

RICHARD E. KIRSCHNER, M.D.

CURRICULUM VITAE

September 27, 2010

Office Address

Nationwide Children's Hospital
Section of Plastic Surgery
700 Children's Drive
Columbus, Ohio 43205
Phone: (614) 722-3887 Fax: (614) 722-3038
Richard.Kirschner@NationwideChildrens.org

Education

- 1985-1989 B.S., Biology, University of Miami,
summa cum laude
- 1985-1989 M.D. with research distinction,
University of Miami School of Medicine

Postgraduate Training and Fellowship Appointments

- July, 1989-June, 1990 Intern, Department of Surgery,
The New York Hospital-Cornell University Medical Center
New York, NY
- July, 1990-June, 1992 Assistant Surgeon, Department of Surgery,
The New York Hospital-Cornell University Medical Center
New York, NY
- July, 1992-Dec., 1993 Research Fellow, Department of Surgery,
Cornell University Medical College
New York, NY
- Jan., 1994-June, 1995 Assistant Surgeon, Department of Surgery,
The New York Hospital-Cornell University Medical Center
New York, NY
- July, 1995-June, 1997 Resident, Division of Plastic and Reconstructive Surgery
The University of Pennsylvania
Philadelphia, PA
- July, 1997-June 1998 Fellow, Division of Plastic and Reconstructive Surgery
The Children's Hospital of Philadelphia
Philadelphia, PA

Faculty and Administrative Appointments

July, 1995-June, 1997	Clinical Instructor, Department of Surgery and Division of Plastic and Reconstructive Surgery The University of Pennsylvania School of Medicine Philadelphia, PA
July 1, 1998- June 30, 2004	Assistant Professor, Department of Surgery and Division of Plastic Surgery The University of Pennsylvania School of Medicine Philadelphia, PA
July 1, 2004- February 28, 2010	Associate Professor, Department of Surgery and Division of Plastic Surgery The University of Pennsylvania School of Medicine Philadelphia, PA
July 1, 1998- June 30, 2007	Director of Research Division of Plastic Surgery The University of Pennsylvania School of Medicine and The Children's Hospital of Philadelphia Philadelphia, PA
May 1, 2000-present	Visiting Scientist Armed Forces Institute of Pathology Washington, D.C.
January 1, 2005- January 31, 2010	Program Director Division of Plastic Surgery The University of Pennsylvania School of Medicine
January, 2006- February 28, 2010	Director, Cleft Palate Program The Children's Hospital of Philadelphia
September, 2009-present	Co-Founder and Medical Director Casa Azul America, Inc.
March 15, 2010-present	Professor of Clinical Surgery Department of Surgery Division of Plastic and Reconstructive Surgery The Ohio State University College of Medicine
March 15, 2010-present	Chief, Section of Plastic and Reconstructive Surgery Nationwide Children's Hospital Columbus, Ohio

March 15, 2010-present Director, Cleft Lip and Palate-Craniofacial Center
Nationwide Children's Hospital
Columbus, Ohio

Hospital Appointments

July 1, 1998-present Attending Surgeon,
Hospital of the University of Pennsylvania
Philadelphia, PA

Attending Surgeon,
The Children's Hospital of Philadelphia
Philadelphia, PA

March 15, 2010-present Chief, Section of Plastic and Reconstructive Surgery
Nationwide Children's Hospital
Columbus, Ohio

Specialty Certification

September 10, 1996 American Board of Surgery
September 18, 1999 American Board of Plastic Surgery

Licensure

Pennsylvania MD-055927-L
New Jersey MA69197
Ohio 35.094826

Awards, Honors, Memberships in Honorary Societies

1982 Alpha Lambda Delta
1984 Phi Kappa Phi
1984 Phi Beta Kappa
1988 Alpha Omega Alpha; President, Alpha Chapter of FL, 1988-89
2001 Honorary Member, Strathmore's Who's Who
2002 Philadelphia Magazine, "Top Docs for Kids"
2004 Main Line Today Magazine "Best Doctors for Kids"
2007 Mary Downs Chair in Craniofacial Treatment and Research,
The Children's Hospital of Philadelphia
2009 Best Doctors in America
2010 Best Doctors in America

Memberships in Professional and Scientific Societies

American Medical Association (1985-)
American Cleft Palate-Craniofacial Association (1997-)
American Society of Plastic Surgeons (1998-)
Plastic Surgery Research Council (1998-)
Pennsylvania Federation of Cleft Palate Clinics (1998-); Secretary-Treasurer (2002-3)
Wound Healing Society (2000-)
Northeastern Society of Plastic Surgeons (2001-)
Diplomate, American Academy of Pediatrics (2001)
Diplomate, American College of Surgeons (2001)
American Association of Pediatric Plastic Surgeons (2001-)
American Association of Plastic Surgeons (2005-)

Committee Appointments/Officer Positions

Research Education Committee, American Cleft Palate-Craniofacial Association (1999-)
Program Committee, International 22q11.2 Deletion Symposium (2000)
Program Committee, Plastic Surgery Research Council (2001-)
Program Committee, Northeastern Society of Plastic Surgeons (2001)
Research Grants Committee, Cleft Palate Foundation (2001-); Chairman (2004-)
Cleft Palate Foundation Research Grants Task Force (2002-)
Program Committee, American Cleft Palate-Craniofacial Association (2003 and 2005)
Task Force on Clinical Trials/Outcome Studies, American Cleft Palate-Craniofacial Association (2003-)
Communications Officer, American Cleft Palate-Craniofacial Association (2010-)
Executive Council, American Cleft Palate-Craniofacial Association (2010-)

Volunteer Positions

Volunteer, American Red Cross (2000-)
Casa Azul America (2009-)

Invited Lectureships

“Orofacial Manifestations of Stickler Syndrome.” Second American Stickler Conference, Philadelphia, PA. July 11, 1998.

“Unilateral Cleft Lip Repair.” First International Cleft Lip and Palate Smile Train Symposium, Beijing, China, March 3, 2000.

“Cleft Palate Repair by Furlow Double-Opposing Z-Plasty.” First International Cleft Lip and Palate Smile Train Symposium, Beijing, China, March 4, 2000.

“Palatal Anomalies in the 22q11.2 Deletion.” Second International Conference on the 22q11.2 Deletion, Philadelphia, PA, June 23, 2000.

“Toward an Understanding of Non-Syndromic Craniosynostosis: Role of Fetal Constraint.” Annual Meeting of the American Association for Dental Research, Chicago, IL, March 8, 2001.

“Speech Considerations in The Patient With Cleft Palate: The Interaction of Speech-Language and Surgical Professionals.” Operation Smile Columbia Medical Conference: *Cleft Lip and Palate Care: Team Approach*, Bogota, Columbia, September 7, 2001.

“Evaluation And Management Of Velopharyngeal Function.” Operation Smile Columbia Medical Conference: *Cleft Lip and Palate Care: Team Approach*, Bogota, Columbia, September 8, 2001.

“Cleft Palate Repair by Furlow Double Opposing Z-Plasty.” 14th Annual Cleft Lip and Palate Symposium: Parameters of Care, Atlanta, Georgia, October 19-21, 2001.

“Velocardiofacial Syndrome: Surgical Management.” 14th Annual Cleft Lip and Palate Symposium: Parameters of Care, Atlanta, Georgia, October 19-21, 2001.

“Surgical Management of Pierre-Robin Sequence: Tongue-Lip Adhesion.” 14th Annual Cleft Lip and Palate Symposium: Parameters of Care, Atlanta, Georgia, October 19-21, 2001.

“Tongue-Lip Adhesion for the Management of Airway Obstruction in Pierre Robin Sequence.” Neonatology Rounds, The Children’s Hospital of Philadelphia, July, 2002.

“Management of Minor Pediatric Burns.” 3rd Annual John M. Templeton, Jr. Trauma Symposium, Philadelphia, PA, March 15, 2003.

“Toward an Understanding of Non-Syndromic Craniosynostosis.” Neonatology Research Seminar, The Children’s Hospital of Philadelphia, May 16, 2003.

“Current Concepts in the Management of VPI in Children with 22q11.2 Deletion Syndrome.” Annual Parents’ Meeting, 22q and You Center, The Children’s Hospital of Philadelphia, October 22, 2003.

“The Furlow Palatoplasty and Velopharyngeal Competence.” Annual Meeting of the American Academy of Pediatrics, New Orleans, LA, November 1, 2003

“Managing the Special Needs Child after Burn Injury.” 4th Annual John M. Templeton, Jr. Trauma Symposium, Philadelphia, PA, March 13, 2003.

“Toward an Understanding of Non-Syndromic Craniosynostosis” Annual Luncheon of the American Association of Pediatric Plastic Surgeons, Philadelphia, PA, October 17, 2004.

“Evaluation and Management of Velopharyngeal Dysfunction: A Surgical Perspective.” Annual Meeting of the American Speech and Hearing Association, Philadelphia, PA, November 18, 2004.

“Timing of Cleft Palate Repair for Optimal Speech Outcome: If Early Is Good, Is Very Early Better?” Pre-Conference Symposium, 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association, Vancouver, B.C., April 3, 2006.

“The Surgical Management of Pigmented Nevi.” Pediatric Dermatology for the Practitioner, Philadelphia, PA, April 22, 2006.

Faculty, Second Pan-African Congress on Cleft Lip and Palate, Ibadan, Nigeria, February, 2008.

“Optimizing Outcomes in Cleft Lip and Palate Surgery.” Center for Human Appearance Conference, The University of Pennsylvania, Philadelphia, PA, October 14, 2008.

“Oronasal Fistula Repair.” 20th Annual Cleft Lip and Palate Symposium, Atlanta, GA, October 24-25, 2008.

“Furlow Palate Repair.” 20th Annual Cleft Lip and Palate Symposium, Atlanta, GA, October 24-25, 2008.

“Bilateral Cleft Lip Repair.” 20th Annual Cleft Lip and Palate Symposium, Atlanta, GA, October 24-25, 2008.

“Advances in Cleft Lip and Palate Surgery.” Meeting of the Montgomery County Dental Society, Blue Bell, PA, October, 27, 2008.

“One Team: Optimizing Outcomes in Cleft Care.” Nationwide Children’s Hospital Grand Rounds, May 5, 2010.

“Surgical Management of Velopharyngeal Dysfunction.” Seventh Biennial International 22q11.2 Deletion Syndrome Conference, Coventry, England, July 30th, 2010.

“Palatal Abnormalities: An International Perspective.” Seventh Biennial International 22q11.2 Deletion Syndrome Conference, Coventry, England, July 30th, 2010.

“The 3 Fundamental Laws of Team Care.” 22nd Annual Tri-State Craniofacial Conference, Indianapolis, IN, September 24, 2010.

Editorial Experience

Manuscript Reviewer, *Cleft Palate-Craniofacial Journal* (1998)

Reviewer, Special Emphasis Panel, National Institute of Dental and Craniofacial Research (1999)

Manuscript Reviewer, *Archives of Dermatology* (2001)

Manuscript Reviewer, *Cleft Palate-Craniofacial Journal* (2001-)

Manuscript Reviewer, *Plastic and Reconstructive Surgery* (2001-)

Associate Editor, *Annals of Plastic Surgery* (2002-)

BIBLIOGRAPHY

Richard E. Kirschner, M.D.

