

CURRICULUM VITAE

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PERSONAL DATA

Name	Kwangchul Choy
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Birth Place	Seoul, Korea
Address	Seoul, 06002 Korea
Citizenship	Republic of Korea

EDUCATION

1987 Feb 23	Dental College Yonsei University, Seoul, Korea D.D.S
1993 Feb 22	Graduate School Yonsei University, Seoul, Korea M.S.
1998 Aug 28	Graduate School Yonsei University, Seoul, Korea Ph.D.

EXPERIENCE

2007 - Present	Private Practice, Veritas Orthodontics, Seoul, Korea
2017 – Present	Clinical professor, Dept. of Orthodontics Dental College Kyung Hee University, Seoul, Korea
2007 - Present	Clinical professor, Dept. of Orthodontics Dental College Yonsei University, Seoul, Korea
2007 - Present	Adjunct professor, Dept. of Orthodontics, Ewha Woman's University, Seoul, Korea
2009 - 2013	Clinical Professor, Samsung Medical Center Sungkyunkwan University
2003 - 2006	Associate Professor, Dept. of Orthodontics Dental College, Yonsei University, Seoul, Korea
2001 - 2002	Visiting Professor, Center for Biomaterial, School of Dental Medicine, University of Connecticut Farmington, CT USA
1998 - 2003	Assistant Professor, Dept. of Orthodontics Dental College Yonsei University, Seoul, Korea
1997 - 1998	Full time lecturer, Dental College, Yonsei University

1995 - 1997	Research fellow, Dept. of Orthodontics, Dental College, Yonsei University, Seoul, Korea
1994 - 1995	Research fellow, Department of Orthodontics, School of Dental Medicine, University of Connecticut Farmington, CT USA
1991 - 1993	Residency, Dept. of Orthodontics Yonsei University, Seoul, Korea
1990 - 1991	Internship, Dental Hospital Yonsei University, Seoul, Korea
1987 - 1990	First Lieutenant, Korean Arm, Public health officer, Korea

ACTIVITIES

2010 - Present	Member, World Implant Orthodontic Committee
2006 - Present	Reviewer, Korean Journal of Orthodontics
2004 - Present	Reviewer, American Journal of Orthodontics and Dentofacial orthopedics
1992 - Present	Member, Korean Association of Orthodontists
1992 – 2015	Member World Federation of Orthodontics
1996 - 1997	Member, Planning Committee Korean Association of Orthodontists
1997 - 1998	Member, Information and Commutation Committee Korean Association of Orthodontists

BOOK AND MULTIMEDIA PUBLICATION

Charles J. Burstone, Kwangchul Choy. Biomechanical Foundation of Clinical Orthodontics. Quintessence Publishing Co. 2015

Kwangchul Choy. Choy's Lectures on Fundamental Biomechanics (9 hour video lecture). Ewireligner Co. 2017

INTERNATIONAL JOURNAL PUBLICATIONS

Evaluation of occlusal condition in Korean young adults using three malocclusion indices: MI, DI and OFI Journal of the Kyushu dental society Kusu Univ. 51(6) 768-72, 1997

Park Y Choy K Lee J Kim T Lever arm mechanic: Control of line of force J Clin Orthod 34(10) 601-5, 2000

Choy K Pae E Kim K Park Y Burstone CJ. The effect of tooth and bone morphology in stress distribution in the periodontal ligament Am J Orthod Dentofacial Orthop 117 1 98-105, 2000

Kwangchul Choy E Pae K Kim Y Park Charles J. Burstone. Controlled Space Closure with a Statically Determinate Retraction System. Angle Orthod 72 191-198, 2002

Kyung-Ho Kim, Chun-Hsi Chung, Kwangchul Choy, Jeong-Sub Lee, and Robert L. Vanarsdall. Effects of prestretching on force degradation of synthetic elastomeric chains Am J Orthod 128 477-82, 2005

Kwangchul Choy, K Kim and Charles J. Burstone. Initial changes of centres of rotation of the anterior segment in response to horizontal forces Eu J Orthod 28 471-474, 2006

Jung-Yoon Choi; Kyung-Ho Kim; Kwangchul Choy; Keun-Taek Oh; Kyoung-Nam Kim. Photocatalytic antibacterial effect of TiO₂ film formed on Ti and TiAg exposed to Lactobacillus acidophilus. Journal of biomedical materials research. Part B, Applied biomaterials 80(2):353-9 2007

Yoon Jeong Choi, Chooryung Judi Chung, Kwangchul Choy, Kyung-Ho Kim. Absolute anchorage with universal T-loop mechanics for severe deepbite and maxillary anterior protrusion and its 10-year stability Angle Orthod 80 771-82, 2010

Kyunam Kim, Kwangchul Choy, Young-Chel Park, Seo Yeon Han, Heekyu Jung, Yoon Jeong Choi. Prediction of mandibular movement and its center of rotation for non-surgical correction of anterior open-bite via maxillary molar intrusion. Angle Ortho. 2018

