



EOS & sterEOS

Full List of Publications

January 2019

Publications on EOS

- Newton PO, Osborn EJ, Bastrom TP, Doan JD, Reighard FG. The 3D Sagittal Profile of Thoracic Versus Lumbar Major Curves in Adolescent Idiopathic Scoliosis. Spine Deformity 2019
- Trac S, Zheng R, Hill DL, Lou E. Intra- and Interrater Reliability of Cobb Angle Measurements on the Plane of Maximum Curvature Using Ultrasound Imaging Method. Spine Deformity 2019
- Fitzgerald R, Upasani VV, Bastrom TP, Bartley CE, Reighard FG, Yaszay B, Newton PO. Three-Dimensional Radiographic Analysis of Two Distinct Lenke 1A Curve Patterns. Spine Deformity 2019
- Pasha S, Sankar WN, Castelein RM. The Link Between the 3D Spino-pelvic Alignment and Vertebral Body morphology in Adolescent Idiopathic Scoliosis. Spine Deformity 2019
- Dagneaux L, Marouby S, Maillot C, Canovas F, Riviere C. Dual mobility device reduces the risk of prosthetic hip instability for patients with degenerated spine: A case-control study. Orthopaedics and Traumatology: Surgery and Research 2018
- Chung CL, Kelly DM, Steele JR, DiAngelo DJ. A mechanical analog thoracolumbar spine model for the evaluation of scoliosis bracing technology. Journal of Rehabilitation and Assistive Technologies Engineering
- Ilharreborde B, Pesenti S, Ferrero E, Accadbled F, Jouve JL, De Gauzy JS, Mazda K. Correction of hypokyphosis in thoracic adolescent idiopathic scoliosis using sublaminar bands: a 3D multicenter study. Eur Spine J 2018
- Sebaaly A, Grobost P, Mallam L, Roussouly P. Description of the sagittal alignment of the degenerative human spine. Eur Spine J 2018
- Bao HD, Shu SB, Shi J, Liu SN, Sun MH, Hu AN, Liu Z, Zhu ZZ, Qian BP, Qiu Y. [Similar coronal curvature may not represent the same 3-dimensional deformity in adolescent idiopathic scoliosis: a matched-pair study using EOS imaging system].. Zhonghua yi xue za zhi 2018
- Chung N, Cheng YH, Po HL, Ng WK, Cheung KC, Yung HY, Lai YM. Spinal phantom comparability study of Cobb angle measurement of scoliosis using digital radiographic imaging. Journal of Orthopaedic Translation 2018
- Le Goic M, Wang D, Chiarovano E, Lecompte J, Laporte S, Duysens J, Vidal P. An Initial Passive Phase That Limits the Time to Recover and Emphasizes the Role of Proprioceptive Information. Frontiers in Neurology 2018

- Bahadir T, Werner J, Clair AJ, Walker PS. Guidelines for Instrumentation for Total Knee Replacement Based on Frontal Plane Radiographs. Bulletin of the NYU Hospital for Joint Diseases 2018
- Hasegawa K, Okamoto M, Hatsushikano S, Caseiro G and Watanabe K. Difference in whole spinal alignment between supine and standing positions in patients with adult spinal deformity using a new comparison method with slot- scanning three-dimensional X-ray imager and computed tomography through digital reconstructed radiography. BMC musculoskeletal disorders 2018
- Post M, Verdun S, Roussouly P, Abelin-Genevois K. New sagittal classification of AIS: validation by 3D characterization. Eur Spine J 2018
- Theologis A, Iyer S, Lenke LG, Sides BA, Kim HJ, Kelly MP. Cervical and Cervicothoracic Sagittal Alignment According to Roussouly's Thoracolumbar Subtypes. Spine 2018
- Kim SB, Heo YM, Hwang CM, Kim TG, Hong JY, Won YG, Ham CU, Min YK, Yi JW. Reliability of the EOS Imaging System for Assessment of the Spinal and Pelvic Alignment in the Sagittal Plane. Clin Orthop Surg 2018
- Iorio J, Lafage V, Lafage R, Henry JK, Stein D, Lenke LG Gupta M, Kelly MP, Sides B, Kim HJ. The Effect of Aging on Cervical Parameters in a Normative North American Population. Global Spine J 2018
- Vergari C, Aubert B, Lallemand-Dudek P, Haen TX, Skalli W. A novel method of anatomical landmark selection for rib cage 3D reconstruction from biplanar radiography. CMBBE: Imaging & Visualization 2018
- Pasha S, Flynn J. Data-driven Classification of the 3D Spinal Curve in Adolescent Idiopathic Scoliosis with an Applications in Surgical Outcome Prediction. Scientific Reports 2018
- Gajny L, Ebrahimi S, Vergari C, Angelini E, Skalli W. Quasi-automatic 3D reconstruction of the full spine from low-dose biplanar X-rays based on statistical inferences and image analysis. Eur Spine J 2018
- Pedersen D, Vanheule V, Wirix-Speetjens R, Taylan O, Delpont HP, Scheys L, Andersen MS. A novel non-invasive method for measuring knee joint laxity in four dof: In vitro proof-of-concept and validation. J Biomech 2018
- Passmore E, Graham HK, Pandy, MG, Sangeux M. Hip- and patellofemoral-joint loading during gait are increased in children with idiopathic torsional deformities. Gait & Posture 2018
- Rosskopf A, Sutter R, Pfirmann C, Buck F. 3D hindfoot alignment measurements based on low-dose biplanar radiographs: a clinical feasibility study. Skeletal Radiol. 2018

