CONTENTS

01 WELCOME

02 FACULTY & STAFF
   06 Faculty Honors
   08 Advanced Practice Providers
   10 Staff

12 PATIENT CARE
   14 Spine
   16 National Recognition
   17 WVU Health System

18 RESIDENCY PROGRAM
   20 Graduates and Current Residents
   22 Resident Research Year
   23 Presentations and Publications

26 RESEARCH
   28 Globally Recognized Cartilage Research
   29 Active Grants
   30 Publications

32 THANK YOU
New faculty members added to our department in 2021 include Dr. Lou Bivona (spine), Dr. Andrew Parsons (pediatric ortho), Dr. Kylie Parrish (orthopaedic medical optimization), and Dr. Drew Wroblewski (hand/upper extremity). Dr. Naji Madi (foot and ankle) will also be starting with us in late 2022. We have expanded into Uniontown Hospital (which joined the system in January 2021) and planted some of our orthopaedic resident graduates around the state at system hospitals. Our research program remains robust with significant (i.e. millions) of external funding. The education of our residents and fellows remains a top priority, fostering a close-knit family and a culture of excellence.

Read on and I hope you enjoy this edition of our Annual Report!

Sanford E. Emery MD, MBA
Professor and Chairman
Department of Orthopaedics
Director of Surgical Services
West Virginia University
FACULTY

Sanford E. Emery MD, MBA  
Chairman, Professor  
Orthopaedics, Spine

John C. France MD  
Chief, Spine Service;  
Professor and Vice Chairman.  
Director, Spine Fellowship

George Bai MD  
Chief, Sports Medicine Service;  
Associate Professor

Louis Bivona MD  
Assistant Professor,  
Orthopaedics, Spine

J. David Blaha MD  
Professor, Orthopaedics

Kathryn Bosia DPM  
Assistant Professor,  
Orthopaedics, Podiatry

Michelle Bramer MD  
Associate Professor,  
Orthopaedic Trauma

Rusty Cain DPM  
Assistant Professor,  
Orthopaedics, Podiatry

Shari Cui MD  
Associate Professor,  
Orthopaedics, Spine

Scott Daffner MD  
Professor, Orthopaedics,  
Spine

Matthew Dietz MD  
Associate Professor,  
Orthopaedics, Adult  
Reconstruction

Stephanie Ferimer MD  
Assistant Professor, Physical  
Medicine and Rehabilitation
On July 1, 2021, the following faculty members earned promotions:

**Promoted to Associate Professor:**
- Dr. Shari Cui
- Dr. Shafic Sraj

**Promoted to Professor:**
- Dr. E. Barry McDonough
- Dr. B. Joseph Prud’homme
FACULTY & STAFF

Andréa Lese MD  
Assistant Professor, Orthopaedics, Hand and Upper Extremity

Bingyun Li PhD  
Professor, Orthopaedics, WVU Cancer Institute Research Programs

Brock Lindsey MD  
Chief, Adult Reconstruction; Musculoskeletal Oncology, Associate Professor, Orthopaedics; Director, Orthopaedic Research Laboratory

Justin Lockrem MD  
Assistant Professor, Orthopaedics, Sports Medicine

John P. Lubicky MD  
Chief, Pediatric Orthopaedics; Professor, Orthopaedics

David Lynch MD  
Assistant Professor, Physical Medicine and Rehabilitation

E. Barry McDonough MD  
Professor, Orthopaedics, Sports Medicine

Benjamin Moorehead MD  
Assistant Professor, Orthopaedics, Sports Medicine

T. Ryan Murphy MD  
Assistant Professor, Orthopaedics, Adult Reconstruction

Kylie Parrish MD  
Assistant Professor, Orthopaedics, Internal Medicine

Andrew Parsons MD  
Assistant Professor, Pediatric Orthopaedics

Jami Pincavitch MD  
Assistant Professor, Orthopaedics, Internal Medicine
Ming Pei MD, PhD
Professor, Orthopaedics; Professor, Human Performance - Exercise Physiology

B. Joseph Prud’homme MD
Chief, Hand and Upper Extremity; Professor, Orthopaedics

Mary Louise Russell MD
Assistant Professor, Physical Medicine and Rehabilitation

Shafic Sraj MD
Associate Professor, Orthopaedics, Hand and Upper Extremity

Drew Wroblewski MD
Assistant Professor, Orthopaedics, Hand and Upper Extremity

John Taras MD
Professor, Orthopaedics, Hand and Upper Extremity

Colleen Watkins MD
Associate Professor, Orthopaedics, Rheumatology/Metabolic Bone

David Tager MD
Assistant Professor, Pediatric Orthopaedics

Naji Madi MD
Assistant Professor, Orthopaedics, Foot & Ankle

WELCOME NEW FACULTY
Sanford E. Emery, MD, MBA, FAOA, was presented with The American Orthopaedic Association’s 2021 Distinguished Clinician Educator Award during the Opening Ceremony of the 2021 Virtual AOA Annual Leadership Meetings on June 8.

