT OF GWINNETT COUNTY

STATE OF GEORGIA

PETER G. HAMILTON	-
and SUSAN HAMILTON	- .
PLAINTIFF	CIVIL ACTION C 07 0 8 4 - 1
vs.	
ACADEMY ORTHOPEDICS, LLC	-
and MICHAEL J. KALSON, M.D.	-
	-
DEFENDANT	
	SUMMONS
TO THE ABOVE NAMED DEFENDANT You are hereby summoned and r whose name and address is:	equired to file with the Clerk of said court and serve upon the Plaintiff's attorney
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Steven A. Pickens, Esq. Mahaffey Pickens Tucker, LLP 1550 North Brown Road, Suite 125 Lawrenceville, Georgia 30043
an answer to the complaint which is here exclusive of the day of service. If you fail to complaint.	ewith served upon you, within 30 days after service of this summons upon you, o do so, judgment by default will be taken against you for the relief demanded in the
This 2 day of Dec	
	Richard T. Alexander, Jr. Clerk of State Court
	By Wseawatt Deputy Clerk
	Deputy Clerk

INSTRUCTIONS: Attach addendum sheet for additional parties if needed, make notation on this sheet if addendum sheet is used.

t m	General Civil Case Filing in	iormation form (Non-Domestic)
Co	urt County GWINNETT	Date Filed MM-DD-YYYY MM-DD-YYYY
	Superior	
	State Docket #16 07	084-1 2016 DEC-2 PM 3: 52
Pla	intiff(s)	Defendant(s) RICHARD ALEXANDER, CLEF
HA	MILTON, PETER G.	ACADEMY ORTHOPEDICS, LLC
Last	First Middle I. Suffix Prefix Maiden	Last First Middle I. Suffix Prefix Maiden
	MILTON, SUSAN	KALSON, MICHAEL J., M.D.
Last	First Middle I. Suffix Prefix Maiden	Last First Middle I. Suffix Prefix Maiden
Last	First Middle I. Suffix Prefix Maiden	Last First Middle I. Suffix Prefix Maiden
Last	First Middle I. Suffix Prefix Maiden	Last First Middle I. Suffix Prefix Maiden
No.	of Plaintiffs2	No. of Defendants 2
Plai	ntiff/Petitioner's Attorney Pro Se	
	•	
Last	KENS, STEVEN A. First Middle I. Suffix	
Dov	# 577850	
Dai	# <u>577656</u>	
(Check Primary Type (Check only ONE)	If Tort is Case Type: (Check no more than TWO)
	Contract/Account	
	Wills/Estate	☐ Auto Accident
	Real Property	☐ Premises Liability
	Dispossessory/Distress	✓ Medical Malpractice
	Personal Property	☐ Other Professional Negligence
	Equity	☐ Product Liability
	Habeas Corpus	☐ Other (Specify)
	Appeals, Reviews	
		Are Punitive Damages Pleaded? ☐ Yes ☑ No
Ш	Post Judgement Garnishment, Attachment, or Other Relief	
	Non-Domestic Contempt	
	Tort (If tort, fill in right column)	I hereby certify that the documents in this filing
	Other General Civil (Specify)	(including attachments and exhibits) satisfy the requirements for redaction of personal or confidential information in O.C.G.A. 9-11-7.1
I	NI .	Communication and the C.C.G.A. 9-11-7.1

IN THE STATE COURT OF GWINNETT COUNTY

STATE OF GEORGIA

FILED IN	OFFICE
CLERK STAT	TE COURT
GWINNETT CO	DUNTY, GA

-2016 DEC -2 PM 3: 52

RICHARD ALEXANDER, CLERK

PETER G. HAMILTON)
and SUSAN HAMILTON	j
Plaintiffs,) CIVIL ACTION FILE
V.) NO. 16 C 07 0 84 - 1
ACADEMY ORTHOPEDICS, LLC and MICHAEL J. KALSON, M.D.,))) <u>JURY TRIAL DEMANDED</u>
Defendants.)

COMPLAINT IN TORT FOR DAMAGES

COME NOW, Plaintiffs Peter G. Hamilton (hereinafter "Mr. Hamilton") and Susan Hamilton (hereinafter "Mrs. Hamilton") in the above-styled action, and file this, their Complaint in Tort for Damages against Defendants Academy Orthopedics, LLC and Michael J. Kalson, M.D. (hereinafter collectively referred to as the "Defendants"), showing this Honorable Court as follows:

PARTIES, JURISDICTION AND VENUE

1.

Plaintiff Peter G. Hamilton resides in Duluth, Georgia and is authorized to bring this action.

2.

Plaintiff Susan Hamilton resides in Duluth, Georgia and is authorized to bring this action.

3.

Defendant Academy Orthopedics, LLC (hereinafter referred to as "Academy") is a professional limited liability company created under the laws of the State of Georgia and authorized to conduct business in the State of Georgia. Said Defendant is subject to the

jurisdiction and venue of this Court, and may be served through its registered agent, Michael Kalson, M.D. at 318 Tribble Gap Road, Cumming, Forsyth County, Georgia 30040.

4

Defendant Michael J. Kalson, M.D. (hereinafter referred to as "Dr. Kalson") is a medical doctor licensed to practice medicine in the State of Georgia. Said Defendant is subject to the jurisdiction and venue of this Court and may be served with process at 318 Tribble Gap Road, Cumming, Forsyth County, Georgia 30040.

5.

Venue is proper in Gwinnett County pursuant to O.C.G.A. § 14-2-510(b)(3) and O.C.G.A. § 9-10-31(b) because Defendant Academy maintains an office in Gwinnett County and the cause of action originated in Gwinnett County.

6.

Defense counsel has indicated that he will acknowledge service on behalf of Defendants.

BACKGROUND FACTS

7.

Plaintiffs reallege and incorporate the allegations contained in Paragraphs 1 through 6 by reference as if set forth fully herein.

8.

On or about December 25, 2014, Mr. Hamilton slipped and fell outside the CVS Pharmacy on Pleasant Hill Road in Gwinnett County, Georgia. Mr. Hamilton sustained a three-part fracture to his left humerus as a result of the fall.

9.

On or about December 26, 2014 Mr. Hamilton presented to the Gwinnett Medical Center at Duluth for treatment to repair his broken left arm.

On that day, after a short consult, Dr. Kalson performed a post open reduction and internal fixation of the three-part fracture of Mr. Hamilton's left humerus using a Biomet OptiLock plate and screws.

11.

During surgery, Dr. Kalson placed an Optilock Jig Head, commonly referred to in the industry as a drill guide (the "Drill Guide") over the lateral aspect of Mr. Hamilton's humerus and held it with guide pins. The Drill Guide is not intended to be implanted in a patient and on its side has stamped into the metal in all capital letters the words "DO NOT IMPLANT." True and accurate copies of photographs of the Drill Guide used in the subject procedure are attached hereto as **Exhibit A** and incorporated herein by reference. Despite the fact that the Drill Guide was not supposed to be implanted, Dr. Kalson neglected to remove the Drill Guide after attaching the Optilock plate and screws. Dr. Kalson then closed the surgical incision with the Drill Guide still inside Mr. Hamilton's shoulder. Mr. Hamilton then spent the night in recovery at Gwinnett Medical Center-Duluth and was discharged the next day.

12.

On January 6, 2015, Mr. Hamilton returned to see Dr. Kalson for a follow-up appointment. Dr. Kalson ordered and examined X-rays of Mr. Hamilton's shoulder but failed to observe the Drill Guide retained in Mr. Hamilton's shoulder. Although Mr. Hamilton expressed that he continued to suffer from agonizing pain, lack of sleep, and an inability to lift his left arm, Dr. Kalson simply ordered a prescription for Norco and advised Mr. Hamilton to go on OxyContin twice a day.

Mr. Hamilton remained in a constant state of pain for the next six (6) months as a result of the retained Drill Guide and ill-fitting plate and screws.

14.

As a result of the retained object, Mr. Hamilton suffered constant pain that would not go away which severely limited the activities in which he could engage. For example, he could not make any sudden upper body movements, rarely slept, could not wear a seatbelt while riding in the car, and had to reach across the steering wheel with his right hand to activate the turn signal while driving. This is not intended to be an exhaustive list of all the problems caused by the negligently implanted Drill Guide.

