

Publications in Peer-Reviewed Journals

- Anglin C**, Fu C, Hodgson AJ, Helmy N, Greidanus NV, Masri BA (2009). Finding and defining the ideal patellar resection plane in total knee arthroplasty. *Journal of Biomechanics*, in press.
- Anglin C**, Brimacombe JM, Wilson DR, Masri BA, Greidanus NV, Tonetti J, Hodgson AJ (2009) Biomechanical consequences of patellar component medialization in total knee arthroplasty. *Journal of Arthroplasty*, in press.
- Brimacombe JM, Wilson DR, Hodgson AJ, **Anglin C** (2009) Effect of calibration method on Tekscan sensor accuracy. *Journal of Biomechanical Engineering*, 131(3):034503.
- Anglin C**, Ho KCT, Briard JL, de Lambilly C, Plaskos C, Nodwell E, Stindel E (2008) In vivo patellar tracking in total knee arthroplasty. *Computer Aided Surgery*, 13(6):377-91.
- Anglin C**, Brimacombe JM, Hodgson AJ, Masri BA, Greidanus NV, Tonetti J, Wilson DR (2008). Determinants of patellar tracking in total knee arthroplasty. *Clinical Biomechanics*, 23(7):900-910.
- Anglin C**, Brimacombe JM, Wilson DR, Masri BA, Greidanus NV, Tonetti J, Hodgson AJ (2008) Intraoperative vs. weightbearing patellar kinematics in total knee arthroplasty: a cadaveric study. *Clinical Biomechanics*, 23(1):60-70.
- Helmy N, **Anglin C**, Greidanus NV, Masri BA (2008). To resurface or not to resurface the patella in total knee arthroplasty. *Clinical Orthopaedics and Related Research*, 466(11):2775-2783.
- Anglin C**, Masri BA, Tonetti J, Hodgson AJ, Greidanus NV (2007) Hip resurfacing femoral neck fracture influenced by valgus placement. *Clinical Orthopaedics and Related Research*, 465:71-79.
- Hodgson AJ, Helmy N, Masri BA, Greidanus NV, Inkpen KB, Duncan CP, Garbuz DS, **Anglin C** (2007) A rapid registration technique improves repeatability of guide-pin positioning in femoral head resurfacing arthroplasty. *Proc Institution of Mechanical Engineering Part H*, 221(7):713-24.
- Hopkins AR, Hansen UN, Amis AA, Taylor M, Gronau N, **Anglin C** (2006) Finite element modelling of glenohumeral kinematics following total shoulder arthroplasty. *Journal of Biomechanics*, 39(13):2476-83.
- Hodgson AJ, Inkpen KB, Shekhman M, **Anglin C**, Tonetti J, Masri BA, Duncan CP, Garbuz DS and Greidanus NV (2005) Computer-assisted femoral head resurfacing. *Computer-Aided Surgery*, 10(5):337-43.
- Wu G et al.: Standardization and Terminology Committee of the International Society for Biomechanics (2005) ISB recommendation on definitions of joint coordinate system of various joints for the reporting of human joint motion--part II: shoulder, elbow, wrist and hand. *Journal of Biomechanics*, 38(5):981-992.
- Nyffeler RW, **Anglin C**, Sheikh R, Gerber C (2003) Influence of peg design and cement mantle thickness on pull-out strength of glenoid component pegs. *Journal of Bone & Joint Surgery*, 85B(5):748-752.
- Anglin C**, Wyss UP, Nyffeler RW, Gerber C (2001) Loosening performance of cemented glenoid prosthesis design pairs. *Clinical Biomechanics*, 16:144-150.
- Anglin C**, Wyss UP, Pichora DR (2000) Mechanical testing of shoulder prostheses and recommendations for glenoid design. *Journal of Shoulder and Elbow Surgery*, 9(4):323-331.
- Anglin C**, Wyss UP, Pichora DR (2000) Shoulder prosthesis subluxation: theory and experiment. *Journal of Shoulder and Elbow Surgery*, 9(2):104-114.
- Anglin C**, Wyss UP, Pichora DR (2000) Glenohumeral contact forces. *Proceedings of the Institution of Mechanical Engineers, Part H*, 214:637-644.
- Anglin C**, Wyss UP (2000) Review of arm motion analyses. *Proceedings of the Institution of Mechanical Engineers, Part H*, 214:541-555.
- Anglin C**, Wyss UP (2000). Arm motion analysis of sit-to-stand, stand-to-sit, cane walking and lifting. *Clinical Biomechanics*, 15(6):441-448.

- Anglin C**, Tolhurst P, Wyss UP, Pichora DR (1999) Glenoid cancellous bone strength and modulus. *J. Biomechanics*, 32(10):1091-1097.
- Romilly DP, **Anglin C**, Gosine RG, Hershler C, Raschke SU (1994) A functional task analysis and motion simulation for the development of a powered upper-limb orthosis. *IEEE Transactions on Rehabilitation Engineering*, 2(3):119-129.
- Stanger CA, **Anglin C**, Harwin WS, Romilly DP (1994) Devices for assisting manipulation: a summary of user task priorities. *IEEE Transactions on Rehabilitation Engineering*, 2(4):256-265.
- Raschke SU, Romilly DP, **Anglin C**, Gosine RG, Hershler C (1993/4) A modified powered upper-limb orthosis. *Canadian Association of Prosthetics and Orthotics Yearbook*.