- Pedersen PH, Vergari C, Alzakri A, Vialle R, Skalli W. A reduced micro-dose protocol for 3D reconstruction of the spine in children with scoliosis: results of a phantom-based and clinically validated study using stereo-radiography. *Eur Radiol* 2018
- Garcia-Cano E, Arambula Cosio F, Duong L, Bellefleur C, Roy-Beaudry M, Joncas J, Parent S, Labelle H. Prediction of spinal curve progression in Adolescent Idiopathic Scoliosis using Random Forest regression. *Comput Biol Med* 2018
- Tokunaga K, Okamoto M, Watanabe K. Implant Orientation Measurement After THA Using the EOS X-Ray Image Acquisition System. *Adv Exp Med Biol* 2018
- Lecoanet P, Vargas M, Pallaro J, Thelen T, Ribes C, Fabre T. Leg length discrepancy after total hip arthroplasty: Can leg length be satisfactorily controlled via anterior approach without a traction table? Evaluation in 56 patients with EOS 3D. *Orthop Traumatol Surg Res* 2018
- Berliner JL, Esposito CI, Miller TT, Padgett DE, Mayman DJ, Jerabek SA. What preoperative factors predict postoperative sitting pelvic position one year following total hip arthroplasty?. *The Bone & Joint Journal* 2018
- Fader RR, Tao MA, Gaudiani MA, Turk R, Nwachukwu BU, Esposito CI, Ranawat AS. The role of lumbar lordosis and pelvic sagittal balance in femoroacetabular impingement. *The Bone & Joint Journal* 2018
- Staub BN, Lafage R, Kim HJ, Shaffrey CI, Mundis GM, Hostin R, Burton D, Lenke L, Gupta MC, Ames C, Klineberg E, Bess S, Schwab S, Lafage V. Cervical mismatch: the normative value of T1 slope minus cervical lordosis and its ability to predict ideal cervical lordosis. *JNS Spine* 2018
- Rampal V, Rohan PY, Saksik R, Wicart P, Skalli W. Assessing 3D paediatric foot morphology using low-dose biplanar radiography: Parameter reproducibility and preliminary values. *Orthop Traumatol Surg Res* 2018
- Macron A, Pillet H, Doridam J, Verney A, Rohan PY. Development and evaluation of a new methodology for the fast generation of patient-specific Finite Element models of the buttock for sitting-acquired deep tissue injury prevention. *J Biomech*, 2018
- Mustafy T, Arnoux PJ, Benoit A, Bianco RJ, Aubin CE, Villemure I. Load-sharing biomechanics at the thoracolumbar junction under dynamic loadings are modified by anatomical features in adolescent and pediatric vs adult functional spinal units. *J Mech Behav Biomed Mater*, 2018