15.

After realizing his intense pain was not subsiding and his left arm did not seem to be healing, Mr. Hamilton decided to seek the opinion of another orthopedic surgeon. Because Mr. Hamilton was convalescing in his lake house in Maine, Mr. Hamilton sought treatment from orthopedic surgeon Dr. Donald P. Endrizzi, (hereinafter referred to as "Dr. Endrizzi") at the Maine Medical Center in Portland, Maine.

16.

Upon examination, Dr. Endrizzi discovered the Drill Guide left in Mr. Hamilton's shoulder by Dr. Kalson and observed that the screws inserted through the Drill Guide and into the OptiLock plate were loose and falling out.

17.

Dr. Endrizzi advised yet another surgery would be necessary to remove the Drill Guide lodged in Mr. Hamilton's shoulder and correctly repair the fractured humerus.

On July 1, 2015, Dr. Endrizzi performed surgery on Mr. Hamilton's left humerus to remove the retained Drill Guide and correctly repair the fractured bone. The successful procedure occurred at Maine Medical Center. **Exhibit A** includes photographs of the actual Drill Guide removed from inside Mr. Hamilton's body.

19.

Mr. Hamilton suffered a heart attack while in recovery from the July 1, 2015 surgery.

CAUSES OF ACTION

COUNT I

Peter Hamilton's claim for Medical Negligence against Michael J. Kalson, M.D. and Academy Orthopedics, LLC

20.

Plaintiffs reallege and incorporate the allegations contained in Paragraphs 1 through 19 by reference as if set forth fully herein.

21.

At all times pertinent to this action, Dr. Kalson was acting within the course and scope of his employment as an actual and/or apparent agent, partner and/or employee of Defendant Academy such that his negligence is imputed to Defendant Academy.

22.

Pursuant to the doctrines of *respondeat superior*, agency, and/or apparent agency, Defendant Academy is liable and responsible for all negligent acts and omissions of each of its agents and employees, including Dr. Kalson and all physicians, nurses, clerical, administrative and other personnel who were responsible for the medical care, referral and treatment of Peter Hamilton at all times pertinent to this action.

At all times relevant hereto, a doctor/patient relationship existed between Mr. Hamilton and Dr. Kalson.

24.

Dr. Kalson owed to Mr. Hamilton a duty to exercise that degree of skill and care employed by like physicians generally under the same or similar circumstances in like surrounding conditions in the medical care and treatment rendered to Mr. Hamilton.

25.

Dr. Kalson deviated and departed from the standard of care applicable to physicians in general under the same or similar circumstances in like surrounding conditions in his medical care and treatment of Mr. Hamilton. Said deviations and departures from the standard of care include, without limitation, the following:

- Dr. Kalson failed to remove the Drill Guide that bears the words "DO NOT IMPLANT" on its side before concluding his surgery on Mr. Hamilton, leaving the Drill Guide implanted inside Mr. Hamilton;
- 2) Dr. Kalson failed to properly secure the OptiLock plate and screws to Mr. Hamilton's left humerus during the above-mentioned procedure; and
- 3) Dr. Kalson failed to discover that the Drill Guide was still in place during his postsurgical examination of Mr. Hamilton.

26.

As a direct and proximate result of the negligent conduct of Dr. Kalson, as described above, Mr. Hamilton suffered serious and permanent injuries and he is entitled to recover all damages allowable by law, including damages for his physical and mental pain and suffering, mental anguish, permanent physical deficits, medical and hospital expenses incurred as a direct

result of the negligence of each of the Defendants, and all other damages allowable by law.

27.

Defendants are jointly and severally liable to Mr. Hamilton for all damages flowing from the above-described breaches of the applicable standards of care.

28.

This is an action for professional negligence arising out of the medical care and treatment rendered to Peter Hamilton by Dr. Kalson in the course of his employment with Academy. Consequently, pursuant to O.C.G.A. § 9-11-9.1, Mr. Hamilton has attached hereto as **Exhibit B** and incorporates herein by reference the Affidavit of N. Douglas Boardman, III, M.D., a duly qualified physician, alleging in at least one particular manner in which Dr. Kalson breached the appropriate standard of care.

COUNT II Peter Hamilton's claim for Res Ipsa Loquitor Against Defendants

29.

Plaintiffs reallege and incorporate the allegations contained in Paragraphs 1 through 28 by reference as if set forth fully herein.

30.

As alleged herein, Mr. Hamilton was injured through the acts and omissions of Defendants while undergoing the Treatment. The acts and omissions of Defendants are presumed to be negligent because:

- (a) Dr. Kalson failed to remove the Drill Guide used in the December 26, 2014 surgery to repair Mr. Hamilton's fractured humerus;
- (b) The Drill Guide clearly bore the inscription "DO NOT IMPLANT"; and
- (c) A subsequent treating physician removed the Drill Guide from inside Mr. Hamilton's body.

As a direct and proximate result of Defendants' negligent and careless acts and omissions, Mr. Hamilton was injured and therefore entitled to recover damages in an amount to be determined by a fair and impartial jury.

COUNT III Susan Hamilton's Claim of Loss of Consortium against Defendants

32.

Plaintiffs reallege and incorporate the allegations contained in Paragraphs 1 through 31 by reference as if set forth fully herein.

33.

At the time Dr. Kalson performed surgery on Plaintiff Peter Hamilton, Plaintiff Peter Hamilton and Plaintiff Susan Hamilton were lawfully married. As a direct and proximate result of the negligence of the Defendants, Plaintiff Susan Hamilton has a claim for loss of consortium. Ms. Hamilton now has to perform many services her husband used to perform, she must also assist in her husband's medical care and the chronic pain her husband has endured has affected their relationship.

34.

Plaintiff Susan Hamilton is entitled to recover general damages in an amount determined to be fair and reasonable by the jury on her claim for loss of consortium.

COUNT IV Attorney's Fees as to all Defendants

35.

Plaintiffs reallege and incorporate the allegations contained in Paragraphs 1 through 34 by reference as if set forth fully herein.

36.

Defendants have acted in bad faith, have been stubbornly litigious and have caused Plaintiffs unnecessary trouble and expense. Accordingly, pursuant to O.C.G.A. § 13-6-11 Plaintiffs are

entitled to recover all reasonable attorney's fees and expenses of litigation incurred in bringing this action.

WHEREFORE, Plaintiffs pray that this Court grant the following relief:

- (a) Enter a judgment in favor of Plaintiff Peter Hamilton on Counts I & II for all general and special damages from Defendants jointly and severally, in an amount to be determined by a fair and impartial jury;
- (b) Enter a judgment in favor of Plaintiff Susan Hamilton on Count III for all general and special damages from Defendants jointly and severally, in an amount to be determined by a fair and impartial jury;
- (c) Enter a judgment in favor of Plaintiffs for all reasonable attorney's fees and expenses of litigation incurred in bringing this action; and
- (d) For such other and further relief as this Court deems just and proper.

Respectfully submitted, this _____ day of December, 2016.