Publications, peer reviewed

1. **Kirschner, R.E.** and Fantini, G.A. Role of iron in reoxygenation injury of postischemic skeletal muscle. *Persp. Vasc. Surg.* 5(2): 69-83, 1992.
2. Fantini, G.A., **Kirschner, R.E.**, and Chiao, J.J.C. U74389F (21-aminosteroid) attenuates reoxygenation injury in postischemic skeletal muscle independent of iron binding. *Circ. Shock* 40(suppl. 2):15, 1993.
3. **Kirschner, R.E.**, Chiao, J., Fantini, G.A., Davis, J.M., and Hoffman, L.A. Elevated neutrophil production of leukotriene B₄ following ischemia-reperfusion of composite tissue grafts. *Circ. Shock* 40(suppl. 2):49-50, 1993.
4. **Kirschner, R.E.** and Fantini, G.A. Role of iron and oxygen-derived free radicals in ischemia-reperfusion injury. *J. Am. Coll. Surg.* 179:103-117, 1994.
5. Chiao, J.J.C., **Kirschner, R.E.**, and Fantini, G.A. Iron delocalization occurs during ischemia and persists upon reoxygenation of skeletal muscle. *J. Lab. Clin. Med.* 124(3):432-438, 1994.
6. Cordeiro, P.G., **Kirschner, R.E.**, Hu, Q-Y., Chiao, J.J.C., Savage, H., Alfano, R.R., Hoffman, L.A., and Hidalgo, D.A. Ultraviolet fluorescence spectroscopy: A noninvasive method for the measurement of redox changes in ischemic myocutaneous flaps. *Plast. Reconstr. Surg.* 96(3):673-680, 1995.
7. **Kirschner, R.E.**, Chiao, J.J.C., Fyfe, B.S., Fantini, G.A., Hoffman, L.A., and Davis, J.M. Neutrophil lipoxygenase activation and leukosequestration in postischemic myocutaneous flaps: role of LTB₄. *Am. J. Physiol.* 268(Heart. Circ. Physiol.37):H2167-H2174, 1995.
8. Fantini, G.A., **Kirschner, R.E.**, and Chiao, J.J.C. Reperfusion injury of postischemic skeletal muscle is attenuated by the 21-aminosteroids U-74389F and U-74500A independent of iron binding. *Surgery* 120:859-865, 1996.
9. **Kirschner, R.E.**, Fyfe, B.S., Hoffman, L.A., Chiao, J.J.C., Davis, J.M., and Fantini, G.A. Ischemia-reperfusion injury of myocutaneous flaps: role of leukocytes and leukotrienes. *Plast. Reconstr. Surg.* 99:1485-1493, 1997.

10. Cordeiro, P.G., Mastorakos, D.P., Hu, Q.-Y., and **Kirschner, R.E.** The protective effect of L-arginine on ischemia-reperfusion injury in rat skin flaps. *Plast. Reconstr. Surg.* 100:1227-1233, 1997.
11. **Kirschner, R.E.**, Hunter, J.V., Bartlett, S.P., and Whitaker, L.A. Synostotic and non-synostotic occipital plagiocephaly: Evidence for a pathophysiologic continuum. *Proceedings of the International Congress of the International Society of Craniofacial Surgery*, 7:325-326, 1998.
12. **Kirschner, R.E.**, Xu, J., Fyfe, B., and Bucky, L.P. Salvage of Free Flaps After Secondary Venous Ischemia by Local Delivery of Heparin. *Ann. Plast. Surg.* 42:521-528, 1999.
13. McDonald-McGinn, D.M., **Kirschner, R.E.**, Goldmuntz, E., Sullivan, K., Eicher, P., Gerdes, M., Moss, E., Solot, C., Wang, P., Jacobs, I., Handler, S., Knightly, C., Heher, K., Wilson, M., Ming, J.E., Grace, K., Driscoll, D., Pasquariello, P., Randall, P., LaRossa, D., Emanuel, B.S., Zackai, E.H. The Philadelphia Story: The 22q11.2 deletion: report on 250 patients. *Genet. Counseling* 10:11-24, 1999.
14. **Kirschner, R.E.** and Low, D.W. Treatment of pyogenic granuloma by shave excision and laser photocoagulation. *Plast. Reconstr. Surg.* 104:1346-1349, 1999.
15. **Kirschner, R.E.**, Wang, P., Jawad, A., Duran, M., Cohen, M., Solot, C., Randall, P., and LaRossa, D. Clinical outcomes in Furlow palatoplasty: The Children's Hospital of Philadelphia experience. *Plast. Reconstr. Surg.* 104:1998-2010, 1999.
16. Zackai, E.H., McDonald-McGinn, D., Gripp, K., **Kirschner, R.E.**, Bartlett, S.P., Whitaker, L.A., Emanuel, B.S., Stolle, K. Microdeletions: An important cause of craniosynostosis. *Am. J. Hum. Genet.* 65(4):A35, 1999 [Abst].
17. **Kirschner, R.E.**, Wang, P., Jawad, A., Duran, M., Solot, C., Cohen, M., Randall, P., and LaRossa, D. Cleft Palate Repair at 3 to 7 Months: A Follow-Up Report *Plast. Reconstr. Surg.* 105:2127-2132, 2000.
18. Karmacharya, J., Ong, G., Hunenko, O., Sena-Esteves, M., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Acellular Human Dermis as a Carrier for Sustained Adenoviral-Mediated Gene Transfer in Impaired Wound Healing [Abst]. *Molecular Therapy*, 1:S68, 2000.
19. Solot, C.B., Gerdes, M., **Kirschner, R.E.**, McDonald-McGinn, D.M., Moss, E., Woodin, M, Aleman, D., Zackai, E.H., and Wang, P. Communication issues in the 22q11.2 deletion syndrome: Children at risk. *Genet. Med.* 3:67-71, 2001.
20. Hunenko, O., Karmacharya, J., Ong, G., and **Kirschner, R.E.** Toward an understanding of non-syndromic craniosynostosis: altered patterns of TGF- β receptor-1, TGF- β receptor-2, and FGF receptor-2 expression induced by intrauterine head constraint. *Ann. Plast. Surg.* 46:546-554, 2001.

21. **Kirschner, R.E.** Karmacharya, J., Ong, G., Hunenko, O., Losee, J.E., Martin, B.G., and Crombleholme, T.M., synthetic hybrid grafts for craniofacial reconstruction: sustained gene delivery using a calcium phosphate bone mineral substitute (Norian CRS). *Ann. Plast. Surg.* 46:538-545, 2001.
22. Singh, D., Bartlett, S.P., Low, D.W., and **Kirschner, R.E.** Surgical reconstruction of pediatric pressure sores: Long-term outcome. *Plast. Reconstr. Surg.* 109:265-269, 2002.
23. **Kirschner, R.E.,** Gannon, F., Xu, J., Wang, J., Karmacharya, J. Bartlett, S., and Whitaker, L.A. Craniosynostosis and altered patterns of fetal TGF- β expression induced by intrauterine constraint. *Plast. Reconstr. Surg.* 109:2338-2346, 2002.
24. Baker, S.B., Weinzweig, J., **Kirschner, R.E.,** and Bartlett, S.P. Applications of a new carbonated calcium phosphate bone cement: Early experience in pediatric and adult craniofacial reconstruction. *Plast. Reconstr. Surg.* 109:1789-1796, 2002.
25. Weinzweig, J., **Kirschner, R.E.,** Hunter, J., Farley, A., Bartlett, S.P., and Whitaker, L.A. Metopic synostosis: Defining the temporal sequence of normal suture fusion and differentiating it from synostosis on the basis of computed tomography images. *Plast. Reconstr. Surg.* 112: 1211-1218, 2003.
26. **Kirschner, R.E.,** Karmacharya, J., Ong, G., Gordon, A.D., Hunenko, O., Losee, J.E., Gannon, F.G., and Bartlett, S.P. Repair of The Immature Craniofacial Skeleton with Norian CRSTM: Quantitative Assessment of Craniofacial Growth. *Ann. Plast. Surg.* 49:33-38, 2002.
27. Dyce O. McDonald-McGinn D. **Kirschner RE.** Zackai E. Young K. Jacobs IN. Otolaryngologic manifestations of the 22q11.2 deletion syndrome. *Arch. Otolaryngol. Head Neck Surg.* 128(12):1408-12, 2002
28. **Kirschner, R.E.,** Low, D.W., Randall, P., Bartlett, S.P., McDonald-McGinn, D.M., Schultz, P.J., Zackai, E.H., and LaRossa, D. Surgical airway management in Pierre Robin sequence: Is there a role for tongue-lip adhesion? *Cleft Palate-Craniofac. J.* 40:13-17, 2003.
29. Losee, J.E., **Kirschner, R.E.,** Whitaker, L.A., and Bartlett, S.P. Congenital nasal anomalies: a classification scheme. *Plast. Reconstr. Surg.* 113(2):676-89, 2004.
30. Losee, J.E., **Kirschner, R.E.** Craniofacial Reconstruction with a new calcium phosphate bone mineral substitute (Norian CRS[®]): Interaction with bioresorbable mesh. *J. Craniofacial Surg.* 14:177-124, 2003.
31. Smartt, J.M., Lin, I.C., Kim, E., Ruotolo, R.A., Veitia, N.A., Crombleholme, T.A., and **Kirschner, R.E.** Hybrid constructs or craniofacial reconstruction: Sustained gene delivery using a demineralized bone matrix putty. *Ann. Plast. Surg.* 52:592-597, 2004.

32. LaRossa D. Jackson OH. **Kirschner RE.** Low DW. Solot CB. Cohen MA. Mayro R. Wang P. Minugh-Purvis N. Randall P. The Children's Hospital of Philadelphia modification of the Furlow double-opposing z-palatoplasty: long-term speech and growth results. *Clin. Plast. Surg.* 31(2):243-9, 2004.
33. McDonald-McGinn, D.M., Minugh-Purvis, N., **Kirschner, R.E.**, Jawad, A., Catanzaro, J.R., Tonneson, M.K., Driscoll, D., LaRossa, D., Emanuel, B.S., and Zackai, E.H. The 22q11.2 deletion in African-American patients: An underdiagnosed population? *Am. J. Med. Genet.* 134A:242-246, 2005.
34. Lin, I., Slemp. A.E., Hwang, C., and **Kirschner, R.E.** Temporospatial patterning of androgen receptors in the developing craniofacial skeleton. *J. Craniofac. Surg.* 15:922-927, 2004.
35. Smartt, J.M., Karmacharya, J., Gannon, F.H., Ong, G., Jackson, O., Bartlett, S.P., and **Kirschner, R.E.** Repair of the immature craniofacial skeleton with a carbonated calcium phosphate cement: Assessment of biocompatibility, osteoconductivity, and remodeling capacity. *Plast. Reconstr. Surg.* 115:1642-50, 2005.
36. Smartt, J.A., Karmacharya, J., Gannon, F.H., Teixeira, C., Mansfield, K., Jackson, O., Shapiro, I.M., and **Kirschner, R.E.** Intrauterine constraint induces chondrocyte apoptosis and premature ossification of the cranial base. *Plast. Reconstr. Surg.* 116:1363-9, 2005.
37. Fakhry, A., Ratisoontorn, C., Vedhachalam, C., Salhab, I., Koyama, E., Leboy, P., Pacifici, M., **Kirschner, R.E.**, and Nah, H.-D. Effects of FGF-2/-9 in calvarial bone cell cultures: differentiation stage-dependent mitogenic effect, inverse regulation of BMP-2 and noggin, and enhancement of osteogenic potential. *Bone* 36:254-266, 2005.
38. Kantor, J., Yan, A.C., Hivnor, C.M., Honig, P.J., and **Kirschner, R.** Extensive aplasia cutis congenital and the risk of sagittal sinus thrombosis. *Arch. Dermatol.* 141:554-6, 2005.
39. Losee, J.E., Feldman, E., Ketkar, M., Singh, D., **Kirschner, R.E.**, Per-Lennart Westesson, P.-L., Cooper, G., Mooney, M.P., and Bartlett, S.P. Nonsynostotic Occipital Plagiocephaly: Radiographic Diagnosis of the "Sticky Suture." *Plast. Reconstr. Surg.* 116:1860-9, 2005.
40. Driscoll, D.A., Boland, T., Emanuel, B.S., Kirschner, R.E., LaRossa, D., Manson, J., McDonald-McGinn, D., Randall, P, Solot, C., Zackai, E., and Mitchell, L.E. Evaluation of potential modifiers of the palatal phenotype in 22q11.2 deletion syndrome. *Cleft Palate-Craniofac. J.* 43:435-441, 2006.