Emery was presented the award for his achievements training medical students, graduates, residents and other health professionals. He has been in the active practice of orthopaedic surgery for the last 33 years, and sub-specializes in adult spine surgery. Emery is a past president of the AOA (2017).

Dr. Emery’s career demonstrates a commitment to excellent orthopaedic education. Over the course of his time at WVU, Dr. Emery grew the department from 5 to 39 full-time faculty, established a resident research program and fostered a significant increase in both funding and productivity of basic and clinical research in orthopaedics. He has more than 70 publications, 34 book chapters, one textbook and has been invited to present his work on more than 200 occasions at local, regional, national and international meetings.

In addition to his dedicated leadership to the AOA, Emery’s leadership roles include serving as president of the American Board of Orthopaedic Surgery and the Cervical Spine Research Society. He has sat on several leadership committees in his institution, including the University Health Associates Board of Directors. He is an esteemed member of several professional medical societies including the American Academy of Orthopaedic Surgeons, North American Spine Society, Scoliosis Research Society, Lumbar Spine Research Society and West Virginia Orthopaedic Society.

In his virtual acceptance speech, Dr. Emery expressed his gratitude to colleagues, mentors, residents, fellows and his family for their influence on him, both personally and professionally. To close, he shared a pearl of wisdom developed over the course of a dynamic career as an orthopaedic educator.

“The take home for the next generation of young leaders is the necessity of change in almost everything we do, but particularly relevant in medical education,” he said.

Sanford E. Emery, MD, MBA, FAOA, AOA 2021 Distinguished Clinician Educator
Sraj named president of the West Virginia State Medical Association

Dr. Shafic Sraj, associate professor of orthopaedic surgery, was sworn in by WVU President Gordon Gee as the 174th president of the West Virginia State Medical Association at the WVSMA Healthcare Summit held at the Greenbrier August 20-22.

Dr. P. Brad Hall, executive medical director of the West Virginia Medical Professions Health Program, is the immediate past president, and Dr. Lisa Costello, assistant professor of pediatrics, was sworn in as the president-elect.

Among several effective speakers, Sraj and School of Medicine alumna and WVU Board of Governors member, Dr. Patrice Harris, provided thought-provoking sessions in line with the summit’s focus on physician unity and diversity and inclusion efforts.

The WVSMA is highly active in promoting the health and well-being of all West Virginians and the physicians who serve the state and surrounding areas. Membership to the WVSMA and its committees is open to all physicians in West Virginia.
In addition to our many faculty and residents, the WVU Department of Orthopaedics employed the services of 27 Advanced Practice Providers (APPs) in 2021.

Our APPs include 23 physician assistants and four nurse practitioners. We also have an additional four physician assistants who are expected to start throughout the spring and summer in 2022.

As our department continues to expand, the role of our APPs has continued to evolve to help meet the changing needs of orthopaedic patient care. These APPs also play a vital role in our clinic and operating room efficiencies. Their responsibilities include, but are not limited to, evaluating and treating patients in clinic, assisting with surgeries and clinical procedures, pre-operative examinations, patient communication, triage, follow-up, and data collection for ongoing research projects. Our APPs are involved in every subspecialty within our department as well as our Orthopaedic Medical Optimization Program (OMOP) and our inpatient service. In addition, several of our APPs participate in our satellite and outreach clinics across West Virginia and southwestern Pennsylvania. These providers travel with faculty to clinic locations in Fairmont, Parkersburg, Martinsburg, Wheeling, Summersville, and Waynesburg, PA. In collaboration with our faculty providers, our APPs continue to work diligently to provide high quality orthopaedic care to all of our patients at WVU Medicine.

