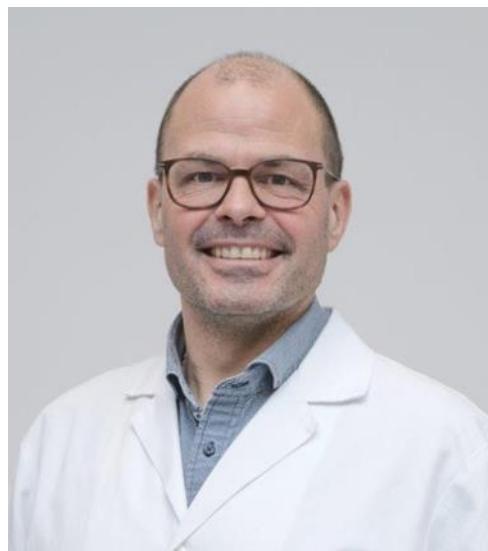


# **Curriculum Vitae**

Prof. Dr. Med. Christian Candrian



## **Table of contents**

<b>1. General data</b>	<b>1</b>
<b>2. Medical and academic education</b>	<b>2</b>
<b>3. Scientific activities</b>	<b>3</b>
• General	
• Awards	
• Grants	
• Publications with impact factor as first or last author	
• Publications with impact factor as co-author	
• Publications without impact factor as author or co-author	
• Media	
<b>4. Teaching and management experience</b>	<b>16</b>
<b>5. Main interests</b>	<b>17</b>
<b>6. Memberships and associations</b>	<b>17</b>
<b>7. References, national and international contacts</b>	<b>17</b>

## 1. GENERAL DATA

<b>Name</b>	Christian Candrian
<b>Nationality</b>	Swiss
<b>Date of Birth</b>	02.03.1971
<b>Place of Birth</b>	Sagogn - GR
<b>Private address</b>	Via Crena, 6949 Comano, Switzerland
<b>Phone number hospital</b>	+41 91 811 61 23
<b>e-mail</b>	christian.candrian@eoc.ch
<b>Marital Status</b>	Married with Ursula Candrian-Domeisen, 2 kids
<b>Languages</b>	German: mother language Italian: second mother language English: very good knowledge French: good knowledge Romansh: basic knowledge
<b>Actual function</b>	Head and Scientific Director of Orthopaedics and Traumatology unit, EOC
<b>Hobbies</b>	Sports, hunting, fishing

## 2. MEDICAL AND ACADEMIC EDUCATION

2024	Full Professor of USI- Università della Svizzera Italiana, Faculty of Biomedical Sciences
2021	<b>Regional Hospital of Lugano, Switzerland</b>
	Head of the Department of Orthopaedics and Traumatology EOC
2020	Scientific Director of Orthopaedics and Traumatology Service
2019	Professor of USI- Università della Svizzera Italiana, Faculty of Biomedical Sciences
2015	Professor of Traumatology and Orthopaedics, University Basel
2012	Fellowship 3 months Dr. Walch (Shoulder Surgery), Lyon, France
2009	Schwerpunkt: Allgemeine Chirurgie und Traumatologie
2008	<b>Regional Hospital of Lugano, Switzerland</b>
	Co-chief of the Department of Surgery and Orthopaedics (Prof. Dr. med. R. Rosso, from 2018 Prof. Dr. Med. P. Majno-Hurst)
	Director of Orthopaedics and Traumatology unit
2007	Promotion to specialist in Orthopaedics and Traumatology
2007	<b>Hospital Bruderholz, Switzerland</b>
	Consultant Orthopaedics and Traumatology (Prof. Dr. med. N. Friederich)
2005-2006	<b>University Hospital Basel, Switzerland</b>
	Consultant Orthopaedics and Traumatology (Prof. Dr. med. P. Regazzoni)
2006	<b>University Hospital Basel, Switzerland</b>
	Cartilage Tissue Engineering, Institute of surgical research and Hospital management (Prof. Dr. med. M. Heberer /Prof. Dr. I. Martin)
2003-2005	<b>Ospedale Regionale di Lugano, Switzerland</b>
	Consultant Surgery (Prof. Dr. med. S. Martinoli)
2004	Promotion to specialist in Surgery
2003	<b>University Hospital Zürich, Switzerland</b>
	Dissertation (Prof. Dr. med. O. Trentz) "The value of the conservative treatment of severe renal injuries"
1999-2003	<b>Cantonal Hospital Chur, Switzerland</b>
	Assistant doctor Surgery (Prof. Dr. med. Th. Rüedi)
1998-1999	<b>Cantonal Hospital Walenstadt, Switzerland</b>
	Assistant doctor Surgery (Dr. W. Schmidt)

1992 - 1998      **University Zürich, Switzerland**  
Medical Education

## **AO Activities (Arbeitsgemeinschaft für Osteosynthesefragen)**

2022	Advanced AO course Director
2018	Advanced AO course Director
2016	Advanced AO course Speaker and Instructor
2015	Advanced AO course Speaker and Instructor
2014	Advanced AO course Speaker and Instructor
2013	Director and Speaker for Scrub Nurse AO course
2012	Speaker at Senior Swiss Resident course, Davos
2011	Director and Speaker for Scrub Nurse AO course
2009	Director and Speaker for Scrub Nurse AO course
2007	Advanced AO course Instructor AO, Davos
2007	AO course Speaker and Instructor, Oberdorf
2004	AO course Manager, Instructor and Coordinator, Oberdorf
2004	Advanced AO course Instructor, Davos

## **3. SCIENTIFIC ACTIVITIES**

### **General**

2020	Scientific Director of Orthopaedics and Traumatology Service, EOC
2017	Clinical Research group of the Orthopaedics and Traumatology Unit (Groupleader: Prof. Giuseppe Filardo)  GCP First level Investigator GCP Sponsor-Investigator Level
2016	Institution of a laboratory for "Tissue Engineering of the locomotor system of southern Switzerland" (Group leader Prof. M. Moretti)
2006	Full time working in the Cartilage Tissue Engineering-group, Institute of surgical research and hospital management, University Basel, Switzerland (Prof. Dr. I. Martin)