MAHAFFEY PICKENS TUCKER, LLP

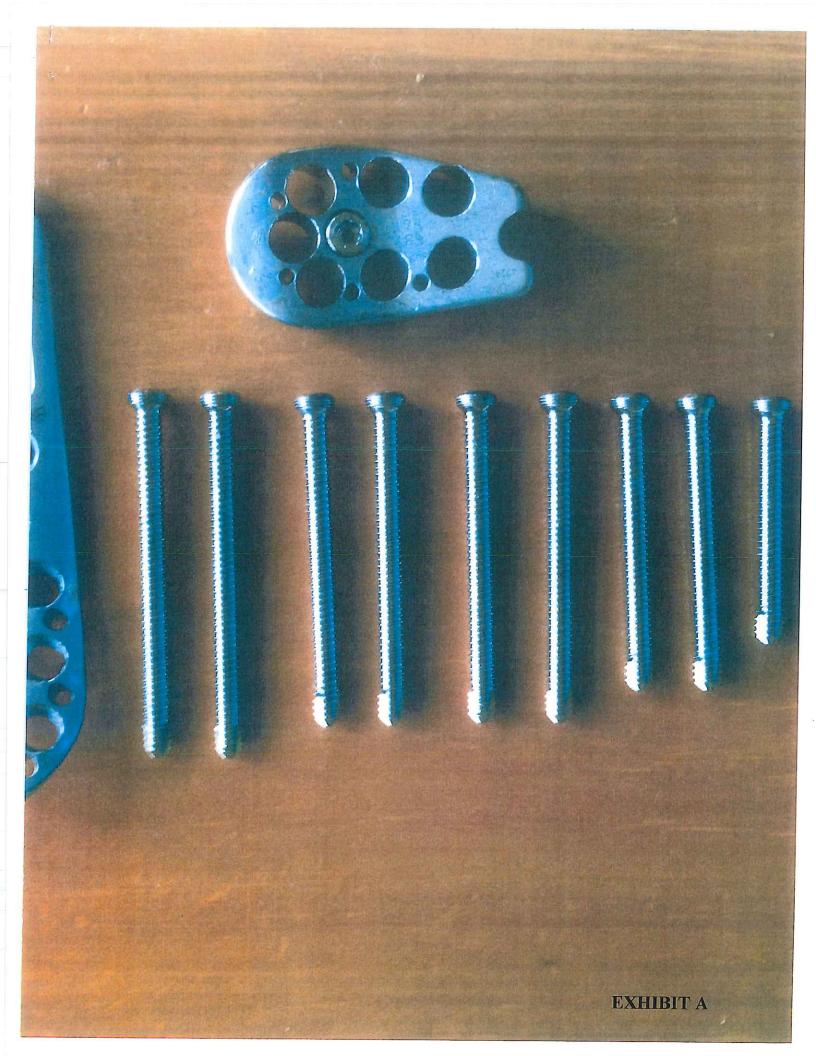
Steven A. Pickens

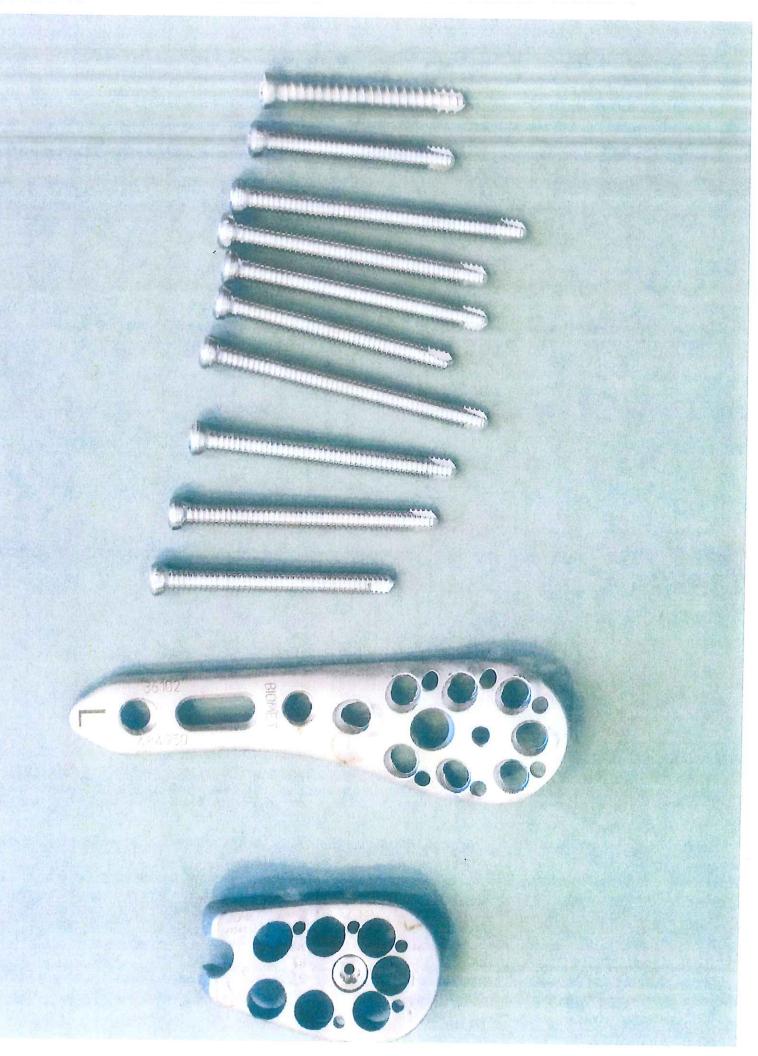
Georgia Bar No.: 577850

David G. McGee

Georgia Bar No.: 809036 Attorneys for Plaintiffs

1550 North Brown Road Suite 125 Lawrenceville, Georgia 30043 (770) 232-0000 spickens@mptlawfirm.com





AFFIDAVIT OF N. DOUGLAS BOARDMAN, III, M.D.

STATE OF VIRGINIA

COUNTY OF HENRICO

Personally appeared before the undersigned attesting officer, duly authorized by law to administer oaths, comes N. Douglas Boardman, III, M.D. who having been duly sworn, testifies and deposes under oath as follows:

1.

My name is N. Douglas Boardman, III, M.D., and I am a United States citizen over the age of 18 years. I am not suffering from any legal disabilities.

2.

I am a physician currently licensed to practice medicine in the State of Virginia. I have been licensed to practice medicine in the State of Virginia continuously since 2002. I have been Board Certified in Orthopedic Surgery since 2002, and I am a Fellow of the American Academy of Orthopedic Surgery. My education, training and experience in medicine are contained in the Curriculum Vitae attached hereto and made a part hereof as **Exhibit 1**.

3.

I am currently an Associate Professor in the Department of Orthopedic Surgery at Virginia Commonwealth University Medical Center and Staff Physician at Hunter Holmes McGuire Veterans Affairs Medical Center in Richmond, Virginia. Prior to this position, I was an instructor at the Mayo Medical School in Rochester, Minnesota beginning in 1998. My medical specialty is Orthopedic Surgery.

4.

During the three (3) year period immediately preceding December 2014, I was continuously practicing medicine in the field of orthopedic surgery. During that three (3) year period, I personally

was involved in the care and treatment of hundreds of hospital patients, a large proportion of which were orthopedic patients, many of whom suffered from humerus fractures.

5.

Because of my academic and vocational experience in orthopedic surgery, I am familiar with and have knowledge of the standard of care that is required and expected of hospitals, physicians, and nurses in diagnosing and caring for orthopedic patients.

6.

During the time that I have practiced medicine, I have been charged with the care of hundreds of patients who have suffered from multi-part humerus fractures. Consequently, I have an appropriate level of knowledge of the standard of care in the evaluation and diagnosis of patients suffering from such fractures.

7.

I have reviewed medical records pertaining to the care and treatment of Peter G. Hamilton, including, without limitation, certified records from Gwinnett Medical Center at Duluth ("the hospital") in Gwinnett County, Georgia detailing the care given to Mr. Hamilton between his admission on or about December 26, 2014, and his discharge on or about December, 27 2014. The records from Gwinnett Medical Center at Duluth that I reviewed included, but were not limited to, the following:

- (a) Patient Registrations and Triage Records;
- (b) Patient History;
- (c) Progress Notes;
- (d) Assessment Notes;
- (e) Physician's Orders;
- (f) Nursing Notes;
- (m) X-ray records;

- (n) Discharge Summary; and,
- (o) Other records that were part of the hospital chart.

8.

I have also reviewed medical records pertaining to the care and treatment of Peter G. Hamilton, including, without limitation, certified records from Maine Medical Center ("the hospital") in Portland, Maine, detailing the care given to Mr. Hamilton between his admission on or about July 1, 2015, and his discharge on or about July 8, 2015. The records from Maine Medical that I reviewed included, but were not limited to, the following:

- (a) Patient Registrations and Triage Records;
- (b) Patient History;
- (c) Progress Notes;
- (d) Assessment Notes;
- (e) Physician's Orders;
- (f) Nursing Notes;
- (m) X-ray records;
- (n) Discharge Summary; and,
- (o) Other records that were part of the hospital chart.
- (p) Photographs of the hardware removed from Mr. Hamilton's shoulder

9.

In setting forth my opinions stated herein, I am relying on the above-listed medical records, as well as my own education, training and experience as a practicing physician and as a Medical Professor in charge of instructing proper techniques used in shoulder and elbow surgery. All opinions as contained herein are given to a reasonable degree of medical certainty.