Interview with Dr. Kwnagchul Choy Indian orthodontics 2018

LECTURES AND POSTER PRESENTATIONS (PARTIAL LISTING)

Three dimensional Treatment planning using Occlusogram Asian Pacific Orthodontic Conference 1996

Nonsurgical assisted RPE on non-growing patient American Association of Orthodontist Conference 1997

Study on estimating skeletal maturity of hand wrist using multiple regression model American Association of Orthodontist Conference 1998

Stress distribution in periodontal ligament Taiwan Orthodontic Conference, 1998

Simulated tooth movement from 'V' and 'Step' bends American Association of Orthodontist Conference 1999

Lingual segmented arch American Association of Orthodontist Conference 2000

Simultaneous retraction and Intrusion using SDRS American Association of Orthodontist Conference 2003

Digital imaging of film-based cephalogram using a digital camera American Association of Orthodontist Conference 2004

Shear bond strength of fiber reinforced composite (FibreKor, Splint-It) and orthodontic bracket American Association of Orthodontist Conference 2005

From the basis to the advanced, Esthetic and biomechanics in mini screw orthodontics. Hands on course, Sydney and Melbourne Australia 2008

Avoiding side effects in orthodontics. University of Connecticut USA 2008

Creative design of retraction spring, Lingual segmented technique. University of Connecticut USA 2010

Midline correction. UCLA, USA 2010

Minimalism in orthodontics using FRC and TAD Invited lecturer for World Implant Orthodontic Conference, Taipei, Taiwan 2010

Avoiding Side Effects in Orthodontics, Correction of Midline Invited lecturer for 6th annual meeting of Saudi Orthodontic Society Jeddah, Saudi 2012

Correction of Asymmetries. University of Maryland USA 2012

Controlling the line of action in TADS. 3rd WIOC Anaheim CA USA 2014

The Biomechanical limitations of TAD and how to overcome them. Dubai UAE 2015

Introduction to Biomechanics International Course. Yonsei University 2015

Biomechanical consideration of friction. Yonsei Symposium, 2015

Biomechanics Symposium. Taipei 2016

Application of Biomechanics in clinical orthodontics Yonsei mini residency course 2016

Biomechanical limitation of TADs. Korean Orthodontic research institute. 2016

Biomechanics of mini screw. Chonnam Univsersity 2016

The role of friction in TADs WIOC Goa, India 2016

Correction of asymmetry in Orthodontics Yonsei Symposium 2016

Biomechanics course in Lima, Peru 2016

Avoiding side effects in orthodontics Inka University Lima, Peru 2016

Avoiding side effects in orthodontics Kyung Hee University Seoul 2017

Biomechanics of TADs Ortho forum seoul 2017

Application of Biomechanics in clinical orthodontics Yonsei mini residency course 2017

Biomechanics of TADs Ortho forum Daegu 2017

Controlling side effects in Orthodontics Columbia University 2017

Introduction to Biomechanics Kiev Ukraine 2017

Application of Biomechanics in clinical orthodontics St. Mary Hospital 2017

Correction of Asymmetries Taipei Taiwan 2018

PUBLICATIONS IN KOREAN ORTHODONTIC JOURNAL

Kwang-Chul Choy, Byung Hwa Sohn. Analysis of force system developed by continuous straight archwire Korean Journal of Orthodontics 1996 Jun; 26(03): 281-290

Young-Chel Park, Kwang-Chul Choy, Hee-Kyung Han. Semi-longitudinal study of growth and development of cranio-facial soft tissue of children aged from 3 to 11 Korean Journal of Orthodontics 1997 Dec; 27(06): 891-904

Kyung-Ho Kim, Kwang-chul Choy, Ji-Yeon Lee, So-Youn Park. Treatment of skeletal Class III malocclusion with maxillary protraction appliance Korean Journal of Orthodontics 1997 Dec; 27(06): 997-1004

Kyung-Ho Kim, Kwang-Chul Choy, Kil-Yong Chung, Hee-Sun Yun. Malocclusion with Congenital Missing of Lower Incisors Korean Journal of Orthodontics 1998 Dec; 28(06): 981-989

Kyung-Ho Kim, Kwang-Chul Choy, Ji-Yeon Lee, Chang-Soo Kang. Orthodontic Traction of Impacted Tooth Korean Journal of Orthodontics 1998 Dec; 28(06): 991-999

Kyung-Ho kim, Kwang-Chul Choy, Ji-Yeon Lee. A study on horizontal reference planes in

lateral cephalogram in Korean children Korean Journal of Orthodontics 1999 Apr; 29(02): 251-265

Kwang-Chul Choy, Kyung-Ho Kim, Young-Chel Park. Factors affecting force system of orthodontic loop spring Korean Journal of Orthodontics 1999 Oct; 29(05): 511-519

Kwangchul Choy. Using computer for head posture calibration in 3D cephalogram Korean Journal of dental association 36(2) 1999