### **Awards**

2016	SIWF-Award for the particular commitment in the teaching of doctors in medical training (Schweizerische Institut für ärztliche Weiter- und Fortbildung)
2014	SIWF-Award for the particular commitment in the teaching of doctors in medical training (Schweizerische Institut für ärztliche Weiter- und Fortbildung)
2008	First prize (5000.-) of the Swiss Society of Surgery (SGC) "Tissue Engineered cartilage with nasal chondrocytes is responsive to physical forces resembling joint loading"
2008	First prize (1000.-) SFAS-Award (Swiss Foot and Ankle Society) "Intra-individual Comparison of Human Ankle and Knee Chondrocytes in vitro: Relevance for Talar Cartilage Repair"

## Grants

- 2022      100'000. - CHF Fellowship for clinical research. J & J, De Puy Syntes, Schweiz  
200'000. – CHF Financial contribution for the current year for clinical research.  
Medacta, Castel S. Pietro  
50'000. - CHF Financial contribution for clinical research. Lima Corporate, San  
Daniele del Friuli  
15'000. - CHF Fellowship for clinical research. OPED AG Steinhausen  
20'000. - CHF Stryker trauma registry  
15'000. - CHF Greenbone
- 2021      100'000. - CHF Fellowship for clinical research. J & J, De Puy Syntes, Schweiz  
150'000. - CHF Financial contribution for the current year for clinical research.  
Medacta, Castel S. Pietro  
50'000. - CHF Financial contribution for clinical research. Lima Corporate, San  
Daniele del Friuli  
15'000. - CHF Fellowship for clinical research. OPED AG Steinhausen  
30'000.- CHF Stryker trauma registry  
16'000. - CHF Greenbone
- 2020      100'000. - CHF Fellowship for clinical research. J & J, De Puy Syntes, Schweiz  
200'000. - CHF Financial contribution for the current year for clinical research.  
Medacta, Castel S. Pietro  
25'000. - CHF Financial contribution for clinical research. Lima Corporate, San  
Daniele del Friuli  
15'000. - CHF Fellowship for clinical research. OPED AG Steinhausen  
47'045. - CHF Immediate vs delayed weight-bearing after surgical treatment  
of malleolar fractures: a randomized controlled trial
- 2019      61'876. - CHF ABREOC 2019 Study of the ligamentization process and  
integration of the graft in ACL reconstruction surgery with or without  
detachment of the tibial insertion of the hamstrings  
47'000. - CHF ABREOC 2019 (MRIC-003/A) Immediate vs. delayed

weightbearing after surgical treatment of malleolar fractures: a multi-centered randomized controlled trial

372'000. - CHF Fondo FNS sarcoma. Ewing sarcoma metastatic invasion dissected through new 3D vascularized human microfluidic models recapitulating endochondral ossification

100'000. - CHF Fellowship for clinical research. J & J, De Puy Syntes, Schweiz

200'000. - CHF Financial contribution for the current year for clinical research. Medacta, Castel S. Pietro

25'000. - CHF Financial contribution for clinical research. Lima Corporate, San Daniele del Friuli

30'000. - CHF Fellowship for clinical research. OPED AG Steinhausen

2018 50'388. - CHF Tutore vs. mitella nella terapia riabilitativa dopo sutura in artroscopia della cuffia dei rotatori: studio monocentrico randomizzato

200'000. - CHF Financial contribution for the current year for clinical research. Medacta, Castel S. Pietro

25'000. - CHF Financial contribution for clinical research. Lima Corporate, San Daniele del Friuli

100'000. - CHF Fellowship for clinical research. J & J, De Puy Syntes, Schweiz

2017 100'000. - CHF Fellowship for clinical research. J & J, De Puy Syntes, Schweiz

450'000. - CHF Financial contribution from the Fidinam foundation, Lugano for three years for transactional research

2016 150'000. - CHF Financial contribution to the clinical research of the traumatology and orthopedics unit in anticipation of the Master School Ticino by Medacta, Castel S. Pietro

48'000. - CHF ABREOC "Study of the immodulatory and condroprotective effect of mesenchimal stem cells with a new model in arthritic joints"

51'200. - CHF. ABREOC "Pilot study of a new prothesis for transfemoral amputated patients"

2015 320'000. - CHF. Financial contribution from the CCT for the creation of a laboratory of regenerative medicine of the musculoskeletal system

- 680'000. - CHF. Financial contribution from the EOC for the creation of a laboratory of regenerative medicine of the musculoskeletal system
- 150'000. - CHF. Financial contribution of the DePuy Synthes company for the ORL trauma registry
- 2007 118'000. - CHF /year for 3 years. German arthroscopy association. Clinical trial (phase I) with engineered osteochondral constructs for the ankle
- 2006 250000. – CHF. Collaborator (writing and experimental work) in a grant by the Swiss National Science Foundation (Div. 3): "Cellular and molecular characterisation of human nasal chondrocyte plasticity, towards their exploration for articular cartilage repair"(No. 310030\_126965)  
260000. – CHF. Collaborator (experimental work and yearly reporting) in a grant by the Swiss National Science Foundation (Div. 3): "Engineering of osteochondral composites using human articular chondrocytes and biomimetic materials" (No. 3200B0-110054)

