



Division Updates

Spine Division

Harvey Smith, MD



Spine Faculty



Harvey Smith, MD



Vincent Arlet, MD



Amrit Khalsa, MD



David Casper, MD



J. Rush Fisher, MD

The academic year has been one of continued growth for the spine division.

Clinical Growth

Over the past year we have continued our clinical growth and expanded our satellite clinics to new locations.

Research

Our division has been established as a leader in both basic science and clinical spine research. Our translational research is conducted in partnership with the Translational Musculoskeletal Research Center at the VA, developing the first *in vivo* large animal tissue-engineered total disc replacement. Our clinical research division is led by Dr. David Casper. Dr. Casper is investigating outcomes for our complex deformity patients as well as all adult spine patients. Dr. Khalsa is continuing his research interests in evaluating cost-effectiveness and risk adjustment models in spine surgery. Dr. Arlet continues his role as an international thought leader in complex spinal deformity. Our division members have multiple federal, society, and industry grants to support our research program.

Academic Productivity

Penn Ortho Spine has been represented in over 25 peer-reviewed publications, abstracts, and book chapters. Multiple

faculty have been visiting professors for Grand Rounds and have also presented at the Seattle Science Foundation three times this past year. Our faculty chair committees with the North American Spine Society, and have organized Instructional Course Lectures at national and international meetings.

Outreach Surgery

Under the leadership of Dr. Arlet, Penn Spine maintains an ongoing outreach program in Trinidad managing complex spinal deformities; this program has received national and international recognition. Dr. Khalsa maintains an ongoing outreach program in South America. Due to the 2020 COVID-19 pandemic, there was a pause in our international work. It is with great excitement that Dr. Arlet resumed his outreach in Trinidad this year.

Spine Fellowship

Our spine fellowship is entering its sixth year of partnership with the Shriners Hospital of Philadelphia. Our complex spinal deformity fellowship is unique in that it offers a combined adult and pediatric complex deformity experience. This past year we added an additional fellowship position.