**Supplemental digital content 1: Sources ineligible following full-text review**

| **Citation** | **Primary reason for exclusion** |
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| Agrawal P, Mozingo JD, Elhabian SY, Anderson AE, Whitaker RT. Combined Estimation of Shape and Pose for Statistical Analysis of Articulating Joints. Shape Med Imaging  Int Work ShapeMI 2020, Held Conjunction with MICCAI 2020, Lima, Peru, Oct 4, 2020, Proc. 2020;12474:111–21. | Includes ineligible anatomy |
| Agricola R, Bierma-Zeinstra S, Verhaar J, Weinans H, Waarsing J. Total hip replacement but not clinical osteoarthritis can be predicted by shape variations of the hip: a prospective cohort study (check). Osteoarthr Cartil. 2012;20(2012):S12–3. | Conference abstract |
| Agricola R, Waarsing JH, Arden NK, Carr AJ, Bierma-Zeinstra SMA, Thomas GE, et al. Cam impingement of the hip—a risk factor for hip osteoarthritis. Nat Rev Rheumatol. 2013;9(10):630–4. | Ineligible concept |
| Ahedi H, Aitken D, Blizzard L, Aspden R, Jones G, Gregory J. Does hip shape associate with hip pain and early structural and radiological changes at the hip in an Australian community-based sample? Osteoarthr Cartil. 2015;23(S2):A182. | Conference abstract |
| Ahedi H, Winzenberg T, Bierma-Zeinstra S, Blizzard L, Van Middelkoop M, Agricola R, et al. Associations between physical activity and cam and pincer morphology. Osteoarthr Cartil. 2019;27(S1):S265. | Conference abstract |
| Ahmad O. Volumetric DXA (VXA): A new method to extract 3D information from multiple in vivo DXA images. ProQuest Dissertations and Theses. [Ann Arbor]: The Johns Hopkins University; 2011. | Thesis |
| Akkoul S, Hafiane A, Leconge R, Harrar K, Lespessailles E, Jennane R. 3D reconstruction method of the proximal femur and shape correction. In: 2014 4th International Conference on Image Processing Theory, Tools and Applications (IPTA). IEEE; 2014. p. 1–6. | Ineligible concept |
| Akkoul S, Hafiane A, Rozenbaum O, Lespessailles E, Jennane R. 3D Reconstruction of the proximal femur shape from few pairs of x-ray radiographs. Signal Process Image Commun. 2017;59:65–72. | Ineligible concept |
| Aldieri A, Terzini M, Audenino AL, Bignardi C, Morbiducci U. Combining shape and intensity dxa-based statistical approaches for osteoporotic HIP fracture risk assessment. Comput Biol Med. 2020;127:104093. | Ineligible concept |
| Ali A, Burks B, Kim R, Taylor M, Laz P. Modelling hip fracture considering intersubject variability in shape and intensity. J Biomech. 2012;45:S287. | Includes ineligible anatomy |
| Ali A, Laz PJ, Rullkoetter PJ. Development of a computational approach to assess hip fracture and repair: Considerations of intersubject and surgical alignment variability. ProQuest Dissertations and Theses. [Ann Arbor]: University of Denver; 2013. | Includes ineligible anatomy |
| Anderson JE, Aspden RM, Reid DM, Barr RJ, Gregory JS. 469 GROSS FEMORAL ROTATION MODELLED USING ACTIVE SHAPE MODELS. Osteoarthr Cartil. 2010;18(S2):S211. | Conference abstract |
| Anderson JE, Reid DM, Barr RJ, Gregory JS. What effect does femoral rotation have on the results of an active shape model? Bone. 2010;47(S1):S158. | Conference abstract |
| Arezoomandershadi S. Segmentation of proximal femur in 3d magnetic resonance images for detection of cam type fai. ProQuest Dissertations and Theses. [Ann Arbor]: University of Ottawa (Canada); 2014. | Ineligible concept |
| Aspden RM, Saunders FR. Osteoarthritis as an organ disease: From the cradle to the grave. Eur Cells Mater. 2019;37:74–87. | Includes ineligible anatomy |
| Atkins PR, Aoki SK, Elhabian SY, Agrawal P, Whitaker RT, Weiss JA, et al. Evaluation of the sclerotic subchondral bone boundary as a surgical resection guide in the treatment of cam-type femoroacetabular impingement. J Orthop Res. 2017;35(S1). | Conference abstract |
| Atkins PR. Characterization of Cam Femoroacetabular Impingement Using Subject-Specific Biomechanics and Population-Based Morphological Measurements. ProQuest Dissertations and Theses. [Ann Arbor]: The University of Utah; 2018. | Thesis |
| Aydogan B. AN ESTIMATION OF GEOMETRIC CHANGES IN THE PROXIMAL FEMURS OF US ADULTS FROM 1988-2014. The Pennsylvania State University; 2018. | Includes ineligible anatomy |
| Babalola KO, Cootes TF, Patenaude B, Rao A, Jenkinson M. Comparing the Similarity of Statistical Shape Models Using the Bhattacharya Metric. In: Larsen R, Nielsen M, Sporring J, editors. Medical image computing and computer-assisted intervention; MICCAI 2006. Copenhagen, Denmark; 2006. p. 142–50. | Includes ineligible anatomy |
| Bague A, Rio L Del, Gregorio S Di, Martelli Y, Sevillano X, Ballester MAG, et al. Discrimination of hip fracture in postmenopausalwomen using a 3D reconstruction method from 2D DXA. Osteoporos Int. 2014;25(S2):S304–5. | Conference abstract |
| Bahl JS, Zhang J, Killen BA, Taylor M, Solomon LB, Arnold JB, et al. Statistical shape modelling versus linear scaling: Effects on predictions of hip joint centre location and muscle moment arms in people with hip osteoarthritis. J Biomech. 2019;85:164–72. | Includes ineligible anatomy |
| Baird D, Evans DS, Gregory JS, Saunders FR, Giuraniuc CV, Barr RJ, et al. The genetic architecture of hip statistical shape models suggests that endochondral bone formation makes an important contribution to hip shape. Osteoarthr Cartil. 2018;26(S1):S157. | Conference abstract |
| Baird D, Gregory J, Barr R, Saunders F, Giuraniuc C, Paternoster L, et al. Adult hip shape is influenced by variation in genes involved in endochondral bone formation: Findings from a genome-wide association study followed by meta-analysis. J Bone Miner Res. 2017;32(S1):S175. | Conference abstract |
| Baird D, Gregory J, Faber B, Aspden R, Giuraniuc C, Saunders F, et al. Susceptibility genes for hip osteoarthritis may influence hip shape. J Musculoskelet Neuronal Interact. 2018;18(1):117–8. | Conference abstract |
| Baka N, Niessen WJ, Kaptein BL, van Walsum T, Ferrarini L, Reiber JHC, et al. Correspondence free 3D statistical shape model fitting to sparse x-ray projections. In: Dawant BM, Haynor DR, editors. Medical Imaging 2010 Image processing; Medical Imaging 2010. San Diego, CA: SPIE - the International Society for Optical Engineering; 2010. p. 7623 0D. | Includes ineligible anatomy |
| Baker-LePain J, Luker K, Lynch JA, Parimi N, Nevitt MC, Corr M, et al. Association of FRZB variants with hip shape and radiographic hip osteoarthritis: Preliminary results. Arthritis Rheum. 2010;62(S10):624. | Conference abstract |
| Baker-LePain JC, Lane NE. Relationship between joint shape and the development of osteoarthritis. Curr Opin Rheumatol. 2010;22(5):538–43. | Review paper |
| Balestra S, Schumann S, Heverhagen J, Nolte L, Zheng G. Articulated Statistical Shape Model-Based 2D-3D Reconstruction of a Hip Joint. In: Stoyanov D, editor. Information processing in computer-assisted interventions. Fukuoka-shi, Japan; 2014. p. 128–37. | Includes ineligible anatomy |
| Barr RJ, Gregory J, Reid DM, Aspden R, Yoshida K, Alesci S, et al. Predicting osteoarthritis progression to total hip replacement: Can we do better than risk factors alone using active shape modelling? Rheumatology. 2009;48(Suppl 1):i100. | Conference abstract |
| Barr RJ, Gregory JS, Yoshida K, Alesci S, Aspden RM, Reid DM. Active appearance modelling of DXA images to assess severity of osteoarthritis of the hip. Arthritis Rheum. 2009;60(S10):215. | Conference abstract |
| Barr RJ, Gregory JS, Yoshida K, Alesci S, Aspden RM, Reid DM. Correlations between Hip Structure Analysis and Active Shape Modelling in subjects with osteoarthritis. Osteoarthr Cartil. 2010;18(S2):S190. | Conference abstract |
| Berghe P Vanden, Demol J, Gelaude F, Sloten J Vander. Virtual anatomical reconstruction of large acetabular bone defects using a statistical shape model. Comput Methods Biomech Biomed Engin. 2017;20(6):577–86. | Ineligible concept |
| Bernard R, Pernus F. Statistical approach to anatomical landmark extraction in AP radiographs. In: Sonka, M and Hanson, KM, editor. MEDICAL IMAGING: 2001: IMAGE PROCESSING, PTS 1-3. 2001. p. 537–44. (Proceedings of SPIE; vol. 4322). | Includes ineligible anatomy |
| Betancourt MCC, Meurs J Van, Zeinstra SB, Rivadeneira F, Hofman A, Weinans H, et al. Contribution of statistical shape model and predefined geometry parameters in prediction of hip osteoarthritis. Bone. 2011;48(S2):S264. | Conference abstract |
| Betancourt MCC, Rivadeneira F, Waarsing E, Bierma-Zeinstra S, Hofman A, Weinans H, et al. Genetic variation near the GDF5 gene is associated with hip geometry. Bone. 2011;48(S2):S156. | Conference abstract |
