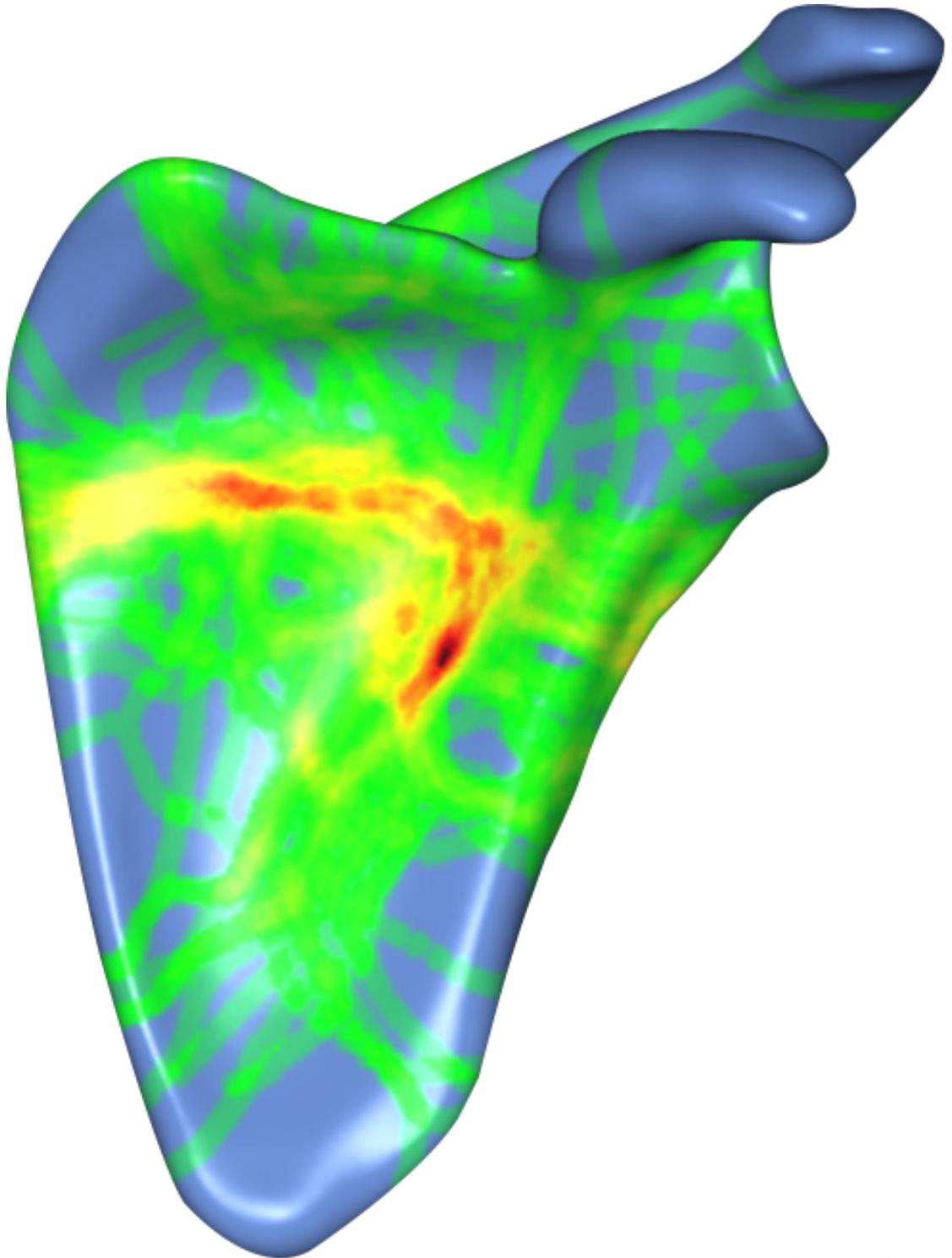


# NASCon News

Official Newsletter of the Scapula Institute



A Scapula Fracture Patient Newsletter  
Volume 3: Spring 2019

**NASCon**  
North American Scapula Consortium



# Letter from Dr. Cole

Dear Patients and Friends of the Scapula Institute,

What an incredible year it has been thus far for the Scapula Institute! We all have so much to be proud of with new teammates and graduations, new discoveries and accomplishments, growing influence and most importantly, many more patients returned to happy functional lives after severe and complex conditions related to shoulder trauma.

