Division Details

Division Data Summary

<table>
<thead>
<tr>
<th>Research and Training Details</th>
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<tbody>
<tr>
<td>Number of Faculty</td>
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<tr>
<td>Direct Annual Grant Support</td>
<td>$159,810</td>
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<td>Peer Reviewed Publications</td>
<td>27</td>
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Clinical Activities and Training

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<th>Clinical Activities and Training</th>
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<tr>
<td>Number of Clinical Staff</td>
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<td>Number of Clinical Fellows</td>
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Significant Accomplishments

National Recognition and Continued Growth

*U.S. News and World Report* ranked our Division of Pediatric Orthopaedic Surgery among the top four in the country. The division’s research efforts and presence at annual meetings helped contribute to the stellar ranking. Faculty members strengthened the division’s national reputation by continuing to present findings and techniques at annual meetings of the Pediatric Orthopedic Society of North America (POSNA) and the American Academy of Orthopaedic Surgeons (AAOS). In addition, faculty enhanced its global reputation by participating in collaborations and conferences in Greece, Brazil, India and Saudi Arabia.

We welcomed new hires Sheila Chandran, MD, and Jaime Rice-Denning, MD, this year. They will certainly contribute to the continued research and clinical accomplishments of the division. Chandran specializes in all aspects of non-surgical pediatric orthopaedics, with a special interest in pediatric gait and the Ponseti technique for managing clubfoot. Rice-Denning specializes in orthopaedic trauma cases.

Motion Analysis Gait Lab Commences Operation

This past year marked the opening of the much-anticipated Motion Analysis Gait Lab. The lab is part of the Center for Advanced Technology at Cincinnati Children’s, and it offers cutting-edge technology to better evaluate and treat orthopaedic and mobility issues. The lab uses high-tech diagnostic instruments that allow doctors to determine exactly how a patient walks, how their joints move and how their muscles function. The research goal of the lab is to use outcomes data to characterize the effectiveness of current treatments while focusing on the development and implementation of innovative techniques. Over the last year, the Gait Lab had 113 patient visits, more than projected for the first year of operations.
HemiBridge Spine Clip Clinical Trial Progresses

During the past year, we enrolled five patients in the HemiBridge™ System US FDA Investigational Device Exemption clinical safety trial. The first patient completed the six-month follow-up visit, with early indications of positive results. Methods to assess implant performance are currently under study.

Preliminary results of device’s effects on spine biomechanics in an in vivo model have been published. Biomechanical effects of the device on spine motion were determined in an in vitro and a computational model. Growth inhibition predictions of the computational model were shown to correlate with previously reported histomorphometric growth plate structural patterns.

Division Publications

15. Nathan ST, Parikh SN. Osteoarticular allograft reconstruction for hill-sachs lesion in an adolescent.

Faculty, Staff, and Trainees

Faculty Members

James McCarthy, MD, Professor
- **Leadership** Director, Pediatric Orthopaedic Surgery

Steven Agabegi, MD, Assistant Professor
- **Research Interests** Scoliosis natural history

Donita Bylski-Austrow, PhD, Associate Professor
- **Leadership** Director of Biomechanics Research
- **Research Interests** Spine Biomechanics

Sheila Chandran, MD, Assistant Professor

Roger Cornwall, MD, Assistant Professor
- **Leadership** Clinical Director; Co-Director, The Hand and Upper Extremity Center
- **Research Interests** Hand and Upper Extremity

Alvin Crawford, MD, Professor
- **Leadership** Co-Director, Spine Center and Fellowship Program
- **Research Interests** Scoliosis and Neurofibromatosis

Chitra Dahia, PhD, Instructor
Viral Jain, MD, Assistant Professor
  Research Interests Scoliosis

Kevin Little, MD, Assistant Professor
  Research Interests Hand and Upper Extremity

Charles Mehlmam, DO, MPH, Associate Professor
  Leadership Director, Musculoskeletal Outcomes Research, Pediatric Orthopaedic Resident Education, Brachial Plexus and Co-Director of the Limb Reconstruction Center
  Research Interests Spine Bracing and Evidence-Based Medicine

Shital Parikh, MD, Assistant Professor
  Research Interests Sports Medicine

Jaime Rice-Denning, MD, Assistant Professor

Joel Sorger, MD, Assistant Professor
  Research Interests Musculoskeletal Oncology

Peter Sturm, MD, Professor
  Leadership Co-Director, The Crawford Spine Center; Director, Spine Fellowship Program

Junichi Tamai, MD, Assistant Professor
  Leadership Director, Physician Assistant Program
  Research Interests Process Improvement

Eric Wall, MD, Professor
  Leadership Director, Orthopaedic Research Program; Director, Sports Medicine Program; Director, Pediatric Orthopaedic Fellowship Program

Clinical Staff Members
  - Lance Bolin, PA-C, Lead Physician Assistant
  - Michael Hood, PA-C
  - Hillary McClung, PA-C
  - Hilliary McCourt, PA-C
  - Sarah Ogle, PA-C
  - Mary Pam Pfister, PA-C
  - Stephanie Pinkstock, PA-C
  - Adriana Reinersman, PA-C

Trainees
  - David Abbasi, MD, PGY4, University of Cincinnati, Cincinnati, OH
  - Antulio Aroche, DO, PGY4, Ingham Regional Medical Center, Lansing, MI
  - Darren Barton, DO, PGY1, Wellmont Holsten Valley Medical Center, TN
  - Nicolas Bonnaig, MD, PGY4, University of Cincinnati, Cincinnati, OH
  - Kyle Boren, DO, PGY1, Wellmont Holsten Valley Medical Center, TN
  - Joseph Borruso, DO, PGY3, Millcreek Community Hospital, Erie, PA
  - William Browning, DO, PGY3, Millcreek Community Hospital, Erie, PA
  - Leroy Butler, DO, PGY1, Wellmont Holsten Valley Medical Center, TN
  - Imran Choudry, MD, PGY4, University of Cincinnati, Cincinnati, OH
  - Andrew Cordaile, DO, PGY4, Peninsula Hospital Center, Far Rockaway, NY
Grants, Contracts, and Industry Agreements

Grant and Contract Awards

CORNWALL, R

**Molecular Mechanisms of Contracture Formation in Neonatal Brachial Plexus Injury**
American Society for Surgery of the Hand

07/01/11-06/30/12

$20,000
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<td>DAHIA, C</td>
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