| Betancourt MCC, Van Meurs J, Zeinstra SB, Rivadeneira F, Hofman A, Weinans H, et al. Contribution of statistical shape model and predefined geometry parameters in prediction of hip osteoarthritis. Bone. 2011;48(2):S264. | Conference abstract |
| Bhalodia R, Elhabian SY, Kavan L, Whitaker RT. DeepSSM: A Deep Learning Framework for Statistical Shape Modeling from Raw Images. In: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). 2018. | Includes ineligible anatomy |
| Biver E, Hars M, Rizzoli R, Ferrari S, Winzenrieth R. DXA-based 3D mapping of hip cortical thinning correlates with incident fractures in postmenopausal women from the GERICO cohort. J Bone Miner Res. 2019;34(S1):165. | Conference abstract |
| Blanc R, Syrkina E, Székely G. Estimating the Confidence of Statistical Model Based Shape Prediction. In: International Conference on Information Processing in Medical Imaging. 2009. p. 602–13. | Includes ineligible anatomy |
| Boonsuk W, Frank MC. Automated separation of bone joint structures for medical image reconstruction. ProQuest Dissertations and Theses. [Ann Arbor]: Iowa State University; 2009. | Ineligible concept |
| Boukala N, Favier E, Laget B, Radeva P. Active shape model based segmentation of bone structures in hip radiographs. In: 2004 IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL TECHNOLOGY (ICIT), VOLS 1- 3. 2004. p. 1682–7. | Includes ineligible anatomy |
| Boukala N, Favier E, Laget B. Active appearance model-based segmentation of hip radiographs. In: Fitzpatrick, JM and Reinhardt, JM, editor. MEDICAL IMAGING 2005: IMAGE PROCESSING, PT 1-3. 2005. p. 443–52. (Proceedings of SPIE; vol. 5747). | Includes ineligible anatomy |
| Bredbenner T, Potter RS, Mason RL, Havill L, Orwoll E, Nicolella DP. Investigation of statistical shape and density modeling as a discriminator for clinical fracture risk. J Bone Miner Res. 2010;25(S1):S85. | Conference abstract |
| Bredbenner TL, Mason RL, Havill LM, Orwoll S, Nicolella DP. Investigating fracture risk classifiers based on statistical shape and density modeling and the MrOS data set. In: Orthopaedic Research Society: Proceedings of the Annual Meeting of the Orthopaedic Research Society. 2012. | Conference abstract |
| Bredbenner TL, Nicolella DP. Statistical Shape and Density Based Finite Element Modeling of the Human Proximal Femur. In: 6th Combined Meeting of the Orthopaedic Research Societies. 2008. p. 305. | Conference abstract |
| Bukovec M, Likar B, Pernus F. SEGMENTATION OF ANATOMICAL STRUCTURES BY CONNECTED STATISTICAL MODELS. IMAGE Anal Stereol. 2011;30(2):77–88. | Includes ineligible anatomy |
| Carballido-Gamio J, Sigurdsson S, Siggeirsdottir K, Jensen A, Sigurdsson G, Aspelund T, et al. Prediction of incident hip fracture: Can we do better than femoral neck abmd? a comprehensive image-based assessment in men and women. J Bone Miner Res. 2018;33:37. | Ineligible concept |
| Carballido-Gamio J, Yu A, Wang L, Su Y, Lang TF, Cheng X. Fracture risk estimation with statistical multi-parametric modeling. J Bone Miner Res. 2016;31(S1):S351. | Conference abstract |
| Cardadeiro G, Baptista F, Zymbal V, Rodrigues LA, Sardinha LB. Ward’s area location, physical activity, and body composition in 8- and 9-year-old boys and girls. J Bone Miner Res. 2010;25(11):2304–12. | Ineligible concept |
| Castano-Betancourt MC, Meurs J Van, Bierma-Zeinstra S, Rivadeneira F, Hofman A, Uitterlinden A, et al. Do predefined geometry measures and Statistical Shape Models describe the same aspects of hip shape? Osteoarthr Cartil. 2010;18:S209–10. | Includes ineligible anatomy |
| Castro-Mateos I, Pozo JM, Cootes TF, Wilkinson JM, Eastell R, Frangi AF. Statistical shape and appearance models in osteoporosis. Curr Osteoporos Rep. 2014;12(2):163–73. | Includes ineligible anatomy |
| Cerveri P, Belfatto A, Manzotti A. Pair-wise vs group-wise registration in statistical shape model construction: representation of physiological and pathological variability of bony surface morphology. Comput Methods Biomech Biomed Engin. 2019;22(7):772–87. | Includes ineligible anatomy |
| Chan CSK, Edwards PJ, Hawkes DJ. Integration of ultrasound based registration with statistical shape models for computer assisted orthopaedic surgery. In: Sonka, M and Fitzpatrick, JM, editor. MEDICAL IMAGING 2003: IMAGE PROCESSING, PTS 1-3. 2003. p. 414–24. (Proceedings of SPIE; vol. 5032). | Includes ineligible anatomy |
| Chandra SS, Xia Y, Engstrom C, Crozier S, Schwarz R, Fripp J. Focused shape models for hip joint segmentation in 3D magnetic resonance images. Med Image Anal. 2014;18(3):567–78. | Includes ineligible anatomy |
| Chen C, Zheng G. Robust Proximal Femur Segmentation in Conventional X-Ray Images via Random Forest Regression on Multi-resolution Gradient Features. In: Kamel, M and Campilho A, editor. IMAGE ANALYSIS AND RECOGNITION. 2013. p. 442–50. (Lecture Notes in Computer Science; vol. 7950). | Conference paper |
| Chen C. Mechanical and micro-structural modeling of trabecular bone by in vivo imaging. University of Iowa; 2016. | Thesis |
| Chen C-C. Automatic Image Analysis for Detection and Evaluation of Pelvic Diseases. National Cheng-Kung University (Taiwan); 2007. | Not in English (thesis) |
| Cherifi D, Soual I, Omari S, Nait-Ali A. 3D Shape Modelling of Femur. In: NaitAli, A and AlDoori, M and Pangracious, V and Moukayed, M, editor. 2016 INTERNATIONAL CONFERENCE ON BIO-ENGINEERING FOR SMART TECHNOLOGIES (BIOSMART). 2016. | Includes ineligible anatomy |
| Chiba K, Osaki M, Ito M, Majumdar S. Osteoarthritis and bone structural changes. Clin Calcium. 2013;23(7):973–81. | Includes ineligible anatomy |
| Chu C, Bai J, Liu L, Wu X, Zheng G. Fully Automatic Segmentation of Hip CT Images via Random Forest Regression-Based Atlas Selection and Optimal Graph Search-Based Surface Detection. In: Cremers, D and Reid, I and Saito, H and Yang, MH, editor. COMPUTER VISION - ACCV 2014, PT III. 2015. p. 640–54. (Lecture Notes in Computer Science; vol. 9005). | Ineligible concept |
| Chu C, Chen C, Liu L, Zheng G. FACTS: Fully Automatic CT Segmentation of a Hip Joint. Ann Biomed Eng. 2015; | Includes ineligible anatomy |
| Chu C, Chen C, Zheng G. Fully Automatic CT Segmentation for Computer-Assisted Pre-operative Planning of Hip Arthroscopy. In: Luo, X and Reichl, T and Mirota, D and Soper, T, editor. COMPUTER-ASSISTED AND ROBOTIC ENDOSCOPY, CARE 2014. 2014. p. 55–63. (Lecture Notes in Computer Science; vol. 8899). | Includes ineligible anatomy |
| Cootes TF, Edwards GJ, Taylor CJ. Active appearance models. IEEE Trans Pattern Anal Mach Intell. 2001;23(6):681–5. | Includes ineligible anatomy |
| Cootes TF, Edwards GJ, Taylor CJ. Active appearance models. In: European conference on computer vision. Springer; 1998. p. 484–98. | Includes ineligible anatomy |
| Cootes TF, Hill A, Taylor CJ. Medical image interpretation using active shape models: Recent advances. In: 14th International Conference on Information Processing in Medical Imaging. 1995. p. 371–2. | Ineligible concept |
| Cootes TF, Taylor CJ. Active Shape Model Search using Local Grey-Level Models: A Quantitative Evaluation. In: BMVC. 1993. p. 64.1-64.10. | Includes ineligible anatomy |
| Craiovan B, Renkawitz T, Weber M, Grifka J, Nolte L, Zheng G. Is the acetabular cup orientation after total hip arthroplasty on a two dimension or three dimension model accurate? Int Orthop. 2014;38(10):2009–15. | Includes ineligible anatomy |
| Cresson T, Branchaud D, Chav R, Godbout B, de Guise JA. 3D shape reconstruction of bone from two x-ray images using 2D/3D non-rigid registration based on moving least-squares deformation. In: Dawant BM, Haynor DR, editors. Proceedings of SPIE - The International Society for Optical Engineering. 2010. p. 76230F. | Ineligible concept |
| Davies RH. Learning shape: Optimal models for analysing natural variability. PQDT - Global. [Ann Arbor]: The University of Manchester (United Kingdom); 2002. | Includes only artificial or non-human hips |
| Davison AK, Cootes TF, Perry DC, Luo W, Lindner C. Perthes Disease Classification Using Shape and Appearance Modelling. In: Computational Methods and Clinical Applications in Musculoskeletal Imaging: 6th Workshop & Challenge in conjunction with MICCAI 2018 - Granada, Spain. 2019. p. 86–98. | Conference paper |
| de Carlos Tolós M. General deformable 3D hip prosthesis model creation for patient-specific implant design according to several anatomical requirements. Universitat Pompeu Fabra, Barcelona; 2020. | Includes only artificial or non-human hips |
| Deng Z, Jiang J, Liu H, Cheng Z, Huang R, Zhang W, et al. A Data-Driven Approach for Assembling Intertrochanteric Fractures by Axis-Position Alignment. IEEE Access. 2020;8:137549–63. | Includes ineligible anatomy |