## Publications

h index: 29  
documents by author: 138  
citations: 2264  
IF total = 458.402

### Peer reviewed publications with impact factor as first or last author (IF total = 123.931)

1. Sangiorgio A, Previtali D, Oldrini LM, Milev SR, Filardo G, **Candrian C.** Comparable results of superior vs antero-inferior plating for the treatment of displaced midshaft clavicle fractures. A comparative study. *Injury*. 2024 Apr. (IF: 2.9 , Ranking Q1)
2. Feltri P, Monteleone AS, Audigé L, Marbach F, Filardo G, **Candrian C.** Patients with rotator cuff tears present a psychological impairment, not only a functional deficit: a systematic review. *Int Orthop*. 2024 Jan. (IF: 3.519, Ranking Q1)
3. Oldrini LM, Sangiorgio A, Feltri P, Marbach F, Filardo G, **Candrian C.** Proximal humerus fractures: deltopectoral open reduction and internal fixation vs deltosplit minimally invasive plate osteosynthesis: which surgical approach provides superior results? *EFORT Open Rev*. 2023 Aug 1. (IF: 5.136, Ranking Q1)
4. Monteleone AS, Feltri P, Müller J, Molina MN, Filardo G, **Candrian C.** Quality of Life from Return to Work and Sport Activities to Sexual Dysfunction after Surgical Treatment of Pelvic Ring Fractures. *Healthcare (Basel)*. 2023 Jul 4. (IF: 3.0, Ranking Q2)
5. Riegger M, Habib N, Testa EA, Müller J, Guidi M, **Candrian C.** The modified Lapidus fusion: a systematic review of biomechanical studies. *EFORT Open Rev*. 2023 Apr 25 (IF: 4.775, Ranking Q1)

6. Feltri P, Monteleone AS, Marbach F, Filardo G, **Candrian C.** Arthroscopic rotator cuff repair: patients with physically demanding work have significantly worse time to return to work, level of employment, and job loss. *Knee Surg Sports Traumatol Arthrosc.* 2022 Sep 27. (IF: 4.342, Ranking Q1).
7. Oldrini LM, Feltri P, Albanese J, Lucchina S, Filardo G, **Candrian C.** Volar locking plate vs cast immobilization for distal radius fractures: a systematic review and meta-analysis. *EFORT Open Rev.* 2022 Sep 19. (IF: 4.618, Ranking Q1).
8. Oldrini LM, Feltri P, Albanese J, Marbach F, Filardo G, **Candrian C.** Reply to Sidiropoulos, K.; Tsikopoulos, K. Comment on "Oldrini et al. PHILOS Synthesis for Proximal Humerus Fractures Has High Complications and Reintervention Rates: A Systematic Review and Meta-Analysis. *Life* 2022, 12, 311". *Life (Basel)*. 2022 Aug. (IF: 3.817, Ranking Q2).
9. Surace MF, Faoro L, Ferraro S, Ippolito G, Zitiello M, **Candrian C.** Minimally Invasive HEROS (Higher External ROTator Sparing) Posterior-lateral Approach for Total Hip Arthroplasty: Surgical Technique and Preliminary Results. *Surg Technol Int.* 2022 Aug 17. (IF: 1.1; Ranking Q3).
10. Pagliazzi G, Cuzzolin M, Pacchiarini L, Delcogliano M, Filardo G, **Candrian C.** Physeal-sparing ACL reconstruction provides better knee laxity restoration but similar clinical outcomes to partial transphyseal and complete transphyseal approaches in the pediatric population: a systematic review and meta-analysis. *Knee Surg Sports Traumatol Arthrosc.* 2022 Jul 15. (IF: 4.342, Ranking Q1).
11. Monteleone AS, Feltri P, Molina MN, Müller J, Filardo G, **Candrian C.** Quality of life from return to work and sports activities to sexual dysfunction after surgical treatment of acetabular fractures. *Arch Orthop Trauma Surg.* 2022 Feb 26 (IF 3.067, Ranking Q1).
12. Oldrini LM, Feltri P, Albanese J, Marbach F, Filardo G, **Candrian C.** PHILOS Synthesis for Proximal Humerus Fractures Has High Complications and Reintervention Rates: A Systematic Review and Meta-Analysis. *Life (Basel)*. 2022 Feb 19 (IF 3.817, Ranking Q2).
13. Rieger M, Müller J, Giampietro A, Saporito A, Filardo G, Treglia G, Guidi M, **Candrian C.** Forefoot Adduction, Hindfoot Varus or Pes Cavus: Risk Factors for Fifth Metatarsal Fractures and Jones Fractures? A Systematic Review and Meta-Analysis. *J Foot Ankle Surg.* 2021 Nov (IF 2.705, Ranking Q2).
14. Cuzzolin M, Secco D, Guerra E, Altamura SA, Filardo G, **Candrian C.** Operative Versus Nonoperative Management for Distal Biceps Brachii Tendon Lesions: A Systematic Review and Meta-analysis. *Orthop J Sports Med.* 2021 Oct (IF: 2.54, Ranking Q1).
15. Previtali D, Bordoni V, Filardo G, Marchettini P, Guerra E, **Candrian C.** High Rate of Pain Sensitization in Musculoskeletal Shoulder Diseases: A Systematic Review and Meta-analysis. *Clin J Pain*, Mar 2021 (IF: 2.893, Ranking: Q1).
16. Davanzo D, Previtali D, Tamborini S, Filardo G, Fusco A, Bordoni V, Gaffurini P, **Candrian C.** Comparison of the survivorship between arthroplasty and ORIF for basi-cervical femoral neck fractures in the overall population and in polymorbid patients. *Orthop Traumatol Surg Res*, May 2021 (IF: 1.809, Ranking: Q1).
17. Bordoni, V., Marelli, N., Previtali, D., Gaffurini, P., Filardo, G., **Candrian, C.** (2020). Outpatient total hip arthroplasty does not increase complications and readmissions: a meta-analysis. *HIP International*. (IF: 1.35, Ranking: Q2).
18. Bordoni V, Poggi A, Zaffagnini S, Previtali D, Filardo G, **Candrian C.** Outpatient total knee arthroplasty leads to a higher number of complications: a meta-analysis. *J Orthop Surg Res.* 2020 Sep. (IF: 2.28, Ranking Q1).

