

Michel Jean Le Duff, MA
E-mail: michelleduff@dochs.org

CURRENT POSITION/APPOINTMENTS:

Research Lead, Joint Replacement Institute at St Vincent Medical center, Los Angeles since October 1998.

ACADEMIC ACHIEVEMENTS and TRAINING

California State University of Northridge, Masters of Arts with Distinction in Kinesiology, 1997.

- Emphasis in Biomechanics.
- Thesis: "A 3-Dimensional Computerized Biomechanical Analysis of the Float Serve in Volleyball"
- University de Haute Bretagne, Rennes II (France), Capes (Teaching credential) 1983.

AWARDS AND SPECIAL DISTINCTIONS

American Hip Society: John Charnley award (2006)

A Study of Implant Failure in Metal-on-Metal Surface Arthroplasties

Pat Campbell Ph.D, Paul E. Beaulé MD, Edward Ebramzadeh Ph.D, Michel Le Duff MA, Koen De Smet MD, Zhen Lu Ph.D, Harlan C. Amstutz MD.

COMPUTER LITERACY

Microsoft Windows, Office suite (Excel, Word, Powerpoint)

Database management (Access)

Statistical software package (Stata)

Optical scanning software (NCS-Pearson Design Expert and Scantools)

Reference management software (Endnote)

Photo and video processing software

(Adobe Photoshop – Windows Movie Maker, Vegas Video)

OTHER SKILLS

Bilingual French/English

PEER REVIEWED PUBLICATIONS

References

- 1. Amstutz H, Beaulé P, Le Duff M.** Hybrid metal-on-metal surface arthroplasty of the hip. *Operative Techniques in Orthopedics* 2001;11-4:253-62.
- 2. Beaulé P, Dorey F, Le Duff M.** Fate of cementless acetabular components retained during revision of a femoral component of a total hip arthroplasty. *Journal of Bone and Joint Surgery* 2003;85-A-12:2288-93.
- 3. Beaulé P, Le Duff M, Amstutz H.** Hemiresurfacing arthroplasty of the hip for failed free-vascularized fibular graft. *J Arthroplasty* 2003;18-6:519-23.
- 4. Amstutz H, Beaulé P, Dorey F, Le Duff M, Campbell P, Gruen T.** Metal-on-metal hybrid surface arthroplasty: two to six year follow-up. *J Bone and Joint Surg* 2004;86 A:28-39.
- 5. Amstutz H, Campbell P, Le Duff M.** Fracture of the neck of the femur after surface arthroplasty of the hip. *J Bone and Joint Surg* 2004;86 A-9:1874-7.
- 6. Amstutz H, Ebramzadeh E, Sarkany A, Le Duff M, Rude R.** Preservation of bone mineral density of the proximal femur following hemisurface arthroplasty. *Orthopaedics* 2004;27-12:1266-71.
- 7. Amstutz H, Le Duff M, Beaulé P.** Prevention and treatment of dislocation after total hip replacement using large diameter balls. *Clin Orthop* 2004;429-12:108-16.
- 8. Beaulé P, Amstutz H, Le Duff M, Dorey F.** Surface arthroplasty for osteonecrosis of the hip: Hemiresurfacing versus metal-on-metal hybrid resurfacing. *J Arthroplasty* 2004;19-12:54-8.
- 9. Beaulé P, Dorey F, Le Duff M, Gruen T, Amstutz H.** Risk factors affecting outcome of metal on metal surface arthroplasty of the hip. *Clin Orthop* 2004;418:87-93.
- 10. Beaulé P, Ebramzadeh E, Le Duff M, Prasad R, Amstutz H.** Cementing a liner into a stable cementless acetabular shell in revision hip surgery: the double socket technique. *Journal of Bone and Joint Surgery* 2004;86-A-May:924-34.
- 11. Beaulé P, Le Duff M, Campbell P, Dorey F, Park S, Amstutz H.** Metal-on-metal surface arthroplasty with a cemented femoral component: A 7-10 year follow-up study. *J Arthroplasty* 2004;19-12:17-22.
- 12. Beaulé P, Lee J, Le Duff M, Amstutz H, Ebramzadeh E.** Orientation of the femoral component in surface arthroplasty of the hip: a biomechanical and clinical analysis. *Journal of Bone and Joint Surgery* 2004;86-A-9:2015-21.
- 13. Amstutz H, Su E, Le Duff M.** Surface arthroplasty in young patients with hip arthritis secondary to childhood disorders. *Orthop Clin North Am* 2005;36-2:223-30.