| Dimitriou D, Tsai T-Y, Yue B, Rubash HE, Kwon Y-M, Li G. Side-to-side variation in normal femoral morphology: 3D CT analysis of 122 femurs. Orthop Traumatol Surg Res. 2016;102(1):91–7. | Ineligible concept |
| Ding F, Leow WK, Howe T Sen. Automatic segmentation of femur bones in anterior-posterior pelvis X-ray images. Lect Notes Comput Sci (including Subser Lect Notes Artif Intell Lect Notes Bioinformatics). 2007;4673:205–12. | Includes ineligible anatomy |
| Dong X, Zheng G. Determining Geometrical Parameters by Particle Filter for Automatic Reconstruction of Surface Model of Proximal Femur from Biplanar Calibrated Fluoroscopic Images. In: 2006 9th International Conference on Control, Automation, Robotics and Vision. IEEE; 2006. p. 1–6. (International Conference on Control Automation Robotics and Vision). | Conference paper |
| Eason LH. Analyses of morphological variation among hominin proximal femora. Am J Phys Anthropol. 2016;159:134–5. | Ineligible concept |
| Eguizabal A, Schreier PJ, Ramírez D. Model-order selection in statistical shape models. In: 2018 IEEE 28th International Workshop on Machine Learning for Signal Processing (MLSP). 2018. p. 1–6. | Includes ineligible anatomy |
| Eguizabal A, Schreier PJ. A weighting strategy for Active Shape Models. In: 2017 IEEE International Conference on Image Processing (ICIP). IEEE; 2017. p. 3610–4. (IEEE International Conference on Image Processing ICIP). | Conference paper |
| El Dakhakhni HAAF. Reconstruction of Patient-Specific Bone Models from X-Ray Radiography. University of Tennessee, Knoxville; 2013. | Includes ineligible anatomy |
| Faber BG, Baird D, Gregory J, Barr RJ, Aspden RM, Lawlor DA, et al. Joint shape may contribute to relationships between body weight and hip osteoarthritis: Findings from a cross sectional study in peri-menopausal women. Osteoarthr Cartil. 2016;24(S1):S196. | Conference abstract |
| Faber BG, Baird D, Gregson CL, Gregory JS, Barr RJ, Aspden RM, et al. Use of hip DXA scans to identify shape changes associated with hip osteoarthritis. J Musculoskelet Neuronal Interact. 2018;18(1):123. | Conference abstract |
| Faber BG, Bredbenner TL, Baird D, Gregory J, Saunders FR, Giuraniuc CV, et al. Is lesser trochanter size a novel risk factor for hip osteoarthritis? findings from the MROS study. Osteoarthr Cartil. 2020;28(S1):S412. | Conference abstract |
| Faber BG, Ebsim R, Saunders FR, Frysz M, Smith GD, Cootes T, et al. Deriving alpha angle from anterior-posterior dual-energy x-ray absorptiometry scans: an automated and validated approach. Wellcome open Res. 2021;6(60):60. | Ineligible concept |
| Faber BG, Frysz M, Tobias JH. Unpicking observational relationships between hip shape and osteoarthritis: hype or hope? Curr Opin Rheumatol. 2020;32(1):110–8. | Review paper |
| Faliszewski I, Saunders FR, Wilkinson S, Pavlova AV, Muthuri SG, Barr RJ, et al. Associations between radiographic hip OA assessed using Kellgren–Lawrence grading and hip shape characterised using statistical shape modelling in a British birth cohort. Osteoarthr Cartil. 2018;26(S1):S437–8. | Conference abstract |
| Filippi S, Motyl B, Bandera C. Comparing parametric solid modelling/reconfiguration, global shape modelling and free-form deformation for the generation of 3D digital models of femurs from X-ray images. Comput Methods Biomech Biomed Engin. 2009;12(1):101–8. | Includes ineligible anatomy |
| Fischer M, Walter SS, Hepp T, Zimmer M, Notohamiprodjo M, Schick F, et al. Automated Morphometric Analysis of the Hip Joint on MRI from the German National Cohort Study. Radiol Artif Intell. 2021;e200213–e200213. | Published after final database search |
| Fischer MCM, Grothues SAGA, Habor J, de la Fuente M, Radermacher K. A robust method for automatic identification of femoral landmarks, axes, planes and bone coordinate systems using surface models. Sci Rep. 2020;10(1):20859. | Includes ineligible anatomy |
| Fritscher K, Schuler B, Link T, Eckstein F, Suhm N, Hänni M, et al. Prediction of Biomechanical Parameters of the Proximal Femur Using Statistical Appearance Models and Support Vector Regression. In: Medical Image Computing and Computer-Assisted Intervention – MICCAI 2008. 2008. p. 568–75. (Lecture Notes in Computer Science). | Conference paper |
| Fritscher KD, Hänni M, Suhm N, Hengg C, Roth T, Kamelger F, et al. Local analysis of the femoral bone in x-ray images using InShapemodels. Int J Comput Assist Radiol Surg. 2008;3(S1):330–417. | Conference abstract |
| Frysz M, Baird D, Gregory J, Aspden R, Tobias J, Paternoster L. Investigating the influence of adult hip shape genetic variants across the life course: Findings from a population-based study in adolescents. J Bone Miner Res. 2018;33(S1):12. | Conference abstract |
| Frysz M, Gregory J, Baird D, Aspden R, Paternoster L, Tobias J. Bone mineral density is related to proximal femur shape: Findings from a crosssectional study in middle aged women. J Bone Miner Res. 2017;32(S1):S81. | Conference abstract |
| Frysz M, Gregory J, Baird D, Aspden R, Paternoster L, Tobias J. Investigation of relationships between hip bone mineral density and hip shape in adolescent and adult females. J Musculoskelet Neuronal Interact. 2018;18(1):134–5. | Conference abstract |
| Frysz M, Gregory J, Baird D, Aspden R, Paternoster L, Tobias J. The effect of age and puberty on proximal femur shape. J Musculoskelet Neuronal Interact. 2018;18(1):134. | Conference abstract |
| Frysz M, Howe L, Kounali D-Z, Gregory J, Barr RJ, Aspden RM, et al. Age at peak height velocity is related to proximal femur shape in adolescents. Osteoarthr Cartil. 2018;26(S1):S427. | Conference abstract |
| Frysz M. Describing the development of hip shape in adolescence, and environmental and genetic influences on this process, in ALSPAC. PQDT - UK & Ireland. [Ann Arbor]: University of Bristol (United Kingdom); 2019. | Thesis |
| Gaffney BM, Nepple J, Clohisy JC, Westen L, Harris MD. Statistical Shape Modeling to Quantify Variation in Femoral Geometry in Patients With Hip Dysplasia. In: Orthopaedic Research Society. New Orleans, LA; 2018. p. 86. | Includes ineligible anatomy |
| Gaffney BMM, Hillen TJ, Nepple JJ, Clohisy JC, Harris MD. Statistical shape modeling of femur shape variability in female patients with hip dysplasia. J Orthop Res. 2019;37(3):665–73. | Includes ineligible anatomy |
| Gallegos Guillen JO, Estacio Cerquin LJ, Obando JD, Castro-Gutierrez E. Segmentation of the Proximal Femur by the Analysis of X-ray Imaging Using Statistical Models of Shape and Appearance. In: ICAISC 2018. 2018. p. 25–35. | Conference paper |
| Gamage P, Xie SQ, Delmas P, Xu P. 3D Reconstruction of Patient Specific Bone Models from 2D Radiographs for Image Guided Orthopedic Surgery. In: 2009 Digital Image Computing: Techniques and Applications. IEEE; 2009. p. 212–6. | Ineligible concept |
| Gee AH, Treece GM. Systematic misregistration and the statistical analysis of surface data. Med Image Anal. 2014;18(2):385–93. | Includes only artificial or non-human hips |
| Gielis W, Rayegan H, Lindner C, Davison AK, Arbabi V, Cootes TF, et al. Changes in bone shape are both a risk factor for and a result of hip osteoarthritis, a follow-up study in the check cohort. Osteoarthr Cartil. 2019;27(S1):S320–1. | Conference abstract |
| Gielis WP, Weinans HH, van Spil WE, Agricola R, Cootes TF, de Jong PA, et al. Prediction of risk for radiographic hip osteoarthritis in subjects with early osteoarthritis of hip or knee. Osteoarthr Cartil. 2017;25(S1):S12. | Conference abstract |
| Golightly YM, Stiller JL, Cantrell J, Renner JB, Jordan JM, Aspden RM, et al. Hip shape by statistical shape modeling is associated with leg length inequality in older adults. Osteoarthr Cartil. 2015;23(S2):A58. | Conference abstract |
| Gollmer ST, Buzug TM. Improved Landmark Initialization for 3D Statistical Shape Model Generation. In: Dossel O, Schlegel WC, editors. World congress on medical physics and bioengineering. Munich, Germany: International Union for Physical and Engineering Sciences in Medicine; 2009. p. 662–5. | Includes ineligible anatomy |
| Gong RH. Two-Dimensional-Three-Dimensional Registration Methods for Computer-Assisted Orthopaedic Surgery. ProQuest Dissertations and Theses. [Ann Arbor]: Queen’s University (Canada); 2011. | Includes ineligible anatomy |
| Goodyear SR, Gregory JS, Barr RJ, McCloskey EV, Alesci S, Lee JH, et al. Can active shape and appearance modelling be used to generate risk factors for hip fracture? Bone. 2010;47(S1):S163. | Conference abstract |
| Gregory JS, Asdpen RM, Reid DM, Barr RJ. Prediction of poor outcome by a novel imaging biomarker (active shape modelling) in hip OA patients. Osteoarthr Cartil. 2015;23(S2):A220–1. | Conference abstract |