19. G Ulrich Exner, Luca Mazzucchelli, Francesca Napoli, **Christian Candrian**. Solitary Epiphysial Enchondroma of the Proximal Humerus Causing Growth Deficiency in a 13-Year-Old Boy Lengthened over Intramedullary Nail. *The Open Orthopaedics Journal*, 2020, 14.1. (IF: 0.51, Ranking: Q3).
20. Davide Previtali, Stamen Milev Roumenov, Gherardo Pagliazzi, Giuseppe Filardo, Stefano Zaffagnini, **Christian Candrian**. Recurrent patellar dislocations without untreated predisposing factors: MPFL reconstruction vs other medial soft tissue surgical techniques—A meta-analysis. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*, 2020. (IF: 4.433, Ranking: Q1).
21. Pagliazzi G, Davanzo D, Delcogliano M, Grande FD, **Candrian C**. Traumatic bilateral medial patellar instability in a 15-year-old girl. *Journal of Orthopaedic Case Report*. 2019. (IF: 0.675, Ranking: Q2).
22. Previtali D, Di Laura Frattura G, Filardo G, Delcogliano M, Deabate L, **Candrian C**. Peri-operative steroids reduce pain, inflammatory response and hospitalization length following knee arthroplasty without increased risk of acute complications: a meta-analysis. *Knee Surg Sports Traumatol Arthrosc*. 2019 Sep 7. (IF: 3.21, Ranking: Q1).
23. Pagliazzi G, Napoli F, Previtali D, Filardo G, Zaffagnini S, **Candrian C**. A Meta-analysis of Surgical Versus Nonsurgical Treatment of Primary Patella Dislocation. *Arthroscopy*. 2019 Aug. (IF: 4.29, Ranking: Q1).
24. Di Laura Frattura G, Zaffagnini S, Filardo G, Romandini I, Fusco A, **Candrian C**. Total Knee Arthroplasty in Patients With Knee Osteoarthritis: Effects on Proprioception. A Systematic Review and Best Evidence Synthesis. *J Arthroplasty*. 2019 Jun 14. (IF: 3.52, Ranking: Q1).
25. Zaffagnini S., Previtali D., Tamborini S, Pagliazzi G., Filardo G., **Candrian C**. Recurrent patellar dislocations: trochleoplasty improves the results of medial patellofemoral ligament surgery only in severe trochlear dysplasia. *Knee Surg Sports Traumatol Arthrosc*. 2019 Mar 22. (IF: 3.227, Ranking: Q1).
26. Guerra E., Previtali D., Tamborini S., Filardo G., Zaffagnini S., **Candrian C**. Midshaft Clavicle Fractures: Surgery Provides Better Results as Compared With Nonoperative Treatment: A Meta-analysis. *Am J Sports Med*. 2019 Mar 5. (IF: 6.057, Ranking: Q1).
27. Simone Ghisla, Francesca Napoli, Gyozo Lehoczky, Marco Delcogliano, Nermine Habib, Michele Arigoni, Giuseppe Filardo, **Christian Candrian**. Posterior pelvic ring fractures: Intraoperative 3D-CT guided navigation for accurate positioning of sacro-iliac screws. *Orthopaedics & Traumatology-Surgery & Research*, August 2018 (IF: 1.413, Ranking: Q2).
28. Filardo G., Andriolo L., Di Laura Frattura G., Napoli F., Zaffagnini S., **Candrian C**. Bone bruise in anterior cruciate ligament rupture entails a more severe joint damage affecting joint degenerative progression. *Knee Surg Sports Traumatol Arthrosc*. 2018 Jun 5. (IF: 3.21, Ranking: Q1).
29. Habib, N., Filardo, G., Delcogliano, M., Arigoni, M., & **Candrian, C.** (2018). An algorithm to avoid missed open-book pelvic fractures. *Eur Rev Med Pharmacol Sci*. (IF: 3.024, Ranking: Q).
30. Filardo G, Zaffagnini S, De Filippis R, Perdisa F, Andriolo L, **Candrian C**. No evidence for combining cartilage treatment and knee osteotomy in osteoarthritic joints: a systematic literature review. *Knee Surg Sports Traumatol Arthrosc*. 2018 Feb 16. (IF: 3.227, Ranking: Q1).
31. **Candrian C**, Grassi A, Filardo G, Vannini F. Comment on "No superior treatment for primary osteochondral defects of the talus. Dahmen J, et al. KSSTA 2017 Jun 27. *Knee Surg Sports Traumatol Arthrosc*. 2017 Dec. (IF: 3.227, Ranking: Q1).

32. **Candrian C**, Iker Iribarri I, Freehill M., Raiss R., Boileau P., Walch G. Anatomic shoulder replacement for Primary Osteoarthritis in Patients over 80 Years. Are Results as Good as in Younger Patients? *Acta Orthopaedica* 2015 Jan 14:1-5. (IF: 2.459, Ranking: Q1)
33. Ochs, B. G., Stöckle, U., **Candrian, C.** (2013). Fractures around shoulder and elbow arthroplasty—rare but difficult. *European Orthopaedics and Traumatology*, 4(2), 111-116. (IF: 1.56, Ranking: Q2)
34. **Candrian C**, Miot S, Wolf F, Bonacina E, Valderrabano V, Dickinson S, Wirz D, Jakob M, Martin I, Barbero A. Are ankle chondrocytes from damaged fragments a suitable cell source for cartilage repair? *Osteoarthritis Cartilage*. 2010 Aug;18(8):1067-76. 2010.(IF: 3.904, Ranking: Q1).
35. **Candrian C**, Barbero A, Bonacina, Heberer M, Martin I. A novel implantation technique for engineered osteo-chondral grafts. *Knee Surg Sports Traumatol Arthrosc*. 2009 Nov. (IF: 1.857, Ranking: Q2).
36. **Candrian C**, Bonacina E, Frueh JA, Vonwil D, Dickinson S, Wirz D, Heberer M, Jakob M, Martin I, Barbero A. Intra-individual comparison of human ankle and knee chondrocytes in vitro: relevance for talar cartilage repair. *Osteoarthritis Cartilage*. 2009 Apr. (IF: 3.953, Ranking: Q1).
37. **Candrian C**, Wolf F, Wendt D, Farhadi J, Heberer M, Martin I, Barbero A. Cartilage tissue engineering using preaggregated human articular chondrocytes. *Eur Cell Mater*. 2008 Dec. (IF: 5.378, Ranking: Q1).
38. **Candrian C**, Vonwil D, Barbero A, Bonacina E, Miot S, Farhadi J, Wirz D, Dickinson S, Hollander A, Jakob M, Li Z, Alini M, Heberer M, Martin I. Engineered cartilage generated by nasal chondrocytes is responsive to physical forces resembling joint loading. *Arthritis Rheum*. 2007 Dec 28. (IF: 6.787, Ranking: Q1).