41. Ruotolo, R.A., Veitia, N., McDonough, J, Corbin, A., McDonald-McGinn, D.M., Solot, C.B., Emanuel, B.S., Zackai, E.H., LaRossa, D., Arens, R., and **Kirschner, R.E.** Velopharyngeal Anatomy in 22q11.2 Deletion Syndrome: A Three-Dimensional Cephalometric Analysis. *Cleft Palate-Craniofac. J.* 43:446-456, 2006.
42. Driscoll, D.A., Boland, T., Emanuel, B.S., **Kirschner, R.E.**, LaRossa, D., Manson, J., McDonald-McGinn, D., Randall, P., Solot, C., Zackai, E., and Mitchell, L.E. Evaluation of potential modifiers of the palatal phenotype in the 22q11.2 deletion syndrome. *Cleft Palate-Craniofac. J.* 43:435-441, 2006.
43. **Kirschner,R.E.**, Cabiling, D., Slemp, A.E., Siddiqi, F., LaRossa,D., and Losee, J.E. Repair of oronasal fistulae with acellular dermal matrices. *Plast. Reconstr. Surg.* 118:1431-1440, 2006.
44. Jacob, S., Wu, C., Freeman, T.A., Koyama, E. and **Kirschner. R.E.**, Expression of Indian hedgehog, BMP-4 and Noggin in craniosynostosis induced by fetal constraint. *Ann. Plast. Surg.* 58:215-221, 2007.
45. Cabiling, D., Kim, E., Yan, D. , Jacob, S., Nah, H.-D., and **Kirschner, R.E.** Differential effects of TGF-beta isoforms on murine fetal dural cells and calvarial osteoblasts. *Plast. Reconstr. Surg.* 120(3):614-24 , 2007.
46. Wise, J.B., Cabiling, D., Yan, D., Mirza, N., and **Kirschner, R.E.** Submucosal Injection of Micronized Acellular Dermal Matrix: Analysis of Biocompatibility and Durability. *Plast. Reconstr. Surg.* 120:1156-60, 2007.
47. Cabiling, D. and **Kirschner, R.E.** Cleft repair in Hay Wells syndrome. *Cleft Palate-Craniofacial J.* 44:335-339, 2007.
48. Lin IC, Slemp AE, Hwang C, Sena-Esteves M, Nah HD, Kirschner RE. Dihydrotestosterone stimulates proliferation and differentiation of fetal calvarial osteoblasts and dural cells and induces cranial suture fusion. *Plast. Reconstr. Surg.* 120(5):1137-47, 2007.
49. Smartt JM Jr, Kim EM, Tobias AM, Yan AC, **Kirschner RE.** Aplasia cutis congenita with calvarial defects: a simplified management strategy using acellular dermal matrix. *Plast Reconstr Surg.* 121(4):1224-9, 2008.
50. Lin IC, Smartt JM Jr, Nah HD, Ischiropoulos H, **Kirschner RE.** Nitric oxide stimulates proliferation and differentiation of fetal calvarial osteoblasts and dural cells. *Plast. Reconstr. Surg.* 121(5):1554-66; discussion 1567-9, 2008.

51. Grant SF, Wang K, Zhang H, Glaberson W, Annaiah K, Kim CE, Bradfield JP, Glessner JT, Thomas KA, Garris M, Frackelton EC, Otieno FG, Chiavacci RM, Nah HD, **Kirschner RE**, Hakonarson H. A genome-wide association study identifies a locus for nonsyndromic cleft lip with or without cleft palate on 8q24. *J Pediatr.* 2009 Dec;155(6):909-13.
52. Kaye AE, Belz JM, **Kirschner RE**. Pediatric dog bite injuries: a 5-year review of the experience at the Children's Hospital of Philadelphia. *Plast Reconstr Surg.* 2009 Aug;124(2):551-8.

Publications, non-peer reviewed

1. Fantini, G.A. and **Kirschner, R.E.** Iron and cardiovascular dysfunction: mechanisms and therapeutic implications. *Surg. Technol. Int.* 4:339-345, 1995.
2. **Kirschner, R.E.**, Gannon, F., Xu, J., Wang, J., Karmacharya, J. Bartlett, S., and Whitaker, L.A. Craniosynostosis and altered patterns of fetal TGF- β expression induced by intrauterine constraint. *Plast. Surg. Forum XXII*:243, 1999.
3. **Kirschner, R.E.**, McDonald-McGinn, D., Baker, S.B., Handler, S.D., Wetmore, R.F., Tom, L.W.C., Potsic, W.P., Randall, P., Zackai, E.H., and LaRossa, D. Airway management in Pierre Robin sequence: Etiology as a predictive factor. *Plast. Surg. Forum XXII*:50, 1999.
4. Baker, S.B., **Kirschner, R.**, Huang, K., Sarwar, D., Low, D., Bartlett, S.B., Randall, P., and LaRossa, D. Fistula formation with Furlow palatoplasty: incidence and influence of variables on fistula formation in a series of 429 consecutive palatoplasties. *Plast. Surg. Forum XXII*:52, 1999.
5. Weinzweig, J., **Kirschner, R.E.**, Bartlett, S.B., Farley, A., Hunter, J., and Whitaker, L.A. Metopic synostosis: Defining parameters that permit diagnosis based on CT images. *Plast. Surg. Forum XXII*:52, 1999.
6. Weinzweig, J., Baker, S.B., Mackay, G.J., **Kirschner, R.E.**, Whitaker, L.A., and Bartlett, S.B. Immediate versus delayed midface distraction in a primate model using a new intraoral internal device. *Plast. Surg. Forum XXII*:52, 1999.
7. Karmacharya, J., Losee, J.E., Gannon, F.H., Hunenko, O., Ong, G., Poser, R.D., Bartlett, S.P., and **Kirschner, R.E.** Repair of the pediatric craniofacial skeleton with a calcium phosphate bone mineral substitute (Norian CRS): Analysis of biocompatibility, osteoconductivity, and remodeling capacity. *Plast. Surg. Forum XXIII*:130, 2000.
8. Karmacharya, J., Ong, G., Hunenko, O., Sena-Esteves, M., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Acellular human dermis as a carrier for sustained adenoviral-mediated gene transfer in impaired wound healing. *Plast. Surg. Forum XXIII*:359, 2000.

9. Karmacharya, J., Ong, G., Hunenko, O., Losee, J.E., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Synthetic hybrid grafts for craniofacial reconstruction: Sustained gene delivery using a calcium phosphate bone mineral substitute (Norian CRS). *Plast. Surg. Forum XXIII*:28, 2000.
10. Singh, D., Bartlett, S.P., Low, D.W., and **Kirschner, R.E.** Surgical reconstruction of pediatric pressure sores: Long-term outcome. *Plast. Surg. Forum XXIII*:25, 2000.
11. Baker, S.B., Weinzweig, J., **Kirschner, R.E.**, and Bartlett, S.P. Applications of a new carbonated calcium phosphate bone cement: Early experience in pediatric and adult craniofacial reconstruction. *Plast. Surg. Forum XXIII*:29, 2000.
12. **Kirschner, R.E.**, Fakhry, A., Ratisoontorn, C., Karmacharya, J., and Nah, H.-D. Role of FGF9 in calvarial osteoblast differentiation and suture development. *Plast. Surg. Forum XXIII*:80, 2000.
13. **Kirschner, R.E.**, Low, D.W., Baker, S.B., Huang, K., Schultz, P.J., Bartlett, S.P., Randall, P., and LaRossa, D. Surgical airway management in Pierre Robin Sequence: Is there a role for tongue-lip adhesion? *Plast. Surg. Forum XXIII*:125, 2000.
14. **Kirschner, R.E.** and Bartlett, S.P. Discussion: Optimal timing of cleft palate closure. *Plast. Reconstr. Surg.* 106(2): 423-5, 2000.
15. **Kirschner, R.E.** and LaRossa, D. Cleft Lip and Palate. *Otolaryngol. Clin.* 33(6):1191-1215, 2000.
16. Hubert, D.M., Karmacharya, J., Gordon, A.D., Ong, G., and **Kirschner, R.E.**, Molecular basis of the delay phenomenon: Quantitative analysis of VEGF. *Plast. Surg. Forum XXIV*, 2001.
17. **Kirschner, R.E.** Discussion: Palatal surface area measurement: Comparisons among different cleft types. *Ann. Plast. Surg.* 50(1): 23-24, 2003.
18. Slemp, A.E. and **Kirschner, R.E.** Keloids and Scars - A review of keloids and scars: their pathogenesis, risk factors, and management. *Current Opinion in Pediatrics* 18(4):396-402, Aug. 2006.
19. Spivak RM, Endo M, Zajac A, Zoltick PW, Ang BU, Horn RB, Flake AW, **Kirschner RE**, Nah HD. In utero gene delivery of adenovirus encoded TGF-beta3 restores physiologic palatal fusion and rescues cleft palate in a TGF-beta3 knockout mouse. *J. Am. Coll. Surg.* October, 2007, Vol 205, Issue 3, pg: S92-S92.

Abstract Presentations

1. **Kirschner, R.E.**, Chiao, J., Fantini, G.A., Fyfe, B., Davis, J.M., and Hoffman, L.A. Ischemia-Reperfusion of Myocutaneous Flaps Activates Neutrophil Generation of Leukotriene B₄. Presented at the 38th Annual Meeting of the Plastic Surgery Research Council in Houston, Texas, April 30, 1993.
2. Fantini, G.A., **Kirschner, R.E.**, and Chiao, J. U74389F (21-aminosteroid) Attenuates Reoxygenation Injury in Postischemic Skeletal Muscle Independent of Iron Binding. Presented at the 16th Annual Conference on Shock in Santa Fe, New Mexico, June 14, 1993.
3. **Kirschner, R.E.**, Chiao, J., Fantini, G.A., Davis, J.M., and Hoffman, L.A. Elevated Neutrophil Production of Leukotriene B₄ Following Ischemia-Reperfusion of Composite Tissue Grafts. Presented at the 16th Annual Conference on Shock in Santa Fe, New Mexico, June 16, 1993.
4. Fantini, G.A., **Kirschner, R.E.**, and Chiao, J.J.C. Lazaroids (21-Aminosteroids) Ameliorate Cellular Membrane Injury Upon Reoxygenation of Postischemic Skeletal Muscle Independent of Iron Binding. Presented at the 27th Annual Meeting of the Association for Academic Surgery in Hershey, Pennsylvania, November 10-13, 1993.
5. **Kirschner, R.E.**, Chiao, J., Fyfe, B., Fantini, G.A., Davis, J.M., and Hoffman, L.A. Ischemia-Reperfusion Injury of Myocutaneous Flaps: Role of Leukocytes and Leukotrienes. Presented at the 39th Annual Meeting of the Plastic Surgery Research Council in Ann Arbor, Michigan, June 5, 1994.
6. Cordeiro, P.G., **Kirschner, R.E.**, Hu, Q-Y., Chiao, J.J.C., Savage, H., Alfano, R.R., Hoffman, L.A., and Hidalgo, D.A. Ultraviolet Fluorescence Spectroscopy: A Noninvasive Method for the Measurement of Redox Changes in Ischemic Myocutaneous Flaps. Presented at the 39th Annual Meeting of the Plastic Surgery Research Council in Ann Arbor, Michigan, June 7, 1994.
7. Cordeiro, P.G., Mastorakos, D.P., Hu, Q.-Y., and **Kirschner, R.E.** The Protective Effect of L-Arginine on Skin Flap Ischemia-Reperfusion Injury. Presented at the 40th Annual Meeting of the Plastic Surgery Research Council in New York, New York, 1995.
8. **Kirschner, R.E.**, LaRossa, D., Solot, C., Cohen, M., and Randall, P. Clinical Outcome of Pharyngeal Flap Surgery for Velopharyngeal Incompetence. Presented at the 42nd Annual Meeting of the Robert H. Ivy Society in Pittsburgh, PA, March 9, 1996.
9. Brown, M.C., Barie, P.S., Hydo, L., **Kirschner, R.E.**, Fantini, G.A., and Bush, H.L. Management of Refractory Cardiogenic Shock with the Intra-Aortic Balloon Pump Following Abdominal Aortic Aneurysm Repair. Presented at the 10th Annual Meeting of the Eastern Vascular Society in Washington, D.C., May 3-5, 1996.

