## **CURRICULUM VITAE**

## CHAD A. PERLYN, MD, PHD

CURRENT POSITION:

Attending Surgeon, Miami Children's Hospital

Associate Program Director Craniofacial Surgery Fellowship Miami Children's Hospital

Assistant Professor of Surgery (Clinical), Division of Plastic Surgery, Florida International University College of Medicine

LICENSURE: Florida Medical License, ME 104064 Missouri Medical License, #2006001567

BOARD CERTIFICATION: Diplomat of the American Board of Plastic Surgery

## EDUCATION AND PROFESSIONAL QUALIFICATIONS:

1987-1991	High School: Pine Crest Preparatory School, Ft. Lauderdale, Florida.
1991-1995	Undergraduate: Northwestern University, Evanston, Illinois. Bachelor of Arts in English Literature.
1995-2000	Medical School: University of Miami,-School of Medicine, Miami, Florida; IviD degree with Research Distinction. Elective 511t Year (Research): Craniofacial Surgery.Research Fellowship,
	Craniofacial Imaging Laboratory, Cleft Palate and Craniofacial Deformities Institute: St. Louis Children's Hospital, St. Louis, Missouri. Principal Investigator: Jeffrey Marsh, MD.

#### POST-GRADUATE TRAINING:

- 2000-2003: Combined General Surgery/Plastic Surgery Training Program, Washington University School of Medicine, Barnes Ho pital and Saint Louis Children's Hospital, St. Louis, Missouri, USA.
- 2003-2006: PhD graduate student (D.Phil, Oxford), University of Oxford, Department of Physiology, Anatomy and Genetics, Oxford, England; Supervisor: Professor Gillian Morriss-Kay. Thesis title: Signaling paradigms of Fibroblast Growth Factor Receptor Type 2: Studies from a Crouzon/Pfeiffor Syndrome Mouse Model.
- 2006-2008: Plastic surgery resident, Washington University School of Medicine, Barnes Hospital and Saint Louis Children's Hospital, St. Louis, Missouri, USA.
- 2008-2009: Pediatric Plastic Surgery and Craniofacial fellow, St. John's Mercy Medical Center, St. Louis, MO. Fellowship Director: Jeffrey L. Marsh, MD

### **PROFESSIONAL ASSOCIATIONS:**

Co-Director and creator, Craniofacial Model Library Project (utilized by 70 centers around the world). http://www.medicalmodeling.com/craniofacialmodels/

#### PROFESSIONAL MEMBERSIDP:

Amercian Society of Plastic Surgeons, Candidate Member American College of Surgeons, Candidate Member Cleft Palate-Craniofacial Association Association of Plastic and Reconstructive Surgeons of Southern Africa (Honorary)

#### HONORS AND AWARDS:

- 2008 Resident Representative to ASPS/PSEFBoard of Directors (2008)
- 2008 Teacher of the Year Award-Division of Plastic Surgery, Barnes Hospital, Saint Louis, MO.
- 2007 Teacher of the Year Award-Division of Plastic Surgery, Barnes Hospital, Saint Louis, MO.
- 2007 Caring Spirit Award Barnes-Jewish Hospital, St. Louis, Missouri.
- 2005 Cassio M. Raposo do Amaral Award-presented for best resident presentation at the International Society of Craniofacial Surgery meeting, Coolum, Australia.
- 2004 Scientific Traveling Fellowship, *Journal of Development*, Kyoto!fokyo, Japan.

- 2004 Arnold Huddart Medal- presented for best scientific research at the Craniofacial Society of Great Britain & Ireland Scientific Annual Scientific Conference, Bath, England.
- 2002 Resident of the Year Award, Barnes-Jewish Hospital, St. Louis, Missouri.
- 2001 Caring Spirit Award-Barnes-Jewish Hospital, St. Louis, Missouri.
- 2000 Best scientific paper St. Louis Society of Plastic Surgeons Annual Resident Research Meeting.
- 1999 Iron Arrow Honor Society the highest honor obtainable at the University of Miami.
- 1999 Alari Teitler Award -presented by the University of Miami School of Medicine for values most representative of a physician.
- 1999 Excellence in Plastic Surgery Award, Department of Surgery, University of Miami School of Medicine, Miami, Florida.
- 1998 Alpha Omega Alpha National Medical Honor Society.
- 1998 Alpha Epsilon Lambda National Honor Society for Graduate and Professional School.