Chang-Soo Kang, Kyung-Ho Kim, Kwang-Chul Choy. The vertical changes of the lip and perioral soft tissue resulting from incisor retraction Korean Journal of Orthodontics 2000 Apr; 30(02): 185-196

Kwang-chul Choy, Kyung-Ho Kim, Young-Chel Park, Chang-Soo Kang. Torsional moment of orthodontic wires Korean Journal of Orthodontics 2000 Aug; 30(04): 467-473

Kwang-Chul Choy, Kyung-Ho Kim, Young-Chel Park, Jung-Yun Han. An experimental study on the stress distribution in the periodontal ligament. Korean Journal of Orthodontics 2001 Feb; 31(01): 15-24

Kyung-Ho Kim, Kwang-Chul Choy, Hyoung-Seon Baik, Ji-Hyun Lee. The effect of treatment timing on maxillary protraction treatment response - A comparison of prepubertal and pubertal patients Korean Journal of Orthodontics 2002 Oct; 32(05): 301-312

Kyung-Ho Kim, Kwang-Chul Choy, Hee-Sun Yun. Cephalometric analysis of skeletal Class II malocclusion in Korean adults Korean Journal of Orthodontics 2002 Aug; 32(04): 241-255

Kyung-Ho Kim, Kwang-Chul Choy, Kil-Yong Jung The relationship between menarche and the ossification stages of the phalanx of the first and third finger Korean Journal of Orthodontics 2002 Aug; 32(04): 265-274

Minkyong Kim Kwangchul Choy. Clinical application of FRC in Orthodontics (1) Introduction Korean Journal of Clinical Orthodontics 3(12) 2004

Minkyong Kim Kwangchul Choy. Clinical application of FRC in Orthodontics (2) bonding of FRC Korean Journal of Clinical Orthodontics 3(13) 2004

Minkyong Kim Kwangchul Choy. Clinical application of FRC in Orthodontics (3) space closure (1) Korean Journal of Clinical Orthodontics 3(14) 2004

Minkyong Kim Kwangchul Choy. Clinical application of FRC in Orthodontics (4) Space closure (2) Korean Journal of Clinical Orthodontics 3(15) 2004

Minkyong Kim Kwangchul Choy. Clinical application of FRC in Orthodontics (5) treatment of vertical problem Korean Journal of Clinical Orthodontics 3(16) 2004

Minkyong Kim Kwangchul Choy. Clinical application of FRC in Orthodontics (6) etc FRC Application Korean Journal of Clinical Orthodontics 3(17) 2004

Sung-Jin Wang, Kyung-Ho Kim, Kwang-Chul Choy. Digital imaging of film-based cephalograms using a digital camera Korean Journal of Orthodontics 2004 Oct; 34(05): 448-457

Sueck-Bum Kim, Min-Jeong Kim, Kyung-Ho Kim, Kwang-Chul Choy. Flexural characteristic changes of fiber reinforced composite (FireKor®) according to water absorption Korean Journal of Orthodontics 2005 Oct; 35(05): 361-370

Min-Jung Kim, Kyung-Ho Kim, Kwang-chul Choy. Bond strength of fiber reinforced composite after repair Korean Journal of Orthodontics 2006 Jun; 36(03): 188-197

Jeong-Sub Lee, Kwang-chul Choy, Young-Chel Park, Kyung-Ho Kim. Changes in lip and perioral soft tissue after bracket removal Korean Journal of Orthodontics 2007 Apr; 37(02): 125-136

Kwangchul Choy. How can biomechanics be useful in clinical orthodontics? Yonsei Journal of Clinical Orthodontics 2016 Vol 23 :209-21

CHAPTERS IN BOOK

Segmented Arch technique 2nd Ed Jisung PubCo. 1995

Orthodontics, Jisung Pub Co.1998

Guidelines of Orthodontics Vol.II Daehan-Narae Pub Co 2004

RESEARCH GRANTS

Torsional moment of Orthodontic wires, 1998 Yonsei University

Design of Retraction Spring, 1998 Dental college, Yonsei University

Stress distribution in the periodontal membrane, 1999 Korean Research Foundation
Experimental measurement of force system of orthodontic springs 2003 Yonsei University

Initial changes of centres of rotation of the anterior segment, 2005 Dental college, Yonsei University

BIOGRAPHICAL SKETCH

Kwangchul Choy, DDS, MS, PhD, is a former professor of orthodontics department at Yonsei University. He graduated and completed orthodontic training at Yonsei University and has been a research fellow and a visiting professor at University of Connecticut. Currently, clinical professor at Yonsei University as well as an adjunct professor of orthodontics at Ewha Womans University. He published a book, *The Biomechanical Foundation of Clinical Orthodontics* and over 30 papers and book chapters in the field of biomechanics. He has carried out clinical and scientific research in the biomechanics of tooth movement and orthodontic appliances and gives many lectures around the world on biomechanics and maintains a private practice in Seoul.