

## **Dr. Marinho Del Santo, Jr.**

### **Orthodontist and Researcher**

#### **Personal**

Date of birth: July 29, 1967  
Place of birth: São Paulo, Brazil  
RG (SSP-SP): 18.340.006-9  
CPF: 136.450.128-77  
Citizenship: Brazilian/Italian  
Wife's Name: Flavia Yazbek Del Santo  
Languages: Portuguese, English, Spanish

#### **Education**

- 1985 - 1989 - Doctor of Dental Surgery - University of São Paulo, SP, Brazil
- 1992 - 1994 - Master of Science - Paulista Medicine School, São Paulo, SP, Brazil
- 1995 - 1997 - Postdoc Fellowship - Baylor College of Dentistry, Dallas, TX, USA
- 1997 - 1999 - Master of Science in Dentistry and Certificate in Orthodontics – Baylor College of Dentistry, Dallas, TX, USA
- 1995 - 1999 - Ph.D. - Biomedical Sciences Institute, University of São Paulo, SP, Brazil

#### **Membership**

International Member of the American Association of Orthodontics

#### **Certification**

National Board Dental Examination Certified – American Dental Association

#### **Award**

- "Faculty Achievement Award"  
Baylor College of Dentistry, Dallas, TX, USA.

#### **I - Clinical Duty**

- **Clínica Del Santo S/S Ltda.**  
Orthodontist and Clinic Director  
  
R. Eng. Antônio Jovino 220, Suite 34  
Morumbi – Zip Code: 05727-220  
São Paulo - SP  
Fone/Fax: (011) 3746-8001  
[marinho@delsanto.com.br](mailto:marinho@delsanto.com.br)

#### **II - Corporative Duty**

- **BioLogique® S/S Ltda.**  
Research Consultant  
[marinho@biologique.com.br](mailto:marinho@biologique.com.br)

**Product:**

- **Decodify® System:** In order to avoid demand inducement by associated orthodontists of dental insurance companies.

Proprietary technology (Oracle® framework).

**III – Research Duty**

- Researcher, Medicine School, University of São Paulo, Clínicas Hospital, Department of Infectious Diseases.

***In Progress Project***

- Reconstituição Imunológica Parcial da Mucosa Oral de Pacientes HIV+1 Após Submissão à HAART. Possíveis Interações entre Células Dendríticas [CD1a<sup>+</sup>] e Linfócitos T [CD4<sup>+</sup>], [CD8<sup>+</sup>] e [CD45RO<sup>+</sup>]. Declínio de Infecção Oportunista por *Candida albicans*.

**IV - Academic Duties**

- American Journal of Orthodontics and Dentofacial Orthopedics (AJO-DO)  
Reviewer - September 2001 – Invited by Dr. David L. Turpin, DDS, MSD, Editor-in-Chief
- The Angle Orthodontist (Angle Orthod), Reviewer – December 2007 – Invited by Dr. Robert J. Isaacson, DDS, MSD, PhD, Editor-in-Chief.
- Revista Dental Press de Ortodontia e Ortopedia Facial – October 2008 – Invited by Dr. Jorge Faber, DDS, PhD, Editor-in-Chief.
- Assistant Researcher – Volunteer – Infection Diseases Department – School of Medicine, University of São Paulo, SP.
- GLPA-SI: Paraconsistent Logics Applied Intelligent Systems, University Santa Cecília, Santos, SP.

**V - Scientific Production**

**Revision-Orthodontics: *American Journal of Orthodontics and Dentofacial Orthopedics***

- Effects of dental tipping and rotation resulting from surgically assisted rapid palatal expansion.
- Reliability of a new computerized method for the identification of cephalometric landmarks.
- The Effect of Vertical Chincap Therapy on the G-Axis: the Growth Axis of the Mandible.