In this edition of NASCON News, you will meet one of our newest team members, Jen Rumley, who brings a new flare to the team and a passion for clinical research teamwork. I want to wish Dr. Anthony Dugarte great success in his new journey in Florida (UCF), where he has moved with his new bride Britt! He has helped to drive so many research projects, chapters, and electronic media to completion over the past three years, and has left an indelible mark on The Institute—we will miss him.

We are featuring a story about Scalpel At The Cross, a ministry my wife and I helped to begin in the Amazon jungle which continues to grow, and I would encourage you to log into our website and take your own tour of this project [www.scalpelatthecross.org](http://www.scalpelatthecross.org). In case you are wondering whether I have ever treated a scapula fracture in the jungle—YES I have. I happened to be down in the Amazon when a patient was involved in an explosion. He would have had a permanently deranged arm and shoulder, but fortunately God placed me in his path at Hospital Amazonico, and he has returned to a normal life I am happy to say. I hope you, my patients, have experienced the same.

We chose to highlight some sophisticated research we are doing, using Siemens software to reconstruct broken scapulas so that we can map out how it is that scapulas break. This information will lead to the best ways to design implants to fix the scapula and help inform us of how best to approach the fractured shoulder blade. Interestingly, I have given many lectures and led many labs over the past six months, in Switzerland, India, and Chile; it is very clear that the world is learning and asking lots of good questions about how they can help their patients. I received a report on Messenger from China this morning about a doctor who fixed a very complicated scapula fracture, and he was thanking me for our teachings.

I trust you are well, and I wish you the very best Summer with lots of fun and excellent function!

**Peter A. Cole, M.D.**

Division Medical Director, HealthPartners Medical Group Orthopaedics  
Chair, Orthopaedic Department, Regions Hospital  
Professor, University of Minnesota



# Meet the Team

The Scapula Institute is a research and educational enterprise dedicated to the study of shoulder girdle injuries as well as spreading our acquired knowledge to relevant practitioners and affected patients.



**Joscelyn Tatro, MS**  
Research Associate,  
Scapula Institute Lead



**Lisa Schroder, BSME, MBA**  
Academic Program  
Director



**Anthony Dugarte, MD**  
Post-Doctoral  
Research Fellow



**Tricia Corbo, BA**  
Trauma Program  
Administrator



**Tina Mannion, PA-C**  
Certified Physician  
Assistant



**Clint McCullough, ATC**  
Certified Athletic  
Trainer



**Jen Rumley, BS**  
Research Coordinator

## Staff Spotlight



### **Anthony Dugarte, M.D., C.S.C.S.**

Anthony Dugarte is a Cleveland, Ohio native who has enjoyed success in sports, as well as academics. He accepted a full athletic scholarship to attend Kent State University and graduated, Cum Laude, with a B.S. in Exercise Physiology. At Kent, Dr. Dugarte was a member of the Golden Flash Football Team and earned Academic All-American Honors as a defensive lineman. Upon graduation from Kent, he went on to obtain his MD from Case Western Reserve University School of Medicine. He was the former Research Fellow for the Department of Orthopedic Surgery at Regions Hospital in St. Paul, Minnesota and is now currently in Ocala, Florida continuing to train for orthopedic surgery.



### **Jen Rumley, BS**

Jen is the newest addition to our scapula care team. She was born and raised in the suburbs of the Twin Cities. Jen just graduated from University of Minnesota – Rochester with a degree in Health Sciences and a minor in Statistics. She has always had a love for orthopaedics and statistics. Growing up playing soccer, she dealt with many injuries that gave her exposure to the Orthopaedic world. Being a part of the research team allows her to combine her passion for statistics and orthopaedics into one career.

Prior to her work with Regions, Jen worked at Tria Orthopaedics in their cadaver lab helping guide courses to benefit residents, fellows and physicians in their learning.

Outside of work, Jen loves to go hiking and walking around different Minneapolis lakes with her dog, Nash and her boyfriend, Dillon.