10. **Kirschner, R.E.** and LaRossa, D. Surgical Management of Velopharyngeal Incompetence. Presented at the Annual Meeting of the Pennsylvania Federation of Cleft Palate Clinics in Hershey, PA, October 19, 1996.
11. **Kirschner, R.E.**, Wang, P., Duran, M., Cohen, M., Solot, C., Randall, P., and LaRossa, D. Clinical Outcomes in Furlow Palatoplasty: An Eighteen Year Experience. Presented at the 43rd Annual Meeting of the Robert H. Ivy Society in King of Prussia, PA, March 8, 1997.
12. **Kirschner, R.E.**, Wang, P., Duran, M., Jawad, A., Cohen, M., Solot, C., Randall, P., and LaRossa, D. Clinical Outcomes in Furlow Palatoplasty: The Children's Hospital of Philadelphia Experience. Presented at the 76th Annual Meeting of the American Association of Plastic Surgeons in Portland OR, May 19, 1997.
13. **Kirschner, R.E.**, Hunter, J., Bartlett, S.P., and Whitaker, L.A. Synostotic and Non-Synostotic Posterior Plagiocephaly: Distinct Entities or a Pathophysiologic Continuum? Presented at the VIIth International Congress of the International Society of Craniofacial Surgery in Santa Fe, New Mexico, September 14-17, 1997.
14. Duran, M., Xu, J., Fyfe, B.S., Bucky, L.P., and **Kirschner, R.E.** Postischemic Injury in Rat Epigastric Flaps: Role of Mast Cells. Presented at the 44th Annual Meeting of the Robert H. Ivy Society in Hershey, PA, March 7, 1998.
15. Xu, J., **Kirschner, R.E.**, Potochny, J.D., Chang, B., and Bucky, L.P. Salvage of Free Flaps After Secondary Venous Ischemia by Local Delivery of Heparin. Presented at the 44th Annual Meeting of the Robert H. Ivy Society in Hershey, PA, March 7, 1998.
16. **Kirschner, R.E.**, Wang, P., Jawad, A., Duran, M., Solot, C., Cohen, M.A., Randall, P., and LaRossa, D. Clinical Outcomes in Furlow Palatoplasty: The Children's Hospital of Philadelphia Experience. Presented at the 55th Annual Meeting of the American Cleft Palate-Craniofacial Association in Baltimore, MD, April 23, 1998.
17. **Kirschner, R.E.**, Xu, J., Fyfe, B., Potochny, J.D., Chang, B., and Bucky, L.P. Salvage of Free Flaps After Secondary Venous Ischemia by Local Delivery of Heparin. Presented at the Annual Meeting of the American Society of Plastic and Reconstructive Surgeons in Boston, MA, October 6, 1998.
18. Baker, S., **Kirschner, R.E.**, Huang, K., Bartlett, S.P., Low, D.W., Randall, P., and LaRossa, D. Cleft Palate Fistula after Furlow Palatoplasty: Incidence and Analysis of Etiologic Variables. Presented at the 45th Annual Meeting of the Robert H. Ivy Society in Pittsburgh, PA, March 13, 1999.
19. Weinzwieg, J., **Kirschner, R.E.**, Bartlett, S.P., Duhaime, A.C., Sutton, L., Sun, P., and Whitaker, L.A. Cranial vault expansion in the management of post-shunt craniosynostosis and slit ventricle syndrome. Presented at the 45th Annual Meeting of

- the Robert H. Ivy Society in Pittsburgh, PA, March 13, 1999.
20. **Kirschner, R.E.**, Minugh-Purvis, N., Huang, K., Wang, P., Jawad, A., Solot, C., Cohen, M.A., Randall, P., and LaRossa, D. Very Early Cleft Palate Repair: Effects on Speech and Midfacial Growth. Presented at the 56th Annual Meeting of the American Cleft Palate-Craniofacial Association in Scottsdale, AZ, April 16, 1999.
 21. McDonald-McGinn, D., **Kirschner, R.E.**, Gripp, K., Bartlett, S.P., Stolle, C., Driscoll, D., Emanuel, B.S., Pasquariello, P., Whitaker, L.A., and Zackai, E.H. Craniosynostosis: Another feature of the 22q11.2 Deletion Syndrome. Presented at the 56th Annual Meeting of the American Cleft Palate-Craniofacial Association in Scottsdale, AZ, April 16, 1999.
 22. McDonald-McGinn, D., Gripp, K., **Kirschner, R.E.**, Bartlett, S.P., Stolle, C., Whitaker, L.A., and Zackai, E.H. Phenotypic Variability of Saethre-Chotzen in Patients with Identified Mutations in the *TWIST* Gene. Presented at the 56th Annual Meeting of the American Cleft Palate-Craniofacial Association in Scottsdale, AZ, April 16, 1999.
 23. Riski, J.F., Solot, C., Cohen, S.R., Burstein, F.D., Uhas, K., McDonald-McGinn, D., **Kirschner, R.E.**, Emanuel, B., LaRossa, D., and Zackai, E. Pressure Flow and Nasometric Evaluation of Velopharyngeal Function in Velo-Cardio-Facial Syndrome. Presented at the 56th Annual Meeting of the American Cleft Palate-Craniofacial Association in Scottsdale, AZ, April 16, 1999.
 24. **Kirschner, R.E.**, Gannon, F.H., Xu, J., Bartlett, S.P., Whitaker, L.A. Toward an Understanding of Non-Syndromic Craniosynostosis: Role of Constraint-Induced Changes In TGF- β . Presented at the 78th Annual Meeting of the American Association of Plastic Surgeons in Colorado Springs, CO, May 3, 1999.
 25. **Kirschner, R.E.** and Xu, J. Posts ischemic Flap Salvage by Local Infusion of Heparin. Presented at the 44th Annual Meeting of the Plastic Surgery Research Council in Pittsburgh, PA, May 25, 1999.
 26. **Kirschner, R.E.**, Xu, J., Fyfe, B.S., Duran, M.G., Wang, J., and Bucky, L.P. Ischemia-Reperfusion Injury in Rat Epigastric Flaps: Role of Mast Cells. Presented at the 44th Annual Meeting of the Plastic Surgery Research Council in Pittsburgh, PA, May 24, 1999.
 27. Weinzwieg, J., **Kirschner, R.E.**, Farley, A., Bartlett, S.P., Hunter, J., and Whitaker, L.A. Metopic Synostosis: Defining Parameters That Permit Diagnosis Based on CT Images. Presented at the 44th Annual Meeting of the Plastic Surgery Research Council in Pittsburgh, PA, May 25, 1999.
 28. Baker, S., **Kirschner, R.E.**, Huang, K., Bartlett, S.P., Low, D.W., Randall, P., and LaRossa, D. Etiology and Incidence of Cleft Palate Fistula After Furlow Palatoplasty. Presented at the Annual Meeting of the Northeastern Society of Plastic Surgeons in

- Burlington, VT, October 1, 1999.
29. Karmacharya, J., Hunenko, O., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Use of Acellular Human Dermis as a Carrier Matrix for Adenoviral-Mediated Gene Transfer. Presented at the 7th Annual Meeting of the Institute for Human Gene Therapy in Absecon, NJ, October 1, 1999.
 30. **Kirschner, R.E.**, Gannon, F., Xu, J., Wang, J., Karmacharya, J. Bartlett, S., and Whitaker, L.A. Craniosynostosis and Altered Patterns of Fetal TGF- β Expression Induced by Intrauterine Constraint. Presented at the 68th Annual Meeting of the American Society of Plastic and Reconstructive Surgeons in New Orleans, LA, October 24, 1999.
 31. **Kirschner, R.E.**, McDonald-McGinn, D., Baker, S.B., Handler, S.D., Wetmore, R.F., Tom, L.W.C., Potsic, W.P., Randall, P., Zackai, E.H., and LaRossa, D. Airway Management in Pierre Robin Sequence: Etiology as a Predictive Factor. Presented at the 68th Annual Meeting of the American Society of Plastic and Reconstructive Surgeons in New Orleans, LA, October 24, 1999.
 32. Baker, S.B., **Kirschner, R.**, Huang, K., Sarwar, D., Low, D., Bartlett, S.B., Randall, P., and LaRossa, D. Fistula Formation With Furlow Palatoplasty: Incidence and Influence of Variables on Fistula Formation in a Series of 429 Consecutive Palatoplasties. Presented at the 68th Annual Meeting of the American Society of Plastic and Reconstructive Surgeons in New Orleans, LA, October 24, 1999.
 33. Weinzweig, J., **Kirschner, R.E.**, Bartlett, S.B., Farley, A., Hunter, J., and Whitaker, L.A. Metopic Synostosis: Defining Parameters That Permit Diagnosis Based on CT Images. Presented at the 68th Annual Meeting of the American Society of Plastic and Reconstructive Surgeons in New Orleans, LA, October 25, 1999.
 34. Weinzweig, J., Baker, S.B., Mackay, G.J., **Kirschner, R.E.**, Whitaker, L.A., and Bartlett, S.B. Immediate Versus Delayed Midface Distraction in a Primate Model Using a New Intraoral Internal Device. Presented at the 68th Annual Meeting of the American Society of Plastic and Reconstructive Surgeons in New Orleans, LA, October 25, 1999.
 35. Weinzweig, J., Baker, S.B., **Kirschner, R.E.**, Mackay, G.J., Whitaker, L.A., and Bartlett, S.B. Immediate Versus Delayed Midface Distraction in a Primate Model Using a New Intraoral Internal Device. Presented at the 8th International Congress of the International Society of Craniofacial Surgeons in Taipei, Taiwan, November 1, 1999.
 36. Bartlett, S.B., Weinzweig, J., **Kirschner, R.E.**, Farley, A., Hunter, J., and Whitaker, L.A. Metopic Synostosis: Defining Parameters That Permit Diagnosis Based on CT Images. Presented at the 8th International Congress of the International Society of Craniofacial Surgeons in Taipei, Taiwan, November 2, 1999.