- Khalil N, Bizdikian AJ, Bakoury Z, Salameh M, Bou Zeid N, Yared F, Otayek J, Kharrat K, Kreichati G, Ghanem J, Lafage R, Lafage V, Obeid I, Assi A. Cervical and postural strategies for maintaining horizontal gaze in asymptomatic adults. *Eur Spine J*, 2018
- Hu Z, Man GCW, Kwok AKL, Law SW, Chu WWC, Cheung WH, Qiu Y, Cheng JCY. Global sagittal alignment in elderly patients with osteoporosis and its relationship with severity of vertebral fracture and quality of life. *Arch Osteoporos*, 2018
- Horn SR, Segreto FA, Ramchandran S, Poorman GR, Sure A, Marascalachi B, Bortz CA, Varlotta CG, Tishelman J, Vasquez-Montes D, Ihejirika Y, Zhou P, Moon J, Lafage R, Diebo BG, Vira S, Jalai CM, Wang C, Shenoy K, Errico T, Lafage V, Buckland A, Passias PG . The Influence of BMI on Achieving Age Adjusted Alignment Goals in Adult Spinal Deformity Corrective Surgery with Full Body Analysis at 1 Year. *World Neurosurgery*, 2018
- Akbar M, Almansour H, Lafage R, Diebo BG, Wiedenhofer B, Schwab F, Lafage V, Pepke W. Sagittal alignment of the cervical spine in the setting of adolescent idiopathic scoliosis. *J Neurosurg Spine*, 2018
- Cobetto N, Aubin CE, Parent S. Contribution of Lateral Decubitus Positioning and Cable Tensioning on Immediate Correction in Anterior Vertebral Body Growth Modulation. *Spine Deformity*, 2018
- Sullivan T, Marino N, Reighard F, Newton P. Relationship Between Lumbar Lordosis and Pelvic Incidence in the Adolescent Patient: Normal Cohort Analysis and Literature Comparison. *Spine Deformity*, 2018
- Yoshihara H, Hasegawa K, Okamoto M, Hatsushikano S, Watanabe K. Relationship between sagittal radiographic parameters and disability in patients with spinal disease using 3D standing analysis. *Orthop Traumatol Surg Res*, 2018
- Donaldson TK, Smith EJ, Koutalos A, John A, Lazennec J, Clarke I. Adverse Wear in MOM Hip-Arthroplasty Related to the Production of Metal Fragments at Impingement Sites. *Open Journal of Orthopedics* 2018
- Turner A, Edwards J, Kinene E. Digital radiography vs low dose 3D imaging technology: A comparison of radiation doses and image quality. *RAD Magazine*, 2018
- Bakouny Z, Khalil N, Otayek J, Bizdikian AJ, Yared F, Salameh M, Bou Zeid N, Ghanem I, Kharrat Km Kreichati G, Lafage R, Lafage V, Assi A. Are the sagittal cervical radiographic modifiers of the Ames-ISSG classification specific to adult cervical deformity?. *J Neurosurg Spine*, 2018