From my review of the above-referenced records, as well as my own education, training and experience, it appears to me that Dr. Michael J. Kalson, M.D. deviated from the applicable standard of care.

11.

The records I reviewed indicate that Mr. Hamilton presented to the Gwinnett Medical Center at Duluth on December 26th 2014, under the care of Dr. Kalson, for repair of a 3-part fracture to his left proximal humerus. During surgery Dr. Kalson neglected to remove a Biomet OptiLock drill guide, inscribed with the words "DO NOT IMPLANT", that was used to insert an OptiLock plate and screws into Mr. Hamilton's humerus. Such drill guide was retained in Mr. Hamilton's body preventing proper fixation and healing and also causing immense amounts of pain and discomfort over the course of many months.

12.

It is my medical opinion that the treatment and care provided to Peter Hamilton at Gwinnett Medical Center-Duluth by Dr. Kalson deviated from the standard of care in that he failed to exercise that degree of care and skill ordinarily exercised by members of his respective profession generally under the same or similar circumstances in like surrounding conditions ("the standard of care").

13.

It is my medical opinion that:

- (a) Dr. Michael J. Kalson, M.D. deviated from the standard of care:
 - (1) By failing to remove the OptiLock drill guide used in the December 26th, 2014 surgery to repair the 3-part fracture to Mr. Hamilton's left proximal humerus; and,

- (2) By failing to properly secure the Biomet OptiLock plate and screws to Mr. Hamilton's left humerus during the above-mentioned procedure; and,
- (3) By failing to discover the above mistake in the January 6, 2015 follow-up appointment where Mr. Hamilton expressed his severe pain and X-rays were ordered to check any progress of the fracture to union.
- (b) The failure to properly secure the OptiLock plate and screws and to remove the OptiLock drill guide in Mr. Hamilton's shoulder, to a reasonable degree of medical certainty, caused otherwise preventable pain and suffering that occurred after the December 26th, 2014 surgery and prevented proper fixation and healing.

14.

It is not my purpose to set forth each and every criticism which I have or may have in the future based upon further review and information and consideration concerning the care and treatment of Peter Hamilton, but rather to provide Mr. Hamilton with an affidavit setting forth an opinion that there was a deviation from the standard of care. It is my understanding that such an affidavit is required by O.C.G.A. § 9-11-9.1 before the patient may file a lawsuit against the negligent parties. I understand that only one deviation from the standard of care needs to be identified for purposes of this Affidavit in filing a Complaint and that was done in this Affidavit.

15.

This Affidavit is not intended to encompass all of the opinions held by me, and I specifically reserve the right to modify or alter these opinions or form additional opinions especially after additional information becomes available.

[Signature Contained on Following Page]

FURTHER AFFIANT SAYETH NOT.

AFFIANT:

Sworn to and subscribed before me this 1044 day of October, 2016.

Charlotte M. Barrett

Notary Public

My Commission Expires: 9/30/2017



N. Douglas Boardman, III, M.D.

1. PERSONAL INFORMATION

1.1 Date and Place of Birth December 7, 1965 Middletown, CT

1.2 Citizenship United States of America

Doswell, VA 23047-0240 Tel: 804-227-3813 (Home) Email: Quailfield(Maol.com

1.4 Office Address

Home Address

1.3

Virginia Commonwealth University Medical Center

Department of Orthopaedic Surgery

Box 980153

P.O. Box 240

9th Floor, West Hospital Richmond, VA 23298 Tel: 804-828-5567 Fax: 804-828-1086 Cell: 804-405-9972

ND, Pidcoe PE, Frith

Email: nboardman@mcvh-vcu.edu

2.0 LICENSURE AND BOARD CERTIFICATION

Commonwealth of Virginia 0101227814, expiration 12/31/2010 Pennsylvania (inactive) Minnesota (inactive)

Fellow, American Academy of Orthopaedic Surgeons, 2004 Board Certification, American Board of Orthopaedic Surgery, 2002 Diplomate, National Board of Medical Examiners, 1993

3.0 EDUCATION

Graduate: University of Pennsylvania School of Medicine, Philadelphia, PA M.D., 1992 (AOA)

Undergraduate: Harvard College, Cambridge, MA A.B., Economics, 1987 Magna cum laude

4.0 MILITARY SERVICE

None

5.0 POSTDOCTORAL TRAINING

Mayo Graduate School of Medicine, Rochester, MN
Fellow, Adult Reconstruction/Shoulder & Elbow Surgery, 19982000 University of Pittsburgh, Pittsburgh, PA
Residency in Orthopaedic Surgery, 1992-1997

6.0 ACADEMIC AND PROFESSIONAL APPOINTMENTS

Associate Professor, Department of Orthopaedic Surgery, Virginia Commonwealth University Medical Center, Richmond, VA July 2006-present

Assistant Professor, Department of Orthopaedic Surgery, Virginia Commonwealth University Medical Center, Richmond, VA August 2000-June 2006

Staff Physician, Hunter Holmes McGuire Veterans Affairs Medical Center, Richmond, VA October 2000-present

Instructor, Mayo Medical School, Rochester, MN June 1998-June 2000

Instructor•, Department of Orthopaedic Surgery, University of Pittsburgh, Pittsburgh, PA **July** 1997-June 1998

Editor-in-Chief, Pittsburgh Orthopaedic Journal

Research Resident, Musculoskeletal Research Center, University of Pittsburgh Department of Orthopaedic Surgery, Pittsburgh, PA. Lab Director: Savio L-Y Woo, Ph.D. July 1993-June 1994

7.0 <u>MEMBERSHIP--SCIENTIFIC, HONORARY AND PROFESSIONAL</u> SOCIETIES

Alpha Omega Alpha
Fellow, American Academy of Orthopaedic Surgeons
American Shoulder and Elbow Surgeons
Virginia Orthopaedic Society
Medical Society of Virginia
Richmond Academy of Medicine
Mayo Elbow Club
Richmond Orthopaedic Club
Southern Orthopaedic Association

Eastern Orthopaedic Association

8.0 MEMBERSHIP IN COMMUNITY ORGANIZATIONS

Fork Church, Doswell, VA
Trout Unlimited, Capital Chapter
Stewardship Council Member
Quail Unlimited
Ducks Unlimited
Ruffed Grouse Society
Coalition for Hanover's Future

9.0 SPECIAL AWARDS AND FELLOWSHIPS

9.1 AWARDS

First Prize, MCV/VCUHS Department of Orthopaedic Surgery Residents' Research Day

Fern SE, Owen JR, Wayne JS, Boardman ND: Roles of the coronoid, radial head, and lateral collateral ligament in varus stability of the elbow, June 2007.

Best Poster Award, 60th Annual Meeting of the Virginia Orthopaedic Society Ivanick NM, LaPlante JK, Owen JR, Wayne JS, Boardman ND: Biomechanical comparison of two fixation techniques for proximal humeral fractures, May 2007.

AcademicKeys Who's Who in Medical Sciences Education, 2004-

Virginia Health Institute/Virginia Business magazine, "Virginia's Top Doctors", 2004

Second Prize, MCV/VCUHS Department of Orthopaedic Surgery Residents' Research Day

Satterfield W, Michener L, Boardman ND 3rd: Closed reduction and percutaneous pinning of displaced proximal humerus fractures. June 2003.

Herodicus Award Paper•

Thompson WO, Boardman ND, Debski RE, Taskiran E, Warner JJP, Fu FH, Woo SL-Y: A biomechanical analysis of rotator cuff deficiency in a cadaveric model. Presented at the 20th Annual Meeting of the American Orthopaedic Society for Sports Medicine, Palm Desert, June 1994.

Alpha Omega Alpha, University of Pennsylvania School of Medicine, 1992

Merck Book Prize, University of Pennsylvania School of Medicine, 1992

American Society of Clinical Pathologists' Award for Academic Excellence and Achievement, University of Pennsylvania School of Medicine, 1990

Magna cum laude, Harvard College, Cambridge, MA, 1987

Harvard College Scholarship for Academic Achievement, 1984-1987

9.2 FELLOWSHIPS

Visiting Scientist, Mayo Clinic Biomechanics Laboratory, Department of Orthopedics, 1998

Virginia Tidewater Consortium,

25¹¹¹ Annual Summer Institute on College Teaching, 2003

Tornier Training Course on Reversed Shoulder Arthroplasty, 2004

Williamson Institute Leadership Fellowship Program, 2007-8

9,3 GRANTS AWARDED

2005: Charitable Gift of Mr. and Mrs. Robert G. Beck, \$12500

1998: National Orthopaedic Surgery Fellows Foundation Grant, "Relative Role of the Coronoid, Radial Head, and Lateral Collateral Ligament in Normal Elbow Kinematics". \$5000

1998: Mayo Foundation Research Grant. "Biomechanical Evaluation of Complex Fracture-Dislocations of the Elbow", \$35000.