| Gregory JS, Barr RJ, Yoshida K, Reid DM, Aspden RM, Silman AJ, et al. Shape of the femoral head and neck correlates with clinical features of OA and can predict progression to total hip replacement. Rheumatology. 2009;48(S1):i5–6. | Conference abstract |
| Gregory JS, Barr RJ, Yoshida K, Reid DM, Silman AJ, Hosie G, et al. 375 NESTED SHAPE MODELS FOR MEDICAL IMAGE ANALYSIS: CALL FOR CONSENSUS ON HIP SHAPE MODELING. Osteoarthr Cartil. 2008;16(S4):S161. | Conference abstract |
| Gregory JS, Stewart A, Reid DM, Aspden RM. Repeatability of active shape modelling of the proximal femur for radiographs and DXA scans. J BONE Miner Res. 2005;20(7):1306. | Conference abstract |
| Gregory JS, Testi D, Undrill PE, Aspden RM. THE SHAPE OF THE PROXIMAL FEMUR IS A MAJOR FACTOR IN OSTEOPOROTIC HIP FRACTURE. Osteoporos Int. 2001;12(S2):S6. | Conference abstract |
| Gregory JS. Shape and texture measurements in clinical images of the hip in osteoporosis and osteoarthritis. University of Aberdeen; 2004. | Thesis |
| Gregson C, Patel A, Baird D, Hardcastle S, Faber B, Smith GD, et al. Alterations in hip shape may explain the increased risk of hip osteoarthritis in individuals with high bone mass. J Bone Miner Res. 2016;31(S1):S77. | Conference abstract |
| Groves D, Bowes MA, Bankes MJK, Goh SK, Robinson P, Williams S. Investigation of male and female hip cam lesions using radiographic features and statistical shape models. J Orthop Res. 2017;35(S1). | Conference abstract |
| Guidetti M, Malloy P, Alter TD, Newhouse AC, Espinoza Orías AA, Inoue N, et al. MRI‐­ and CT‐­based metrics for the quantification of arthroscopic bone resections in femoroacetabular impingement syndrome. J Orthop Res. 2022;40(5):1174–81. | Published after final database search |
| Gundry M, Knapp K, Hopkins S, Winzenrieth R, Ferchaud L. 3D Shape Modelling Analysis of the Hip using 3D-SHAPER Software - A Comparison Between Contralateral, Ipsilateral, and Baseline Hips for RTKR, TKR, and Control Participants. J BONE Miner Res. 2019;34(S1):176. | Conference abstract |
| Harmon E. Size and shape variation in the proximal femur of Australopithecus africanus. J Hum Evol. 2009;56(6):551–9. | Ineligible concept |
| Harmon EH, Plavcan JM. The proximal femur of early hominins: The pattern and significance of interspecific shape variation. Am J Phys Anthropol. 2010;141:122–3. | Ineligible concept |
| Harmon EH. A comparative analysis of femoral morphology in Australopithecus afarensis: Implications for the evolution of bipedal locomotion. ProQuest Dissertations and Theses. [Ann Arbor]: Arizona State University; 2005. | Thesis |
| Harris MD, Reese SP, Peters CL, Weiss JA, Anderson AE. Three-dimensional quantification of femoral head shape in controls and patients with cam-type femoroacetabular impingement. Ann Biomed Eng. 2013;41(6):1162–71. | Ineligible concept |
| Harris MD. The geometry and biomechanics of normal and pathomorphologic human hips. ProQuest Dissertations and Theses. [Ann Arbor]: The University of Utah; 2013. | Thesis |
| Hefny MS, Ellis RE. A statistical shape model of femoral head-neck cross sections using principal tangent components. In: 2013 IEEE 10th International Symposium on Biomedical Imaging. IEEE; 2013. p. 89–92. (IEEE International Symposium on Biomedical Imaging). | Conference paper |
| Hefny MS. Analysis of discrete shapes using Lie groups. ProQuest Dissertations and Theses. [Ann Arbor]: Queen’s University (Canada); 2014. | Thesis |
| Henak CR, Carruth ED, Anderson AE, Harris MD, Ellis BJ, Peters CL, et al. Finite element predictions of cartilage contact mechanics in hips with retroverted acetabula. Osteoarthr Cartil. 2013;21(10):1522–9. | Ineligible concept |
| Higashiura K, Mukherjee DP, Okada T, Yokota F, Hori M, Takao M, et al. Disease Discrimination based on Disease Subspace of Organ Shape Using Orthogonal Complement of Normal Subspace. In: Shen, CW and Kuo, SY and DalKwack, K and Chen, YW and Hsu, PY and Ko, F, editor. 2012 6TH INTERNATIONAL CONFERENCE ON NEW TRENDS IN INFORMATION SCIENCE, SERVICE SCIENCE AND DATA MINING (ISSDM2012). 2012. p. 453–7. | Includes ineligible anatomy |
| Huang J, Griffith JF, Wang D, Shi L. Segmentation of Proximal Femur from Computed Tomography Images Using a Novel Graph-cut Based Method with Shape Prior. In: ECR 2015. Vienna; 2015. p. C–0057. | Conference abstract |
| Huber MB, Carballido-Gamio J, Fritscher K, Schubert R, Haenni M, Hengg C, et al. Morphological texture analysis of radiographs of the proximal femur: In vitro study using biomechanical strength as a standard of reference. In: JOURNAL OF BONE AND MINERAL RESEARCH. AMER SOC BONE & MINERAL RES 2025 M ST, NW, STE 800, WASHINGTON, DC 20036 …; 2007. p. S476–S476. | Ineligible concept |
| Hufnagel H, Ehrhardt J, Pennec X, Schmidt-Richberg A, Handels H. Coupled Level Set Segmentation Using a Point-Based Statistical Shape Model Relying on Correspondence Probabilities. In: Dawant, BM and Haynor, DR, editor. MEDICAL IMAGING 2010: IMAGE PROCESSING. 2010. (Proceedings of SPIE; vol. 7623). | Includes ineligible anatomy |
| Hufnagel H, Pennec X, Ehrhardt J, Ayache N, Handels H. Comparison of statistical shape models built on correspondence probabilities and one-to-one correspondences. In: Reinhardt JM, Pluim JPW, editors. Image processing conference; Medical imaging 2008. San Diego, CA: Society of Photo-optical Instrumentation Engineers; American Association of Physicists in Medicine; 2008. p. 6914 4T. | Includes ineligible anatomy |
| Humbert L, Whitmarsh T, De Craene M, del Rio Barquero LM, Fritscher K, Schubert R, et al. 3D reconstruction of both shape and Bone Mineral Density distribution of the femur from DXA images. In: 2010 IEEE International Symposium on Biomedical Imaging: From Nano to Macro. IEEE; 2010. p. 456–9. | Conference paper |
| Husmann O, Rubin PJ, Leyvraz P-F, de Roguin B, Argenson J-N. Three-dimensional morphology of the proximal femur. J Arthroplasty. 1997;12(4):444–50. | Ineligible concept |
| Inamdar G, Pedoia V, Gallo MC, Souza R, Majumdar S. Analysis of the relationship between proximal femur 3D shape and cartilage health in patients with hip osteoarthritis. J Orthop Res. 2017;35(S1). | Conference abstract |
| Ireland A, Saunders F, Muthuri S, Pavlova A, Hardy R, Martin K, et al. Age at onset of walking in infancy is associated with hip and spine shape in early old age. Osteoporos Int. 2018;29:S612–3. | Includes ineligible anatomy |
| Iwashita Y, Kurazume R, Nakamura K, Okada T, Sato Y, Sugano N, et al. Patient-specific femoral shape estimation using a parametric model and two 2D fluoroscopic images. In: ACCV Workshop on Multi-dimensional and Multi-view Image Processing. 2007. p. 59–65. | Conference paper |
| Iwashita Y, Kurazume R, Nakamura K, Okada T, Sato Y. In-vivo experiments of 3D femoral shape estimation using two 2D fluoroscopic images. In: Proceedings of the Third Joint Workshop on Machine Perception and Robotics. Kusatsu; 2007. p. 3008. | Conference abstract |
| Jabbar F, Barr RJ, Reid DM, Aspden RM, Reid IR, Mason B, et al. Active Shape Modelling As a Predictor of Hip Fracture. J BONE Miner Res. 2008;23(S1):S453. | Conference abstract |
| Jeffrey JE, Barr RJ, Arden CP, Hart DJ, Thomas GE, Garden S, et al. Joint shape as a predictor of end-stage osteoarthritis of the hip: a 19 year retrospective analysis of the Chingford study. Osteoarthr Cartil. 2012;20(S1):S199–200. | Conference abstract |
| Jia R. A Computer-Aided Tracking and Motion Analysis with Ultrasound System for Describing Hip Joint Kinematics. University of Oxford; 2020. | Includes ineligible anatomy |
| Johnson LG, Pawliuk C. Application of statistical shape modeling to the human hip joint: a scoping review protocol. JBI Evid Synth. 2020; | Protocol for this review |
| Kagiyama Y, Otomaru I, Takao M, Sugano N, Nakamoto M, Yokota F, et al. CT-based automated planning of acetabular cup for total hip arthroplasty (THA) based on hybrid use of two statistical atlases. Int J Comput Assist Radiol Surg. 2016;11(12):2253–71. | Includes ineligible anatomy |
| Kainmueller D, Lamecker H, Zachow S, Hege HC. An articulated statistical shape model for accurate hip joint segmentation. In: Proceedings of the 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society: Engineering the Future of Biomedicine, EMBC 2009. 2009. | Includes ineligible anatomy |
| Khanduja V, Baelde N, Dobbelaere A, Houcke J Van, Li H, Pattyn C, et al. Patient-specific assessment of dysmorphism of the femoral head-neck junction: a statistical shape model approach. Int J Med Robot Comput Assist Surg. 2016;12(4):765–72. | Includes ineligible anatomy |