- 14. Beulé P, Krismer M, Mayrhofer P, Wanner S, Le Duff M, Mattesich M, Stoeckl B, Amstutz H, Biedermann R.** EBRA-FCA for measurement of migration of the femoral component in surface arthroplasty of the hip. *J Bone Joint Surg Br.* 2005;87-B-5:741-4.
- 15. Amstutz H, Beulé P, Dorey F, Le Duff M, Campbell P, Gruen T.** Metal-on-metal hybrid surface arthroplasty - Surgical technique. *J Bone and Joint Surg* 2006;88 A-suppl 1 part 2:234-49.
- 16. Amstutz H, Le Duff M.** Background of metal-on-metal resurfacing. *Proc Inst Mech Eng [H]* 2006;220-2:85-94.
- 17. Beulé P, Dorey F, Hoke R, Le Duff M, Amstutz H.** The value of patient activity level in the outcome of total hip arthroplasty. *J Arthroplasty* 2006;21-4:547-52.
- 18. Campbell P, Beulé P, Ebrahimzadeh E, Le Duff M, De Smet K, Lu Z, Amstutz H.** A study of implant failure in metal-on-metal surface arthroplasties. *Clin Orthop* 2006;453:35-46.
- 19. Amstutz H, Antoniadou J, Le Duff M.** Results of metal-on-metal hybrid hip resurfacing for Crowe type I and II developmental dysplasia. *J Bone and Joint Surg Am* 2007;89-2:339-46.
- 20. Amstutz H, Ball S, Le Duff M, Dorey F.** Hip resurfacing for patients under 50 years of age. Results of 350 Conserve Plus with a 2-9 year follow-up. *Clin Orthop Rel Res* 2007;460:159-64.
- 21. Amstutz H, Campbell P, Le Duff M.** Metal-on-metal hip resurfacing: what have we learned? *AAOS Instructional Course Lecture* 2007;56:149-61.
- 22. Amstutz H, Le Duff M, Campbell P, Dorey F.** The effects of technique changes on aseptic loosening of the femoral component in hip resurfacing. Results of 600 Conserve Plus with a 3-9 year follow-up. *J Arthroplasty* 2007;22-4:481-9.
- 23. Ball S, Le Duff M, Amstutz H.** Early results of conversion of a failed femoral component in hip resurfacing arthroplasty. *J Bone and Joint Surg Am* 2007;89:735-41.
- 24. Beulé P, Harvey N, Zaragoza E, Le Duff M, Dorey F.** The femoral head/neck offset and hip resurfacing. *J Bone Joint Surg Br.* 2007;89-1:9-15.
- 25. Beulé P, Le Duff M, Zaragoza E.** Quality of life following femoral head-neck osteochondroplasty for femoroacetabular impingement. *J Bone Joint Surg Am.* 2007;89-4:773-9.
- 26. Le Duff M, Amstutz H, Dorey F.** Metal-on-metal hip resurfacing for obese patients. *J Bone and Joint Surg Am* 2007;89-12:2705-11.
- 27. Amstutz H, Le Duff M.** Eleven years of experience with metal-on-metal hybrid hip resurfacing: a review of 1000 conserve plus. *J Arthroplasty.* 2008;23-6 Suppl 1:36-43.
- 28. Amstutz H, Le Duff M, Harvey N, Hoberg M.** Improved survivorship of hybrid metal-on-metal hip resurfacing with second-generation techniques for Crowe-I and II developmental dysplasia of the hip. *J Bone and Joint Surg* 2008;90-Suppl 3:12-20.