UTC APPs – Left to Right: (FRONT ROW) Casey Mozingo, Rachel Dearth, Amy Stubblefield, Colleen Allison, (BACK ROW) Ron Bewick, Nathan Guerriere, Kris Smith, Travis Randolph
**SPINE APPs** - Left to Right: Emily Viglianco, Jacqueline Walker

**POC APPs** – Left to Right: Stacy Skidmore, Laura Stavrakis, Brittany Dzugan, Ashley Barber, Holly Bonnell

**ADULT RECONSTRUCTION**
Alicia Cooper, PA-C  
Nathan Guerriere, PA-C*  
Katie Seifried, PA-C  
Stacy Skidmore, PA-C

**ATHLETICS**
Travis Randolph, PA-C

**FOOT & ANKLE**
Hannah Williams, PA-C*

**HAND & UPPER EXTREMITY**
Colleen Allison, APRN  
Rachel Darth, PA-C*  
Kelsie Lusk, PA-C*  
Jon Kline, PA-C*

**INPATIENT**
Thomas Gocke, PA-C  
Claire Leinhauser, PA-C

**METABOLIC BONE DISEASE**
Ashley Wilson, APRN

**MUSCULOSKELETAL ONCOLOGY**
Stacy Skidmore, PA-C

**ORTHO MEDICAL OPTIMIZATION PROGRAM**
Valerie Matyus, APRN  
Casey Mozingo, APRN

**PEDIATRIC ORTHOPAEDICS**
Holly Bonnell, PA-C  
Brittney Dzugan, PA-C

**PHYSICAL MEDICINE AND REHABILITATION**
Gyl Cendana, PA-C

**SPINE**
Emily Viglianco, PA-C  
Jacqueline Walker, PA-C

**SPORTS MEDICINE**
Kristopher Smith, PA-C  
Amy Stubblefield, PA-C

**TRAUMA**
Laura Stavrakis, PA-C

**WAYNESBURG CLINIC**
Ron Bewick, PA-C

*Incoming 2022*
FACULTY & STAFF
Staff Members

**HSC Staff** – Left to Right: (FRONT ROW) Kerry Fluharty (Executive Assistant), Jennifer Forquer (Surgical Scheduler / Admin Assistant), Heather Hudson (Surgical Scheduler / Admin Assistant), Stacy Marolt (Surgical Scheduler / Admin Assistant), Melinda Quarrick (Surgical Scheduler / Admin Assistant), Elaine Cumberledge (Lead Surgical Scheduler / Admin Assistant), (BACK ROW) Dominique Friend (Registration Specialist), Brenda Sandy (Financial Analyst), Lisa Myles (Surgical Scheduler / Admin Assistant), Adrian Hagood (Surgical Scheduler / Admin Assistant), Nancy McGalla (Surgical Scheduler / Admin Assistant), Valerie Bunnell (Surgical Scheduler / Admin Assistant), Antoinette Summers (Administrator), Jackie Horton (Surgical Scheduler / Admin Assistant)

**SPINE Staff** – Left to Right: Mark Townsend (Rad Tech), Christina Lattanzo (Lead Ortho Tech), Ashley Wilson (ACA), Jennifer Burns (RN)

**POC Staff** – Left to Right: Victoria Gifford (Ortho Tech), Renee Dillow (Lead Ortho Tech), Kailey Myers (ACA), Ashley Wilson (ACA)
Congratulations Natalie Gilbert, WVU School of Medicine, Orthopaedics, for being named 2021 Ambulatory Nurse of the Year Platinum Award winner (20+ years of experience)!

WVU Medicine WVU Hospitals announced award-winners for its top nurses and personnel who support nursing efforts at the 2021 Nurse of the Year virtual ceremony held May 6.

“Any time we can celebrate the achievements and accomplishments of these deserving individuals is an honor and a reflection of the tremendous care at WVU Medicine,” Lya M. Cartwright-Stroupe, DNP, APRN, CPNP, NEA-BC, NPD-BC, manager of nursing research and professional development, Magnet® program director, and transition to practice program director, said.
ORTHOPAEDIC CLINICS
We have three conveniently located clinics in Morgantown, Fairmont, and now Waynesburg, PA. The Morgantown location is in the Physician Office Center, attached to J.W. Ruby Memorial Hospital. The Fairmont location is housed in our WVU Medicine Outpatient Center, directly across from the I-79 Downtown Fairmont exit. The Waynesburg clinic features multiple specialties and is located off the I-79 Waynesburg exit.

UNIVERSITY TOWN CENTRE
University Town Centre is the home for several of our Orthopaedic centers, including the Center for Joint Replacement, the WVU Sports Medicine Center, and the Orthopaedic Hand Clinic. WVU Medicine University Town Centre is conveniently located in the University Town Centre development just off I-79 in Granville. This spacious center offers patients access to their favorite primary care providers.