- Assessment of Anterior Face Height in a Native African Sample.
- Cephalometric Parameters Affecting Anterior Open Bite.
- Long-Term Maxillary Changes in Skeletal Class II Treated with Slow and Rapid Palatal Expansion.
- Comparison of Hand-Traced and Computerized Cephalograms: Landmark Identification, Measurement and Superimposition Accuracy.
- Dental and Skeletal Base Relationship Evaluation: a Different Approach.
- Periodontal Impact of Surgically Induced Dental Lesions in Mandibular Osteodistraction.
- Cephalometric Norms of Japanese and Differences in Growth Prediction.
- Maxillary Reference Plane for Three-Dimensional Cephalometric Analysis using Computerized Tomography Imaging.
- Pi Analysis: A New Cephalometric Analysis for Anteroposterior Discrepancy.
- Validity of Angular and Linear Measurements in Digital Vs. Conventional Cephalometric Analyses.
- Evaluation of Inter-Observer Agreement for the Discrepancy Index (DI).
- Different Skeletal Types Underlying Class III Malocclusion in a Random Population.
- A Cephalometric Comparison of Two Intraoral Molar Distalization Appliances: Bimetric Versus Pendulum.
- Cephalometric Analysis of Sagittal Discrepancies Using the Beta Angle on African-American Patients.
- Three-Dimensional Soft Tissue Analysis for the Evaluation of Facial Asymmetry: Development of Diagnostic Standard Values.
- Association of Dentoskeletal Morphology with Incisor Inclination in Angle Class II Patients. A Cephalometric Study.
- Associations Between the Craniofacial Morphology, Head Posture and Cervical Vertebral Body Fusions in Males with Sleep Apnea.
- Agreement Evaluation of a Newly Proposed System for Malocclusion Classification.
- Assessment of the Three Dimensional Condylar and Dental Positional Relationships in CR/MIC Shifts.
- Cephalometric Evaluation of Maxillary sinus Sizes in Different Malocclusion Groups.
- A Cephalometric Study to Assess Familial Phenotype of Mandibular Prognathism (Class III Malocclusion).
- The reliability of On-screen Estimated Natural Head Position of Conventional Cephalograms and Cephalograms Derived From Cone Beam CT Images.

- A new consideration in headgear force system: 3D analysis using finite element method.

### **Revision-Orthodontics: *The Angle Orthodontist***

- Geometrical Influence of the Sagittal and Vertical Apical Base Relationship on ANB Angle.

### **Abstracts**

- A Morphologic Study of the Midpalatal Suture in Human Fetuses. Del Santo, Jr., M; Minarelli, AM; Liberti, EA. AAO, San Francisco, May 1995.
- Interdependence of the size of the anterior base of the skull, maxillary base and maxillary alveolar base. Del Santo, Jr., M; Minarelli, AM; Villi, ER; Liberti, EA; Matson, E. AAO, Denver, May 1996.
- Decorin in Mandibular Condylar Cartilage and Articular Cartilage: Maturation-Associated Differences. Hinton, RJ; Marches, F; Del Santo, Jr., M; Fuentes, MA. IADR, Orlando, March 1997.
- Tissue Distribution of Decorin in Mandibular Condylar Cartilage. Del Santo, Jr., M; Hinton, RJ. AAO, Philadelphia, May 1997.
- Counterbalancing Proportion During Childhood and Adolescence. Del Santo, Jr., M; Santos-Pinto, A; Buschang, PH. AAO, Dallas, May 1998.
- Decorin in Mandibular Condylar Cartilage Following Discectomy. Hinton, RJ; Marches, F; Del Santo, Jr., M; Fuentes, MA. IADR, Nice, France, June 1998.
- Evaluation by Immunohistochemical Method of the Growing Mandibular Condylar Process of Rats Submitted to Hyperpropulsor Appliance Twin block-like. Del Santo, Jr., M; Boldrini, SC; Azeredo, RA; Lemos, JLR; Liberti, EA. X Meeting of the Cell Biology Brazilian Society, Santos, SP, Brazil, October 1999.
- Mid-Symphyseal Distraction Osteogenesis for Correcting Transverse Mandibular Deficiency. Gandini, Jr. LG, Del Santo Jr., M. AAO, Toronto, Canada, May 2001.
- Degree of Agreement between Radiographic Evaluation and Periodontal Probing with Direct Surgical Assessment of the Bone Level of Palatally Erupted Lateral Incisors. Garducci MG, Lino AP, Del Santo Jr., M. AAO, Toronto, Canada, May 2001.
- Pain Prevalence in TMD Patients: Retrospective Descriptive Study. Uehara N, Bastidas GG, Guimarães AS, Del Santo, Jr., M. IADR, Göteborg, Sweden, June 2003.
- Diagnóstico de Disfunções do Crescimento Craniofacial através de Inteligência Artificial. Mario MC, Ortega N, Del Santo Jr. M, Massad E. Santos, São Paulo, Outubro de 2003.
- Paraconsistent Artificial Neural Network: an Application in Cephalometric Analysis. Abe JM, Mario MC, Ortega NRS, Del Santo, Jr., M. Logic Based Intelligent Information Systems, KES 2005, Melbourne, Australia, September 2005.