37. Weinzweig, J., **Kirschner, R.E.**, Sun, P., Losee, J.E., Bartlett, S.P., Duhaime, A., Sutton, L., and Whitaker, L.A. Cranial Vault Expansion in the Management of Post-Shunt Craniosynostosis and Slit Ventricle Syndrome. Presented at the 8th International Congress of the International Society of Craniofacial Surgeons in Taipei, Taiwan, November 2, 1999.
38. Karmacharya, J., Losee, J.E., Gannon, F.H., Hunenko, O., Ong, G., Poser, R.D., Bartlett, S.P., and **Kirschner, R.E.** Repair of The Pediatric Craniofacial Skeleton With a Calcium Phosphate Bone Mineral Substitute (Norian CRS): Analysis of Biocompatibility, Osteoconductivity, and Remodeling Capacity. Presented at the 46th Annual Meeting of the Robert H. Ivy Society in Philadelphia, PA, March 11, 2000.
39. Ong, G., Karmacharya, J., Hunenko, O., Losee, J.E., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Synthetic Hybrid Grafts for Craniofacial Reconstruction: Sustained Gene Delivery Using a Calcium Phosphate Bone Mineral Substitute (Norian CRS). Presented at the 46th Annual Meeting of the Robert H. Ivy Society in Philadelphia, PA, March 11, 2000.
40. Losee, J.E., **Kirschner, R.E.**, Bartlett, S.P., and Whitaker, L.A. Congenital Nasal Anomalies: An Institutional Experience and Classification Scheme. Presented at the 46th Annual Meeting of the Robert H. Ivy Society in Philadelphia, PA, March 11, 2000.
41. **Kirschner, R.E.**, Solot, C.B., McDonald-McGinn, D.M., Emanuel, B.S., Zackai, E.S., Randall, P., and LaRossa, D. Cleft Palate And Velopharyngeal Dysfunction In Chromosome 22q11.2 Deletion Syndrome: Review Of 143 Patients. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, GA, April 14, 2000.
42. Karmacharya, J., Gannon, F.H., Teixeira, C., MS, Mansfield, K., Losee, J., Hunenko, O., Shapiro, I.M., and **Kirschner, R.E.** Craniosynostosis Induced By Fetal Constraint Is Associated With Apoptosis And Premature Ossification Of The Cranial Base. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, GA, April 13, 2000.
43. Baker, S.B., Weinzweig, J., Jeneby, T., Chalian, A., Whitaker, L.A., Bartlett, S.P., and **Kirschner, R.E.** Applications of a New Calcium Phosphate Bone Paste: A One Year Experience in Pediatric and Adult Craniofacial Reconstruction. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, GA, April 12, 2000.
44. Weinzweig, J., Bartlett, S.P., **Kirschner, R.E.**, Duhaime, A., Sutton, L., Sun, P., and Whitaker, L.A. Cranial Vault Expansion in the Management of Post-Shunt Craniosynostosis and Slit Ventricle Syndrome. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, GA, April 12, 2000.
45. Weinzweig, J., **Kirschner, R.E.**, Bartlett, S.B., Farley, A., Hunter, J., and Whitaker,

- L.A. Metopic Synostosis: Defining Parameters That Permit Diagnosis Based on CT Images. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, GA, April 13, 2000.
46. Baker, S.B., **Kirschner, R.**, Huang, K., Sarwar, D., Low, D., Bartlett, S.B., Randall, P., and LaRossa, D. Incidence and Etiology of Cleft Palate Fistulas: Analysis of 429 Consecutive Furlow Palatoplasties. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, GA, April 12, 2000.
 47. **Kirschner, R.E.**, McDonald-McGinn, D., Baker, S.B., Handler, S., Wetmore R., Tom. L., Potsic, W., Randall, P., Zackai, E.H., and LaRossa, D. Airway Management in Pierre Robin Sequence: Etiology as a Predictive Factor. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, GA, April 15, 2000.
 48. McDonald-McGinn, D., LaRossa, D., **Kirschner, R.E.**, Randall, P., Low, D.W., Schultz, P., Mayro, R., Schiffman, P., Solot, C.B., Cohen, M.,A., Laufer, A., Driscoll, D., Emanuel, B.S., and Zackai, E.H. Variability in the 22q11.2 Deletion: Findings in 28 Unselected Relatives. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, GA, April 15, 2000.
 49. Karmacharya, J., Losee, J.E., Gannon, F.H., Hunenko, O., Ong, G., Poser, R.D., Bartlett, S.P., and **Kirschner, R.E.** Repair of The Pediatric Craniofacial Skeleton With a Calcium Phosphate Bone Mineral Substitute (Norian CRS): Analysis of Biocompatibility, Osteoconductivity, and Remodeling Capacity. Presented at the 45th Annual Meeting of the Plastic Surgery Research Council in Seattle, WA, May 19, 2000.
 50. Karmacharya, J., Ong, G., Hunenko, O., Losee, J.E., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Synthetic Hybrid Grafts for Craniofacial Reconstruction: Sustained Gene Delivery Using a Calcium Phosphate Bone Mineral Substitute (Norian CRS). Presented at the 45th Annual Meeting of the Plastic Surgery Research Council in Seattle, WA, May 20, 2000.
 51. Hunenko, O., Karmacharya, J, Ong, G., and **Kirschner, R.E.** Toward an Understanding of Non-Syndromic Craniosynostosis: Altered Patterns Of TGF- β Receptor-1, TGF- β Receptor-2, And FGF Receptor-2 Expression Induced By Intrauterine Head Constraint. Presented at the 45th Annual Meeting of the Plastic Surgery Research Council in Seattle, WA, May 19, 2000.
 52. **Kirschner, R.E.**, Fakhry, A., Ratisoontorn, C., Karmacharya, J., and Nah, H.-D. Role of FGF9 in Calvarial Osteoblast Differentiation and Suture Development. Presented at the 45th Annual Meeting of the Plastic Surgery Research Council in Seattle, WA, May 19, 2000.
 53. Losee, J.E., **Kirschner, R.E.**, Bartlett, S.P., and Whitaker, L.A. Congenital Nasal Anomalies: An Institutional Experience and Classification Scheme. Presented at the

- 79th Annual Meeting of the American Association of Plastic Surgeons in Laguna Niguel, CA, May, 2000.
54. Karmacharya, J., Ong, G., Hunenko, O., Sena-Esteves, M., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Acellular Human Dermis as a Carrier for Sustained Adenoviral-Mediated Gene Transfer in Impaired Wound Healing. Presented at the Third Annual Meeting of the American Society of Gene Therapy in Denver, CO, May 31-June 4, 2000.
 55. Minugh-Purvis, N., **Kirschner, R.E.**, LaRossa, D., McDonald-McGinn, D.M., and Zackai, E.H. Cephalofacial Morphometrics in Children with the 22q11.2 Deletion. Presented at the Second International Conference on the 22q11.2 Deletion in Philadelphia, PA, June 25, 2000.
 56. Gripp, K., McDonald-McGinn, D.M., **Kirschner, R.E.**, Bartlett, S.P., Stolle, K., Driscoll, D., Emanuel, B.S., Pasquariello, P., Whitaker, L.A., and Zackai, E.H. Craniosynostosis in the 22q11.2 Deletion Syndrome. Presented at the Second International Conference on the 22q11.2 Deletion in Philadelphia, PA, June 25, 2000.
 57. Karmacharya, J., Ong, G., Hunenko, O., Sena-Esteves, M., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Acellular Human Dermis as a Carrier for Sustained Adenoviral-Mediated Gene Transfer in Impaired Wound Healing. Presented at the Northeastern Society of Plastic Surgeons 17th Annual Meeting in Montreal, September 14-16, 2000.
 58. **Kirschner, R.E.**, Fakhry, A., Ratisoontorn, C., Karmacharya, J., and Nah, H.-D. Role of FGF9 in Calvarial Osteoblast Differentiation and Suture Development. Presented at the Northeastern Society of Plastic Surgeons 17th Annual Meeting in Montreal, September 14-16, 2000.
 59. Hunenko, O., Karmacharya, J., Ong, G., and **Kirschner, R.E.** Toward an Understanding of Non-Syndromic Craniosynostosis: Altered Patterns Of TGF- β Receptor-1, TGF- β Receptor-2, And FGF Receptor-2 Expression Induced By Intrauterine Head Constraint. Presented at the Northeastern Society of Plastic Surgeons 17th Annual Meeting in Montreal, September 14-16, 2000.
 60. Karmacharya, J., Losee, J.E., Gannon, F.H., Hunenko, O., Ong, G., Poser, R.D., Bartlett, S.P., and **Kirschner, R.E.** Repair of The Pediatric Craniofacial Skeleton With a Calcium Phosphate Bone Mineral Substitute (Norian CRS): Analysis of Biocompatibility, Osteoconductivity, and Remodeling Capacity. Presented 69th Annual ASPS/PSEF/ ASMS Scientific Meeting in Los Angeles, October 14-18, 2000.
 61. Karmacharya, J., Ong, G., Hunenko, O., Sena-Esteves, M., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Acellular Human Dermis as a Carrier for Sustained Adenoviral-Mediated Gene Transfer in Impaired Wound Healing. Presented 69th Annual ASPS/PSEF/ ASMS Scientific Meeting in Los Angeles, October 14-18, 2000.

62. **Kirschner, R.E.**, Fakhry, A., Ratisoontorn, C., Karmacharya, J., and Nah, H.-D. Role Of FGF9 in Calvarial Osteoblast Differentiation and Suture Development. Presented 69th Annual ASPS/PSEF/ ASMS Scientific Meeting in Los Angeles, October 14-18, 2000.
63. **Kirschner, R.E.**, Low, D.W., Baker, S.B., Huang, K., Schultz, P.J., Bartlett, S.P., Randall, P., and LaRossa, D. Surgical Airway Management in Pierre Robin Sequence: Is There a Role for Tongue-Lip Adhesion? Presented 69th Annual ASPS/PSEF/ ASMS Scientific Meeting in Los Angeles, October 14-18, 2000.
64. Karmacharya, J., Ong, G., Hunenko, O., Losee, J.E., Martin, B.G., Crombleholme, T.M., and **Kirschner, R.E.** Synthetic Hybrid Grafts for Craniofacial Reconstruction: Sustained Gene Delivery Using a Calcium Phosphate Bone Mineral Substitute (Norian CRS). Presented 69th Annual ASPS/PSEF/ ASMS Scientific Meeting, in Los Angeles, October 14-18, 2000.
65. Singh, D., Bartlett, S.P., Low, D.W., and **Kirschner, R.E.** Surgical Reconstruction of Pediatric Pressure Sores: Long-Term Outcome. Presented 69th Annual ASPS/PSEF/ ASMS Scientific Meeting, in Los Angeles, October 14-18, 2000.
66. Baker, S.B., Weinzweig, J., **Kirschner, R.E.**, and Bartlett, S.P. Applications of a new carbonated calcium phosphate bone cement: Early experience in pediatric and adult craniofacial reconstruction. Presented 69th Annual ASPS/PSEF/ ASMS Scientific Meeting, in Los Angeles, October 14-18, 2000.
67. Hwang, C., Karmacharya, J., Gordon, A.D., Ong, G., and **Kirschner, R.E.** Toward an Understanding of Non-Syndromic Craniosynostosis: Androgen Receptor Expression and the Influence of Androgen Stimulation on the Developing Calvarium. Presented at the 46th Annual Meeting of the Robert H. Ivy Society in Baltimore, MD. March, 2001.
68. Karmacharya, J., Ong, G., Hunenko, O., Losee, J.E., Gannon, F.H., Poser, R.D., Bartlett, S.P., and **Kirschner, R.E.** Repair of the Craniofacial Skeleton with a Calcium Phosphate Bone Mineral Substitute (Norian CRS): Effect of Skeletal Maturity on Long-Term Remodeling Capacity. Presented at the 46th Annual Meeting of the Robert H. Ivy Society in Baltimore, MD. March, 2001.
69. Gordon, A.D., Karmacharya, J., Ong, G., Hunenko, O., Losee, J.E., Gannon, F.H., Bartlett, S.P., and **Kirschner, R.E.** Repair of the Immature Craniofacial Skeleton with Norian CRS: Quantitative Assessment of Craniofacial Growth. Presented at the 46th Annual Meeting of the Robert H. Ivy Society in Baltimore, MD. March, 2001.
70. **Kirschner, R.E.**, Karmacharya, J., Ong, G.T., Gordon, A.D., Hunenko, O., Losee, J.E., Gannon, F.H., and Bartlett, S.B. Repair of the Immature Craniofacial Skeleton with a Calcium Phosphate Cement (Norian CRS): Quantitative Assessment of Craniofacial Growth. Presented at the 46th Annual Meeting of the Plastic Surgery

Research Council in Milwaukee, WI, June 11, 2001.