- 29. Hoberg M, Le Duff M, Amstutz H.** Metal-on-metal hybrid hip resurfacing : Development and current state. *Orthopade*. 2008;37-7:679-84.
- 30. Amstutz H, Le Duff M.** Cementing the metaphyseal stem in metal-on-metal resurfacing: when and why. *Clin Orthop Rel Res* 2009;467-1:79-83.
- 31. Amstutz H, Le Duff M.** Current Status of Hemi-Resurfacing Arthroplasty for Osteonecrosis of the Hip. A 27-year Experience. *Orthop Clin North Am* 2009;40-2:275-82.
- 32. Amstutz H, Le Duff M.** Hip Resurfacing Arthroplasty. *American Academy of Orthopaedic Surgeons Web site: Orthopaedic Knowledge Online* 2009;7-1:<http://www5.aaos.org/oko/description.cfm?topic=ADU030>.
- 33. Amstutz H, Le Duff M.** Hip resurfacing results for osteonecrosis are as good as for other etiologies at 2- to 12-years. *Clin Orthop Rel Res* 2009;In Press.
- 34. Le Duff M, Wisk L, Amstutz H.** Range of motion after stemmed total hip arthroplasty and hip resurfacing. A clinical study. *Bulletin of the NYU Hospital for Joint Diseases* 2009;67-2 177-81

BOOK CHAPTERS

- 1. Amstutz H, Le Duff M, Dorey F.** Hip resurfacing: indications, results, and prevention of complications. In: Sofue M, Endo N, eds. *Treatment of osteoarthritic change in the hip*. Shinano, Japan: Springer, 2007:195-204.
- 2. Amstutz H, Le Duff M.** Evolution of hip resurfacing. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:1-15.
- 3. Amstutz H, Le Duff M.** Results of Conserve®Plus hip resurfacing. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:103-17.
- 4. Amstutz H, Le Duff M.** "Primary" osteoarthritis. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:149-59.
- 5. Amstutz H, Le Duff M.** Post-traumatic arthritis. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:203-11.
- 6. Amstutz H, Le Duff M.** Rheumatoid arthritis and related disorders. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:213-20.
- 7. Amstutz H, Le Duff M.** Hip resurfacing for other conditions and etiologies. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:221-8.
- 8. Amstutz H, Le Duff M.** Assessment of the failed or poorly performing hip resurfacing. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:229-37.
- 9. Amstutz H, Le Duff M, Boitano P.** Osteonecrosis of the hip. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:161-80.
- 10. Amstutz H, Su E, Le Duff M.** Childhood disorders. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:181-202.
- 11. Le Duff M, Dorey F.** Outcome studies and data collection. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:61-76.
- 12. Schmalzried T, Le Duff M.** Rehabilitation and Activity Following Total Hip Resurfacing. In: Amstutz HC, ed. *Hip Resurfacing: Principles, Indications, Technique and Results*. Philadelphia: Elsevier, 2008:245-51.

PUBLISHED ABSTRACTS

1. **British Orthopaedic Association:**

HC Amstutz, PE Beaulé, TA Gruen, and MJ Le Duff

Hybrid metal on metal surface arthroplasty: first 300 hips with 2.5–5.9 years of follow up.

J Bone Joint Surg Br Proceedings, Jul 2003; 85-B: 158.

2. **Société Française de Chirurgie Orthopédique et Traumatologique:**

P. Beaulé, M. Le Duff, F. Dorey, and H. Amstutz

Behaviour of non-cemented acetabular implants left in place after revision of the femoral component of total hip arthroplasty.

J Bone Joint Surg Br Proceedings, Apr 2004; 86-B: 40.

3. **European Federation of National Associations of Orthopaedics and Traumatology:**

Harlan C. Amstutz, Paul E. Beaulé, Thomas A. Gruen, and Michel J. Le Duff

O3253 Hybrid metal on metal surface arthroplasty. first 400 hips with conserve plus?, 2.5–5.9 years of follow-up.

J Bone Joint Surg Br Proceedings, Sep 2004; 86-B: 361.

4. **European Federation of National Associations of Orthopaedics and Traumatology:**

Harlan C. Amstutz, Thomas A Gruen, and Michel J. Le Duff

O3165 Femoral loosening and thigh pain eliminated with a double wedge tapered extensively coated grit-blasted stem.

J Bone Joint Surg Br Proceedings, Sep 2004; 86-B: 353.

5. **European Federation of National Associations of Orthopaedics and Traumatology:**

H.C. Amstutz, P.C. Campbell, F. Dorey, P. Beaulé, and M. Le Duff

O3156 Risk factors for femoral loosening in metal-on-metal hybrid hip resurfacing.