- Efeitos da desnutrição proteica sobre músculos e estruturas cartilaginosas do crânio responsáveis pelo crescimento. Boldrini SC; Oliveira F; Del Santo, Jr., M; Liberti EA. Congresso do Instituto de Ciências Biomédicas 4:52, 2005.
- Uso de Redes Neurais Artificiais Paraconsistentes Para Aproximação Funcional. Laptex 2007, Santos, SP, Brazil, July 2007.
- Diagnóstico Cefalométrico Eletrônico: Contextualização de Variáveis Cefalométricas. OrtoSPO, São Paulo, SP, Brazil, October 2008.

#### **Reader's Forum – American Journal of Orthodontics and Dentofacial Orthopedics**

- Board certification differentiates professionals. Marinho Del Santo Jr. 2001;120(6):13 A.
- Different logic might provide new answers. Marinho Del Santo Jr. 2003;123(1):19A
- Biomechanical FEM evaluation of distraction osteogenesis. Marinho Del Santo Jr. 2004;126(2):19A-20A.

#### **ABO – Associação Brasileira de Odontologia, Seccional São Paulo**

- Ortodontia no Brasil. Marinho Del Santo Jr. 27:18,2009.

#### **Published Papers**

- The Structure of the Human Temporomandibular Joint Disc: A Scanning Electron Microscopy Study. Minarelli, AM; Del Santo, Jr., M; Liberti, EA. Journal of Orofacial Pain 11(2): 95-100, 1997.
- Morphological aspects of the mid-palatal suture in the human foetus: a light and scanning electron microscopy study. Del Santo, Jr, M; Minarelli, AM; Liberti, EA. European Journal of Orthodontics 20(1): 93-99, 1998.
- Age-Associated Changes in Decorin in the Mandibular Condylar Cartilage. Del Santo, M; Marques, F; Ng, M; Hinton, RJ. Archives Oral Biology 45:485-493, 2000.
- Long-term skeletal and dental effects of mandibular midsymphiseal distraction osteogenesis. Del Santo, Jr. M; Guerrero CA; Buschang PH; English JD; Samchukov ML; Bell WH. American Journal of Orthodontics and Dentofacial Orthopedics, 118:485-493, 2000.
- Effects of cervical headgear and edgewise appliances on growing patients. Gandini, MR; Gandini, LG; Martins, JCR; Del Santo, Jr., M. American Journal of Orthodontics and Dentofacial Orthopedics 119:531-539, 2001.
- Midsymphiseal Distraction Osteogenesis for Correcting Transverse Mandibular Discrepancies. Del Santo, Jr., M; Wolford, LM; English, JD; Gandini, Jr., LG. American Journal of Orthodontics and Dentofacial Orthopedics 121:629-638, 2002.