CENTER FOR JOINT REPLACEMENT AT WVU MEDICINE
The Center for Joint Replacement at WVU Medicine offers patients a comprehensive planned course of treatment. We believe our patients play a key role in ensuring a successful recovery. Our goal is to involve our patients in their treatment through each step of the program.

WVU MEDICINE SPORTS MEDICINE CENTER
WVU’s Sports Medicine Center cares for athletes of all levels. We work to get all patients back to their highest level of activity possible. Our physicians manage sports-related injuries and medical conditions that include muscle and joint pain, sprains, and concussions. The WVU Sports Medicine Center has access to specialists from multiple disciplines, including Orthopaedics and experts from the WVU Spine Center. Individuals with sports injuries have same-day access to our services, which are available around the clock, seven days a week.

WVU SPINE CENTER
The WVU Spine Center brings specialists together with a multidisciplinary team approach to provide our patients with comprehensive spinal care. We use a full range of treatment options to ensure that patients with spine problems get the treatment they need quickly, efficiently, and easily. The Spine Center combines the expertise of WVU neurologists, orthopaedic specialists, neurosurgeons, pain management physicians, and rehabilitation services to target every patient’s particular problem and provide optimal treatment.
When Mr. Bill Stalnaker first came to The Spine Medicine Center in 2018, he said his first love was guitar, and his second love was singing. He spoke of his passions and the recent loss of function as well as his fears.

Mr. Stalnaker is a professional musician/guitarist and teacher, but by the time he came to clinic, he was incapable of even strumming a guitar. He had been gradually losing his hand function and balance for a couple of months with symptoms suddenly worsening in the two weeks preceding his first clinic visit. He had searing pain shooting from his neck into his shoulders and hands, and was no longer able to do the thing which defined so much of his life, play guitar. Mr. Stalnaker had an MRI and the results prompted expedited referral and intake into the spine clinic.

After examining Mr. Stalnaker and reviewing his imaging, it was evident that he was suffering from rapidly progressive cervical spondylotic myelopathy (CSM). CSM is a disorder and dysfunction of the spinal cord resulting from pressure from arthritis. It is a traffic jam of the biggest highway of messages in the body, the cervical (neck) spinal cord. In essence, a mega-highway is slowed by the gradual narrowing of the lanes until signals controlling our arms, legs, and sometimes even involuntary bowel and bladder functions, are impeded. It typically occurs slowly, resulting in the loss of dexterity, sharpness, and balance; these symptoms are subtle and can go unnoticed for quite some time, especially in the absence of pain. In some cases, rapid progression can occur with or without injury/insult. In severe cases, patients can lose function altogether, resulting in spinal cord injury and frank paralysis.

Once patients are symptomatic, the only treatment is surgical, as nothing but a change of spinal structure can alleviate the tightness and compression causing the cord dysfunction.

Mr. Stalnaker was presented with multiple treatment options after which it was determined that he would undergo a Cervical Laminoplasty with Reconstruction. This procedure is a posterior (back of the neck) surgery that essentially “raises the roof” of a flattened hallway resulting from pressure from arthritis. It is a traffic jam of the biggest highway of messages in the body, the cervical (neck) spinal cord. In essence, a mega-highway is slowed by the gradual narrowing of the lanes until signals controlling our arms, legs, and sometimes even involuntary bowel and bladder functions, are impeded. It typically occurs slowly, resulting in the loss of dexterity, sharpness, and balance; these symptoms are subtle and can go unnoticed for quite some time, especially in the absence of pain. In some cases, rapid progression can occur with or without injury/insult. In severe cases, patients can lose function altogether, resulting in spinal cord injury and frank paralysis.

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containing the crushed spinal cord. Though the shape of Bill's spine was not perfectly suited to a back-sided surgery (he was curved forward rather than backward), it was the procedure that could best alleviate multiple levels of tightness while sparing vocal cord function. And having already lost the ability to play guitar (his first love), his spine team was hesitant to endanger his ability to sing (his second love) by performing a multi-level front-sided surgery. As an added bonus, the surgery does not require fusion; therefore, patients are able to achieve the benefits of decompression without the lasting stiffness of a long, rigid fixation. Weighing multiple other factors, it was agreed that he would undergo this approach; his surgery was urgently set to prevent further loss of function.