# **RESEARCH GRANTS:**

2005-2006:	Plastic Surgery Educational Foundation/Fresh Start Surgical Gifts
	Research Fellowship Grant. Provided \$30,000.00 for salary support for
	project entitled, "Effects of an <i>Fgfr2</i> mutation on palatal and
	craniofacial growth."

- 2005-2006: American Cleft Palate and Craniofacial Association/Cleft Palate Foundation's Junior Investigator Grant. Provided \$5,000.00 for support of project entitled, "Etiology of Congenital Anomalies of the Trachea in Individuals with *FGFR* Mutations: Studies from a Crouzon Mouse Model".
- 2003-2005: American College of Surgeons Resident Research Grant. Provided \$60,000.00 for support of project entitled, "Roles of Fibroblast Growth Factor Receptor-3 in Normal and Abnormal Skull Development and Growth."
- 2004-2005: Plastic Surgery Educational Foundation Grant. Provided \$4000.00 for support of project entitled "Effects of the *Fgfr2cysmryr* mutation on craniofacial growth."
- 2003-2004: SmileTrain Cleft Palate Etiology Grant. Provided \$20,000.00 for support of project entitled, "The aetiology of cleft palate and midface hypoplasia in a Crouzon mouse model."
- 1998-1999: University of Miami Dean's Research Award. Provided \$3,000.00 dollars for support of project entitled, "The use of antibiotics in fibrin glue for the treatment of contaminated wounds."

PEER REVIEWED PUBLICATIONS:

Greene, A.K., Perlyn, C.A., Alomari, A.I. Management of Lymphatic Malformation. Clin Plast Surg 38:75-82,20011.

Burke, R.M., Morin, R.J., Perlyn, C.A., Laure, B., Wolfe, S.A. Special Considerations in Vascular Anomalies: Operative Management of Cranifoacial Osseous Lesions. Clin Plast Surg 38:133-142, 2011.

Perlyn, C.A., Nichols, D., Becker, D., Woo., A. Kane, A. Le Premier Siecle: One hundred years of progress in the treatment of Apert syndrome. J Craniofac Surg. 20:801-806,2009.

Nathan, N., Latham, K., Cooper, J., Perlyn, C., Gozlan, 1., Thaller, S.R. Anthropometry of the external ear in children with cleft lip and palate in comparison to age-matched controls. J Craniofac Surg. 19:1391-1395,2008.

Perlyn, C.A., Marsh, J.L. Craniofacial dysmorphology of Carpenter syndrome: Lessons from three affected siblings. *P/ast Reconstr Surg.* 121:97181, 2008.

Schmelzer, R., Perlyn, C.A., Kane, A., Pilgram, T.T., Govier, D., Marsh, J.L.. Patterns of calvarial dysmorphology in non-syndromic sagittal synostosis. *Plast ReconstrSurg.* 119:1546-1552,2007.

Hansen, M.S., 6lafsdóttir, H., Darvann, T.A., Hermann, N.V., Oubel, E., Larsen, R., Ersb01l, B.K. Frangi, A.F., Larsen, P, Perlyn, C.A., Morriss-Kay, G.M., Kreiborg, S. Estimation of independent non-linear deformation modes for analysis of craniofacial malformations in crouzon mice. *JSBI* 4:1296-1299, 2007.