71. Hubert, D.M., Karmacharya, J., Gordon, A.D., Ong, G.T., and **Kirschner, R.E.** Molecular Basis of the Delay Phenomenon: Quantitative Analysis of VEGF Production in the Rat TRAM Model. Presented at the 46th Annual Meeting of the Plastic Surgery Research Council in Milwaukee, WI, June 11, 2001.
72. Hwang, C., Karmacharya, J., Gordon, A.D., Ong, G., and **Kirschner, R.E.** Toward an Understanding of Non-Syndromic Craniosynostosis: Androgen Receptor Expression and the Influence of Androgen Stimulation on the Developing Calvarium. Presented at the 58th Annual Meeting of the American Cleft Palate-Craniofacial Association in Minneapolis, MN, April 26, 2001.
73. Hunenko, O., **Kirschner, R.E.**, Minugh-Purvis, N., Cohen, M.A., Solot, C.B., McDonald-McGinn, D.M., Randall, P., Zackai, E.H., and LaRossa, D. Orofacial Manifestations of Stickler Syndrome: An Analysis of Speech Outcome and Facial Growth After Cleft Palate Repair. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Minneapolis, MN, April 26, 2001.
74. Schiffman, P., **Kirschner, R.E.**, Hung, Z., Bernick, S., LaRossa, D., Randall, P., McDonald-McGinn, D.M., Zackai, E.H., and Mayro, R. Oral Manifestations of the 22q11.2 Deletion Syndrome. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Minneapolis, MN, April 27, 2001.
75. **Kirschner, R.E.**, Solot, C.B., McDonald-McGinn, D.M., Randall, P., Zackai, E.H., and LaRossa, D. Speech Outcome After Cleft Palate Repair in Patients with a Chromosome 22q11.2 Deletion. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Minneapolis, MN, April 27, 2001.
76. Solot, C.B., Kirschner, R.E., Moss, E., McDonald-McGinn, D.M., Zackai, E.H., and Wang, P. Speech and Language Skills in School Age Children with 22q11.2 Deletion Syndrome. Presented at the 57th Annual Meeting of the American Cleft Palate-Craniofacial Association in Minneapolis, MN, April 27, 2001.
77. Schiffman, P., **Kirschner, R.E.**, Hung, Z., Bernick, S., LaRossa, D., Randall, P., McDonald-McGinn, D.M., Zackai, E.H., and Mayro, R. Oral Manifestations of the 22q11.2 Deletion Syndrome. Presented at the 9th International Congress on Cleft Palate and Related Craniofacial Anomalies in Gothenberg, Sweden, June 2001.
78. **Kirschner, R.E.**, Solot, C.B., McDonald-McGinn, D.M., Randall, P., Zackai, E.H., and LaRossa, D. Speech Outcome After Cleft Palate Repair in Patients with a Chromosome 22q11.2 Deletion. Presented at the 9th International Congress on Cleft Palate and Related Craniofacial Anomalies in Gothenberg, Sweden, June 2001.
79. **Kirschner, R.E.**, Low, D.W., Baker, S.B., Huang, K., Schultz, P.J., Bartlett, S.P., Randall, P., and LaRossa, D. Surgical Airway Management in Pierre Robin Sequence: Is There a Role for Tongue-Lip Adhesion? Presented at the 9th International Congress on Cleft Palate and Related Craniofacial Anomalies in

Gothenberg, Sweden, June 2001.

80. **Kirschner, R.E.**, Hunenko, O., Minugh-Purvis, N., Cohen, M.A., Solot, C.B., McDonald-McGinn, D.M., Randall, P., Zackai, E.H., and LaRossa, D. Orofacial Manifestations of Stickler Syndrome: An Analysis of Speech Outcome and Facial Growth After Cleft Palate Repair. Presented at the 9th International Congress on Cleft Palate and Related Craniofacial Anomalies in Gothenberg, Sweden, June 2001.
81. Karmacharya, J., Ong, G., Gordon, A.D., Hunenko, O., Losee, J.E., Gannon, F.G., Bartlett, S.P., and **Kirschner, R.E.** Repair of The Immature Craniofacial Skeleton with Norian CRSTM: Quantitative Assessment of Craniofacial Growth. Presented at the 18th Annual Meeting of the Northeastern Society of Plastic Surgeons in Philadelphia, PA, October 5, 2001.
82. **Kirschner, R.E.**, Cohen, M.A., Solot, C.B., Bartlett, S.P., McDonald-McGinn, D.M., Zackai, E.H., Randall, P., and LaRossa, D. Long-Term Speech Outcome After Cleft Palate Repair: Influence of Etiology. Presented at the 18th Annual Meeting of the Northeastern Society of Plastic Surgeons in Philadelphia, PA, October 6, 2001.
83. Losee, J.E., Karmachrya, J., Ong, G., Gordon, A.D., Hunenko, O., Gannon, F.G., Bartlett, S.P., and **Kirschner, R.E.** Craniofacial Reconstruction with a New Calcium Phosphate Bone Mineral Substitute (Norian CRS[®]): Interaction with Bioresorbable Mesh. Presented at the 18th Annual Meeting of the Northeastern Society of Plastic Surgeons in Philadelphia, PA, October 6, 2001.
84. Hubert, D.M., Karmacharya, J., Gordon, A.D., Ong, G., and **Kirschner, R.E.**, Molecular Basis of the Delay Phenomenon: Quantitative Analysis of VEGF Production in the Rat TRAM. Presented at the Presented 70th Annual ASPSP/SEF/ASMS Scientific Meeting in Orlando, FL, November 7, 2001.
85. **Kirschner, R.E.**, Zackai, E.H., Randall, P., Cohen, M.A., Solot, C.B., McDonald-McGinn, D.M., Bartlett, S.P., and LaRossa, D. Long-Term Speech Outcome after Cleft Palate Repair: Influence of Etiology. Presented at the 59th Annual Meeting of the American Cleft Palate-Craniofacial Association in Seattle, WA, May 1, 2002.
86. Slemp, A.E., Emanuel, B.S., Minugh-Purvis, N., LaRossa, D., Zackai, E.H., McDonald-McGinn, D.M., and **Kirschner, R.E.** Craniofacial Dysmorphology in 22q11.2 Deletion Syndrome: An Anthropometric Analysis. Presented at the 59th Annual Meeting of the American Cleft Palate-Craniofacial Association in Seattle, WA, May 2, 2002. *Winner: Paul W. Black Junior Investigator Award*
87. Singh, D., Slemp, A.E., **Kirschner, R.E.**, Cohen, M.A., Birgfeld, C., and LaRossa, D. Borderline Velopharyngeal Insufficiency after Cleft Palate Repair: What Happens Over Time? Presented at the 59th Annual Meeting of the American Cleft Palate-Craniofacial Association in Seattle, WA, May 3, 2002.
88. Slemp, A.E., Siddiqi, F., and **Kirschner, R.E.** Repair of Palatal Fistulas Using

- Acellular Dermal Grafts. Presented at the 47th Annual Meeting of the Plastic Surgery Research Council in Boston, MA, April 18, 2002.
89. Slemp, A.E., Sena-Esteves, M., Hwang, C., and **Kirschner, R.E.** Toward an Understanding of Non-Syndromic Craniosynostosis: Influence of Androgens on Fetal Dura and Calvarial Bone. Presented at the 47th Annual Meeting of the Plastic Surgery Research Council in Boston, MA, April 19, 2002.
 90. Russell, K., McDonald-McGinn, D.M., Drummond, D., Lamar, D., States, L., Schiffman, P., **Kirschner, R.E.**, Mayro, R., Tonnesen, M., Jacobs, I., and Zackai, E.H. Congenital Cervical Spine Abnormalities in the 22q11.2 Deletion. Presented at the Third International 22q11.2 Deletion Meeting in Rome, Italy, June 7, 2002.
 91. **Kirschner, R.E.**, Solot, C.B., McDonald-McGinn, D.M., Randall, P., Zackai, E.H., and LaRossa, D. Speech Outcome after Cleft Palate Repair in Patients with a Chromosome 22q11.2 Deletion. Presented at the Third International 22q11.2 Deletion Meeting in Rome, Italy, June 7, 2002.
 92. **Kirschner, R.E.**, Solot, C.B., Slemp, A.E., McDonald-McGinn, D.M., Emanuel, B.S., Zackai, E.H., and LaRossa, D. Aberrant Carotid Arteries Associated with 22q11.2 Deletions: Influence on Surgical Management of VPI. Presented at the Third International 22q11.2 Deletion Meeting in Rome, Italy, June 7, 2002.
 93. Schiffman, P., **Kirschner, R.E.**, Hung, Z., Bernick, S., LaRossa, D., McDonald-McGinn, D.M., Zackai, E.H., and Mayro, R. Oral Manifestations of the 22q11.2 Deletion. Presented at the Third International 22q11.2 Deletion Meeting in Rome, Italy, June 7, 2002.
 94. Slemp, A.E., Karmacharya, J., Bleier, B.S., and **Kirschner, R.E.**, Temporospatial Expression of Androgen Receptors in the Fetal Craniofacial Skeleton. Presented at the Clinical Congress of the American College of Surgeons in San Francisco, CA, October 7, 2002.
 95. Ketkar, M., Losee, J.E., Feldman, E., Singh, D., **Kirschner, R.E.**, Bartlett, S.P., Westesson, P. Radiographic Diagnosis of Nonsynostotic Occipital Plagiocephaly. Presented at the 41st Annual Meeting of American Society of Neuroradiology. Washington, DC. April 26-May 2, 2003.
 96. McDonald-McGinn, D.M., Catanzaro, J., Drummond, D., Jacobs, I., **Kirschner, R.E.**, LaRossa, D., Russell, K., Schiffman, P., Simon, E., States, L., Tamai, J., Tonneson, M., and Zackai, E.H. Cervical Spine Instability in Patients with the 22q11.2 Deletion. Presented at the 60th Annual Meeting of the American Cleft Palate-Craniofacial Association in Asheville, NC, April 10, 2003.
 97. **Kirschner, R.E.**, Slemp, A.E., Sidiqqi, F., Losee, J.E., and LaRossa, D. Repair of Oronasal Fistulae Using Acellular Dermal Matrices: Preclinical Studies and Clinical Case Series. Presented at the 60th Annual Meeting of the American Cleft Palate-