#### **Peer reviewed publications with impact factor as co-author**

(IF total = 334.471)

1. Bersini S, Arrigoni C, Talò G, **Candrian C**, Moretti M. Complex or not too complex? One size does not fit all in next generation microphysiological systems. *iScience*. 2024 Feb 12. (IF: 5.8, Ranking Q1)
2. Schuppisser MV, Mondini Trissino da Lodi C, Albanese J, **Candrian C**, Filardo G. Achilles tendinopathy research has a gender data gap: A systematic review and meta-analysis. *Knee Surg Sports Traumatol Arthrosc*. 2024 Feb 5. (IF: 4.663, Ranking Q1).
3. Baum C, Audigé L, Stojanov T, Müller SA, **Candrian C**; ARCR\_Pred Study Group; Müller AM, Rosso C, Fankhauser L, Willscheid G, Moroder P, Akgün D, Danzinger V, Gebauer H, Imiolkzyk JP, Karpinski K, Lacheta L, Minkus M, Paksoy A, Samaniego E, Thiele K, Weiss I, Suter T, Müller-Lebschi J, Mueller S, Saner M, Haag-Schumacher C, Tamborrini-Schütz G, Trong MLD, Buitrago-Tellez C, Hasler J, Riede U, Weber S, Moor B, Biner M, Fournier S, Gallusser N, Marietan D, Pawlak S, Spormann C, Hansen B, Mamisch N, Durchholz H, Bräm J, Cunningham G, Kourhani A, Ossipow S, Simao P, Lädermann A, Egli R, Erdbrink S, Flückiger R, Lombardo P, Pinworasarn T, Scacchi P, Weihs J, Zumstein M, Flury M, Berther R, Ehrmann C, Hübscher L, Schwappach D, Eid K, Bensler S, Fritz Y, Grünberger N, Kriegling P, Langthaler D, Niehaus R, Nobs R, Benninger E, de Groot Q, Doert A, Ebert S, Grimm P, Mottier F, Pisan M, Schätz J, Schwank A, Wiedenbach J, Scheibel M, Audigé L, Bellmann F, Brune D, de Jong M, Diermayr S, Endell D, Etter M, Freislederer F, Gkikopoulos N, Glanzmann M, Grobet C, Jung C, Moro F, Moroder P, Ringer R, Schätz J, Schwyzer HK, Weber B, Wehrli M, Wirth B, Nötzli M, Franz A, Oswald J, Steiger B, Ameziane Y, Child C,

- Spagna G, Candrian C, Del Grande F, Feltri P, Filardo G, Marbach F, Schönweger F, Jost B, Badulescu M, Lüscher S, Napieralski F, Öhrström L, Olach M, Rechsteiner J, Scheler J, Spross C, Zdravkovic V, Zumstein MA, Chlasta A, Gerber K, Hayoz A, Müller-Lebschi J, Schuster F, Wieser K, Borbas P, Bouaicha S, Camenzind R, Catanzaro S, Gerber C, Grubhofer F, Hasler A, Hochreiter B, Marcus R, Selman F, Sutter R, Wyss S, Appenzeller-Herzog C, Aghlmandi S, Ahlbom I, Baum C, Eckers F, Grezda K, Hatz S, Hunziker S, Stojanov T, Taha M, Tamborrini-Schütz G, Mueller AM. Functional and Radiologic Outcomes of Degenerative Versus Traumatic Full-Thickness Rotator Cuff Tears Involving the Supraspinatus Tendon. *Am J Sports Med.* 2024 Feb. (IF: 6.202, Ranking Q1)
4. Rieger M, Le H, van Kuijk SMJ, Guyenes G, **Candrian C**, Cianfoni A, Hirsch JA, Koetsier E. Intradiscal Glucocorticoid Injection in Discogenic Back Pain and Influence on Modic Changes: A Systematic Review and Meta-analysis of RCTs. *Pain Physician.* 2023 Sep. (IF: 3.7, Ranking Q1)
  5. De Pellegrin L, Feltri P, Filardo G, **Candrian C**, Harder Y, Galetti K, De Monti M. Effects of negative pressure wound therapy with instillation and dwell time (NPWTi-d) versus NPWT or standard of care in orthoplastic surgery: A systematic review and meta-analysis. *Int Wound J.* 2023 Aug. (IF: 3.1, Ranking Q1)
  6. Stoffel K, Michelitsch C, Arora R, Babst R, **Candrian C**, Eickhoff A, Gebhard F, Platz A, Schmid FA, Weschenfelder W, Sommer C. Clinical performance of the Femoral Neck System within 1 year in 125 patients with acute femoral neck fractures, a prospective observational case series. *Arch Orthop Trauma Surg.* 2023 Jul. (IF: 3.404, Ranking Q1)
  7. Marin R, Feltri P, Ferraro S, Ippolito G, Campopiano G, Previtali D, Filardo G, Marbach F, De Marinis G, **Candrian C**, Surace MF. Impact of tuberosity treatment in reverse shoulder arthroplasty after proximal humeral fractures: A multicentre study. *J Orthop Sci.* 2023 Jul. (IF: 1.8, Ranking Q2)
  8. Feltri P, Gonalba GC, Boffa A, **Candrian C**, Menon A, Randelli PS, Filardo G. Platelet-rich plasma does not improve clinical results in patients with rotator cuff disorders but reduces the retear rate. A systematic review and meta-analysis. *Knee Surg Sports Traumatol Arthrosc.* 2023 May. (IF: 4.663, Ranking Q1)
  9. Rosso C, Morrey ME, Schär MO, Grezda K; **Swiss Orthopaedics Shoulder and Elbow Expert Group**. The role of platelet-rich plasma in shoulder pathologies: a critical review of the literature. *EFORT Open Rev.* 2023 Apr 25. (IF: 4.775, Ranking Q1)
  10. Arrigoni C, Ostano P, Bersini S, Crippa M, Colombo MV, Gilardi M, Zagra L, Mello-Grand M, Gregnanin I, Ghilardi C, Bani MR, **Candrian C**, Chiorino G, Moretti M. Differential angiogenesis of bone and muscle endothelium in aging and inflammatory processes. *Commun Biol.* 2023 Jan 31. (IF: 6.548, Ranking Q1)
  11. De Pellegrin L, Feltri P, Filardo G, **Candrian C**, Harder Y, Galetti K, De Monti M. Effects of negative pressure wound therapy with instillation and dwell time (NPWTi-d) versus NPWT or standard of care in orthoplastic surgery: A systematic review and meta-analysis. *Int Wound J.* 2023 Jan 3. (IF: 3.099, Ranking Q2)
  12. Feltri P, Gonalba GC, Boffa A, **Candrian C**, Menon A, Randelli PS, Filardo G. Platelet-rich plasma does not improve clinical results in patients with rotator cuff disorders but reduces the retear rate. A systematic review and meta-analysis. *Knee Surg Sports Traumatol Arthrosc.* 2022 Dec 11. (IF: 4.114, Ranking Q1)
  13. Stoffel K, Michelitsch C, Arora R, Babst R, **Candrian C**, Eickhoff A, Gebhard F, Platz A, Schmid FA, Weschenfelder W, Sommer C. Clinical performance of the Femoral Neck System within 1 year in 125 patients with acute femoral neck fractures, a prospective observational case series. *Arch Orthop Trauma Surg.* 2022 Dec 2. (IF: 2.928, Ranking Q1)