# Research Spotlight

Journal of  
Orthopaedic  
Research

ORS  
Orthopaedic Research Society

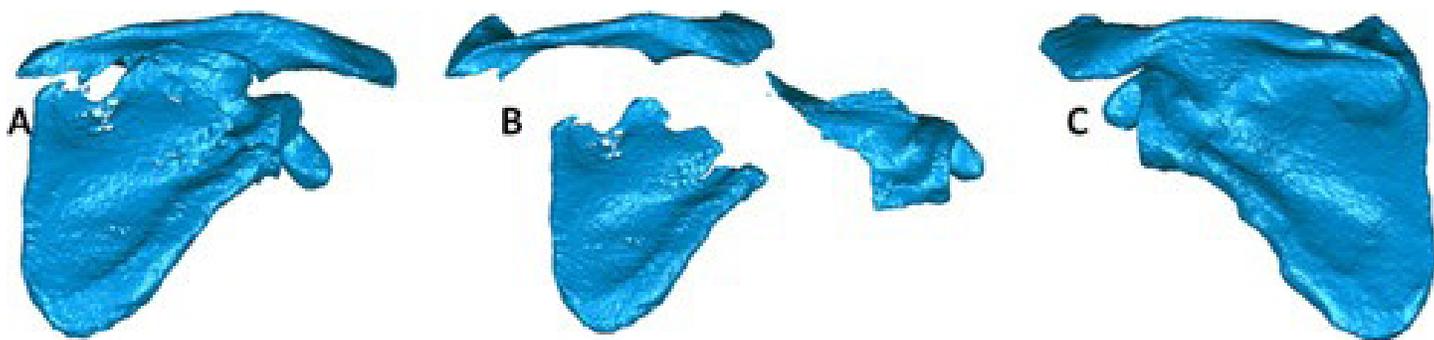
## Comparison of 2 versus 3 Dimensional Fracture Mapping Strategies for 3 Dimensional Computerized Tomography Reconstructions of Scapula Neck and Body Fractures

Anthony Dugarte, MD<sup>1</sup>; Luisa Tkany<sup>2</sup>; Lisa K. Schroder, BSME, MBA<sup>1</sup>; Andreas Petersik, Dr. – Ing<sup>2</sup>; Peter A. Cole, MD<sup>1</sup>.

<sup>1</sup>Division of Orthopaedic Trauma, Department of Orthopaedic Surgery, University of Minnesota, Regions Hospital, St. Paul, Minnesota,

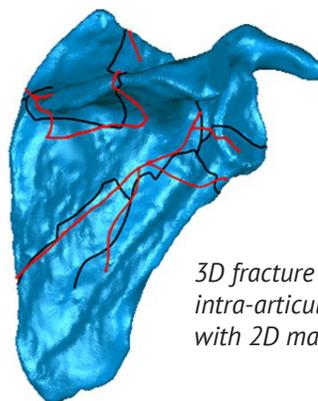
<sup>2</sup>Stryker Trauma GmbH, Schönkirchen, Germany

Journal of Orthopaedic Research. May 2017. | <https://doi.org/10.1002/jor.23603>



3D model of the fractured scapula (non-reduced) (A), separated spine, glenoid, and infraspinous fossa fracture fragments (B), and the uninjured, contralateral side (C).

Fracture mapping has been used in the understanding of injury patterns in different bones. Understanding bony fracture patterns is of great importance in determining optimal treatment strategies. This study found 3D fracture mapping resulted in important differences that are more accurate than the previously described 2D fracture renderings.



3D fracture mapping (black) revealing an intra-articular glenoid fracture not seen with 2D mapping (red).

### Thank You

With your support and donations we are able to advance the treatment and care of the scapula fractures. Dr. Cole and his team are trying to improve every step in the care of scapula fractures with each study he does.

We thank our Industry sponsor, Stryker Trauma for funding this research.

# Scalpel at the Cross



Scalpel At The Cross is an organization Dr. Cole and his wife, Nancy, founded in 2004. Scalpel At The Cross is a medical mission camp, which serves the orthopaedic needs of the Pucallpan Peruvians, tribal populations and missionaries who serve them.

Dr. Cole grew up with a strong faith background. During his early teen years he lived in Caracas, Venezuela for four years. During that time, his family came into contact with a number of Christian missionaries. He was influenced by them and intrigued by the thought of doing faith work overseas and in underdeveloped countries.



## How big is the campus in Peru?

The facilities include a campus of about 25 acres, a guest lodge, a warehouse, an apartment, and a meeting hall. These facilities are connected by boardwalks that traverse the jungle, over the water. Their mission is about a half hour drive from two government hospitals.

## What does a typical mission trip look like?

A typical mission is a 10-14 day trip with 10-20 people at a time. Typically 3-4 surgeons, 2-3 trainees, and several Allied Health professionals (like nurses and PAs). In the jungle, they hold a large clinic, generally, about 100 patients. Out of those 100 patients, they select the ones that would benefit most from an operations (20-25 people).