| Khayyeri H, Vaananen S, Flivik G, Jurvelin JS, Dahlberg LE, Isaksson H. A novel method to test association of 3D hip morphological parameters with hip osteoarthritis. J Orthop Res. 2016;34(S1):1271. | Conference abstract |
| Klima O, Barina D, Kleparnik P, Zemcik P, Chromy A, Spanel M. Lossy Compression of 3D Statistical Shape and Intensity Models of Femoral Bones Using JPEG 2000. IFAC Pap. 2016;49(25):115–20. | Includes ineligible anatomy |
| Klima O, Kleparnik P, Spanel M, Zemcik P. Intensity-based femoral atlas 2D/3D registration using Levenberg-Marquardt optimisation. In: Gimi, B and Krol, A, editor. MEDICAL IMAGING 2016-BIOMEDICAL APPLICATIONS IN MOLECULAR, STRUCTURAL, AND FUNCTIONAL IMAGING. 2016. (Proceedings of SPIE; vol. 9788). | Includes ineligible anatomy |
| Kotcheff ACW, Redhead A, Taylor CJ, Hukins DWL. Shape model analysis of THR radiographs. In: Proceedings of 13th International Conference on Pattern Recognition. 1996. p. 391–5 vol.4. | Includes only artificial or non-human hips |
| Kotcheff ACW, Taylor CJ. Automatic construction of eigenshape models by direct optimization. Med Image Anal. 1998;2(4):303–14. | Includes ineligible anatomy |
| Lauzeral N, Borzacchiello D, Kugler M, George D, Remond Y, Hostettler A, et al. Shape parametrization of bio-mechanical finite element models based on medical images. Comput Methods Biomech Biomed Eng Imaging Vis. 2019;7(5):480–9. | Includes ineligible anatomy |
| Le Bras A, Laporte S, Bousson V, Mitton D, De Guise JA, Laredo JD, et al. 3D reconstruction of the proximal femur with low-dose digital stereoradiography. Comput Aided Surg. 2004;9(3):51–7. | Ineligible concept |
| Lee JH, Hwang YN, Park SY, Kim SM. Diagnosis of Osteoporosis by Quantification of Trabecular Microarchitectures from Hip Radiographs Using Artificial Neural Networks. In: Pan, L and Paun, G and PerezJimenez, MJ and Song, T, editor. BIO-INSPIRED COMPUTING - THEORIES AND APPLICATIONS, BIC-TA 2014. 2014. p. 247–50. (Communications in Computer and Information Science; vol. 472). | Ineligible concept |
| Li W, Kornak J, Harris T, Lu Y, Cheng X, Lang T. Hip fracture risk estimation based on principal component analysis of QCT atlas: a preliminary study. In: Hu XP, Clough A V., editors. Proceedings of SPIE - The International Society for Optical Engineering. 2009. p. 72621M. | Ineligible concept |
| Lim S-J, Udupa JK, Souza A, Jeong Y-Y, Ho Y-S, Torigian DA. A new general method of 3D model generation for active shape image segmentation. In: Reinhardt JM, Pluim JPW, editors. Proceedings of SPIE - The International Society for Optical Engineering. 2006. p. 61444B. | Includes ineligible anatomy |
| Lindner C, Thiagarajah S, Wilkinson JM, Wallis GA, Cootes TF, arcOGEN Consortium, et al. Short-term variability of proximal femur shape in anteroposterior pelvic radiographs. In: MIUA. 2011. p. 69–74. | Conference paper |
| Lindner C, Thiagarajah S, Wilkinson JM, Wallis GA, Cootes TF, arcOGEN Consortium. Accurate Bone Segmentation in 2D Radiographs Using Fully Automatic Shape Model Matching Based On Regression-Voting. In: Sakuma, I and Barillot, C and Navab, N, editor. MEDICAL IMAGE COMPUTING AND COMPUTER-ASSISTED INTERVENTION - MICCAI 2013, PT II. 2013. p. 181–9. (Lecture Notes in Computer Science; vol. 8150). | Includes ineligible anatomy |
| Lindner C, Thiagarajah S, Wilkinson JM, Wallis GA, Cootes TF. Accurate Fully Automatic Femur Segmentation in Pelvic Radiographs Using Regression Voting. In: International Conference on Medical Image Computing and Computer-Assisted Intervention. 2012. p. 353–60. | Conference paper |
| Lindner C, Thomson J, Cootes TF, Consortium A. Learning-Based Shape Model Matching: Training Accurate Models with Minimal Manual Input. In: Navab, N and Hornegger, J and Wells, WM and Frangi, AF, editor. MEDICAL IMAGE COMPUTING AND COMPUTER-ASSISTED INTERVENTION, PT III. 2015. p. 580–7. (Lecture Notes in Computer Science; vol. 9351). | Includes ineligible anatomy |
| Lindner C. Statistical shape analysis of the proximal femur: Development of a fully automatic segmentation system and its applications. The University of Manchester (United Kingdom); 2014. | Thesis |
| Liu WP, Shang YF, Yang X, Deklerck R, Cornelis J. Shape Deformation Using Golden Section Search in PCA-Based Statistical Shape Model. In: Jobbagy A, editor. European Medical & Biological Engineering Conference. Budapest, Hungary; 2011. p. 659–62. | Includes ineligible anatomy |
| Lu R-S, Taylor M, Bottema MJ. Texture analysis improves the estimate of bone fracture risk from DXA images. Osteoarthr Cartil. 2016;24(S1):S319–20. | Conference abstract |
| Luker KR, Lynch JA, Chaganti RK, Parimi N, Nevitt M, Gregory JS, et al. Active shape modeling of the hip and incident osteoporotic hip fractures. Arthritis Rheum. 2009;60(S10):594. | Conference abstract |
| Mahaisavariya B, Sitthiseripratip K, Tongdee T, Bohez EL., Vander Sloten J, Oris P. Morphological study of the proximal femur: a new method of geometrical assessment using 3-dimensional reverse engineering. Med Eng Phys. 2002;24(9):617–22. | Ineligible concept |
| Mahieu P, Hananouchi T, Watanabe N, Claes P, Li H, Audenaert E. Morphological abnormalities of the femur in the dysplastic hip. Relation between femur en acetabulum. Acta Orthop Belg. 2018; | Includes ineligible anatomy |
| Martin CM, Turgeon JG, Goela A, Rice CL, Wilson TD. A three-dimensional measurement approach for the morphology of the femoral head. J Anat. 2014;225(3):358–66. | Ineligible concept |
| Martin J, Murphy C, Gregory J, Aspden R, Riemen A, Saunders F. Does a hysterectomy predispose women to developing osteoarthritis? JBMR Plus. 2018;2(S1):S41. | Conference abstract |
| May H, Ruhli FJ. Integrating geometric-morphometric analysis in human long bones studies. Ann Anat. 2014;196(S1):163. | Conference abstract |
| Merle CD. The determination of variation in proximal femoral geometry and shape in primary hip osteoarthritis using active shape modelling. PQDT - UK & Ireland. [Ann Arbor]: University of Oxford (United Kingdom); 2011. | Thesis |
| Meynen A, Matthews H, Nauwelaers N, Claes P, Mulier M, Scheys L. Accurate reconstructions of pelvic defects and discontinuities using statistical shape models. Comput Methods Biomech Biomed Engin. 2020;23(13):1026–33. | Includes ineligible anatomy |
| Meynen A, Vles G, Zadpoor AA, Mulier M, Scheys L. The morphological variation of acetabular defects in revision total hip arthroplasty—A statistical shape modeling approach. J Orthop Res. 2021;39(11):2419–27. | Includes ineligible anatomy |
| Mezhov V, Laslett L, Ahedi H, Blizzard L, Aspden R, Gregory J, et al. Predictors of total hip replacement: Data from the tasmanian older adult cohort study. Intern Med J. 2018;48(Suppl 4):11. | Conference abstract |
| Munugoda IP, Ahedi H, Mattap S, Aspden R, WIlls K, Graves S, et al. Association of hip shapes with knee osteoarthritis outcomes in older-adults. Osteoarthr Cartil. 2019;27(S1):S358. | Conference abstract |
| Munugoda IP, Ahedi HG, Aspden RM, Wills K, Graves SE, Lorimer M, et al. SAT0562 Hip shape predicts knee osteoarthritis outcomes over a decade in older-adults. Ann Rheum Dis. 2018;77(S2):1134. | Conference abstract |
| Murphy C, Martin J, Gregory J, Aspden R, Riemen A, Saunders F. Surgical menopause, hip shape and OA: Are they related? JBMR Plus. 2018;2(S1):S41. | Conference abstract |
| Museyko O, Bousson V, Laredo J-D, Adams J, Friedberger A. Statistical shape and appearance models and statistical parameter mapping for hip fracture discrimination: Not better than BMD or less robust. J Bone Miner Res. 2015;30(S1):S104. | Conference abstract |
| Museyko O. Application of shape and appearance models in osteoporosis and osteoarthritis. Osteoporos Int. 2015;26(S1):S388. | Conference abstract |
| Muthuri S, Saunders FR, Pavlova AV, Hardy R, Kuh D, Aspden RM, et al. Associations between BMI across adult life and hip shapes at age 60 to 64: Evidence from the 1946 British birth cohort. Osteoarthr Cartil. 2017;25(S1):S86–7. | Conference abstract |
| Nakahara I, Takao M, Sakai T, Nishii T, Yoshikawa H, Sugano N. Gender differences in 3D morphology and bony impingement of human hips. J Orthop Res. 2011;29(3):333–9. | Ineligible concept |
| Nelson AE, Golightly YM, Liu F, Lynch JA, Gregory JS, Aspden RM, et al. Variations in hip shape are associated with prevalent radiographic knee OA: the Johnston county osteoarthritis project. Osteoarthr Cartil. 2014;22(S1):S239–40. | Conference abstract |
| Nelson AE. The Importance of Hip Shape in Predicting Hip Osteoarthritis. Curr Treat Options Rheumatol. 2018;4(2):214–22. | Review paper |
| Noble PC, Box GG, Kamaric E, Fink MJ, Alexander JW, Tullos HS. The effect of aging on the shape of the proximal femur. Clin Orthop Relat Res. 1995;(316):31–44. | Ineligible concept |