9.4 INVITED SEMINARS

Instructor, Annual Mayo Elbow Surgical Skills Course, Mayo Clinic, Rochester, MN 1999-present

VCU Medical Center Department of Rheumatology Grand Rounds, "Update on Total Elbow Arthroplasty", Richmond, VA 2000

Course Faculty, 1st Annual VCU Trauma Symposium,

"Shoulder Arthroplasty for Trauma", Williamsburg, VA, December 2001

Course Faculty, 7¹¹¹ AnnualSports Medicine for the Primary Care Physician, Williamsburg, VA, December 2001

"Injuries of the Elbow, Wrist, and Hand: The Orthopaedic Perspective"

"Injuries of the Hip, Leg, Ankle, and Foot: The Orthopaedic Perspective"

VCU Medical Center Department of Emergency Medicine Grand Rounds, "Elbow Trauma", Richmond, VA, August 2003

Invited Lecture, "Use of Orthobiologics and Bone Graft Substitutes", Huntsville, AL, November 2003

Lecturer, Virginia EMS, "Severe Orthopaedic Trauma", Richmond, VA, December 2003

Invited Lecture, "Use of Orthobiologics and Bone Graft Substitutes", Harrisonburg, VA, April 2004

Course Faculty, Tornier Shoulder Arthroplasty Course, Williamsburg, VA, May 2004
"Pros and Cons of Glenoid Resurfacing"

"Clinical Results of Shoulder Arthroplasty"

McClain Visiting Professor, University of Pittsburgh, Pittsburgh, PA, October 2004 "Update on Total Elbow Arthroplasty"

"Complex Fracture-Dislocations of the Elbow"

Instructor, Biomet Learning Center, "Total Elbow Arthroplasty", 2004-present

Visiting Professor, Emory University, Atlanta, GA, April 2005

"Complex Fracture-Dislocations of the Elbow"

Course Faculty, Tornier Reversed Training, New Brunswick, NJ, September 2005

Course Faculty, "Modern Solutions in Shoulder and Elbow Surgery", Paradise Island, February 2006

"Evaluation and Nonoperative Management of the Stiff Elbow"

"Management of Complex Instability of the Elbow"

"Management of Radial Head Fractures"

VCU Medical Student Series on Career Decisions/ Dual Doctors, March 2006

Invited Lecture, Arthritis Foundation/Williamsburg Arthritis Project, April 2006
"Update on Shoulder and Elbow Arthritis"

Course Faculty, Tornier Comprehensive Shoulder Course, Houston, April 2006

"Reverse Total Shoulder Technique"

"Aequalis Shoulder Concepts"

"Rehabilitation After Shoulder Arthroplasty"

VCU Medical Center Department of Internal Medicine, "Shoulder Referrals", Richmond, VA, May 2006

VCU Medical Center Department of Orthopaedic Surgery/Perisurgical Services "Beer and Bones", "Shoulder Arthroplasty", Richmond, VA, November 2006

Course Faculty, VCU Medical Center Operating Room Nursing Trauma Training Symposium, Richmond, VA, November 2006

"Introduction to Radiology"

"Surgeon Expectations of OR Staff"

Hands-on Surgical Skills Training

Grand Rounds, University of Virginia, Charlottesville, VA, December 2006 "Complex Instability of the Elbow"

"Reverse Total Shoulder Arthroplasty"

Grand Rounds, Pontiac Osteopathic Hospital, Pontiac, Michigan, June 2007
"Complex Fracture-Dislocations of the Elbow"

"Early Experience with Reverse Total Shoulder Arthroplasty"

Course Faculty, Advanced Shoulder Arthroplasty Course, Las Vegas, September 2007
"Revision Shoulder Arthroplasty"

"Indications for Reversed Total Shoulder Arthroplasty"

Course Faculty/Lab Instructor, Annual Advances in Trauma and Arthroplasty, Resident Bioskills Session, Washington, DC, October 2007

Grand Rounds, University of Virginia, Charlottesville, VA, December 2007 "Shoulder Arthroplasty"

Keynote Speaker, DePuy J&J Regional Sales Meeting, Keswick, VA, January 2008 "Shoulder Arthroplasty 2008"

Keynote Speaker, DePuy J&J National Sales Meeting, New Orleans, LA, January 2008 "Innovation and Education in Shoulder Arthroplasty 2008"

Course Faculty, VCU Medical Center Operating Room Nursing Trauma Training Symposium, Richmond, VA, February 2008
"Total Shoulder• Arthroplasty"

"Reverse Shoulder Arthroplasty"

Hands-on Surgical Skills Training

VCU Medical Center Department of Orthopaedic Surgery/Perisurgical Services "Beer and Bones", "Intramedullary Fixation of Clavicle Fractures and Nonunions", Richmond, VA, March 2008

Course Faculty, 3rd International Symposium on Regional Anesthesia,

Washington, DC, April 2008

"Complications of Regional Anesthesia"

Live Webcast, "Anatomic Total Shoulder Arthroplasty", Philadelphia, PA, April 2008

Course Faculty, Techniques in Anatomic and Reverse Shoulder Arthroplasty,

Orthopaedic Learning Center, Chicago, April 2008

"Treatment Options for Rotator Cuff Tear Arthropathy"

"Reverse Total Shoulder Arthroplasty: Surgical Technique"

Hands-on Surgical Skills Training

Course Faculty, Virginia Orthopaedic Society 61st Annual Meeting,

Wintergreen, VA, May 2008

"Arthroscopic Treatment of Primary Osteoarthritis of the Elbow"

Faculty Moderator, Shoulder and Elbow Session

Meeting Chair

Inaugural Speaker, Philadelphia Shoulder Symposium, Philadelphia, May 2008 "Proximal Humerus Fractures"

Invited Lecture, "Update on Shoulder Arthroplasty 2008", Roanoke, VA, June 2008

Course Faculty, Techniques in Anatomic and Reverse Shoulder Arthroplasty, VISTA Learning Center, Baltimore, MD, June 2008

"Treatment Options for Rotator Cuff Tear Arthropathy"

Hands-on Surgical Skills Training

Course Faculty, Anatomic and Reverse Shoulder Arthroplasty Cadaveric Learning Center UAMS, Little Rock, AK, February 2009

"Anatomic Shoulder Arthroplasty—Design Rationale"

"Reverse Shoulder Arthroplasty—Design Rationale"

Hands-on Surgical Skills Training

Course Faculty, VCU Medical Center Operating Room Nursing Trauma Training Symposium, Richmond, VA, February 2009

"Total Shoulder Arthroplasty"

"Reverse Shoulder Arthroplasty"

Hands-on Surgical Skills Training

Course Faculty, AAOS Surgical Skills Course, "Distal Humerus Fractures",

AAOS Annual Meeting, Las Vegas, NV, February 2009

Invited Lecture, Central VA NAON Chapter, Richmond, VA, March 2009

Update on Shoulder Arthroplasty

Course Faculty, Anatomic and Reverse Shoulder Arthroplasty Cadaveric Learning Center Miami, FL, April 2009

"Hemi and Total Shoulder Arthroplasty"

"Anatomic Shoulder Arthroplasty—Design Rationale"

"Reverse Shoulder Arthroplasty—Design Rationale"

Hands-on Surgical Skills Training

Course Faculty, DePuy Signature Series Trauma Symposium, Chicago 2009

"Proximal Humerus Fractures"

Hands-on Surgical Skills Training

VCU Medical Center Department of Orthopaedic Surgery/Perisurgical Services "Beer and Bones", "Fractures of the Distal Humerus and Proximal Ulna", Richmond, VA, September 2009

Course Faculty, Anatomic and Reverse Shoulder Arthroplasty Cadaveric Learning Center Raynham, MA, October 2009

"Treatment Options for Cuff Tear Arthropathy"

"Total Shoulder Arthroplasty Tips and Pearls"

"Henri and Total Shoulder Arthroplasty"

Hands-on Surgical Skills Training

Invited Lecture, "Proximal and Distal Humerus Fractures", Louisville, KY, October 2009

Course Chair, DePuy Signature Series Trauma Symposium, Miami, FL, December 2009

"Proximal Humerus Fractures" Hands-on Surgical Skills Training

Invited Lecture, "Reverse Total Shoulder Arthroplasty", Charleston, SC, February 2010

Course Faculty, DePuy Signature Series Trauma Symposium, Miami, FL, February 2010 "Distal Humerus Fractures"

Hands-on Surgical Skills Training

Course Faculty, Virginia Orthopaedic Society 63" Annual Meeting,

Charlottesville, VA, May 2010

"Debate: Proximal Humerus Fractures—Fix or Replace?"