J Bone Joint Surg Br Proceedings, Sep 2004; 86-B: 352.

6. **European Federation of National Associations of Orthopaedics and Traumatology:**

H.C. Amstutz, P. Beaulé, P.C. Campbell, F. Dorey, M. Le Duff, and T. Gruen

O3153 Analysis of short-term fractures of metal-on-metal hip resurfacing.

J Bone Joint Surg Br Proceedings, Sep 2004; 86-B: 352.

7. **European Federation of National Associations of Orthopaedics and Traumatology:**

Harlan C. Amstutz, Paul E. Beaulé, Thomas A. Gruen, and Michel J. Le Duff

O2633 Metal on metal hybrid surface arthroplasty (sa) for ddh. 3.5 to 6.5 year follow-up.

J Bone Joint Surg Br Proceedings, Sep 2004; 86-B: 333.

8. **European Federation of National Associations of Orthopaedics and Traumatology:**

Paul E. Beaulé, Michel J. Le Duff, Frederick J. Dorey, and Harlan C. Amstutz

O2371 Fate of cementless acetabular components retained during revision of a femoral component of a total hip arthroplasty.

J Bone Joint Surg Br Proceedings, Sep 2004; 86-B: 311.

9. **Société Française de Chirurgie Orthopédique et Traumatologique:**

P.E. Beaulé, M. LeDuff, and H. Amstutz

Metal-on-metal hybrid twin cups for treatment of femoral head necrosis.

J Bone Joint Surg Br Proceedings, Apr 2005; 87-B: 121.

10. Société Française de Chirurgie Orthopédique et Traumatologique:

P.E. Beaulé, M. Le Duff, F. Dorey, and H. Amstutz

Clinical and radiographic factors influencing early outcome of metal-on-metal resurfaced prostheses.

J Bone Joint Surg Br Proceedings, Apr 2005; 87-B: 121.

11. Combined Orthopaedic Associations:

P.E. Beaulé, M.J. Le Duff, H.C. Amstutz, R. Biederman, and P. Mayrhofer

Study of femoral component migration in surface arthroplasty of the hip using EBRA-FCA

J Bone Joint Surg Br Proceedings, Sep 2005; 87-B: 364.

12. Combined Orthopaedic Associations:

P.E. Beaulé, F.J. Dorey, M. Le Duff, and H.C. Amstutz

Validation of activity level in the assessment of the clinical outcome of total hip arthroplasty.

J Bone Joint Surg Br Proceedings, Sep 2005; 87-B: 360.

13. Combined Orthopaedic Associations:

H.C. Amstutz, P.E. Beaulé, T.A. Gruen, and M.J. Le Duff

Risk factors in hybrid metal-on-metal surface arthroplasty – first 400 hips with 2.5- to 6.5-year follow-up.

J Bone Joint Surg Br Proceedings, Sep 2005; 87-B: 356.

14. Combined Orthopaedic Associations:

H.C. Amstutz and M.J. Le Duff

Anatomic metal-on-metal THR for prevention of dislocation. The use of large femoral heads and thin sockets.

J Bone Joint Surg Br Proceedings, Sep 2005; 87-B: 355 - 356.

15. Combined Orthopaedic Associations:

H. Amstutz, J. Antoniadis, M. Le Duff, and E. Su

Surface arthroplasty in young patients with hip arthritis secondary to childhood disorders.

J Bone Joint Surg Br Proceedings, Sep 2005; 87-B: 355.

16. Combined Orthopaedic Associations:

H.C. Amstutz, P.E. Beaulé, T.A. Gruen, and M.J. Le Duff

Metal-on-metal hybrid surface arthroplasty for developmental dysplasia of the hip: 3.5 to 6.5-year follow-up.

J Bone Joint Surg Br Proceedings, Sep 2005; 87-B: 355.

17. Italian Hip Society:

H.C. Amstutz, M.J. Le Duff, F.J. Dorey

Indications, limitations, and results of metal-on-metal hip resurfacing

Hip international, Dec 2005; 15(4): 245

18. Italian Hip Society:

H.C. Amstutz, M.J. Le Duff

Surface arthroplasty: the future
Hip international, Dec 2005; 15(4): 248