| Noble PC, Kamaric E, Sugano N, Matsubara M, Harada Y, Ohzono K, et al. Otto AuFranc Award: Three-Dimensional Shape of the Dysplastic Femur: Implications for THR. Clin Orthop Relat Res. 2003;417:27–40. | Ineligible concept |
| Nolte D, Bull AMJ. Femur finite element model instantiation from partial anatomies using statistical shape and appearance models. Med Eng Phys. 2019;67:55–65. | Includes ineligible anatomy |
| Nolte D. Using statistical models of shape in musculoskeletal biomechanics and orthopaedic reconstruction. Imperial College London; 2019. | Includes ineligible anatomy |
| Novak G, Osztroluczki A, Hwang K, Shave S, Chandler A, Fidrich M. Development of a semiautomated contouring toolkit for pelvic organs on an MR image series. Int J Radiat Oncol Biol Phys. 2013;87(2):S713. | Includes ineligible anatomy |
| O’Connor J, Rutherford M, Hill J, Beverland D, Dunne N, Lennon A. Statistical Shape Model Based 2D–3D Reconstruction of the Proximal Femur—Influence of Radiographic Femoral Orientation on Reconstruction Accuracy. In: Computer Methods in Biomechanics and Biomedical Engineering. 2018. p. 153–60. | Conference paper |
| O’Connor J, Rutherford M, Hill J, Dunne N, Beverland D, Lennon A. Combined hip rotations can lead to erroneous pre-operative planning measurements in total hip arthroplasty. J Orthop Res. 2017;35(S1). | Conference abstract |
| Okada T, Nakamoto M, Sato Y, Sugano N, Asaka T, Chen Y, et al. Effects of surface correspondence methods in statistical shape modelling of the proximal femur on approximation accuracy. Int J Comput Assist Radiol Surg. 2006;1(S1):468. | Conference abstract |
| Okoli AB. Image analysis for extracapsular hip fracture surgery. PQDT - UK & Ireland. [Ann Arbor]: University of Newcastle Upon Tyne (United Kingdom); 2018. | Thesis |
| Özbulut Ö, Runhaar J, Kloppenburg M, Boers M, Bijlsma HJ, Bierma-Zeinstra S. Two-year clinical follow-up from the onset of complaints is predictive for the early diagnosis of hip osteoarthritis. Osteoarthr Cartil. 2020;28(S1):S365. | Conference abstract |
| Pavlova AV, Saunders FR, Muthuri SG, Gregory JS, Barr RJ, Martin KR, et al. Statistical shape modelling of hip and lumbar spine morphology and their relationship in the MRC National Survey of Health and Development. J Anat. 2017;231(2):248–59. | Includes ineligible anatomy |
| Peng TT. Detection of Femur Fractures in X-ray images. Citeseer; 2002. | Ineligible concept |
| Peters CL, Erickson JA, Anderson L, Anderson AA, Weiss J. Hip-preserving surgery: understanding complex pathomorphology. J Bone Jt Surgery Am Vol. 2009;91(Suppl 6):42. | Ineligible concept |
| Pham DD, Morariu CA, Terheiden T, Warwas S, Landgraeber S, Jaeger M, et al. POLAR APPEARANCE MODELS: A FULLY AUTOMATIC APPROACH FOR FEMORAL MODEL INITIALIZATION IN MRI. In: 2018 IEEE 15TH INTERNATIONAL SYMPOSIUM ON BIOMEDICAL IMAGING (ISBI 2018). 2018. p. 1002–5. (IEEE International Symposium on Biomedical Imaging). | Ineligible concept |
| Prakoonwit S. 3D Reconstruction from Few Silhouettes Using Statistical Models and Landmark Points. In: 2010 International Conference on Cyberworlds. 2010. p. 120–5. | Includes ineligible anatomy |
| Prakoonwit S. Towards Multiple 3D Bone Surface Identification and Reconstruction Using Few 2D X-Ray Images for Intraoperative Applications. Int J Art, Cult Des Technol. 2014;4(1):13–31. | Includes ineligible anatomy |
| Querol LB, Büchler P, Rueckert D, Nolte LP, Ballester MÁG. Statistical Finite Element Model for Bone Shape and Biomechanical Properties. In: MICCAI 2006. 2006. p. 405–11. | Conference paper |
| Rajamani KT, Gonzalez Ballester MA, Nolte L-P, Styner M. A novel and stable approach to anatomical structure morphing for enhanced intraoperative 3D visualization. In: Galloway, Jr. RL, Cleary KR, editors. MEDICAL IMAGING 2005: VISUALIZATION, IMAGE-GUIDED PROCEDURES, AND DISPLAY, PTS 1 AND 2. 2005. p. 718. (Proceedings of SPIE; vol. 5744). | Conference paper |
| Rajamani KT, Hug J, Nolte LP, Styner M. Bone morphing with statistical shape models for enhanced visualization. In: Galloway, Jr. RL, editor. MEDICAL IMAGING 2004: VISUALIZATION, IMAGE-GUIDED PROCEDURES, AND DISPLAY. 2004. p. 122. (Proceedings of SPIE; vol. 5367). | Conference paper |
| Rajamani KT, Joshi SC, Styner MA. Bone model morphing for enhanced surgical visualization. In: 2004 2nd IEEE International Symposium on Biomedical Imaging: Macro to Nano (IEEE Cat No 04EX821). IEEE; 2004. p. 1255–8. | Conference paper |
| Ravikumar N, Gooya A, Cimen S, Frangi AF, Taylor ZA. Group-wise similarity registration of point sets using Student’s t-mixture model for statistical shape models. Med Image Anal. 2018;44:156–76. | Includes ineligible anatomy |
| Richardson T, Wang S. Open-curve shape correspondence without endpoint correspondence. Med Image Comput Comput Assist Interv. 2006;9:17–24. | Ineligible concept |
| Richmond BG, Jungers WL. Hominin proximal femur morphology from the Tugen Hills to Flores. African Genes Perspect Hominin Evol. 2012;62:248. | Ineligible concept |
| Richmond BG, Jungers WL. Orrorin tugenensis femoral morphology and the evolution of hominin bipedalism. Science (80- ). 2008;319(5870):1662–5. | Ineligible concept |
| Runhaar J, Hall M, Schiphof D, Hosnijeh FS, van Meurs J, Agricola R, et al. What to deploy to prevent hip OA; population attributable fractions of risk factors for incident clinical and radiographic hip OA. Osteoarthr Cartil. 2019;27(S1):S271–2. | Conference abstract |
| Ryniewicz A. Is based on the modeling of the hip joint can discover the excellent characteristics of biobearing? Bio-Algorithms and Med-Systems. 2015;11(2):eA34–5. | Ineligible concept |
| Saberi Hosnijeh F, Zuiderwijk M, Versteeg M, Smeele J, Hofman A, Uitterlinden AG, et al. The shape of the hip joint as a risk factor for osteoarthritis. Osteoarthr Cartil. 2016;24(S1):S21–2. | Conference abstract |
| Sadowsky O, Taylor RH. Image registration and hybrid volume reconstruction of bone anatomy using a statistical shape atlas. ProQuest Dissertations and Theses. [Ann Arbor]: The Johns Hopkins University; 2009. | Includes ineligible anatomy |
| Sahlstedt H. Characterization of Normal Femoral Anatomy in Pediatric Patients using Statistical Shape Models. 2018. | Thesis |
| San Millan M, Rissech C, Turbon D. Using geometric morphometrics to analyse the human acetabular shape for forensic purposes. Eur J Anat. 2017;21(4):334. | Ineligible concept |
| Sapthagirivasan V, Anburajan M, Mahadevan V. Segmentation of proximal femur in digital radiographic image using principal component model. In: 2011 3rd International Conference on Electronics Computer Technology. 2011. p. 113–7. | Conference paper |
| Saunders FR, Muthuri S, Pavlova AV, Adams J, Kuh D, Aspden RM, et al. Variations in hip shape in individuals entering early old age. Osteoarthr Cartil. 2016;24(S1):S246. | Conference abstract |
| Schierjott RA, Hettich G, Graichen H, Jansson V, Rudert M, Traina F, et al. Quantitative assessment of acetabular bone defects: A study of 50 computed tomography data sets. PLoS One. 2019;14(10):e0222511. | Includes ineligible anatomy |
| Schmid J, Kim J, Magnenat-Thalmann N. Robust statistical shape models for MRI bone segmentation in presence of small field of view. Med Image Anal. 2011;15(1):155–68. | Includes ineligible anatomy |
| Schmid J, Magnenat-Thalmann N. MRI bone segmentation using deformable models and shape priors. Med Image Comput Comput Assist Interv. 2008;11:119–26. | Includes ineligible anatomy |
| Schuler B, Fritscher KD, Kuhn V, Eckstein F, Schubert R. Using a statistical appearance model to predict the fracture load of the proximal femur. In: Miga MI, Wong KH, editors. Proc SPIE. 2009. p. 72610W. (PROCEEDINGS- SPIE THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING; vol. 7261). | Conference paper |
| Schumann S, Zheng G, Nolte L-P. Calibration of X-ray radiographs and its feasible application for 2D/3D reconstruction of the proximal femur. In: 2008 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE; 2008. p. 470–3. | Conference paper |
| Serrurier A, Jolivet E, Quijano S, Thoreux P, Skalli W. Distribution and variability study of the femur cortical thickness from computer tomography. Comput Methods Biomech Biomed Engin. 2014;17(7):768–86. | Includes ineligible anatomy |
| Siebelt M, Agricola R, Weinans H, Kim YJ. The role of imaging in early hip OA. Osteoarthr Cartil. 2014;22(10):1470–80. | Review paper |
| Song W wei, Liu B, Ou Z ying, De wei Zhao, Wang W ming, Han J. Reconstruction of Patient Specific Models of Femur for Surgery of Avascular Necrosis of Femoral Head. In: 2007 IEEE/ICME International Conference on Complex Medical Engineering. IEEE; 2007. p. 661–5. | Conference paper |