- Avaliação morfométrica do crescimento da cartilagem do processo condilar da mandíbula de ratos submetidos ao aparelho hiperpropulsor "twin block like". Del Santo, Jr., M; Boldrini SC; Ferreira AC; Liberti EA. *Ortodontia* 35:8-14, 2002.
- Distração Osteogênica Sinfiseana para Correção de Discrepâncias Mandibulares Transversais. *Dental Press* 7:71-80, 2002.
- Morphoquantitative study of aging of the guinea pig's myenteric plexus column. Del Santo, Jr., M; Liberti EA. *Rev. Chilena de Anatomia* 20:125-130, 2002.
- Buccolingual inclinations of posterior teeth in subjects with different facial patterns. Janson G, Bombonatti R, Cruz KS, Hassunuma CY, Del Santo, Jr. M. *American Journal of Orthodontics and Dentofacial Orthopedics* 125:316-22; 2004.
- Alterações no perfil dos lábios de pacientes submetidos a cirurgias ortognáticas maxilares to tipo Le Fort I. Del Santo LM; Souza RP; Del Santo Jr. M; Marcantonio E. *R Dental Press Ortod Ortop Facial* 9:1-15, 2004.
- Fuzzy Modeling in Wits, ANB and Y-Axis Scores. Del Santo Jr. M; Ortega N, Mário MC, Abe JM. *Theory of Science and Logic, Institute of Advanced Studies, USP, Issue 55, October 2004.*
- Assessment of Cephalometric Variables Using Paraconsistent Artificial Network. Abe JM, Ortega NRS, Mario MC, Del Santo M, Jr. *Institute of Advanced Studies, USP, Issue 59, April 2005.*
- Influence of Occlusal Plane Inclination on ANB and Wits Assessments of Anteroposterior Jaw Relationships. Del Santo, Jr., M. *American Journal of Orthodontics and Dentofacial Orthopedics*; 129:641-648, 2006.
- Aplicação das Redes Neurais Artificiais Paraconsistentes na Análise de Variáveis Craniométricas para Diagnóstico de Maloclusão. Abe JM, Mário MC, Del Santo, Jr., M, Ortega NRS. *Revista Seleção Documental: Inteligência Artificial e Novas Tecnologias* 8:15-20, 2007.
- Inter-Relação entre o Perfil dos Lábios Superiores e a Posição da Maxilla e dos Incisivos Superiores em Pacientes Adultos. Del Santo LM; Bachega MA, Del Santo, Jr., M. *Dental Press. In Press, 2007.*
- Diagnóstico Cefalométrico Eletrônico: Contextualização de Variáveis Cefalométricas. Del Santo M, Jr., Del Santo LM. *In Press, 2008.*
- Sistema Decodify<sup>®</sup>: Mensuração de Risco como Ferramenta Administrativa para Clínica Ortodôntica, Del Santo, Jr., M., Del Santo, LM. *In Press, 2009.*
- Caso Clínico: Diagnóstico: Palavra-Chave para Ortodontia. Del Santo M, Jr., Del Santo LM. *In Press, 2009.*

### **Books - Chapters**

- Why to Consider Craniofacial Growth? Orto 2006 Meeting, Paulista Orthodontic Society, 30 pages, São Paulo, SP.

- Decodify: Electronic Cephalometric Diagnosis. Orto 2008 Meeting, Paulista Orthodontic Society, 8 pages, São Paulo, SP.

### **Theses**

- Morphological aspects of the mid-palatal suture in the human foetus: a light and scanning electron microscopy study. Master of Science Thesis - Department of Morphology -Paulista Medical School, São Paulo, SP, Brazil, 1994.
- Effects of the Twin-Block-like appliance in mandibular condyles of growing rats. Ph.D. Thesis - Department of Anatomy - Biomedical Sciences Institute - University of São Paulo, SP, Brazil, 1999.
- Long-term skeletal and dental effects of mandibular midsymphyseal distraction osteogenesis. Master of Science in Dentistry Thesis - Department of Orthodontics - Baylor College of Dentistry, Dallas, Texas, 1999.