One week later, Mr. Stalnaker underwent a cervical laminoplasty from C3-C6 with reconstruction. Surgery went routinely and he recovered uneventfully, being discharged home the next day. Though his early recovery was riddled with odd symptoms and waxing/waning scares (zingers into his left chest/collar, fluctuating numbness in his hands), eventually his spinal cord awoke. By two weeks after surgery, he was walking better and playing guitar again. By six months after surgery, Bill had regained nearly all of his lost function and insisted he played guitar even better than before his myelopathy diagnosis and consequent surgical intervention.

Now, years after surgery, Mr. Stalnaker is playing in his band, teaching high school students, and continuing to regale clinic staff with his tales of fighting the good fight both as a teacher and in political activities. Though life surrounding his scare with CSM left some scars, the lessons and tribulations will live on.
PATIENT CARE
National Recognition

HIGH PERFORMERS
WVU Medicine J.W. Ruby Memorial Hospital has been named the number one hospital in West Virginia for 2021-22 by U.S. News & World Report, which also recognized six WVU Medicine hospitals, including Ruby Memorial, as High Performing Hospitals.

In the Specialties category, Ruby Memorial Hospital was recognized as High Performing in multiple categories, including Orthopaedics. In the Procedures and Conditions category, Ruby Memorial Hospital was also recognized as High Performing in multiple categories, including Knee Replacement.

The annual Best Hospitals rankings and ratings are designed to assist patients and their doctors in making informed decisions about where to receive care for challenging health conditions or for common elective procedures.

CENTER FOR JOINT REPLACEMENT RECEIVES ADVANCED CERTIFICATION
The Center for Joint Replacement at WVU Medicine, led by Dr. Brock Lindsey, recently received advanced certification and is one of 120 Joint Commission ADVANCED CERTIFIED PRIMARY HIP AND KNEE programs in the country!

The advanced certification was developed by the Joint Commission in 2016 and involves a significantly more rigorous and comprehensive review than the standard certification, which the program previously held. Programs are evaluated on the quality, consistency, and safety of their services and patient care. This advanced certification award demonstrates the commitment to provide exceptional orthopaedic care to the people of West Virginia and surrounding areas.

WVU ORTHOPAEDIC CLINIC LOCATIONS
MORGANTOWN
Physician Office Center
WVU Spine Center
WVU Medicine Sports Medicine Center
Center for Joint Replacement at WVU Medicine
FAIRMONT
WVU Medicine Outpatient Center: Fairmont
WAYNESBURG
WVU Medicine Outpatient Center: Waynesburg
RESIDENCY PROGRAM

CONTINUED EXCELLENCE IN EDUCATION AND FACILITIES

Our residents continue to receive top-notch education from our dedicated staff in the major orthopaedic sub-specialties. Through graduated responsibility, our junior residents expand their knowledge and skills with the guidance of both senior residents and faculty. There is an emphasis on clinical excellence and research proficiency. Residents receive robust operative experience and ample opportunities to expand their knowledge of orthopaedics through research projects and presentations at both local and national levels.

The residents also provide excellent education to others in the healthcare field and community through outreach programs, medical student anatomy labs, splinting and casting workshops, and Special Forces training labs.

As the WVU Medicine system expands, our residents see a larger volume of patients with increasing complexity. The department has expanded to meet these challenges with additional new faculty and APPs.

With the easing of COVID restrictions, the residency program is having a resurgence of group activities outside of work. The yearly intern welcome party has returned, as well as gatherings for all major holidays. We now have a growing WVU Orthopaedics tailgate for all WVU football home games that is attended by friends, family, residents, and faculty.

The WVU Orthopaedic Residency Program had another successful academic year in 2020-2021.
FELLOWSHIP NEWS
As the year ends, there is a departure of the graduating Chief Residents. Each matched into a competitive fellowship:

Williams Brooks, MD - UT Houston Orthopedic Sports Medicine and Shoulder Fellowship

Julie Glener, MD - Holy Cross Orthopaedic Institute Shoulder and Elbow Fellowship

Jason Kinney, MD - Johns Hopkins Adult Hip and Knee Replacement Fellowship

Justin Ray, MD - OrthoCarolina Foot and Ankle Fellowship

ARRIVALS AND DEPARTURES
Each year we welcome four new interns. The class of 2026-2027 includes Brendan Farley, MD (Central Michigan University), John Pisquiy, MD (Texas Tech University), Grant Slack, MD (Wright State University), and Chris Wilson, MD (Penn State).