14. Sangiorgio A, Oldrini LM, **Candrian C**, Errani C, Filardo G. Radiofrequency ablation is as safe and effective as surgical excision for spinal osteoid osteoma: a systematic review and meta-analysis. *Eur Spine J.* 2022 Oct 10. (IF: 3.134, Ranking Q1).
15. Mainardi VL, Rubert M, Sabato C, de Leeuw A, Arrigoni C, Dubini G, **Candrian C**, Müller R, Moretti M. Culture of 3D Bioprinted Bone Constructs Requires an Increased Fluid Dynamic Stimulation. *Acta Biomater.* 2022 Sep 12. (IF: 8.947, Ranking Q1).
16. Petta D, D'Amora U, D'Arrigo D, Tomasini M, **Candrian C**, Ambrosio L, Moretti M. Musculoskeletal tissues-on-a-chip: role of natural polymers in reproducing tissue-specific microenvironments. *Biofabrication.* 2022 Aug 31. (IF: 9.954, Ranking Q1)
17. Previtali D, Mameli A, Zaffagnini S, Marchettini P, **Candrian C**, Filardo G. Tendinopathies and Pain Sensitisation: A Meta-Analysis with Meta-Regression. *Biomedicines.* 2022 Jul 20. (IF: 6.081, Ranking Q1)
18. Feltri P, Solaro L, Di Martino A, **Candrian C**, Errani C, Filardo G. Union, complication, reintervention and failure rates of surgical techniques for large diaphyseal defects: a systematic review and meta-analysis. *Sci Rep.* 2022 Jun 1. (IF: 4.379, Ranking Q1).
19. Marin R, Feltri P, Ferraro S, Ippolito G, Campopiano G, Previtali D, Filardo G, Marbach F, De Marinis G, **Candrian C**, Surace MF. Impact of tuberosity treatment in reverse shoulder arthroplasty after proximal humeral fractures: A multicentre study. *J Orthop Sci.* 2022 Apr 20. (IF: 2.8, Ranking Q2).
20. Previtali D, Capone G, Marchettini P, Candrian C, Zaffagnini S, Filardo G. High Prevalence of Pain Sensitization in Knee Osteoarthritis: A Meta-Analysis with Meta-Regression. *Cartilage.* 2022 Jan-Mar;13 (IF 4.634, Ranking Q1).
21. Di Laura Frattura G, Bordoni V, Feltri P, Fusco A, **Candrian C**, Filardo G. Balance Remains Impaired after Hip Arthroplasty: A Systematic Review and Best Evidence Synthesis. *Diagnostics (Basel).* 2022 Mar (IF: 3.817, Ranking Q2).
22. Schiavon G, Capone G, Frize M, Zaffagnini S, **Candrian C**, Filardo G. Infrared Thermography for the Evaluation of Inflammatory and Degenerative Joint Diseases: A Systematic Review. *Cartilage.* 2021 Dec (IF: 4.634, Ranking Q1).
23. Cuzzolin M, Previtali D, Zaffagnini S, Deabate L, **Candrian C**, Filardo G. Anterior Cruciate Ligament Reconstruction versus Nonoperative Treatment: Better Function and Less Secondary Meniscectomies But No Difference in Knee Osteoarthritis-A Meta-Analysis. *Cartilage.* 2021 Dec (IF: 4.634, Ranking Q1).
24. Feltri P, Mondini Trissino da Lodi C, Grassi A, Zaffagnini S, **Candrian C**, Filardo G. One-stage bilateral unicompartmental knee arthroplasty is a suitable option vs. the two-stage approach: a meta-analysis. *EFORT Open Rev.* 2021 Nov 19 (IF: 4.618, Ranking Q1).
25. Cuzzolin M, Previtali D, Delcogliano M, Filardo G, **Candrian C**, Grassi A. Independent Versus Transtibial Drilling in Anterior Cruciate Ligament Reconstruction: A Meta-analysis With Meta-regression. *Orthop J Sports Med.* 2021 (IF: 2.727, Ranking: Q1).
26. Feltri P, Solaro L, Errani C, Schiavon G, **Candrian C**, Filardo G. Vascularized fibular grafts for the treatment of long bone defects: pros and cons. A systematic review and meta-analysis. *Arch Orthop Trauma Surg.* 2021 (IF: 3.067, Ranking: Q1).
27. Nutarelli S, Delahunt E, Cuzzolin M, Delcogliano M, **Candrian C**, Filardo G. Home-Based vs Supervised Inpatient and/or Outpatient Rehabilitation Following Knee Meniscectomy: A Systematic Review and Meta-analysis. *JAMA Netw Open.* 2021; 4(5):e2111582. (IF: 5.032, Ranking: Q1).

