

Plastic Surgery

Division Photo



Front Row: D. Jones; Second Row: J. Taylor, C. Gordon

Division Data Summary

Research and Training Details	
Number of Faculty	4
Peer Reviewed Publications	3
Clinical Activities and Training	
Number of Clinical Students	1
Outpatient Encounters	2912

Division Highlights

David Billmire, MD

Dr. Billmire is integrating the academic, research and clinical components of the Division. He has a particular focus on the development of the research program. The Division is focusing on a collaborative research program with Developmental Biology. The goal is to develop a world class program with a focus on Cranial Facial research. The plan is to integrate the recruitment efforts along with the existing research by Dr. Jesse Taylor and Dr. Donna Jones.

Christopher Gordon, MD

Dr. Gordon's research is focusing on the molecular biology of bone growth and the genetic basis for facial clefting. An

animal model is being developed by Dr. Steve Potter to test this research. Dr. Gordon is working on publishing in a peer review journal with results of this research.

Jesse Taylor, MD

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

Kevin Yakuboff, MD

Dr. Yakuboff has a primary interest in pediatric burns, brachial-plexus injury, and pediatric congenital hand anomalies. Dr. Yakuboff performs all nerve procedures, more complex congenital hand anomalies, secondary surgeries, and participates in the CCHMC brachial-plexus reconstruction program.

Donna Jones, PHD

Dr. Jones in collaboration with Dr. Armando Uribe, is characterizing the normal development of craniofacial shape. Using statistical techniques only recently applied to clinical questions, this work focuses on the actual multivariate nature of craniofacial skeleton, rather than extrapolating shape from large numbers of separate measurements.

Faculty Members

David Billmire, MD, Professor ; Director, Pediatric Plastic Surgery
Christopher Gordon, MD, Assistant Professor
Jesse Taylor, MD, Assistant Professor
Kevin Yakuboff, MD, Professor

Clinical Staff Members

• Dawn Rothchild, RN, PNP

Trainees

- Kevin Cook, MD, Resident, 2009, University of Cincinnati, PGY4
- Rian Maercks, MD, Resident, 2009, University of Cincinnati, PGY6
- Brian Pan, MD, Resident, 2009, University of Cincinnati, PGY5
- Elizabeth Tran, MD, Resident, 2009, University of Cincinnati, PGY6

Significant Accomplishments

Tissue Engineering

Dr. Jesse Taylor and Dr. Donna Jones are researching ways to improve bone allografts revitalization and acellular periosteum. The new method fills the void with living bone created from the individual's own stem cells, avoiding both rejection and reabsorption. The bone that has been developed replicates the form and function of the bone as well as the capacity to heal. Under careful scrutiny, the results appear to speak for themselves, and offer hope where frustration used to be the rule.

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 outcome for patients with Craniofacial abnormalities, such as cleft lip/palate. The Division is collaborating with Developmental Biology in creating a world class research program focusing on Craniofacial Anomalies.

Plagiocephaly Program

The division is engaged in a multidisciplinary clinic made up of Plastic Surgery, Physical Therapy, durable medical equipment and Nursing. The objective of the Plagiocephaly Program is to treat patients with plagiocephaly (malformation of the head) in a timely manner. The secondary goal is to educate physicians and families about plagiocephaly and how to improve the outcome. The division acts as a regional resource to families, patients and referring physicians.

Division Publications

- 1. Monasterio FO, Taylor JA. <u>Major craniofacial clefts: case series and treatment philosophy</u>. *Plast Reconstr Surg.* 2008; 122: 534-43.
- Santamaria E, Morales C, Taylor JA, Hay A, Ortiz-Monasterio F. <u>Mandibular microsurgical reconstruction in</u> patients with hemifacial microsomia. Plast Reconstr Surg. 2008; 122: 1839-49.
- 3. O'Brien SP, Billmire DA. Prevention and management of outpatient pediatric burns. J Craniofac Surg. 2008; 19: 1034-9.