| Song W, Cao S, Zhang H, Wang W, Song K. 3D-SSM Based Segmentation of Proximal Femur from Hip Joint CT Data. In: Shen, G and Huang X, editor. ADVANCED RESEARCH ON COMPUTER SCIENCE AND INFORMATION ENGINEERING. 2011. p. 194–9. (Communications in Computer and Information Science; vol. 153). | Conference paper |
| Song W, Hua S, Ou Z, Zhao Q, An H. Automatic Measurement of Morphological Parameters of Hip Joint from CT Images. In: 2008 2nd International Conference on Bioinformatics and Biomedical Engineering. IEEE; 2008. p. 2382–5. | Conference paper |
| Song W, Hua S, Zhao Q, Cui W, Ou Z. Modeling for Rehabilitation of Collapsing Femoral Head Based on 3D Statistical Shape Knowledge. In: 2009 3rd International Conference on Bioinformatics and Biomedical Engineering. IEEE; 2009. p. 1–4. | Conference paper |
| Song WW, Li GH, Ou ZY, Han J, De wei Zhao, Wang WM. Model-Based Segmentation of Femoral Head and Acetabulum from CT Images. In: 2007 IEEE/ICME International Conference on Complex Medical Engineering. IEEE; 2007. p. 586–90. | Conference paper |
| Sugano N, Noble PC, Kamaric E, Salama JK, Ochi T, Tullos HS. The morphology of the femur in developmental dysplasia of the hip. J Bone Joint Surg Br. 1998;80-B(4):711–9. | Ineligible concept |
| Talib H, Rajamani K, Kowal J, Styner M, González Ballester MA. Assessing the feasibility of ultrasound-initialized deformable bone models. In: Cleary KR, Galloway, Jr. RL, editors. MEDICAL IMAGING 2006: VISUALIZATION, IMAGE-GUIDED PROCEDURES, AND DISPLAY. 2006. p. 61410R. (Proceedings of SPIE; vol. 6141). | Conference paper |
| Tang TS, Ellis RE. 2D/3D deformable registration using a hybrid atlas. Med Image Comput Comput Assist Interv. 2005;8:223–30. | Includes ineligible anatomy |
| Taylor M, Bryan R, Nair P. Accounting for patient variability in finite element analysis of the resurfaced femoral head. J Biomech. 2010;43:S31. | Includes ineligible anatomy |
| Thevenot J, Koivumäki J, Kuhn V, Eckstein F, Jämsä T. A novel methodology for generating 3D finite element models of the hip from 2D radiographs. J Biomech. 2014;47(2):438–44. | Ineligible concept |
| Tibrewala R, Bahroos E, Mehrebian H, Foreman SC, Link TM, Pedoia V, et al. [18F]-sodium fluoride PET-MR imaging reveals bone-cartilage interactions in hip osteoarthritis. Osteoarthr Cartil. 2019;27(S1):S145–7. | Conference abstract |
| Tsaousis N. Cortical thickness estimation of the proximal femur from multi-view, dual-energy x-ray absorptiometry. PQDT - UK & Ireland. [Ann Arbor]: University of Cambridge (United Kingdom); 2015. | Ineligible concept |
| Turmezei TD, Treece GM, Gee AH, Sigurðsson S, Jónsson H, Aspelund T, et al. 3D joint space mapping is a better predictor of future total hip replacement than current 2D radiographic gold standards: an ages-reykjavik study. Osteoarthr Cartil. 2019;27(S1):S341–2. | Conference abstract |
| Vaananen SP, Isaksson H, Waarsing E, Zadpoor AA, Jurvelin JS, Weinans H. Estimation of 3D rotation of femur in 2D radiographs - Effects on shape parameters. J Biomech. 2012;45(S1):S459. | Conference abstract |
| Väänänen SP, Jurvelin JS, Isaksson H. Estimation of 3D shape and internal density of proximal femur by combining DXA images with shape and density templates. Trans Orthop Res Soc San Fr. 2012;1020(464):2012. | Ineligible concept |
| van Buuren MM, Arden NK, Bierma-Zeinstra SM, Bramer WM, Casartelli NC, Felson DT, et al. The association between adult hip morphology and hip osteoarthritis: a systematic review. Osteoarthr Cartil. 2020;28(S1):S260–1. | Conference abstract |
| van Buuren MMA, Arden NK, Bierma-Zeinstra SMA, Bramer WM, Casartelli NC, Felson DT, et al. Statistical shape modeling of the hip and the association with hip osteoarthritis: a systematic review. Osteoarthr Cartil. 2021;29(5):607–18. | Review paper |
| van der Heijden RA, Waarsing JH, Reijman M, Verhaar JA, Bierma-Zeinstra SM, Ginai AZ, et al. 439 IMPINGEMENT AND THE RELATION WITH OSTEOARTHRITIS OF THE HIP IN A POPULATION OF RETIRED SOCCER PLAYERS AND CONTROLS. Osteoarthr Cartil. 2009;17(S1):S234. | Conference abstract |
| van der Veer EL, Gielis WP, Weinans HH, Beek FJA, van Hasselt PM, Sakkers RJB. The effect of hip surgery on the sphericity of the femoral head in Hurler syndrome. J Inherit Metab Dis. 2019;42:257. | Abstract withdrawn |
| Van Houcke J, Audenaert EA, Atkins PR, Anderson AE. A Combined Geometric Morphometric and Discrete Element Modeling Approach for Hip Cartilage Contact Mechanics. Front Bioeng Biotechnol. 2020;8. | Ineligible concept |
| Van Klij P, Heerey J, Waarsing JH, Agricola R. The prevalence of cam and pincer morphology and its association with development of hip osteoarthritis. J Orthop Sport Phys Ther. 2018;48(4):230–8. | Ineligible concept |
| Veilleux NJ, Kalore NV, Wegelin JA, Vossen JA, Jiranek WA, J.S. W. Automated femoral version estimation without the distal femur. J Orthop Res. 2018;36(12):3161–8. | Ineligible concept |
| Versteeg M, Saberi-Hosnije F, Zuiderwijk ME, Waarsing JH, Agricola R, Oei EH, et al. Genetic determinants of mild acetabular dysplasia. Osteoarthr Cartil. 2016;24(S1):S227–8. | Conference abstract |
| Villette CC, Zhang J, Phillips ATM. Influence of femoral external shape on internal architecture and fracture risk. Biomech Model Mechanobiol. 2020;19(4):1251–61. | Includes ineligible anatomy |
| Waarsing JH, Kloppenburg M, Slagboom PE, Bijsterbosch J, Bos SD, Watt I, et al. 068 OSTEOARTHRITIS SUSCEPTIBILITY GENES ARE ASSOCIATED WITH VARIATIONS IN HIP MORPHOLOGY. Osteoarthr Cartil. 2009;17(S1):S45–6. | Conference abstract |
| Wang J, Shi C. Automatic construction of statistical shape models using deformable simplex meshes with vector field convolution energy. Biomed Eng Online. 2017;16(1):49. | Includes ineligible anatomy |
| Weaver TD. The shape of the Neandertal femur is primarily the consequence of a hyperpolar body form. Proc Natl Acad Sci U S A. 2003;100(12):6926–9. | Includes only artificial or non-human hips |
| Weinans H. Femoral shape and impingement. Osteoarthr Cartil. 2013;21(S):S6. | Conference abstract |
| Weinans H. Joint shape modeling and osteoarthritis. Ann Rheum Dis. 2013;71. | Includes ineligible anatomy |
| Whitmarsh T, Fritscher KD, Humbert L, Del Rio Barquero LM, Roth T, Kammerlander C, et al. A Statistical Model of Shape and Bone Mineral Density Distribution of the Proximal Femur for Fracture Risk Assessment. In: Medical image computing and computer-assisted intervention : MICCAI . International Conference on Medical Image Computing and Computer-Assisted Intervention. T. Whitmarsh, Center for Computational Imaging & Simulation Technologies in Biomedicine (CISTIB), Universitat Pompeu Fabra (UPF) and CIBER-BBN, Barcelona, Spain. Germany; 2011. p. 393–400. | Conference paper |
| Whitmarsh T, Fritscher KD, Humbert L, Del-Rio-Barquero LM, Schubert R, Frangi AF. Hip fracture discrimination using 3D reconstructions from Dual-energy X-ray Absorptiometry. In: 2011 IEEE International Symposium on Biomedical Imaging: From Nano to Macro. IEEE; 2011. p. 1189–92. | Conference paper |
| Whitmarsh T, Humbert L, De Craene M, del Río Barquero LM, Fritscher K, Schubert R, et al. 3D bone mineral density distribution and shape reconstruction of the proximal femur from a single simulated DXA image: an in vitro study. In: Dawant BM, Haynor DR, editors. Proc SPIE. 2010. p. 76234U. | Conference paper |
| Wise BL, Luker K, Lynch J, Liu F, Parimi N, Nevitt M, et al. The association of proximal femur shape with lateral compartment knee osteoarthritis: the osteoarthritis initiative. Osteoarthr Cartil. 2013;21(S1):S163. | Conference abstract |
| Xia Y, Chandra S, Salvado O, Fripp J, Schwarz R, Lauer L, et al. Automated MR Hip Bone Segmentation. In: 2011 International Conference on Digital Image Computing: Techniques and Applications. 2011. p. 25–30. | Includes ineligible anatomy |
| Xia Y, Fripp J, Chandra SS, Schwarz R, Engstrom C, Crozier S. Automated bone segmentation from large field of view 3D MR images of the hip joint. Phys Med Biol. 2013;58(20):7375–90. | Includes ineligible anatomy |
| Xia Y, Fripp J, Chandra SS, Walker D, Crozier S, Engstrom C. Automated 3D quantitative assessment and measurement of alpha angles from the femoral head-neck junction using MR imaging. Phys Med Biol. 2015;60(19):7601–16. | Includes ineligible anatomy |
| Xia Y. Automated Segmentation and Quantitative Analysis of the Hip Joint from Magnetic Resonance Images. 2014. | Thesis |
| Yokota F, Okada T, Takao M, Sugano N, Tada Y, Sato Y. Automated segmentation of the femur and pelvis from 3D CT data of diseased hip using hierarchical statistical shape model of joint structure. In: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). 2009. | Includes ineligible anatomy |