We look forward to training more competent and conscientious orthopaedic surgeons and are excited to see what the 2022-2023 academic year brings.
RESIDENCY PROGRAM
Graduates and Current Residents

Will Brooks MD
SOM: East Tennessee State University
Fellowship: UT Houston Orthopedic Sports Medicine and Shoulder Fellowship

Julie Glener MD
SOM: University of Central Florida
Fellowship: Holy Cross Orthopaedic Institute – Shoulder and Elbow

Jason Kinney MD
SOM: Medical College of Georgia at Augusta University
Fellowship: Johns Hopkins Adult Hip and Knee Replacement Fellowship

Justin Ray MD
SOM: East Carolina University
Fellowship: OrthoCarolina Foot and Ankle Fellowship

Justin Vaida MD
SOM: University of Massachusetts
Fellowship: Prisma Health Upstate-Orthopaedic Trauma Fellowship

Patrick Luchini MD
SOM: West Virginia University
Fellowship: Vanderbilt Univ. Orthopedic Sports Medicine and Shoulder Surgery Fellowship

Eric Neumann MD
SOM: West Virginia University
Fellowship: University of Washington Spine Surgery Fellowship

Joshua Reside MD
SOM: University of Florida
Fellowship: Mississippi Sports Medicine & Orthopaedic Center

Taylor Shackleford MD
SOM: University of Kentucky

Keenan Atwood MD
SOM: Medical College of Wisconsin

Michael Booth MD
SOM: SUNY Upstate Medical University

Michael Niemann MD
SOM: West Virginia University
Benjamin Giertych MD
SOM: University of Wisconsin

Michael Quinet MD
SOM: Medical College of Georgia at Augusta University

Kenneth Sabacinski MD
SOM: Charles E. Schmidt College of Medicine at Florida Atlantic University

Nathaniel Williams MD
SOM: Pennsylvania State University College of Medicine

Edwin Chaharbakhshi MD
SOM: Loyola University Chicago Stritch School of Medicine

Brendan Farley MD
SOM: Central Michigan University College of Medicine

Grant Slack MD
SOM: Wright State University Boonshoft School of Medicine

Christopher Wilson MD
SOM: Penn State College of Medicine

Jennafir Ernst MD
SOM: University of Pittsburgh

Vincent Morrow MD
SOM: West Virginia University

Caitlyn Patton MD
SOM: West Virginia University

John Pisquiy MD
SOM: Texas Tech University Health Science Center El Paso - Foster School of Medicine

Brody Fitzpatrick MD
SOM: University of Wisconsin
RESIDENCY PROGRAM

Resident Research Year

At West Virginia University, the Accreditation Council for Graduate Medical Education offers an accredited orthopaedic surgery research position each year. This position is a six-year track, compared to the traditional five-year categorical track. It is completed between the residents’ first and second years.

During this time, residents have no hospital-based duties or call responsibilities, which provides them with the autonomy to establish and conduct their own research projects. They also have the opportunity to participate in ongoing studies alongside several faculty research members. The residents are expected to prepare grant submissions, oversee and manage studies, present poster and podium presentations, and submit peer-reviewed manuscripts.

Brock Lindsey, MD, (Chief, Adult Reconstruction and Musculoskeletal Oncology), is the Director of the WVU Department of Orthopaedics Research Laboratory and advises lab residents during their research year.

He, along with Matthew Dietz, MD, (Adult Reconstruction), Ming Pei, MD, PhD, and Bingyun Li, PhD, conduct the majority of the Department’s basic science research with main focuses on:

- **NANOTECHNOLOGY**
- **IMMUNOTHERAPY**
- **TISSUE REGENERATION**
- **ONCOLOGY**
- **INFECTION (BIOFILM)**

The Department also has an active clinical research focus with ongoing projects in every orthopaedic subspecialty.

The WVU Department of Orthopaedics Research Laboratory is located on the fifth floor of the WVU Health Sciences Center adjacent to the main hospital campus. The 4,000-square-foot lab space contains state-of-the-art amenities capable of conducting basic science research with emphasis on tissue engineering, nanotechnology, and cadaver and pre-clinical model studies.

The Research Resident also participates in daily resident education conferences, performs monthly cadaver dissection for anatomy conference, and provides lectures to students in the School of Medicine. The opportunities and experiences generated from this year are meant to serve as a foundation for a career as a clinician-scientist.

Interested in learning more?