- Craniofacial Association in Asheville, NC, April 10, 2003.
98. Ruotolo, R.A., Veitia, N., McDonough, J, Corbin, A., McDonald-McGinn, D.M., Solot, C.B., Emanuel, B.S., Zackai, E.H., LaRossa, D., Arens, R., and **Kirschner, R.E.** Velopharyngeal Anatomy in 22q11.2 Deletion Syndrome: A Three-Dimensional Cephalometric Analysis. Presented at the 60th Annual Meeting of the American Cleft Palate-Craniofacial Association in Asheville, NC, April 11, 2003.
 99. Losee, J.E., Bartlett, S.P., Feldman, E., Ketkar, M., **Kirschner, R.E.**, Singh, D., and Westesson, P. Non-Synostotic Occipital Plagiocephaly: Radiographic Diagnosis of the “Sticky Suture.” Presented at the 60th Annual Meeting of the American Cleft Palate-Craniofacial Association in Asheville, NC, April 12, 2003.
 100. Kim, E.M., Ruotolo, R.A., Veitia, N., Lin, I., Nah, H.-D., and Kirschner, R.E. Influence of TGF-beta Isoforms on Fetal Dural Cell and Osteoblast Differentiation. Presented at the Annual Meeting of the Plastic Surgery Research Council in Las Vegas, NV, April, 2003.
 101. Veitia, N.A., Ruotolo, R.A., Lin, I., Kim, E., Sena-Esteves, M., Javazon, E.H., Nah, H.-D., and **Kirschner, R.E.** Influence of Dural Signaling on Fetal Osteoblast Proliferation and Differentiation. Presented at the Annual Meeting of the Plastic Surgery Research Council in Las Vegas, NV, April, 2003.
 102. Smartt, J.M., Lin, I.C., Kim, E., Ruotolo, R.A., Veitia, N.A., Crombleholme, T.A., and **Kirschner, R.E.** Hybrid constructs or craniofacial reconstruction: Sustained gene delivery using a demineralized bone matrix putty. Presented at the Annual Meeting of the Northeastern Society of Plastic Surgeons in Baltimore, MD, October 3, 2003.
 103. Ruotolo, R.A., Veitia, N., McDonough, J, Corbin, A., McDonald-McGinn, D.M., Solot, C.B., Emanuel, B.S., Zackai, E.H., LaRossa, D., Arens, R., and **Kirschner, R.E.** Velopharyngeal Anatomy in 22q11.2 Deletion Syndrome: A Three-Dimensional Cephalometric Analysis. Presented at the Annual Meeting of the American Academy of Pediatrics in New Orleans, LA, November 1, 2003.
 104. Smartt, J., Lin, I., , Hyun, G., Zderic, S., and **Kirschner, R.E.** Synergistic Action of Androgens and Dynamic Tensile Strain on Dural Cell Differentiation and TGF-b1 Expression. Presented at the 61st Annual Meeting of the American Cleft Palate-Craniofacial Association in Chicago, IL, March 18, 2004.
 105. Lin, I., Smartt, J., Nah, H.-D., Ischiropoulos, H., and **Kirschner, R.E.** Influence of Nitric Oxide on Proliferation and Differentiation of Fetal Dural Cells and Calvarial Osteoblasts. Presented at the 61st Annual Meeting of the American Cleft Palate-Craniofacial Association in Chicago, IL, March 18, 2004.
 106. Lin, I., Smartt, J., Nah, H.-D., Ischiropoulos, H., and **Kirschner, R.E.** Androgen-Induced Osteogenesis is Mediated by Nitric Oxide. Presented at the 49th Annual

- Meeting of the Plastic Surgery Research Council in Ann Arbor, MI, June 9-12, 2004.
107. Lin, I.C., Smartt, J.M., Ischiropoulos, H., and **Kirschner, R.E.** Intermittent Hydrostatic Compression Promotes Nitric Oxide Production and Osteodifferentiation of Fetal Dural Cells. Presented at the 21st Annual Meeting of the Northeastern Society of Plastic Surgeons in Naples, FL, January 20, 2005.
 108. Cabiling, David, Kim, E., Yan, D., Jacob, S., Nah, D., **Kirschner, R.E.**, The Differential Effect of TGF β Isoforms on Fetal Dural Cell and Calvarial Osteoblast Differentiation and Proliferation. Presented at the 51st Annual Meeting of the Robert H. Ivy Society in King of Prussia, PA, April 16, 2005.
 109. Tjoa, S, Lee, K.-J., **Kirschner, R.E.**, and Nah, H.-D. Direct/Indirect Effects of a Crouzon Mutation (C278F-FGFR2) on Cranial Base and Suture Development. Presented at the 51st Annual Meeting of the Robert H. Ivy Society in King of Prussia, PA, April 16, 2005.
 110. Jacob, S., Freeman, T., Yan, D., Cabiling, D., Shapiro, I., and **Kirschner, R.E.** Fetal Head Constraint Decreases Apoptosis and Osteoclast Activity in Cranial Sutures. Presented at the 51st Annual Meeting of the Robert H. Ivy Society in King of Prussia, PA, April 16, 2005.
 111. Ruotolo, R.A., Solot, C.B., LaRossa, D., and **Kirschner, R.E.** Management of VP Dysfunction in 22q11.2 Deletion (Velocardiofacial) Syndrome: Optimizing Surgical Outcome. Presented at the 51st Annual Meeting of the Robert H. Ivy Society in King of Prussia, PA, April 16, 2005.
 112. Yan, D., Cabiling, D.S., Jacob, S., Ruotolo, R.A., Veitia, N.A., Nah, H.-D., and **Kirschner, R.E.** Soluble Mediators Produced by Fetal Dural Cells and Calvarial Osteoblasts Stimulate Proliferation and Inhibit Osteodifferentiation of Mesenchymal Stem Cells. Presented at the 50th Annual Meeting of the Plastic Surgery Research Council in Toronto, ON, May 20, 2005.
 113. Cabiling, D., Kim, E., Yan, D., Jacob, S., Nah, H.-D., and **Kirschner, R.E.**, The Differential Effect of TGF β Isoforms on Fetal Dural Cell and Calvarial Osteoblast Differentiation and Proliferation. Presented at the 50th Annual Meeting of the Plastic Surgery Research Council in Toronto, ON, May 20, 2005.
 114. Cabiling, D.S., Espinel, C.F., Nah, H.-D., and **Kirschner, R.E.** Intermittent Hydrostatic Compression Promotes Osteodifferentiation of Neonatal Dural Cells. Presented at the 51st Annual Meeting of the Plastic Surgery Research Council in Dana Point, CA, May 19, 2006.
 115. Espinel, C.F., Cabiling, D.S., Nah, H.-D., and **Kirschner, R.E.** Compression-Induced Osteodifferentiation of Neonatal Dura: Role of FGF2/FGFR Signaling. Presented at the 51st Annual Meeting of the Plastic Surgery Research Council in Dana Point, CA, May 20, 2006.

116. Ruotolo, R.A., Espinel, C.F., LaRossa, D., and **Kirschner, R.E.** Lip Adhesion and Nasal Conformers: Staging Cleft Lip Repair to Optimize Outcome. Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 5, 2006.
117. Cabiling, D. and **Kirschner, R.E.** Cleft Repair in Hay Wells Syndrome. Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 5, 2006.
118. Cabiling, D., Espinel, C.F., Nah, H.-D., and **Kirschner, R.E.** Intermittent Hydrostatic Compression of Neonatal Dural Cells Promotes FGF2 Production and Osteodifferentiation. Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 6, 2006. *Winner: Paul Black Junior Investigator Award.*
119. McDonald-McGinn, D.M., **Kirschner, R.E.**, Solot, C.B., Glick, P., Sullivan, K., Driscoll, D., Emanuel, B.S., Pasquariello, P., Mayro, R., Randall, P., LaRossa, D., and Zackai, E.H. The 22q11.2 Deletion: Hear Hoofbeats-Think Zebras! Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 7, 2006.
120. Minugh-Purvis, N., Glick, P., Kim, S., **Kirschner, R.E.**, Low, D., and LaRossa, D. Early Childhood Facial Growth and Symmetry in Children with Non-Syndromic Cleft Lip and Palate Treated with Nasoalveolar Molding. Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 7, 2006.
121. Jacob, S., Cabiling, D., Yan, D., Rozycka, M., Freeman, T., and **Kirschner, R.E.**, Fetal Head Constraint Decreases Apoptosis and Osteoclast Activity in Cranial Sutures. Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 5, 2006.
122. Ruotolo, R.A., Espinel, C.F., Solot, C., McDonald-McGinn, D.M., Zackai, E.H., and **Kirschner, R.E.** Velar Motion and VPI Treatment Outcomes in 22q11.2 Deletion Syndrome. Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 8, 2006.
123. Cabiling, D., Jackson, O., Solot, C., Cohen, M., McDonald-McGinn, D.M., Zackai, E.H., and **Kirschner, R.E.** Outcomes in Posterior Pharyngeal Flap Surgery for Treatment of VPI in 22q11.2 Deletion Syndrome. Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 8, 2006.
124. Jackson, O., Hammoudeh, Z., **Kirschner, R.E.**, Solot, C., Cohen, M., Randall, P., and LaRossa, D. The Children's Hospital of Philadelphia Modification of the Furlow Double-Opposing Z-Palatoplasty: 10 Year Speech Outcomes. Presented at the 63rd

- Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 8, 2006.
125. Cabiling, D., Jackson, O., LaRossa, D., and **Kirschner, R.E.** Comparison of Morbidity of Standard Superiorly-Based, Lined Posterior Pharyngeal Flaps with Wide/Subobstructing Posterior Pharyngeal Flaps. Presented at the 63rd Annual Meeting of the American Cleft Palate-Craniofacial Association in Vancouver, B.C., April 8, 2006.
 126. Cabiling, D.S., Espinel, C.F., Nah, H.-D., and **Kirschner, R.E.** Intermittent Hydrostatic Compression Promotes Osteodifferentiation of Neonatal Dural Cells. Presented at the Combined Annual Meeting of the Ohio Valley and Robert H. Ivy Societies of Plastic Surgeons in Pittsburgh, PA, June 2, 2006.
 127. Ruotolo, R.A., Espinel, C.F., Solot, C.B., McDonald-McGinn, D.M., Zackai, E.H., and **Kirschner, R.E.** Velar Motion and VPI Treatment Outcomes in 22q11.2 Deletion Syndrome. Presented at the Combined Annual Meeting of the Ohio Valley and Robert H. Ivy Societies of Plastic Surgeons in Pittsburgh, PA, June 2, 2006.
 128. Jackson, O., Hammoudeh, Z., **Kirschner, R.E.**, Solot, C.B., Cohen, M.A., Randall, P., and LaRossa, D. The Children's Hospital of Philadelphia Modification of the Furlow Double-Opposing Z-Plasty: Long-Term Outcomes. Presented at the Combined Annual Meeting of the Ohio Valley and Robert H. Ivy Societies of Plastic Surgeons in Pittsburgh, PA, June 2, 2006.
 129. Cabiling, D., Jackson, O., LaRossa, D., and **Kirschner, R.E.** Comparison of Morbidity of Superiorly-Based, Lined Posterior Pharyngeal Flaps with Wide/Subobstructing Posterior Pharyngeal Flaps. Presented at the Combined Annual Meeting of the Ohio Valley and Robert H. Ivy Societies of Plastic Surgeons in Pittsburgh, PA, June 2, 2006.
 130. Spivak RM, Endo M, Zoltick PW, Zajac A, Ang BU, Horn RB, Flake AW, **Kirschner RE**, Nah HD. In Utero Gene Delivery For Rescue of Cleft Palate in a TGF- β 3 Knockout Mouse. Presented at the 53rd Annual Combined Meeting of the Robert H. Ivy Society of Plastic Surgeons and John Staige Davis Society of Plastic Surgeons in Hershey, PA, March 31st, 2007.
 131. Spivak RM, Endo M, Kim SG, Zajac A, Horn RB, Ang BU, Zoltick PW, Flake AW, **Kirschner RE**, Nah HD. Transduction Kinetics and Localization of Adenovirus and Lentivirus Encoded Protein In Mouse Embryonic Palatal Shelves.
 132. Zajac, A, Cabiling, DS, Salhab, I, Lee, S-H, Choi, Y, **Kirschner, RE**, and Nah, H-D. The Role of Pyrophosphate and ANK in Craniofacial Bone Remodeling. Presented at the 64th Annual Meeting of the American Cleft Palate-Craniofacial Association, Broomfield, CO, April 23rd-28th, 2007.
 133. Elliott, RM, Jackson, O, Chen, E, Minugh-Purvis, N, Mayro, R, **Kirschner, RE**,