Hansen, M.S., 6tafsd6ttir, H., Darvann, T.A., Hermann, N.V., Oubel, E., Larsen, R., Ersb0ll, B.K. Frangi, A.F., Larsen, p., Perlyn, C.A., Morriss-Kay, G.M., Kreiborg, S. Craniofacial statistical deformation models of wild-type mice and crouzon mice. *Progress in Biomedical Optics and Imaging* 6512:6512c, 2007.

Jenkins, D., Seelow, D., Jehee, F.S., Perlyn, C.A., Alonso, L.G., Bueno, D.F., Donnai, D.Josifiova, D., Mathijssen, I.M.J., Morton, J.E.V., Orstavik, K.H. Sweeney, E. Wall, S.A., Marsh, J.L. Nuinberg, P., Passos-Bueno, M.R., Wilkie, A.O.M. RAB23 mutations in carpenter syndrome imply an unexpected role for Hedgehog signaling in cranial-suture development and obesity. *Am J Hum Genetics* 80:1162-1170,2007.

6lafsdóttir, H., Darvann, T.A., Hermann, N.V., Oubel, E., Ersb011, B.K., Frangi, A.F., Larsen, P., Perlyn, C.A., Morriss-Kay, G.M., Kreiborg, S., Computational mouse atlases and their application to automatic assessment of craniofacial dysmorphology caused by the Crouzon mutation Fgfr2c<sup>342</sup>v. *Journal of Anatomy.* 21:37–52, 2007.

Perlyn, C.A., DeLeon, V.B., Babbs, C., Govier, D., Burell, L., Darvann, T., Kreiborg, S., Morriss-Kay, G.M.: The craniofacial phenotype of the Crouzon mouse: Analysis of a model for syndromic craniosynostosis using 3D MicroCT. *Cleft Palate-Craniofac J.* 43:740-747, 2006.

Perlyn, C.A., Morriss-Kay, G.M., Darvann, T., Tenenbaum, M., Omitz, D. A model for the phannacologic treatment of Crouzon syndrome. *Neurosurgery* 59:210-215,2006.

Perlyn, C.A., Lowe, J.B. The S.O.F.T. check method: An approach to lower eyelid and midface rejuvenation. *Missouri Medicine* 103;275-281, 2006.

Perlyn, C.A., Schmelzer, R., Govier, D., Marsh, J.L. Congenital scalp and calvarial deficiencies:

Principles for classification and surgical management. *Plast Reconstr Surg* 11S:1129w1141, 2005.

Perlyn, C.A., Hagan, R., Schmelzer, R., et al. Development of the Craniofacial Model Library. In Salyer, K., ed. *Craniofacial Surgery X*· *Proc of the X International Congress of the ISCF*. Monduzzi, Bologna, 2003.

Mobley, S.R., Glassberg, M.K., Luebke, A., Perlyn, C.A., Davis, R.E. Expression of Endothelinw1 in rat random-pattern skin flaps treated with topical nifedipine. *Arch of Facial Plastic Surg.* 5(1):78-82, 2003.

Perlyn, C.A., Brownstein, J.N., Huebener, D.V., Marsh, J.L., et al. Occlusal relationship in bilateral cleft lip and palate patients during the mixed dentition stage: Does neonatal maxillary arch configuration predetermine outcome? *Cleft Palate Craniofac J.* 39(3):317-321,2002.

Perlyn, C.A., Schmelzer, R., Sutera, S, et al. Effect of distraction osteogenesis of the mandible on upper airway volume and resistance in children with micrognathia. *Plast. Reconstr. Surg.* 109(6):1809-1818, 2002.

Aldridge K., Marsh J.L., Perlyn C.A., Richtsmeier J.T., Kane A.A. Quantification of the impact of isolated craniosynostosis on central nervous system morphology. *Transactions of the 9th International Congress on Cleft Palate and Related Craniofacial Anomalies*. June 2001.

Perlyn, C.A., Kane, A.A., Marsh, J.L., et al. The craniofacial anomalies archive at St. Louis Children's Hospital: 20 Years of craniofacial imaging experience. *Plast. Reconstr. Surg.* 108(7):1862-70, 2001.