### **Lectures**

- One-year skeletal and dental effects of mandibular midsymphyseal distraction osteogenesis. Moyers Symposium, Ann Arbor, Michigan, February 2000. Invited by Dr. James McNamara, Jr. (University of Michigan, MI).
- Mandibular Growth: A Clinical Approach. São José dos Campos, São Paulo, Brazil, February 2000.
- Mandibular Growth: A Clinical Approach. Araraquara, São Paulo, Brazil, April 2000.
- One-year skeletal and dental effects of mandibular midsymphyseal distraction osteogenesis. Bauru, São Paulo, Brazil, May 2000.
- Del Santo Cephalometric Analysis  
Araraquara Dental School (FOA-UNESP), São Paulo, Brazil, October 2000.
- Cephalometric Analysis  
Maxillary Growth: A Judicious Approach  
Mandibular Growth: A Judicious Approach.
- Distraction Osteogenesis  
Fortaleza, Ceará, Brazil, March 2001.
- 102<sup>nd</sup> Annual Session - Philadelphia, Pennsylvania, USA, Maio 2002  
Speaker  
Invited in July 2001 by Dr. Frederick G. Preis, DDS, President of the American Association of Orthodontists.
- Midsymphyseal Distraction Osteogenesis  
Araraquara, SP, Brazil, August 2001.
- Research Methodology  
Federal University of São Paulo

Medicine School  
August – December 2002.

- Mandibular Growth: Diagnosis and Treatment Plan  
APEO  
São Paulo, SP, Brazil, November 2003.
- Dental Positioners  
Sociedade Brasileira de Ortodontia  
Rio de Janeiro, RJ, Brazil, July 2004.
- Orthodontics: From Treatment Plan to Occlusal Adjustments  
APCD-Jd. Paulista  
São Paulo, SP, Brazil, April 2006.
- Orthodontics: Contribution to Esthetics  
Dental Esthetics Meeting  
São Paulo, SP, Brazil, May 2006.
- Why to Consider Craniofacial Growth?  
Orto 2006 Meeting, Paulista Orthodontic Society  
São Paulo, SP, Brazil, October 2006.
- Esthetics in Orthodontics  
ABO – Distrital Ceará  
Fortaleza, Ceará, Brazil, June 2008.
- Decodify: Electronic Cephalometric Diagnosis  
ABO – Distrital Ceará  
Fortaleza, Ceará, Brazil, June 2008.
- Scientific Methodology: Clinical Procedures Based on Evidences  
UFCE - Universidade Federal do Ceará  
Fortaleza, Ceará, Brazil, June 2008.
- Craniofacial Growth and Development  
UFMA - Universidade Federal do Maranhão  
São Luiz, Maranhão, Brazil, June 2008.
- Decodify: Electronic Cephalometric Diagnosis  
UFMA - Universidade Federal do Maranhão  
São Luiz, Maranhão, Brazil, June 2008.
- Electronic Cephalometric Diagnosis: Contextualized Cephalometric Variables  
Orto2008, Sociedade Paulista de Ortodontia  
São Paulo, SP, October 2008.
- Diferencial em Diagnóstico Cefalométrico.  
Convenção European Clinics Corporation  
São Paulo, Março 2009.

### **Relevant Courses Attended**

- Summer Institute in Clinical Dental Research Methods (240 horas) – Seattle, Washington, USA - University of Washington – June/July 1996.
- Orthodontic Mechanics (80 hours) – Charles Tweed Foundation, Tucson, Arizona, USA - 1 to 16, April 1996.
- Multiple Regression Analysis (40 hours) – Public Health School/University of São Paulo - 3 to 14, February 2003.