- Bartlett, SP, Low, DW, Randall, P, and LaRossa, D. Anthropometric Measurement of Mandibular Growth of Children with Pierre Robin Sequence. Presented at the 64th Annual Meeting of the American Cleft Palate-Craniofacial Association, Broomfield, CO, April 23rd-28th, 2007.
134. Afifi, AM, Smith, D, Deleyiannis, F, Jiang, S, Mooney, MP, Vecchione, L, Ford, M, **Kirschner, RE**, MacKay, D, Boustred, M, and Losee, JE. PLAN Score: Pennsylvania Lip and Nose Scoring System for Cleft Lip and Nose Deformities. Presented at the 64th Annual Meeting of the American Cleft Palate-Craniofacial Association, Broomfield, CO, April 23rd-28th, 2007.
 135. Ang BU, Horn RB, Spivak RM, Cabiling D, Zajac A, Nah HD, **Kirschner RE**. FGFR2 Mutations in Dural Cells Influence Calvarial Osteoblast Proliferation and Differentiation. Presented at the 64th Annual Meeting of the American Cleft-Palate Craniofacial Association, Broomfield, CO, April 23-28, 2007.
 136. Ang BU, Horn RB, Spivak RM, Nah HD, **Kirschner RE**. Osteodifferentiation of Mesenchymal Stem Cells Induced by Altered FGFR2 Signaling in Dural Cells. Presented at the 86th Annual Meeting of the American Association of Plastic Surgeons, May 19-22, 2007, Coeur d'Alene, Idaho.
 137. Spivak RM, Endo M, Zoltick PW, Zajac A, Ang BU, Flake AW, **Kirschner RE**, Nah HD. In Utero Delivery Of Adenovirus Encoded TGF- β 3 Rescues Cleft Palate In A TGF- β 3 Knockout Mouse. Presented at the 10th Anniversary Annual Meeting of the American Society of Gene Therapy, Seattle, WA, May 30-June 3, 2007.
 138. Ang BU, Horn RB, Spivak RM, Nah HD, **Kirschner RE**. FGFR2 Mutations in Neonatal Dural Cells Influence Osteodifferentiation of Mesenchymal Stem Cells. Presented at the 52nd Annual Meeting of the Plastic Surgery Research Council, Stanford, CA, June 20-23, 2007,
 139. Spivak RM, Endo M, Zoltick PW, Zajac A, Ang BU, Horn RB, Flake AW, **Kirschner RE**, Nah HD. In Utero Gene Delivery of Virally Encoded TGF- β 3 Rescues Cleft Palate In A TGF- β 3 Knockout Mouse. Presented at the XII Biennial International Congress of the International Society of Craniofacial Surgery, Salvador, Bahia, Brazil, August 23rd-25th, 2007.
 140. Ang BU, Spivak RM, Horn RB, Nah HD, **Kirschner RE**. FGFR2 Mutations in Neonatal Dural Cells Promote Osteodifferentiation of Mesenchymal Stem Cells. Presented at the XII Biennial International Congress of the International Society of Craniofacial Surgery, Salvador, Bahia, Brazil, August 23rd-25th, 2007.
 141. Horn, RB, Ang, BU, Spivak, RM, Radu, A; Nah, HD; **Kirschner, RE**. Osteogenic Induction of Dural Cells in an Acellular Dermal Matrix. Presented at the XII Biennial International Congress of the International Society of Craniofacial Surgery, Salvador, Bahia, Brazil, August 23rd-25th, 2007.
 142. Spivak RM, Endo M, Zajac A, Zoltick PW, Ang BU, Horn RB, Flake AW,

- Kirschner RE**, Nah HD. In Utero Gene Delivery Rescues Cleft Palate in the TGF- β 3 Knockout Mouse. Presented at the 24th Annual Meeting of the Northeastern Society of Plastic Surgeons, Southampton, Bermuda, October 3-7, 2007.
143. Spivak RM, Endo M, Zajac A, Zoltick PW, Ang BU, Horn RB, Flake AW, **Kirschner RE**, Nah HD. In utero gene delivery of adenovirus encoded TGF-beta3 restores physiologic palatal fusion and rescues cleft palate in a TGF-beta3 knockout mouse. Presented at the 93rd Annual Clinical Congress of the American College of Surgeons, New Orleans, LA, October 7-11, 2007.
144. Ang BU, Horn RB, Spivak RM, Nah HD, **Kirschner RE**. Dural Cells With FGFR2 Mutations Promote Osteogenic Differentiation. Presented at the Surgical Forum of the 93rd Annual Clinical Congress of the American College of Surgeons, New Orleans, LA, October 7-11, 2007.
145. Spivak RM, Endo M, Zajac A, Zoltick PW, Lakin G.E., Flake AW, **Kirschner RE**, Nah HD. In Utero Gene Delivery of Virally Encoded TGF- β 3 Rescues Cleft Palate in the TGF- β 3 Knockout Mouse. Presented at the 87th Annual Meeting of the American Association of Plastic Surgeons, Boston, MA, April, 2008.
146. Lakin GE, Spivak RM, Zajac A, Dienno JJ, Davis PF, Zoltick PW, **Kirschner RE**, Nah HD. Adenovirus Encoding the IRF6 Gene Partially Rescues the Fusion Defect in a TGF-beta3-/- Mouse Embryonic Palatal Organ Culture. Presented at the 65th Annual Meeting of the American Cleft Palate-Craniofacial Association in Philadelphia, PA, April 14-18th, 2008.
147. Horn, R., Ang, B., Radu, A., Setzer, F. Nah, H.-D., and **Kirschner, R.E.** Osteogenic Induction Of Dural Cells In An Acellular Dermal Matrix. Presented at the 65th Annual Meeting of the American Cleft Palate-Craniofacial Association in Philadelphia, PA, April 14-18th, 2008.
148. Spivak RM, Endo M, Zajac A, Zoltick PW, Lakin G.E., Flake AW, **Kirschner RE**, Nah HD. In Utero Gene Delivery of Virally Encoded TGF- β 3 Rescues Cleft Palate in the TGF- β 3 Knockout Mouse. Presented at the 65th Annual Meeting of the American Cleft Palate-Craniofacial Association in Philadelphia, PA, April 14-18th, 2008. *Winner: Paul Black Junior Investigator Award.*
149. Lakin GE, Zoltick PW, Zajac A, **Kirschner RE**, Nah HD. The Molecular Regulation of Palatogenesis: Adenovirus-Mediated IRF6 Transduction of the Medial Edge Epithelium Rescues the Fusion Defect of the TGF-beta3-/- Mouse Palate in Organ Culture. Presented at the 25th Annual Meeting of the Northeastern Society of Plastic Surgeons in Philadelphia, PA, October 2-5, 2008.
150. Wu, C., Yang, B.H., Salhab, I., Kirschner, R.E., and Nah, H.-D. IRF6 as a Downstream Effector of Signaling in Palatogenesis: In Utero Somatic Delivery of Ad-IRF6 Rescues the Palatal Fusion Defect in TGF-b3 KO Mice. Presented at the 67th Annual Meeting of the American Cleft Palate-Craniofacial Association in Ft. Worth, TX, March 18, 2010. *Winner: Paul Black Junior Investigator Award.*

151. Lakin, G.E., Salhab, I., Dienno, J.J., Zoltick, P.W., Kallewaard, N.L., Bergelson, J.M., Kirschner, R.E., Nah, H.-D. Detection of a Target Receptor for Adenoviral Mediated Gene Delivery to the Palate: The Coxsackievirus and Adenovirus Receptor (CAR). Presented at the Annual Meeting of the American Association of Plastic Surgeons in San Antonio, TX, March 20-23, 2010. *Winner: Third Place Poster Award.*
152. Wu, C., Yang, B.H., Salhab, I., Kirschner, R.E., and Nah, H.-D. IRF6 as a Downstream Effector of Signaling in Palatogenesis: In Utero Somatic Delivery of Ad-IRF6 Rescues the Palatal Fusion Defect in TGF- β 3 KO Mice. Presented at the Annual Meeting of the American Association of Plastic Surgeons in San Antonio, TX, March 20-23, 2010. *Winner: First Place Poster Award.*

Book Chapters

1. **Kirschner, R.E.** and Fantini, G.A. Role of neutrophils. In *Reperfusion Injury of Skeletal Muscle*. Fantini, G.A., Editor. Austin, TX: R.G. Landes Company, 1994.
2. Gordon, A.D. and **Kirschner, R.E.** Benign Parotid Tumors. In *eMedicine Journal: Plastic Surgery*. Aly ,A., Downey, S., Furnas, D.W., and Vistnes, L.M., Eds <http://www.emedicine.com>, 2001.
3. Karmacharya, J. and **Kirschner, R.E.** Cleft Lip. In *eMedicine Journal: Plastic Surgery*. Aly ,A., Downey, S., Furnas, D.W., and Vistnes, L.M., Eds. <http://www.emedicine.com>, 2001.
4. **Kirschner, R.E.** Palatal Anomalies in 22q11.2 Deletion Syndrome. In *Velocardiofacial Syndrome: Understanding Microdeletion Disorders*, Murphy, K. and Scambler, P., Eds. Cambridge:Cambridge University Press, 2005.
5. Ruotolo, R.A., and **Kirschner, R.E.** Surgical Management of Velopharyngeal Dysfunction. In *Cleft Lip and Palate*, Second Edition, Berkowitz, S., Ed. Springer, 2005.
6. Ruotolo, R.A., and **Kirschner, R.E.** Velopharyngeal Insufficiency. In *Current Reconstructive Surgery*, Serletti, J.M. and Losee, J.E., Eds., New York: McGraw-Hill, *in preparation*.
7. Kaye A.E. and **Kirschner, R.E.** Pierre Robin Sequence. In *Comprehensive Cleft Care*, Losee, J.E. and Kirschner, R.E., Eds., New York: McGraw-Hill, 2008.
8. Jiang, S., Losee, J.E., and **Kirschner, R.E.** Cleft Lip Adhesion. In *Comprehensive Cleft Care*, Losee, J.E. and Kirschner, R.E., Eds., New York: McGraw-Hill, 2008.

9. LaRossa, D, Low, D.W., and **Kirschner, R.E.** The Children's Hospital Modification of the Furlow Z-Palatoplasty. . In *Comprehensive Cleft Care*, Losee, J.E. and Kirschner, R.E., Eds., New York: McGraw-Hill, 2008.
10. **Kirschner, R.E.** and Nah, H.-D. Craniofacial Growth: Genetic Basis and Morphogenetic Process in Craniosynostosis. In *Plastic Surgery*, Guyuron, B., Ed. London: Elsevier, 2009, pp. 317-330.

Books Edited

1. Losee, J.E. and **Kirschner, R.E.**, Eds. *Comprehensive Cleft Care*. New York: McGraw Hill, 2008.