Contact:

**EDWIN CHAHARBKHSHI MD**
edwin.chaharbakhshi@hsc.wvu.edu
Current Research Resident

**BROCK LINDSEY MD**
blindsey@hsc.wvu.edu
Director, WVU Department of Orthopaedics Research Laboratory
2020-2021 Presentations and Publications

PODIUM AND POSTER PRESENTATIONS

• Awarded Jon Michael Moore Trauma Center Research Grant


PUBLICATIONS


RESIDENCY PROGRAM
2020-2021 Presentations and Publications (cont.)

Left to Right: Jason Kinney, Pat Luchini, Will Brooks, Michael Niemann, Eric Neumann, Chris Wilson, Justin Ray, Eddie Chaharbakhshi, Taylor Shackleford


Left to Right: Chief Residents Jason Kinney, Will Brooks, Julie Glener, Justin Ray
Welcome to the West Virginia University Orthopaedic Research Laboratory. In the lab, you will find research and education opportunities in the areas of tissue/cartilage engineering, stem cell research, immunophenotyping, and nanotechnology/nanomedicine. There are also opportunities in the clinical areas of adult reconstruction, spine, sports medicine, trauma, and hand and upper extremity.
The laboratory conducts in vivo and in vitro research in a modern environment. The laboratory faculty and staff are multidisciplinary and include faculty from Orthopaedics, Microbiology and Immunology, Pathology, and Statistics. Graduate students from the university’s Health Sciences Center collaborate with orthopaedic surgeons and bioengineers on MS and PhD research topics. The lab is situated within the Department of Orthopaedics at WVU and provides support to orthopaedic residents in research projects, both basic science and clinical. The lab is well equipped and encourages multidisciplinary musculoskeletal research between various departments in the Health Sciences Center.
Ming Pei, MD, PhD, has been named a world expert in cartilage research by Expertscape. They report Pei is in the top 0.1% of scholars in the world who have written medical literature about cartilage in the past decade.

Pei is a professor in the West Virginia University School of Medicine Department of Orthopaedics and Division of Exercise Physiology and this is the third time he has received this recognition.

Pei’s lab focuses on the investigation of cell-matrix interaction and attempts to explore/engineer an ideal matrix to rejuvenate adult stem cells’ stemness. Achieving this goal will benefit future stem cell-based musculoskeletal tissue engineering and regeneration, particularly for cartilage regeneration.

“Cartilage defects occur often in the elderly population and tend to cause osteoarthritis if no treatment is received. Current treatments in the clinic can relieve patients’ symptoms but fail to repair cartilage functionally and biologically,” explained Pei. “Adult stem cells are a promising cell source for cartilage tissue engineering and regeneration, which needs a large quantity of high-quality stem cells. However, a long-term ex vivo expansion of stem cells can cause cell senescence where the cells lose their proliferation and differentiation potentials.”

Since joining the department in 2005, Pei’s work has been supported by the AO Foundation, Musculoskeletal Transplant Foundation, and National Institutes of Health. Through collaboration with principal investigators across the country, Pei’s lab has been published more than 97 times in his area of interest in various medical publications.

Expertscape is a database that objectively ranks people and institutions by their expertise in more than 27,000 biomedical topics. It examines all medical publications indexed in the National Library of Medicine’s MEDLINE database and then experts are ranked by both the quality and quantity of their publications.
2021 Active Grants

SCOTT D. DAFFNER MD
• Title: M6-C™ Artificial Cervical Disc IDE Post-Approval Study
  Source: Spinal Kinetics

MATTHEW J. DIETZ MD
• Title: Relationship of Biomarkers and Fluorescence in Prosthetic Knee Infections
  Source: US DHHS-NIH-National Institute of Arthritis, Musculoskeletal and Skin Diseases
• Title: Prescrib3d Technologies Active Antibiotic Spacer
  Source: US NSF-Biological Sciences
• Title: WVCTSI Research Scholar Program
  Source: West Virginia Clinical and Translational Science Institute

SANFORD E. EMERY MD, MBA
• Title: Prospective, Randomized, Controlled, Blinded Pivotal Study – Transforaminal Lumbar Interbody Fusion (TLIF) At 1 Or 2 Levels Using Infuse™ Bone Graft and The Capstone™ Spinal System with Posterior Supplemental Fixation For Treatment of Symptomatic Degeneration.
  Source: Medtronic Incorporated

JOHN C. FRANCE MD
• Title: Thoracolumbar Burst Fractures (AOSpine A3, A4) in Neurologically Intact Patients: An Observational, Multicenter Cohort Study Comparing Surgical Versus Non-Surgical Treatment
  Source: AO Research Foundation

