



Curriculum Vitae

Personal information **Niklaus F FRIEDERICH**

Work experience

Medical Advisor

University of Basel, Dept. Biomedical Engineering [01/07/2015 – Current]

City: Basel/Allschwil

Country: Switzerland

Medical advisor to the MIRACLE projects I and II; Research projects funded by the Werner Siemens Foundation WSS

Head of Biomechanics and Biocalorimetry University of Basel,

Dept. Biomedical Engineering [01/04/2013 – Current]

City: Basel/Allschwil

Country: Switzerland

Head of Biomechanics at the Dept. Biomedical Engineering, University of Basel.

Funded by a grant from the Hans-Heiner Zaeslin private trust

Head, Dept. of Orthopaedic Surgery

Kantonsspital Bruderholz [01/04/1998 – 31/03/2013]

City: Bruderholz Country: Switzerland

Head of the Department of Orthopaedic Surgery. 20 staff, 22 residents in training

Consultant

Orthoklinik Dornach [01/04/2013 – 30/06/2015]

City: Dornach

Country: Switzerland

Consultant Orthopaedic Surgeon

Consultant

Deutsche Arthroshilfe e.V. [01/04/1998 – Current]

City: Mannheim

Country: Germany

Evaluating research proposals sent in to Deutsche Arthroshilfe e.V. and grading them for final decision by the Kuratel. Non-employed. Honorarium per case.

Education and training

MD

University of Bern; Medical School [01/04/1975 – 30/06/1981]

Address: 3000 Bern (Switzerland)

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FMH Orthopaedic Surgery

Swiss Orthopaedics; Foederatio Medicorum Helveticorum (Residency Specialist Training) [02/07/1983 – 11/12/1991]

Address: 3000 Bern (Switzerland)

Habilitation (Privat-Dozent, PD)

University of Basel [01/01/1994 – 16/10/1997]

Address: 4000 Basel (Switzerland)

Additional information

Publications

1. Stolz M, Gottardi R, Raiteri R, Miot S, Martin I, Imer R, Stauer U, Raducanu A, Duggelin M, Baschong W, Daniels

AU, Friederich
 NF, Attila A, Aebi U: Early detection of aging cartilage and osteoarthritis in mice and patient samples using atomic force microscopy. *Nature Nanotechnology*, 4(3):186-192, 2009
 Citations: 445

2. Sommer C, Friederich NF, Müller W: Improperly placed anterior cruciate ligament grafts: correlation between radiological parameters and clinical results. *Knee Surgery, Sports Traumatology, Arthroscopy*, 8(4):207-213, 2000
 Citations: 282

3. Biedert RM, Stauffer E, Friederich NF: Occurrence of free nerve endings in the soft tissue of the knee joint. A histologic investigation. *Am J Sport Med*, 20(4):430-433, 1992
 Citations: 243

4. Räder DA, Friederich NF, Hefti F: Discoid Lateral Meniscus in Children. Long-term Follow-up after Total Meniscectomy. *The Journal of Bone and Joint Surgery*, 80(11):1579-1586, November 1998
 Citations: 242

5. Hirschmann MT, Konala P, Amsler F, Iranpour F, Friederich NF, Cobb JP: The position and orientation of total knee replacement components: a comparison of conventional radiographs, transverse 2D-CT slices and 3D-CT reconstruction. *J Bone Surgery* 93B(5), 629-633, 2011
 Citations: 207

6. Hirschmann MT, Testa E, Amsler F, Friederich NF: The unhappy total knee arthroplasty (TKA) patient: Higher WOMAC and lower KSS in depressed patients prior and after TKA. *Knee Surgery, Sports Traumatology, Arthroscopy* 21 (10) 2405-2411, 2013
 Citations: 183

7. Amis AA, Beynnon B, Blankevoort L, Chambat P, Christel P, Dürselen L, Friederich NF, Grood E, Hertel P, Jakob R, Müller W, O'Brien M, O'Connor J: Proceedings of the ESSKA Scientific Workshop on reconstruction of the anterior and posterior cruciate ligaments. *Knee Surg. Sports Traumatol. Arthroscopy* 2(3):124-132, 1994
 Citations: 83

8. Hirschmann MT, Zimmermann N, Rychen T, Candrian C, Hudetz D, Lorez LG, Amsler F, Müller W, Friederich NF: Clinical and radiological outcomes after management of traumatic knee dislocation by open single stage complete reconstruction. *BMC Musculoskeletal Disorders* 2010. 11:102. DOI 10.1186/1471-2474-11-102
 Citations: 74

9. Friederich NF, O'Brien WR: Functional anatomy of the cruciate ligaments. In: Jakob RP, Stäubli HU (editors): *The Knee and the cruciate ligaments. Anatomy, biomechanics, reconstruction, complications, rehabilitation*: Springer-Verlag Berlin-Heidelberg-New York-Tokyo 1992, S. 78-91
 Book chapter

10. O'Brien WR, Friederich NF: Fibre recruitment of the cruciate ligaments. In: Feagin JA Jr (ed): *The Crucial Ligaments*, 2nd edition, Churchill-Livingstone New York, 1993, S. 307-317
 Book chapter

11. O'Brien WR, Friederich NF: Isometric placement of cruciate ligament substitutes. In: Feagin JA Jr (ed): *The Crucial Ligaments*, 2nd edition, Churchill-Livingstone New York, 1993, S. 595-604
 Book chapter

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