Intellectual Property (Rights Sold)

Method and apparatus for computer assisted femoral head resurfacing. Provisional filed: June 17, 2005. PCT filed: June 19, 2006. Co-inventors: Antony Hodgson & Kevin Inkpen. International Search Report very positive. Rights sold to Orthosoft / Zimmer CAS (Montreal, Canada).

American Society for Testing & Materials (ASTM) standard

F2028-02: Standard test method for the dynamic evaluation of glenoid loosening or disassociation.

Abstracts in Conference Proceedings (2007-9)

- Fu C, Wai J, Anglin C. Computer-assisted surgery system for resurfacing the patella in total knee arthroplasty. 32nd Conference of the Canadian Medical and Biological Engineering Society, Calgary, AB, May 20-22, 2009. [Jack Fu won 2nd place in the presentation competition.]
- Ho KCT, Anglin C. Knee mechanics after joint replacement using computed tomography. 32nd Conference of the Canadian Medical and Biological Engineering Society, Calgary, AB, May 20-22, 2009.
- Anglin C, Fu C, Hodgson AJ, Helmy N, Greidanus NV, Masri BA. Finding and defining the ideal patellar resection plane in total knee arthroplasty. 55th Annual Meeting of the Orthopaedic Research Society, Las Vegas, NV, Feb 22-25, 2009.
- Anglin C, Ho KCT, Briard JL, de Lambilly C, Plaskos C, Nodwell E, Stindel E. In vivo patellar tracking in total knee arthroplasty. 55th Annual Meeting of the Orthopaedic Research Society, Las Vegas, NV, Feb 22-25, 2009.
- Fu C, Wai J, Anglin C. Computer-assisted surgery system for resurfacing the patella in total knee arthroplasty. 9th Annual Alberta Biomedical Engineering Conference, Banff AB, October 24-26, 2008.
- Ho KCT, Anglin C. Knee mechanics after joint replacement using computed tomography. 9th Annual Alberta Biomedical Engineering Conference, Banff AB, October 24-26, 2008. [Karen Ho won the Most Creative Poster Award]
- Ho KCT, Anglin C. Computed tomography methods for assessing total knee replacement mechanics. *Imaging and Measurements in Biomedical Engineering*, Paris, France, October 2-3, 2008.
- Anglin C, Fu C, Hodgson AJ, Helmy N, Greidanus NV, Masri BA. Defining the ideal patellar resection plane. 8th Annual Meeting of the International Society for Computer-Assisted Orthopaedic Surgery, Hong Kong, June 4-7, 2008.
- Anglin C, Ho KCT, Briard JL, de Lambilly C, Plaskos C, Nodwell E, Stindel E. Patellar kinematics during computer-assisted total knee arthroplasty. 8th Annual Meeting of the International Society for Computer-Assisted Orthopaedic Surgery, Hong Kong, June 4-7, 2008.

- Anglin C, Brimacombe JM, Hodgson AJ, Masri BA, Greidanus NV, Tonetti J, Masri BA, Wilson DR. Surgeon control of patellar tracking: effects of femoral, tibial and patellar component position. 53rd Annual Meeting of the Orthopaedic Research Society, San Diego, CA, Feb 11-14, 2007. [New Investigator Recognition Award Finalist]
- Anglin C, Brimacombe JM, Wilson DR, Masri BA, Greidanus NV, Tonetti J, Masri BA, Hodgson AJ. Intraoperative vs weightbearing flexion ex vivo: comparison of patellar kinematics. 53rd Annual Meeting of the Orthopaedic Research Society, San Diego, CA, Feb 11-14, 2007.
- Hodgson AJ, Helmy N, Masri BA, Greidanus NV, Inkpen KB, Duncan CP, Garbuz DS and Anglin C. A rapid registration technique improves repeatability of guide-pin positioning in femoral head resurfacing arthroplasty. 7th Annual Meeting of the International Society for Computer-Assisted Orthopaedic Surgery, Heidelberg, Germany, Jun 20-23, 2007.

Research Reports

- Anglin C (2000) Biomechanical and tribological evaluation of Durasul versus Sulene polyethylene glenoids. Sulzer Orthopedics Ltd.
- Anglin C (2000) Influence of glenoid peg design and cement mantle thickness on pullout force. Sulzer Orthopedics Ltd.
- Anglin C (2000) Biomechanical testing of the Anatomical cemented and uncemented metal-back glenoid. Sulzer Orthopedics Ltd.
- Klabunde R, Anglin C (2000) Festigkeitsvergleich des GSB Ellenbogen Ulnateils [Strength comparison of the GSB elbow ulna post]. Sulzer Orthopedics Ltd.
- Anglin C (1999) Investigation of the subluxation and fixation properties of the Anatomica, Select and competitor glenoids. Sulzer Orthopedics Ltd.
- Anglin C (1999) Investigation of the head/stem connection strength and stem strength of the Anatomica humeral component. Sulzer Orthopedics Ltd.
- Anglin C (1998) Static and dynamic testing of the Anatomica humeral and glenoid components. Sulzer Orthopedics Ltd.
- Anglin C (1997) Evaluation of the Flock of Birds Electromagnetic Tracking System: Implications for the Navitrack Computer-Assisted Surgery System. Sulzer Orthopedics Ltd.
- Anglin C (1997) Evaluation of the Navitrack Computer Assisted Surgery System. Sulzer Orthopedics Ltd.
- Anglin C, Wyss U (1995) Biomechanics of the shoulder joint. Sulzer Orthopedics Ltd.
- Anglin C, Wyss U (1995) Shoulder arthroplasty: complications and standard test methods. Sulzer Orthopedics Ltd.