Gurley, J.M., Pilgram, T., Perlyn, C.A., Marsh, J.L. Long term outcome of autogenous rib graft nasal reconstruction. *Plast. Reconstr. Surg.* 108(7):1895-1905, 2001.

Perlyn, C.A., Marsh, J.L., Pilgram, T.K., Kane, A. Plasticity of the endocranial base in nonsyndromic craniosynostosis. *Plast. Reconstr. Surg.* 108(2):294-301, 2001.

Haugen, C., Perlyn, C.A., Thatler, S. Plastic surgery of the abdominal wall. *J. Florida Med. Assoc.* 86(2):69-73, 2000.

Perlyn C, Meara J, Smith S, Breuing K, Bartlett R. Secondary reconstruction of a giant congenital lentiginous dermal nevus with serial large volume tissue expansion. *Annals P/ast. Surg.* 43(5);546-550, 1999.

Oarri JE, Perlyn CA, Johnson MJ, Mobley SR, Kurtin OC, Thaller SR. Patterns of maxillofacial injuries in powered watercraft collisions. *P/ast. Recon. Surg.* 104(4):922w927, 1999.

Davis RE, Wachholz JH, Jasir D, Perlyn CA. Agrarna MH. Comparison of topical anti-ischemic agents in the salvage offailing random-pattern skin flaps. *Arch of Facial Plastic Surgery*, 1(1):27-32, 1999.

Perlyn C, Edmiston J. Unilateral Amastia: A case of Poland's Syndrome: *Arch Pediatr Ado/esc Med*, 153(12):1305-1306, 1999

Knox, K.L., Ringstrom, S.J., Szabo, M., Perlyn, C.A., Sutandi, S., Schwartz N.B. RU486 on an estrogen background blocks the rise in serum follicle-stimulating hormone induced by antiserum to inhlbin or ovariectomy. *Endocrinology* 137:1226wl232, 1996.

Szabo, *M.*, Knox, K.L., Ringstrom, S.J., Perlyn, C.A., Sutandi, S., SchwartzN.B. Mechanism of the inhibitory action of RU486 on the secondary follicle-stimulating honnone surge. *Endocrinology* 137:85-89, 1996.

#### BOOKS:

Greene, A.K. & Perlyn, C.A. (Eds.) 2011; Vascular Anomalies/Clinics in Plastic Surgery. Philadelphia, PA. W.B. Saunders Company.

Marsh, J.L. & Perlyn, C.A. (Eds.). 2010; Decision Making in Plastic Surgery. StLouis, MO: Quality Medical Publishers.

#### INVITED/GUEST LECFURES:

Pittsburgh, USA. University of Pittsburgh. Title "Drug therapy for craniosynostosis." January 2008.

Boston, USA. Boston Children's Hospital/Harvard University. Title "Developments In development: New insight Into craniofacial embryogenesis." October, 2007.

Copenhagen, Denmark. Copenhagen Craniofacial Unit/Danish Craniofacial Society. *Title* "*The pharmacologic treatment of Craniosynostosis-is it possible?*" October, 2006.

Bloomfontein, South Africa. Association of Plastic Surgeons of Southem Africa annual meeting. Title "The Craniofacial Model Library and the Tactile Imaging Phenomena." Oct, 2005.

Copenhagen, Denmark. Copenhagen Dental School. Title "Growth of the Crouzon Skull. What can we learn from a mouse?" May, 2005!

Tokyo, Japan. Tokyo Medical and Dental University. Title "Fibroblast Growth Factor Receptors and Palate Development-Studies from a mouse model for Cleft Palate." Sep, 2004.

Taipei, Taiwan. Chang Gong Memorial Hospital. Title "From Lab Bench to Operating Theater: Insight from Craniofacial Developmental Biology." Sep, 2004

London, England. Great Ormond Street Children's' Hospital. Title "Palatal Blueprinting. The Molecular Plan for Palate Development." May, 2004.