28. Audigé L, Bucher HCC, Aghlmandi S ARCR\_Pred Study Group, et al Swiss-wide multicentre evaluation and prediction of core outcomes in arthroscopic rotator cuff repair: protocol for the ARCR\_Pred cohort studyBMJ Open 2021; 1. (IF: 2.496, Ranking: Q1).
29. Reale D, Previtali D, Andriolo L, Grassi A, **Candrian C**, Zaffagnini S, Filardo G. No differences in clinical outcome between CMI and Actift meniscal scaffolds: a systematic review and meta-analysis. Knee 2021 (IF: 1.913, Ranking: Q1).
30. Boffa A, Previtali D, Di Laura Frattura G, Vannini F, **Candrian C**, Filardo G. Evidence on ankle injections for osteochondral lesions and osteoarthritis: a systematic review and meta-analysis. Int Orthop. 2021 (IF: 2.78, Ranking: Q1).
31. Possenti L, Mecchi L, Rossoni A, Sangalli V, Bersini S, Cicchetti A, Costantino ML, **Candrian C**, Arrigoni C, Rancati T, Moretti M. Radiobiological Studies of Microvascular Damage through In Vitro Models: A Methodological Perspective. Cancers, 2021 (IF: 6.126, Ranking: Q1).
32. Mainardi VL, Arrigoni C, Bianchi E, Talò G, Delcogliano M, **Candrian C**, Dubini G, Levi M, Moretti M. Improving cell seeding efficiency through modification of fiber geometry in 3D printed scaffolds. Biofabrication, Feb 2021 (IF: 8.213, Ranking: Q1).
33. Crippa M, Bersini S, Gilardi M, Arrigoni C, Gamba S, Falanga A, **Candrian C**, Dubini G, Vanoni M, Moretti M. A microphysiological early metastatic niche on a chip reveals how heterotypic cell interactions and inhibition of integrin subunit  $\beta$  3 impact breast cancer cell extravasation. Lab Chip, Mar 2021 (IF: 6.914, Ranking: Q1).
34. Habib N, Filardo G, Distefano D, **Candrian C**, Reinert M, Scarone P. Use of Intraoperative CT Improves Accuracy of Spinal Navigation During Screw Fixation in Cervico-thoracic Region. 2021, Spine (Phila Pa 1976) (IF: 2.903, Ranking: Q1).
35. Mondadori C, Crippa M, Moretti M, **Candrian C**, Lopa S, Arrigoni C. Advanced Microfluidic Models of Cancer and Immune Cell Extravasation: A Systematic Review of the Literature. Front Bioeng Biotechnol. 2020 Aug. (IF: 6.914, Ranking: Q1).
36. Petta D, Basoli V, Pellicciotta D, Tognato R, Barcik JP, Arrigoni C, Della Bella E, Armiento AR, **Candrian C**, Richards GR, Alini M, Moretti M, Eglin D, Serra T. Sound-induced morphogenesis of multicellular systems for rapid orchestration of vascular networks. Biofabrication. 2020 Sep 25. (IF: 8.123, Ranking: Q1)
37. Previtali D, Andriolo L, Di Laura Frattura G, Boffa A, **Candrian C**, Zaffagnini S, Filardo G. Pain Trajectories in Knee Osteoarthritis—A Systematic Review and Best Evidence Synthesis on Pain Predictors. Journal of Clinical Medicine. 2020. (IF: 3.03, Ranking: Q1).
38. Boffa A, Previtali D, Di Laura Frattura G, Vannini F, **Candrian C**, Filardo G. Evidence on ankle injections for osteochondral lesions and osteoarthritis: a systematic review and meta-analysis [published online ahead of print, 2020 Jul 9]. Int Orthop. (IF: 1.53, Ranking: Q1).
39. Filardo G, Previtali D, Napoli F, **Candrian C**, Zaffagnini S, Grassi A. PRP Injections for the Treatment of Knee Osteoarthritis: A Meta-Analysis of Randomized Controlled Trials [2020 Jun 19]. Cartilage. (IF: 2.961, Ranking: Q1).
40. Arrigoni C, D'Arrigo D, Rossella V, **Candrian C**, Albertini V, Moretti M. Umbilical Cord MSCs and Their Secretome in the Therapy of Arthritic Diseases: A Research and Industrial Perspective. Cells. Published 2020 May 28. (IF: 5.656, Ranking: Q1).
41. Chiara Arrigoni, Silvia Lopa, **Christian Candrian**, Matteo Moretti. Organs-on-a-chip as model systems for multifactorial musculoskeletal diseases. Current Opinion in Biotechnology, 2020. (IF: 8.083, Ranking: Q1)