BENJAMIN M. FRYE MD
• Title: Fellowship in Adult Reconstruction
  Source: OMeGA Medical Grants Association
• Title: Fellowship in Adult Reconstruction
  Source: Smith+Nephew

DAVID F. HUBBARD MD
• Title: Fixation Using Alternative Implants for the Treatment of Hip Fractures
  Source: McMaster University
• Title: A Prospective, Randomized, Multicenter Controlled Trial of CERAMENT™G as Part of Surgical Repair of Open Diaphyseal Tibial Fractures
  Source: BONE SUPPORT AB

BINGYUN LI PHD
• Title: Mid-Atlantic Sustainable Biomass for Value-added Products Consortium (MASBio)
  Source: USDA – National Institute of Food & Agriculture

CONGRATULATIONS!

Congratulations Suzanne Danley, Research & Grants Analyst, WVU School of Medicine, Orthopaedics for being awarded the 2021 Vice President’s Award for Clerical/Secretarial!

Each year, WVU Health Sciences recognizes individuals and teams with Vice President’s Awards for their significant contributions to the mission of the Health Sciences Center.

The Vice President’s Awards honor faculty and staff who have been recognized by their peers for their outstanding accomplishments. Winners were nominated by their peers and selected by their respective Achievement Award committees.

BROCK A. LINDSEY MD
• Title: Systemic IL-12 Therapy within Nanocapsules Leading to Immune Modulation for Osteosarcoma
  Source: WV CTSI: CTR Idea /US DHHS-NIH-NIGMS
• Title: A Prospective, Post-Market, Multi-Center Study of Tritanium Acetabular Shell
  Source: Stryker
• Title: A Longitudinal Multi-Center Study of Robotic-Arm Assisted THA: Acetabular Cup Placement Accuracy and Clinical Outcomes
  Source: Stryker
• Title: Delineating Mechanisms of Checkpoint Blockade Failure While Manipulating MDSCs as a Treatment to this Conundrum
  Source: Musculoskeletal Tumor Society / Sarcoma Strong Foundation
• Title: Comparative Effectiveness of Pulmonary Embolism Prevention after Hip and Knee Replacement (PEPPER): Balancing Safety and Effectiveness
  Source: Dartmouth College/Medical University of South Carolina

MING PEI MD, PHD
• Title: Decellularized Matrix and Cartilage Regeneration
  Source: US DHHS – NIH – National Institute of Arthritis, Musculoskeletal and Skin Diseases
RESEARCH
2021 Publications


THANK YOU!
THANK YOU!

Sanford E. Emery MD, MBA
Professor and Chairman, Department of Orthopaedics, West Virginia University
Director of Surgical Services, WVU Medicine

Please consider a gift to the Department of Orthopaedics for our WVU Foundation accounts. We utilize these funds for resident and faculty educational and research activities.

If you would like to designate a specific area for your gift, here are some suggestions:

1. Resident Research and Education
2. Faculty Research
3. Chair’s Discretion

Credit card donations can be made directly online at give.wvu.edu/Orthopaedics. If you choose to donate by check, please use the attached envelope for your convenience.

Any gift makes an impact. Thank you very much for your consideration.

Yours truly,

Sanford E. Emery MD, MBA
Professor and Chairman, Department of Orthopaedics, West Virginia University
Director of Surgical Services, WVU Medicine

The growth and success of our clinical and research programs need investment for us to compete on the national stage.
ORTHOPAEDIC LOCATIONS

PHYSICIAN OFFICE CENTER
1 Medical Center Drive
Morgantown, WV 26505

Clinics: WVU Orthopaedics

WVU MEDICINE OUTPATIENT CENTER: FAIRMONT
100 Stoney Hill Road
Fairmont, WV 26554

Clinics: WVU Orthopaedics

WVU MEDICINE OUTPATIENT CENTER: WAYNESBURG
451 Murtha Drive
Waynesburg, PA 15370

WVU SPINE CENTER
943 Maple Drive
Morgantown, WV 26505

WVU MEDICINE UNIVERSITY TOWN CENTRE
6040 University Town Centre Drive
Morgantown, WV 26501

Clinics:
WVU Medicine Sports Medicine Center
Center For Joint Replacement At WVU Medicine

Patients can call 855-WVU-CARE to schedule an appointment at any of our locations.

WVUMedicine.org
medicine.hsc.wvu.edu/ortho