

### Division Photo



**First row:** J. Taylor, D. Jones, A. Uribe; **Second row:** D. Billmire, C. Gordon

### Division Data Summary

#### Research and Training Details

Number of Faculty	3
Peer Reviewed Publications	4

#### Clinical Activities and Training

Number of Clinical Staff	1
Outpatient Encounters	4,293

## Faculty Members

**David Billmire, MD**, Associate Professor ; *Director, Pediatric Plastic Surgery*

**Christopher Gordon, MD**, Assistant Professor

**Jesse Taylor, MD**, Assistant Professor

## Clinical Staff Members

- **Dawn Rothchild, RN, PNP**

## Significant Accomplishments in FY08

### Plagiocephaly Program

The division is engaged in a multidisciplinary clinic made up of Plastic Surgery, PT, durable medical equipment and Nursing. The objective of the plagiocephaly program is to treat patients with plagiocephaly in a timely manner. The secondary goal is to educate physicians about plagiocephaly.

### Craniofacial Anomalies Team

The Craniofacial Anomalies Team involves several other disciplines which are Plastic Surgery, Dental, Speech Pathology, Genetics, Psychology and Nursing. The primary goal is to improve the health outcomes for patients with

Craniofacial abnormalities. The division is exploring research opportunities with Developmental Biology.

## Tissue Engineering

Drs. Taylor and Jones are working on improvement in the area of bone allografts revitalization and engineering acellular periosteum. This study is also using growth factors and stem cells.

## Division Highlights

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### Dr. Donna Jones

The Plastic Surgery Division is working on Characterizing Craniofacial shape for use in diagnostic of positional Plagiocephaly. This is a collaborative adventure with Dawn Rothchild, Dr. Donna Jones and Dr. Brian Pann.

### Dr. David Billmire

Dr. David Billmire's current clinical research centers on facial bone growth after severe burns and chemical signaling defects in craniosynostosis. Dr. Billmire has been at the forefront of craniofacial surgery, introducing craniofacial bone distraction to the Cincinnati area in 1994. He has served as the President of the Ohio Valley Society of Plastics and Reconstructive Surgery and as a guest examiner for the qualifying exam of the American Board of Plastic Surgery.

### Dr. Christopher Gordon

Dr. Chris Gordon's research focuses on the molecular biology of bone growth and the genetic basis for facial clefting. He is working to develop a comprehensive research center that will provide new insights into factors and mechanisms that underlie craniofacial disorders and to foster the development of research, technology and therapeutics that can alter the outcome in craniofacial disorders.

### Dr. Ken Yakuboff

Dr. Kevin Yakuboff has a primary interest in pediatric burns, brachial plexus injury and pediatric congenital hand anomalies. Dr. Yakuboff manages the more complex congenital hand anomalies and participates in the CCHMC brachio-plexus reconstruction program.

### Dr. Jesse Taylor

Dr. Taylor's interests include craniofacial surgery (craniosynostosis, craniofacial syndromes, major facial clefts), cleft lip and palate, cleft rhinoplasty, hemifacial microsomia, facial trauma (both primary and secondary reconstruction), rhinoplasty, facial reanimation (facial paralysis) and extremity salvage.

## Division Collaboration

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**Collaboration with Genetics; Psychology; Dental; Speech Pathology; ENT; Nursing**

### Collaborating Faculty: Craniofacial Anomalies Team

The program is a multidisciplinary process involving several divisions. The focus is on improving health outcomes for craniofacial anomalies patients.

## Division Publications

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1. Billmire DA. **"Surgical management of clefts and velopharyngeal dysfunction."** In: AW Kummer, ed. *Cleft palate and craniofacial anomalies : effects on speech and resonance*. Clifton Park, NY: Thomson Delmar Learning; 2008: 508-540.
2. Billmire DA. **"Pediatric burn reconstruction."** In: ML Bentz, BS Bauer, RM Zuker, eds. *Principles and practice of pediatric plastic surgery*. St. Louis, MO: Quality Medical Pub; 2008: 267-307.
3. Chung TL, Pumplun DW, Holton LH, 3rd, Taylor JA, Rodriguez ED, Silverman RP. [Prevention of microsurgical anastomotic thrombosis using aspirin, heparin, and the glycoprotein IIb/IIIa inhibitor tirofiban](#) . *Plast Reconstr Surg*. 2007; 120: 1281-8.
4. Molina FM, Morales C, Taylor JA. [Mandibular distraction osteogenesis in a patient with Melnick-Needles syndrome](#) . *J Craniofac Surg*. 2008; 19: 277-9.