## How much of an impact does the mission bring to the community?

Breaking a bone is very different in underdeveloped countries. If you can imagine, let's say breaking your tibia bone or your femur bone. Now imagine there are no orthopedists where you live. It will be left untreated. With an untreated injury you could end up with a flail leg, or just an extremely crooked leg. Now, if you're a young lady, you'll never get married under those circumstances. If you have a family, you may lose your family. You'll never be able to hold a job. These people are marginalized in that society, so you go from making a work-a-day means by driving a motor taxi to unemployable and a really desperate living situation. The mission has countless stories where they have taken patients that have been crippled for years and reconstructed their bone and restored them to a completely normal, fulfilling life with a family, with a job and a self-esteem and a purpose and a role in society.



To learn more or  
to contribute to  
Dr. Cole's mission visit:  
[Scalpelatthecross.org](http://Scalpelatthecross.org)

# Where in the World is Dr. Cole?



## Kolkata, India

In the Beginning of December, 2018, Dr. Cole spent a week in Kolkata, India. He had the chance to teach AO Advanced Upper Extremity topics. While he was there he was able to meet many different physicians from all around the world.



A complete list of published manuscripts, book chapters, electronic media, and presentations can be found on our website: [www.ScapulaInstitute.org](http://www.ScapulaInstitute.org)

### Presentations at National Meetings



### Who funded the research?

In partnership with University of Minnesota and HealthPartners, our research program has been funded through the years by foundation grants (AO Foundation, COTA, AONA, OMeGA, AORF), industry grants (DePuy Synthes, Stryker), and patient contributions.

## Patient Spotlight - Pacer Beaver

There's a small scar on Pacer Beaver's shoulder in the shape of the number seven. That's one of the only signs of the accident, 17 years ago, that changed his life. Pacer was snowmobiling with his family in northern Minnesota when he hit an embankment and flew into the air. The snowmobile crashed down on top of him, crushing his shoulder as it landed.

X-rays at the hospital confirmed he'd broken his scapula. Fortunately, a new surgeon had just moved to the Twin Cities who was an expert in that type of surgery. Pacer was transferred to Regions Hospital in St. Paul where he was one of Dr. Cole's very first scapula surgery patients.

"At the time, I didn't know what was going to happen or if I'd ever use my shoulder again," Pacer says. "I was a truck driver moving furniture. I was always active. I thought about what life would be like if I had limitations. Thankfully, Dr. Cole put me at ease and everything with the surgery went well."

Pacer quickly progressed through physical therapy—eager to regain this strength and get back to work. Seventeen years later he continues to work as a truck driver, he plays softball recreationally, and mostly he tries to keep up with his four kids. Pacer got back in touch with Dr. Cole recently to make sure everything still looked good, and Dr. Cole was happy to report that it did.

"I have nothing but the best things to say about Dr. Cole," Pacer says. "He made me right."



# Regions Scapula Physicians

We are very lucky to have **FOUR** physicians that help collect data for scapula patients at Regions Hospital. Each physician is eager to grow our scapula database and improve the outcomes of fractured scapulas!



Peter Cole, MD



Patrick Horrigan, MD



Chad Myeroff, MD



David Solfelt, MD

## NASCon Members

The North American Scapula Consortium (NASCon) is a network of passionate surgeons working together to further the mission of the Scapula Institute through research, education, and advances in patient care.



**Regions Hospital®**

**St. Paul, MN**

Peter Cole, MD  
 Brian Cunningham, MD  
 David Solfelt, MD  
 Chad Myeroff, MD  
 Patrick Horrigan, MD



**Buffalo, NY**  
 Evgeny Dyskin, MD



**Baltimore, MD**  
 Babar Shafiq, MD



**Kansas City, MO**  
 Jonathon Dubin, MD



North American Scapula Consortium



**St. Cloud, MN**  
 Tim Hiesterman, DO



**Portland, OR**  
 Darin Friess, MD  
 Adam Mirarchi, MD



**Detroit, MI**  
 Trent Guthrie, MD



**University of Pittsburgh**

**Pittsburgh, PA**  
 Ivan Tarkin, MD

To learn more about research, The Scapula Institute,  
and NASCon visit [www.ScapulaInstitute.org](http://www.ScapulaInstitute.org)

**Follow us on Social Media:**  
Facebook.com/PeterAColeMD  
Twitter.com/PeterAColeMD

**To schedule a research appointment or ask questions:**

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## Please Give

*This vital work cannot be accomplished without  
dedicated professionals and loyal donors.*

Given your recovery from this special injury, few people understand the impact of our work quite as personally as you do. *Thank you for considering this opportunity to be part of great progress toward improving patient care.*

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