Society President

Las Vegas Reverse Course

Ginter talk

10. MAJOR COMMITTEES

10.1 UNIVERSITY

VCU Medical Center

Chair, Orthopaedic Patient Care Committee, 2007-present

Orthopaedic Resident Education Committee, Department of Orthopaedic Surgery, 2001-present

Orthopaedic Representative, Operating Room Committee, 2003-present

Trauma Patient Care Committee, 2004-2008

Trauma Medical Audit Committee, 2004-2008

Clinical Faculty Representative, Executive Committee of the Faculty, 2007-9

Simulation Committee, 2008-present

Claims Committee, August 2009-present

Director, Orthopaedic Grand Rounds Program

VCU School of Medicine

Step 2b Clinical Skills Examination Committee

M4 Advisory Committee

10.2 PROFESSIONAL

Shoulder/Elbow Program Subcommittee, American Academy of Orthopaedic Surgeons, 2005-2009

Moderator, Shoulder/Elbow DJD Session, AAOS Annual Meeting, Chicago March 2006 AAOS Annual Meeting, San Diego February 2007

Moderator, Rotator Cuff Session

AAOS Annual Meeting, San Francisco March 2008

AAOS Annual Meeting, Las Vegas, February 2009

ICL Evaluator, AAOS Annual Meeting, New Orleans, March 2010

Board of Directors, Virginia Orthopaedic Society

Board Representative to Medical Society of Virginia, 2005-2008

Course Chair, 2008 Annual Meeting

President-elect, 2008-2009

President 2009-present

Delegate to Medical Society of Virginia, Richmond Academy of Medicine

Member•, Legislative Committee

Board of Directors, Orthopaedic Research Laboratory Alumni Council

DePuy Johnson & Johnson Shoulder Surgeon Advisory Board 2009-

Ad hoc journal reviewer,

Archives of Physical Medicine and Rehabilitation

Clinical Orthopaedics and Related Research

Journal of Shoulder and Elbow Surgery

, Journal of Orthopaedic Research

11. <u>OTHER SIGNIFICANT SCHOLARLY, RESEARCH OR AI)MINSTRATIVE</u> EXPERIENCE

11.1 GRADUATE AND UNDERGRADUATE STUDENTS

Faculty Preceptor, VCU premedical student March-2010

Faculty Preceptor, VCU premedical student February-, 2008

Faculty Preceptor, VCU premedical student Rahul Mahajan, March-May 2006

Faculty Preceptor, VCU medical student Clare Winer, October-December 2005

Faculty Preceptor, VCU premedical student Gabrielle Sakellarides, 2005

Clinical Faculty Advisor, Nathan Ivanick, VCU School of Medicine.

"Biomechanical Evaluation of Plate Fixation of Proximal

Humerus Fractures", 2004-2005

Clinical Faculty Advisor, Joseph Iaquinto, VCU School of Engineering,

Department of Biomedical Engineering, "Finite Element Analysis of Plate

Fixation of Proximal Humerus Fractures", 2004-2005

Clinical Faculty Advisor, Justin Fisk, .VCU School of Engineering, Department of Biomechanical Engineering, "Three-Dimensional Modeling of the Elbow", 2006-2007

Dissertation Committee Member, Amee L. Seitz, DPT, PhD Candidate, Department of Physical Therapy, "Effects of Scapular Alterations on Subacromial Space", 2009

11.2 POSTDOCTORAL TRAINEES

Department of Orthopaedic Surgery, VCU Medical Center

Train 4-5 Orthopaedic Surgery Residents per year

Responsible for Clinic, Operating Room, and Inpatient training

Initiation of Shoulder/Elbow Journal Club

Clinical Research Advisor

Paul Nassab, MD:

"Achilles Tendon Allograft Reconstruction of Distal Biceps and Triceps Ruptures"

"Perioperative Cost of Arthroplasty in Hemophiliacs"

"Bilateral Open Elbow Dislocations: A Case Report"

William Satterfield, MD and Shane Leavitt, MD:

"Percutaneous Pinning of Displaced Fractures of the Proximal Humerus"

11.3 MAJOR TEACHING ASSIGNMENTS

Department of Orthopaedic Surgery, VCU Medical Center

Director, Biennial Shoulder & Elbow Teaching Module for Orthopaedic Surgery Residents

Lectures:

"Shoulder Arthritis", "Elbow Arthritis", "Complex Instability of the Elbow", "Shoulder and Elbow Trauma", "Examination of the Shoulder and Elbow", "Shoulder Instability"

Director, Third and Fourth Year Medical Student Elective in Orthopaedic Surgery for VCU School of Medicine

Director, Grand Rounds Program

Shoulder/Elbow Rotation, preceptor to 1 resident every 3 months

Departments of Orthopaedic Surgery and Internal Medicine, VCU Medical Center Ad hoc preceptor to Internal Medicine Residents

VCU School of Medicine

Ml Mentor, 2005-

MI-M4 Faculty Advisor, annual

M4 Update lecture, "Update on Orthopaedic Surgery and Sports Medicine: What's Emergent and What Not to Miss", May Annual 2006-present

M2 Lecture, "Introduction to the Shoulder and Elbow", annual

M1 Lecture, "The Orthopaedic Physical Examination", 2004

Blackstone Family Practice Lecture, "Injuries of the Shoulder and Elbow", 2001/3 Athletic Training Student Lecture, "Shoulder and Elbow Injuries", 2002

12, BIBLIOGRAPHY

12.1 PAPERS PUBLISHED

- 1. McCarthy DM, Boardman ND 3rd, Tramaglini DM, Sotereanos DG, Herndon JH: Clinical management of partially lacerated digital flexor tendons: A survey of hand surgeons. J Hand Surg [Am] 1995 Mar;20(2):273-275.
- 2. Thompson WO, Debski RE, Boardman ND 3rd, Taskiran E, Warner JJ, Fu FH, Woo SL: A biomechanical analysis of rotator cuff deficiency in a cadaveric model. Am J Sports Med 1996 May;24(3):286-292.
- 3. Boardman ND, Debski RE, Warner JJ, Taskiran E, Maddox L, Imhoff AB, Fu FH, Woo SL: Tensile properties of the superior glenohumeral and coracohumeral ligaments. J Shoulder Elbow Surg 1996 Jul;5(4):249-254.
- 4. Pfaeffle HJ, Tomaino MM, Grewal R, Xu J, Boardman ND, Woo SL, Herndon JH: Tensile properties of the interosseous membrane of the human forearm. J Orthop Res 1996 Sep;14(5):842-845.
- 5.Noguchi M, Seiler JG 3rd, Boardman ND 3rd, Tramaglini DM, Gelberman RH, Woo SL: Tensile properties of canine intrasynovial and extrasynovial flexor tendon autografts. J Hand Surg [Am] 1997 May;22(3):457-463.
- 6. Caldwell GL, Warner JP, Miller MD, Boardman D, Towers J, Debski R: Strength of fixation with transosseous sutures in rotator cuff repair. J Bone Joint Surg Am 1997 Jul;79(7): 1064-1068.
- 7. Boardman ND 3rd, Morifusa S, Saw SS, McCarthy DM, Sotereanos DG, Woo SL: Effects of tenorrhaphy on the gliding function and tensile properties of partially lacerated canine digital flexor tendons. J Hand Surg [Am] 1999 Mar;24(2):302-309.
- 8, Boardman ND 3rd, Cofield RI-I: Neurologic complications of shoulder surgery. Clin Orthop 1999 Nov;368:44-53.
- 9. Hsu H-C, Boardman ND 3", Luo Z-P, An K-N: Tendon-defect and muscle-unloaded models for relating a rotator cuff tear to glenohumeral instability. J Orthop Res 2000;18(6):952-958.