| Yokota F, Okada T, Takao M, Sugano N, Tada Y, Tomiyama N, et al. Automated CT segmentation of diseased hip using hierarchical and conditional statistical shape models. In: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). 2013. | Includes ineligible anatomy |
| Yoshida K, Barr RJ, Gregory JS, Aspden RM, Alesci S, Macfarlane GJ, et al. Link between the severity of osteoarthritis and the shape of the hip joint using DXA images. Rheumatology. 2009;48(S1):I99. | Conference abstract |
| Yoshida K, Gregory JS, Barr RJ, Alesci S, Aspden RM, Reid DM. 029 TEMPORAL STRUCTURAL CHANGES IN HIP OA DETECTED BY SHAPE AND APPEARANCE MODELLING OF DXA IMAGES: A ONE-YEAR PROSPECTIVE LONGITUDINAL STUDY. Osteoarthr Cartil. 2009;17(S1):S24. | Conference abstract |
| Yoshida K, Gregory JS, Mason B, Reid IR, Reid DM. SAT0327 Predicting hip osteoarthritis progression using active appearance modelling (AAM) applied to hip DXA images from the auckland calcium study: Ann Rheum Dis. 2013;71(Suppl 3):582.2-583. | Conference abstract |
| Youn K, Park MS, Lee J. Iterative approach for 3D reconstruction of the femur from un-calibrated 2D radiographic images. Med Eng Phys. 2017;50:89–95. | Includes ineligible anatomy |
| Zeng W-N, Wang F-Y, Chen C, Zhang Y, Gong X-Y, Zhou K, et al. Investigation of association between hip morphology and prevalence of osteoarthritis. Sci Rep. 2016;6(1):23477. | Ineligible concept |
| Zhang J. Development of an automated system for building a large population-based statistical model of femur morphology [Internet]. University of Aukland; 2013. Available from: https://researchspace.auckland.ac.nz/handle/2292/20946 | Includes ineligible anatomy |
| Zhang Q, Bhalerao A, Dickenson E, Hutchinson C. Active appearance pyramids for object parametrisation and fitting. Med Image Anal. 2016;32:101–14. | Includes ineligible anatomy |
| Zhang X, Chen C, Boone S, Joshi V, Welbeck A, Liang G, et al. MRI-based active shape model of the human proximal femur using fiducial and secondary landmarks and its validation. In: Gimi B, Krol A, editors. Medical Imaging 2018: Biomedical Applications in Molecular, Structural, and Functional Imaging. SPIE; 2018. p. 56. | Conference abstract |
| Zhang X. MRI-based active shape model of the human proximal femur using fiducial and secondary landmarks and its validation. University of Iowa; 2018. | Thesis |
| Zheng G, Ballester MÁG, Styner M, Nolte L-P. Reconstruction of Patient-Specific 3D Bone Surface from 2D Calibrated Fluoroscopic Images and Point Distribution Model. In: Medical image computing and computer-assisted intervention : MICCAI . International Conference on Medical Image Computing and Computer-Assisted Intervention. G. Zheng, MEM Research Center, University of Bern, CH-3014, Bern, Switzerland. Germany; 2006. p. 25–32. | Conference paper |
| Zheng G, Ballester MAG. An Integrated Approach for Reconstructing a Surface Model of the Proximal Femur from Sparse Input Data and a Multi-Level Point Distribution Model. In: Bello, F and Edwards P, editor. ISBMS 2008: Biomedical Simulation. Berlin, Heidelberg: Springer Berlin Heidelberg; 2008. p. 59–68. (Lecture Notes in Computer Science; vol. 5104). | Conference paper |
| Zheng G, Dong X, Gonzalez Ballester MA. Unsupervised Reconstruction of a Patient-Specific Surface Model of a Proximal Femur from Calibrated Fluoroscopic Images. In: Medical Image Computing and Computer-Assisted Intervention – MICCAI 2007. Berlin, Heidelberg: Springer Berlin Heidelberg; 2007. p. 834–41. | Conference paper |
| Zheng G, Dong X, Nolte L-P. Robust and Accurate Reconstruction of Patient-Specific 3D Surface Models from Sparse Point Sets: A Sequential Three-Stage Trimmed Optimization Approach. In: Yang, GZ and Jiang, T and Shen, DG and Gu, L and Yang J, editor. MEDICAL IMAGING AND AUGMENTED REALITY. 2006. p. 68–75. (Lecture Notes in Computer Science; vol. 4091). | Conference paper |
| Zheng G, Dong X. Automatic Reconstruction of a Patient-Specific Surface Model of a Proximal Femur from Calibrated X-Ray Images Via Bayesian Filters. In: Huang, DS and Heutte, L and Loog M, editor. ICIC 2007: Advanced Intelligent Computing Theories and Applications With Aspects of Theoretical and Methodological Issues. Berlin, Heidelberg: Springer Berlin Heidelberg; 2007. p. 1094–102. (Lecture Notes in Computer Science; vol. 4681). | Conference paper |
| Zheng G, Dong X. Particle Filter Based Automatic Reconstruction of a Patient-Specific Surface Model of a Proximal Femur from Calibrated X-Ray Images for Surgical Navigation. In: Talon, JB and Philips, W and Popescu, D and Scheunders P, editor. ACIVS 2007: Advanced Concepts for Intelligent Vision Systems. Berlin, Heidelberg: Springer Berlin Heidelberg; 2007. p. 616–27. (Lecture Notes in Computer Science; vol. 4678). | Conference paper |
| Zheng G, Gollmer S, Schumann S, Dong X, Feilkas T, González Ballester MA. A 2D/3D correspondence building method for reconstruction of a patient-specific 3D bone surface model using point distribution models and calibrated X-ray images. Med Image Anal. 2009;13(6):883–99. | Includes ineligible anatomy |
| Zheng G, González Ballester MA. An Integrated Approach for Reconstructing Surface Models of the Proximal Femur from Sparse Input Data for Surgical Navigation. In: Duffy V, editor. ICDHM 2007: Digital Human Modeling. 2007. p. 767–75. (Lecture Notes in Computer Science; vol. 4561). | Conference paper |
| Zheng G, Nolte L-P. Surface Reconstruction of Bone from X-ray Images and Point Distribution Model Incorporating a Novel Method for 2D-3D Correspondence. In: 2006 IEEE Computer Society Conference on Computer Vision and Pattern Recognition - Volume 2 (CVPR’06). IEEE; 2006. p. 2237–44. | Conference paper |
| Zheng G, Rajamani KT, Nolte L-P. Use of a Dense Surface Point Distribution Model in a Three-Stage Anatomical Shape Reconstruction from Sparse Information for Computer Assisted Orthopaedic Surgery: A Preliminary Study. In: Narayanan, PJ and Nayar, SK and Shum H, editor. COMPUTER VISION - ACCV 2006, PT II. 2006. p. 52–60. (Lecture Notes in Computer Science; vol. 3852). | Conference paper |
| Zheng G, Rajamani KT, Zhang X, Dong X, Styner M, Nolte L-P. Kernel Regularized Bone Surface Reconstruction from Partial Data Using Statistical Shape Model. In: 2005 IEEE Engineering in Medicine and Biology 27th Annual Conference. IEEE; 2005. p. 6579–82. (PROCEEDINGS OF ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY). | Conference paper |
| Zheng G, Rajamani KT. An optimal three-stage method for anatomical shape reconstruction from sparse information using a dense surface point distribution model. In: Cleary KR, Galloway, Jr. RL, editors. MEDICAL IMAGING 2006: VISUALIZATION, IMAGE-GUIDED PROCEDURES, AND DISPLAY. 2006. p. 614110. (Proceedings of SPIE; vol. 6141). | Conference paper |
| Zheng G, Schumann S. 3-D reconstruction of a surface model of the proximal femur from digital biplanar radiographs. In: 2008 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE; 2008. p. 66–9. | Conference paper |
| Zheng G, Schumann S. A System for 3-D Reconstruction of A Patient-Specific Surface Model from Calibrated X-ray Images. In: Westwood, JD and Westwood, SW and Haluck, RS and Hoffman, HM and Mogel, GT and Phillips R, editor. MMVR. 2009. p. 453–8. (Studies in Health Technology and Informatics; vol. 142). | Conference paper |
| Zheng G. A robust and accurate approach for reconstruction of patient-specific 3D bone models from sparse point sets. In: Cleary KR, Miga MI, editors. Proc SPIE. 2007. p. 65092W. | Conference paper |
| Zheng G. Personalized X-Ray Reconstruction of the Proximal Femur via Intensity-Based Non-rigid 2D-3D Registration. In: Fichtinger, G and Martel, A and Peters T, editor. MEDICAL IMAGE COMPUTING AND COMPUTER-ASSISTED INTERVENTION (MICCAI 2011), PT II. 2011. p. 598–606. (Lecture Notes in Computer Science; vol. 6892). | Conference paper |
| Zheng G. Reconstruction of Patient-Specific 3D Bone Model from Biplanar X-Ray Images and Point Distribution Models. In: 2006 International Conference on Image Processing. IEEE; 2006. p. 1197–200. (IEEE International Conference on Image Processing ICIP). | Conference paper |
| Zheng G. Statistically deformable 2D/3D registration for estimating post-operative cup orientation from a single standard AP X-ray radiograph. Ann Biomed Eng. 2010;38(9):2910–27. | Includes ineligible anatomy |
| Zsemlye G. Shape prediction from partial information. ProQuest Dissertations and Theses. [Ann Arbor]: Eidgenoessische Technische Hochschule Zuerich (Switzerland); 2006. | Thesis |