- Bakouny Z, Assi A, Yared F, Khalil N, Mansour E, Yaacoub JJ, Skalli W, Ghanem I. Combining acetabular and femoral morphology improves our understanding of the down syndrome hip. *Clinical Biomechanics*, 2018
- van Drongelen S, Fey B, Stief F, Kaldowski H, Ipek D, Meurer A. Changes in leg alignment after total hip replacement detected with the EOS system. *Gait & Posture*, 2018
- Choisne J, Valiadis JM, Travert C, Kolta S, Roux C, Skalli W. Vertebral strength prediction from Bi-Planar dual energy x-ray absorptiometry under anterior compressive force using a finite element model: An in vitro study. *Journal of the Mechanical Behavior of Biomedical Materials*, 2018
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- Bailly R, Lempereur M, Thepaut M, Rémy Neris O, Pons C, Houx L, Brochard S. 3D lower limb bone morphology in ambulant children with cerebral palsy and its relation to gait. *Annals of Physical and Rehabilitation Medicine*, 2018
- Blandin C, Boisson M, Segretin F, Feydy A, Rannou F, Nguyen C. Pelvic parameters in patients with chronic low back pain and an active disc disease: A case-control study. *Annals of Physical and Rehabilitation Medicine*, 2018
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- Bizdikian AJ, Assi A, Bakouny Z, Yared F, Saghbini E, Bakhos GE, Esber S, Khalil N, Otayek J, Ghanimeh J, Sauret C, Skalli W, Ghanem I. Validity and reliability of different techniques of neck–shaft angle measurement. *Clinical Radiology*, 2018
- Rohan PY, Perrier A, Ramanoudjame M, Hausselle J, Lelièvre H, Seringe R, Skalli W, Wicart P. Three-Dimensional Reconstruction of Foot in the Weightbearing Position From Biplanar Radiographs: Evaluation of Accuracy and Reliability. *J Foot and Ankle Surgery*, 2018
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- De Francesco CJ, Pasha S, Miller DJ, Betz, RR, Clements DH, Fletcher ND, Glotzbecker MG, Hwang SW, Kelly MP, Lehman RA, Lonner BS, Newton PO, Roye BD, Sponseller PD, Upasani VV, Cahill PJ. Agreement Between Manual and Computerized Designation of Neutral Vertebra in Idiopathic Scoliosis. Spine Deform 2018
- Fougeron N, Rohan PY, Macron A, Travert C, Pillet H & Skalli W . Subject specific finite element mesh generation of the pelvis from biplanar x-ray images: application to 120 clinical cases. Computer Methods in Biomechanics and Biomedical Engineering, 2018
- Assi A, Bakouny Z, Bizdikian AJ, Otayek J, Yared F, Lafage V, Khalil N, Massaad A, Ghanem I, Skalli W.. Variation of the sagittal vertical axis during walking and its determinants.. Gait Posture. 2018
- García-Cano E, Arámbula Cosío F, Duong L, Bellefleur C, Roy-Beaudry M, Joncas J, Parent S, Labelle H. Dynamic ensemble selection of learner-descriptor classifiers to assess curve types in adolescent idiopathic scoliosis.. Med Biol Eng Comput. 2018
- Sterba M, Arnoux PJ, Labelle H, Warner WC, Aubin CE. Biomechanical analysis of spino-pelvic postural configurations in spondylolysis subjected to various sport-related dynamic loading conditions. European Spine Journal, 2018
- Passmore E, Sangeux M. Is it the right moment to change how we report kinetics?. Gait & Posture, 2018
- Bao HD, Shu SB, Shi J, Liu SN, Sun MH, Hu AN, Liu Z, Zhu ZZ, Qian BP, Qiu Y. Similar coronal curvature may not represent the same 3-dimensional deformity in adolescent idiopathic scoliosis: a matched-pair study using EOS imaging system. Zhonghua Yi Xue Za Zhi, 2018
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- What Does a Spine Surgeon Need to Know to Plan a Lumbar Deformity Correction?. Neurosurgery Clinics, 2018"
- Markus I, Schlegl AT, Burkus M, Jozsef K, Niklai B, Than P, Tunyogi-Csapo M. The effect of coronal decompensation on the biomechanical parameters in lower limbs in adolescent idiopathic scoliosis. Orthopaedics and Traumatology: Surgery and Research, 2018
- Jackson TJ, Miller D, Nelson S, Cahill PJ, Flynn JM. Two for One: A Change in Hand Positioning During Low-Dose Spinal Stereoradiography Allows for Concurrent, Reliable Sanders Skeletal Maturity Staging. Spine Deformity, 2018
- Hernandez T, Thenard T, Vergari C, Robichon L, Skalli W, Vialle R. Coronal Trunk Imbalance in Idiopathic Scoliosis: Does Gravity Line Localisation Confirm the Physical Findings?. Orthopaedics and Traumatology: Surgery and Research, 2018

- Burkus M, Schlégl AT, O'Sullivan I, Markus I, Vermes C, Tunyogi-Csapo M. Sagittal plane assessment of spino-pelvic complex in a Central European population with adolescent idiopathic scoliosis: a case control study. *Scoliosis and Spinal Disorders*, 2018
- Cobetto N, Aubin CE, Parent S. Surgical Planning and Follow-up of Anterior Vertebral Body Growth Modulation in Pediatric Idiopathic Scoliosis Using a Patient-Specific Finite Element Model Integrating Growth Modulation. *Spine Deformity*, 2018
- Assi A, Bakouny Z, Mansour E, Yaacoub JJ, Yared F, Ghanem I. Spinopelvic Alignment in Subjects With Down Syndrome. *Clinical Spine Surgery*, 2018
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- Passmore E, Kerr Graham H, Pandy MG, Sangeux M. Hip- and patellofemoral-joint loading during gait are increased in children with idiopathic torsional deformities. *Gait & Posture*, 2018
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- Pasha S, Ecker M, Deeney V. Considerations in sagittal evaluation of the scoliotic spine. Eur J Ortho Surg & Trauma, 2018
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