- 10. Boardman ND, Cofield RH, Bengtson KA, Little R, Jones MC, Rowland CS: Rehabilitation after total shoulder arthroplasty. J Arthroplasty 2001 Jun;16(4):483-486.
- 11. Mileti J, Boardman ND 3rd, Sperling JW, Cofield RH, Torchia ME, O'Driscoll SW, Rowland CS: Radiographic analysis of polyethylene glenoid components using modern cementing techniques. J Shoulder Elbow Surg 2004 Sep;13(5):4492-498.
- 12. Hull JR, Owen JR, Fern SE, Wayne JS, Boardman ND Role of the coronoid process in varus osteoarticular stability of the elbow. J Shoulder Elbow Surg 2005 Jul;14(4):441-6.
- 13. Michener LA, Boardman ND, Pidcoe PE, Frith AM: Scapular muscle tests in subjects with shoulder pain and functional loss: reliability and construct validity. Phys Ther 2005 Nov; 85(11): 1128-38.
- 14. Fern SE, Owen JR, Ordyna NO, Wayne JS, Boardman ND HI: Complex varus elbow instability: a terrible triad model. J Shoulder Elbow Surg 2009 Mar;18(2):269-74.
- 15. Kalra N. Michener LA, Seitz AL, Boardman ND: Effect of posture on acromiohumeral distance with arm elevation in subjects with and without rotator cuff disease using ultrasonography. J Orthop Sports Phys Ther. Accepted for publication, May 2010.

12.2 ABSTRACTS AND PRESENTATIONS

- 1. Debski RE, Thompson WO, Boardman ND, McMahon PJ, Warner JJP, Woo SLY, Fu FH: Rotator cuff function in a variety of deficiency states: A dynamic biomechanical analysis. Presented at the American Orthopaedic Society for Sports Medicine Specialty Day Meeting, New Orleans, February 1994.
- 2. Thompson WO, Boardman ND, Debski RE, Taskiran E, Warner JJP, Woo SL-Y, Fu FH: Glenohumeral motion with rotator cuff pathology: A dynamic analysis. Presented at the 27th Annual American Orthopaedic Association Residents' Conference, Atlanta, March 1994.
- 3. Thompson WO, Boardman ND, Debski RE, Taskiran E, Warner JJP, Fu FH, Woo SL-Y: A biomechanical analysis of rotator cuff deficiency in a cadaveric model. Presented at the 20th Annual Meeting of the American Orthopaedic Society for Sports Medicine, Palm Desert, June 1994. *Herodieus Award Winner*
- 4. Debski RE, McMahon PJ, Thompson WO, Boardman ND, Warner JJP, Woo SLY, Fu FH: A dynamic shoulder testing apparatus to study glenohumeral joint motion. Presented at the Second World Congress of Biomechanics, Amsterdam, July 1994.

- 5. Boardman ND, Thompson WO, Debski RE, McMahon PJ, Warner JJP, Woo SLY, Fu FH: Glenohumeral motion with rotator cuff pathology: A dynamic analysis. Presented at the Second World Congress of Biomechanics, Amsterdam, July 1994.
- 6. Boardman ND, Morifusa S, Chan SS, Sotereanos DG: Impact of repair on the gliding function of partially lacerated canine flexor tendons. Presented at the 49¹¹ Annual Meeting of the American Society for Surgery of the Hand, Cincinnati, October 1994.
- 7. Boardman ND, Warner JJP, Debski RE, Taskiran E, Maddox L, Fu FH, Woo SLY: Structural properties of the superior glenohumeral and coracohumeral ligaments. Presented at the 62nd Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando, February 1995.
- 8. Boardman ND, Caldwell GL, Miller MD, Towers J, Debski RE, Warner JJP: A biomechanical evaluation of transosseous rotator cuff fixation. Presented at the 62" Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando, February 1995.
- 9. Caldwell GL, Warner JJP, Miller MD, Boardman ND, Towers J, Debski RE: Transosseous rotator cuff fixation: The weak link? A biomechanical evaluation. Presented at the 62" Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando, February 1995.
- 10. Morifusa 5, Chan SS, Boardman ND, Tramaglini DM, Pfaeffle HJ, Sotereanos DO, Herndon JH: Effect of partial laceration on gliding function and structural properties of the canine flexor digitorum profundus tendon. *Trans Orthop Res Sac* 41:137, 1995.
- 11. Boardman ND, Pfaeffle HJ, Xu J, Grewal R, Tomaino MM, Herndon JH: Tensile properties of the interosseous membrane of the human forearm. *Trans Orthop Res Soc* 41:629, 1995.
- 12. Boardman ND, Debski RE, Taskiran E, Maddox L, Fu FH, Warner JJP, Woo SLY: Structural and anatomic characteristics of the coracohumeral and superior glenohumeral ligaments. *Trans Orthop Res Soc* 41:681, 1995.
- 13. Boardman ND, Torchia ME: Preoperative loss of external rotation in patients with anterior glenohumeral instability. Presented at the 16th Annual Meeting of the Minnesota Orthopaedic Society, Minneapolis, May 12, 2000.
- 14. Boardman ND, Torchia ME: Preoperative loss of external rotation in patients with anterior glenohumeral instability. Presented at the 2001 ISAKOS Congress, Montreux, Switzerland, May 2001.

- 15. Hull JR, Owen JR, Fern SE, Wayne JS, Boardman ND III: Role of the coronoid process in varus osteoarticular stability of the elbow. Presented at the Orthopaedic Research Society, New Orleans, February 2003.
- 16, Hull JR, Owen JR, Fern SE, Wayne JS, Boardman ND III: Role of the coronoid process in varus osteoarticular stability of the elbow. Presented at the Virginia Orthopaedic Society, May 2003.
- 17. Michener LA, Boardman ND, Pidcoe PE, Firth AM. Reliability and validity of scapular muscle strength testing in patients with shoulder pain and functional loss. Presented at American College of Sports Medicine Annual Meeting, San Francisco, June 2003.
- 18. Michener LA, Boardman ND, Pidcoe PE, Firth AM. Reliability and validity of scapular muscle strength testing in patients with shoulder pain and functional loss. Presented at American Physical Therapy Association Scientific Meeting and Exposition; Washington, DC, June 2003.
- 19. Mileti J, Boardman ND, Sperling JW, O'Driscoll SW, Rowland CS, Cofield RH: Radiographic analysis of second generation total shoulder arthroplasty. Presented at the American Shoulder and Elbow Surgeons, Las Vegas, November 2003.
- 20, Michener LA, Boardman ND, Pidcoe PE, Firth AM. Construct validity and reliability of scapular muscle performance testing in patients with shoulder pain and functional loss. Presented at the International Shoulder Congress of Shoulder Therapists and Surgeons, Washington, DC; May, 2004.
- 21. Nassab PF, Branham D, Michener LA, Boardman ND: Allograft reconstruction of chronic distal biceps tendon ruptures. Presented at the Virginia Orthopaedic Society Annual Meeting, Norfolk, VA, May 2006.
- 22. Leavitt S, Satterfield W, Michener L, Boardman ND: Clinical outcomes following closed reduction and percutaneous pinning of displaced fractures of the proximal humerus. Presented at the 23r^d Annual Meeting of the Southern Orthopaedic Association, Paradise Island, July 2006.
- 23. Nassab PF, Branham D, Michener LA, Boardman ND: Allograft reconstruction of chronic distal biceps tendon ruptures. Presented at the 23rd AnnualMeeting of the Southern Orthopaedic Association, Paradise Island, July 2006.
- 24. Michener LA, Kalra N, Pinkstaff S, Ericksen J, Boardman ND: Ultrasonographic measurement of the acromiohumeral distance in patients with rotator cuff disease: a pilot study. J Orthop Sports Phys Ther 2007 37(1):A22-23.
- 25. Boardman ND: Reverse total shoulder arthroplasty: indications and early complications. Presented at the Virginia Orthopaedic Society 60th Annual Meeting, Charlottesville, VA, May 2007.