## **Research Meeting Committees**

### **Master of Science**

- Candidate: Otávio Luiz Ferraz  
Institution: Heliópolis Hospital  
Graduate Program in Oral and Maxillofacial Surgery  
Date: December 22th, 2000
- Candidate: Rogério Labbate  
Institution: Heliópolis Hospital  
Graduate Program in Oral and Maxillofacial Surgery  
Date: June 29th, 2001
- Candidate: Gustavo Mattos Barreto  
Institution: Faculdade de Odontologia - UNESP – Araraquara (SP)  
Graduate Program in Orthodontics  
Date: March 27th, 2002
- Candidate: Halissa Simplício  
Institution: Faculdade de Odontologia - UNESP – Araraquara (SP)  
Graduate Program in Orthodontics  
Date: April 29th, 2002
- Candidate: Taís Cristina dos Santos Dinelli  
Institution: Faculdade de Odontologia - UNESP – Araraquara (SP)  
Graduate Program in Orthodontics  
Date: April 29th, 2002
- Candidate: Fábio Torres  
Institution: Faculdade de Odontologia – USP-Bauru (SP)  
Graduate Program in Orthodontics  
Date: February 05th, 2003
- Candidate: Elda Aguiar da Silva Borges  
Institution: Escola Paulista de Medicina – Universidade Federal de São Paulo  
Graduate Program in Morphology  
Date: February 20th, 2003
- Candidate: Luciano Mauro Del Santo  
Institution: Heliópolis Hospital  
Graduate Program in Oral and Maxillofacial Surgery  
Date: January 23th, 2004

## **PhD Degree**

- Candidate: Pedro César Fernandes dos Santos  
Institution: Faculdade de Odontologia - USP-SP  
Graduate Program in Dental Sciences  
Date: September 1st, 2006

## **Research Symposium Committee**

- Scientific Committee - LAPTEC 2007 – 6th Congress of Logic Applied to Technology, Nov 21<sup>st</sup>-23<sup>rd</sup>, 2007, Santos, SP, Brazil.

## **Interview**

- “Diagnóstico Cefalométrico Eletrônico: Tecnologia e Inovação Mundialmente Inédita.”  
Revista Dental Press, Pág. 1-4, December 2008.

## **VI – Volunteer Work**

- Projeto Equilíbrio - Prefeitura do Município de São Paulo/FMUSP.  
Assistance to homeless children presenting drugs addiction, São Paulo, Brazil.

## **VII - Contacts for Recommendation**

### **Dental School**

- São Paulo University  
Dr. Carlos de Paula Eduardo, DDS, PhD, Dean  
Av. Prof. Lineu Prestes, 2227  
São Paulo, SP, CEP: 05508-900  
Brazil  
[dirfo@usp.br](mailto:dirfo@usp.br)

### **Master of Science**

- Paulista Medical School  
Department of Morphology  
Dr. Ricardo L. Smith, MD, PhD, Chairperson and Coordinator of Graduate Program  
Rua Botucatu, 740  
São Paulo, SP, CEP: 04023-900  
Brazil  
[rlsmith.morf@epm.br](mailto:rlsmith.morf@epm.br)

### **Ph.D.**

- Biomedical Sciences Institute  
Department of Anatomy  
São Paulo University  
Dr. Edson A. Liberti, Ph.D., Adviser  
Av. Prof Lineu Prestes, 2415  
São Paulo, SP, CEP: 05508-900

Brazil  
[ealibert@biomed.icb2.usp.br](mailto:ealibert@biomed.icb2.usp.br)

### **Postdoc Fellowship**

Baylor College of Dentistry  
Department of Biomedical Sciences  
The Texas A&M University System  
3302 Gaston Ave.,  
Dallas, TX 75246  
USA

- Dr. Robert J. Hinton, PhD, Associate Professor and Former Adviser  
[bohinton@bcd.tamhsc.edu](mailto:bohinton@bcd.tamhsc.edu)

### **Master of Science and Certificate in Orthodontics**

Baylor College of Dentistry  
Department of Orthodontics  
The Texas A&M University System  
3302 Gaston Ave.  
Dallas, TX 75246  
USA

- Dr. Richard F. Ceen, DDS, MS, Associate Professor, Former Chairperson  
[rceen@bcd.tamhsc.edu](mailto:rceen@bcd.tamhsc.edu)
- Dr. Peter H. Buschang, BA, PhD, Associate Professor, Research Director and Adviser  
[phbuschang@bcd.tamhsc.edu](mailto:phbuschang@bcd.tamhsc.edu)