- 26, Fern SE, Owen JR, Wayne JS, Boardman ND: An injury model for.• the terrible triad of the elbow: varus stability. Presented at the Virginia Orthopaedic Society 60th Annual Meeting, Charlottesville, VA, May 2007.
- 27. Fern SE, Owen JR, Wayne JS, Boardman ND: The role of the coronoid process, LCL, and radial head in yarns stability of the elbow. Presented at the Virginia Orthopaedic Society 60th Annual Meeting, Charlottesville, VA, May 2007.
- 28. Ivanick NM, LaPlante JK, Owen JR, Wayne JS, Boardman ND: Biornechanical comparison of two fixation techniques for proximal humeral fractures. Presented at the Virginia Orthopaedic Society 60th Annual Meeting, Charlottesville, VA, May 2007. BEST POSTER AWARD WINNER
- 29. Flak K, Boardman ND, Foster• WC: Indications and early results of total humerus replacement. Presented at the Virginia Orthopaedic Society both Annual Meeting, Charlottesville, VA, May 2007.
- 30. Michener• LA, Kalra N, Pinkstaff S, Ericksen J, Boardman ND. Measurement of the subacromial space using ultrasonography. J Ath Train 42:S-34, 2007.
- 31. Fern SE, Owen JR, Wayne JS, Boardman ND: The role of the coronoid process, LCL, and radial head in varus stability of the elbow, Presented at the Orthopaedic Research Society, San Francisco, March 2008.
- 32. Ivanick NM, LaPlante JK, Owen JR, Wayne JS, Boardman ND: Biomechanical comparison of two fixation techniques for proximal humeral fractures. Presented at the Orthopaedic Research Society, San Francisco, March 2008.
- 33. Leavitt SC, Owen JR, Thongtrangen 1, Wayne JS, Boardman ND: Biornechanical evaluation of precontoured plates in distal humeral fracture fixation: a comparison of methods in varus torsion. Presented at the 61st Annual Meeting of the Virginia Orthopaedic Society, Wintergreen, VA, May 2008.
- 34. Keen C, Boardman ND: Double plating of humeral shaft nonunions. Presented at the 61st Annual Meeting of the Virginia Orthopaedic Society, Wintergreen, VA, May 2008.
- 35. Umberhandt R, Boardman ND: Treatment of distal humerus fractures with total elbow arthroplasty. Presented at the 61st Annual Meeting of the Virginia Orthopaedic Society, Wintergreen, VA, May 2008.
- 36. Leavitt SC, Satterfield W, Michener L, Boardman ND: Clinical outcomes following closed reduction and percutaneous pinning of displaced fractures of the proximal humerus. Presented at the 61st Annual Meeting of the Virginia Orthopaedic Society, Wintergreen, VA, May 2008.

- 37.Seitz AL, Kalra N, Boardman ND, Michener LA: Influence of posture on subacromial space. Proceedings of the Annual Meeting of American Society of Shoulder and Elbow Therapists, Santa Barbara, CA, September, 2008.
- 38.Kalra N, Seitz AL, Boardman ND, Michener LA. Effect of posture on acromiohumeral distance with arm elevation in subjects with and without rotator cuff disease using ultrasonography. J Orthop Sports Phys Ther, 39(1):A17, 2009.
- 39. Thongtrangan I, Owen JR, Leavitt SC, Wayne JS, Boardman ND HI: Biomechanical evaluation of parallel vs. perpendicular plate fixation for distal humerus fractures. Presented at the Orthopaedic Research Society, Las Vegas, February 2009.
- 40. Fern SE, Owen JR, Ordyna NO, Wayne JS, Boardman ND III: The role of the coronoid process, LCL, and radial head in varus stability of the elbow. Presented at the American Shoulder and Elbow Surgeons Specialty Day Meeting, Las Vegas, February 2009.
- 41. Thongtrangan I, Owen JR, Leavitt SC, Wayne JS, Boardman ND III: Biomechanical evaluation of parallel vs. perpendicular plate fixation for distal humerus fractures. Presented at the 62" Annual Meeting of the Virginia Orthopaedic Society, Virginia Beach, VA, May 2009.
- 42.Michener LA, Kalra N, Seitz AL, Boardman ND: Upper quadrant posture effects on subacromial pace in subjects with and without rotator cuff disease using ultrasonography. J Athl Train 2009 May-Jun 44(3).
- 43. Seitz AL, Michener LA, Lynch SS, Boardman ND: Effects of scapular assistance test on acromiohumeral distance measured in vivo using ultrasonography. Presented at the Closed Meeting of the American Society of Shoulder and Elbow Therapists, New York, October 2009.
- 44.Huff L, Owen JR, Wayne JS, Boardman ND: Biomechanical comparison of two locking compression plates for proximal humeral fractures. Presented at the 63rd Annual Meeting of the Virginia Orthopaedic Society, Charlottesville, VA, May 2010.
- 45.Hendry T, Michener LA, Boardman ND: Reverse total shoulder arthroplasty for complex proximal humerus fractures in the elderly. Presented at the 63rd Annual Meeting of the Virginia Orthopaedic Society, Charlottesville, VA, May 2010.
- 46.Seitz AL, Michener LA, Lynch SS, Zirker CA, Stith TR, Boardman ND: Effects of scapular assistance test on acromiohumeral distance measured in vivo using ultrasonography, J Orthop Sports Phys Ther 40(1):A31, 2010.
- 47. Amee Seitz, Lori Michener, Phil McClure, Sheryl Finucane, Stephanie Lynch, N. Douglas Boardman: Scapular Upward Rotation and Posterior Tilt Increases Subacromial Space, But Not Muscle Performance in Subacromial Impingement

Syndrome. Presented at the APIA. Combined Sections Meeting. New Orleans, LA, February 2010.

- 48. Seitz AL, Michener LA, Lynch SS, Zirker CA, Stith TR, Boardman ND: Anterior versus posterior subacromial space changes with humeral elevation using ultrasonography. J Orthop Sports Phys Ther 40(1):A30-31, 2010.
- 49. Seitz AL, Michener LA, Boardman ND: Scapular dyskinesis: Effects of scapular assistance on subacromial space. Presented at the 3rd International Congress of Shoulder and Elbow Therapists. Edinburgh, UK, September 2010.
- 50. Huff L, Owen JR, Wayne JS, Boardman ND: Biomechanical comparison of two locking compression plates for proximal humeral fractures. Presented at the Closed meeting of American Shoulder and Elbow Surgeons. Scottsdale, AZ, October 2010.

12.3 BOOK CHAPTERS

- I, Boardman ND, Fu FH: Shoulder biomechanics, in McGinty JB, Caspari RB, Jackson RW, Poehling GG (eds.): <u>Operative Arthroscopy, Second Edition.</u> Philadelphia, Lippincott-Raven, 1996, pp. 625-633.
- 2. Boardman ND, Werner FW, Fu FH: Principles of musculoskeletal biomechanics----Shoulder, in Peimer CA (ed.): <u>Surgery of the Hand and Upper Extremity</u>. New York, McGraw-Hill, 1996, pp. 11-18.
- 3. Woo SL-Y, Boardman ND, Debski RE, Fu FH: Pathophysiology of injury and healing, in Hawkins RJ and Misamore GW (eds.): <u>Shoulder Injuries in the Athlete.</u> New York, Churchill-Livingstone, 1996, pp. 41-51.
- 4. Warner JJP, Boardman ND: Biomechanics of shoulder instability, in Warren RF, Craig EV, Altchek DW (eds.): <u>The Unstable Shoulder.</u> Philadelphia, Lippincott Williams & Wilkins, 1999.
- 5. Hendry T, Boardman ND: Revision total elbow arthroplasty, in Chhabra AB and Isaacs JE (eds.): <u>Arthritis and Arthroplasty:--The Hand, Wrist, and Elbow</u>. Philadelphia, Elsevier, 2010.
- 6. Hendry T, Boardman ND, Chadderdon RC: Elbow arthritis, in Chhabra AB and Isaacs JE (eds.): <u>Arthritis and Arthroplasty:--The Hand, Wrist, and Elbow</u>. Philadelphia, Elsevier, 2010.

7. Section Editor with Joseph Abboud, Shoulder Trauma, OKU 10, AAOS (in prep).