42. Davide Previtali, Giulia Merli, Giorgio Di Laura Frattura, **Christian Candrian**, Stefano Zaffagnini, Giuseppe Filardo. The Long-Lasting Effects of "Placebo Injections" in Knee Osteoarthritis: A Meta-Analysis. *Cartilage*, 2020. (IF: 2.961, Ranking: Q1)
43. Angelo Boffa, Davide Previtali, Sante Alessandro Altamura, Stefano Zaffagnini, **Christian Candrian**, Giuseppe Filardo. Platelet-Rich Plasma Augmentation to Microfracture Provides a Limited Benefit for the Treatment of Cartilage Lesions: A Meta-analysis. *Orthopaedic Journal of Sports Medicine*, 2020. (IF: 6.093, Ranking: Q1)
44. Marco Delcogliano, Roberto Marin, Luca Deabate, Davide Previtali, Giuseppe Filardo, Michele Francesco Surace, **Christian Candrian**, Paolo Gaffurini. Arthroscopically assisted and three-dimensionally modeled minimally invasive rim plate osteosynthesis via modified anterolateral approach for posterolateral tibial plateau fractures. *The Knee*, 2020. (IF: 1.762, Ranking: Q1)
45. Marie Meyer, Marie Nicod Lalonde, Nathalie Testart, Mario Jreige, Christel Kamani, Sarah Boughdad, Barbara Muoio, Fabio Becce, Niklaus Schaefer, **Christian Candrian**, Luca Giovanella, John O Prior, Giorgio Treglia, Martin Riegger. Detection Rate of Culprit Tumors Causing Osteomalacia Using Somatostatin Receptor PET/CT: Systematic Review and Meta-Analysis. *Diagnostics (Basel)*. Published 2019 Dec 18. (IF: 2.489, Ranking: Q2)
46. Deabate L, Previtali D, Grassi A, Filardo G, **Candrian C**, Delcogliano M. Anterior Cruciate Ligament Reconstruction Within 3 Weeks Does Not Increase Stiffness and Complications Compared With Delayed Reconstruction: A Meta-analysis of Randomized Controlled Trials. *Am J Sports Med*. 2020. (IF: 6.057, Ranking: Q1)
47. Verzellotti S., **Candrian C.**, Alberio R, Molina M.N., Grassi F.A. Direct anterior versus postero-lateral approach for bipolar hip hemiarthroplasty in femoral neck fractures: a prospective randomized study. *The journal of arthroplasty*. 2019 Aug. (IF: 3.52, Ranking: Q1)
48. Bordoni V, di Laura Frattura G, Previtali D, Tamborini S, **Candrian C**, Cristallo Lacalamita M, Del Grande F, Filardo G. Bone Bruise and Anterior Cruciate Ligament Tears: Presence, Distribution Pattern, and Associated Lesions in the Pediatric Population. *Am J Sports Med*. 2019 Nov. (IF: 6.057, Ranking: Q1)
49. D'Arrigo D, Roffi A, Cucchiari M, Moretti M, **Candrian C**, Filardo G. Secretome and Extracellular Vesicles as New Biological Therapies for Knee Osteoarthritis: A Systematic Review. *J Clin Med*. 2019 Nov. (IF: 3.303, Ranking: Q1)
50. Habib, N., **Candrian, C.**, Scarone, P. (2018). Analysis of Radiological Accuracy among Different Intraoperative Imaging Systems for Screw Fixation in Cervicothoracic Region. *Journal of Neurological Surgery Part A: Central European Neurosurgery*. (IF: 0.95, Ranking: Q3)
51. Andriolo L., Altamura S. A., Reale D., **Candrian C.**, Zaffagnini S., Filardo G. Non-surgical treatments of patellar tendinopathy: multiple injection of platelet-rich plasma are a suitable option. A Systematic review and meta-analysis. *Am J Sports Med*, 2017. (IF: 6.057, Ranking: Q1)
52. Arrigoni C Petta D, Bersini S, Mironov V, **Candrian C**, Moretti M. Engineering complex muscle-tissue interfaces through microfabrication. *Biofabrication*. 2019 Jun 12; 11(3):032004. (IF: 7.236, Ranking: Q1)
53. Luca Andriolo, Dennis C. Crawford, Davide Reale, Stefano Zaffagnini, **Christian Candrian**, Alessia Cavicchioli, Giuseppe Filardo. Osteochondritis Dissecans of the Knee: Etiology and Pathogenetic Mechanisms. A Systematic Review. *Cartilage* 1-18, July 2018. (IF: 2.621, Ranking: Q1)

54. Del Grande F., Delcogliano M., Guglielmi R., Raithel E., Stern S. E., Papp D. F., **Candrian C.** Fritz J. Fully automated 10-minute 3D CAIPIRINHA SPACE TSE MRI of the knee in adults. A multicenter, multireader, multifield-strength validation study. *Investigative radiology*. Volume 00, Number 00, Month 2018 (IF: 6.224, Ranking: Q1)
55. S. Bersini, M. Gilardi, M. Mora, S. Krol, C. Arrigoni, **C. Candrian**, S. Zanotti, M. Moretti. Tackling muscle fibrosis: From molecular mechanisms to next generation engineered models to predict drug delivery. *Advanced Drug Delivery Reviews*, In Press (IF: 11.8, Ranking: Q1)
56. Andriolo L, **Candrian C**, Papio T, Perdisa F, Cavicchioli A, Filardo G. Osteochondritis Dissecans of the Knee - Conservative Treatment Strategies: A Systematic Review. *Cartilage*. 2018 Feb 1. (IF: 2.000, Ranking: Q2)
57. Lopa S, Mondadori C, Mainardi VL, Talò G, Costantini M, **Candrian C**, Świeżkowski W, Moretti M. Translational Application of Microfluidics and Bioprinting for Stem Cell-Based Cartilage Repair. *Stem Cells International* 2018. (IF: 3.540, Ranking: Q2)
58. Grassi A, Napoli F, Romandini I, Samuelsson K, Zaffagnini S, **Candrian C**, Filardo G. Is Platelet-Rich Plasma (PRP) Effective in the Treatment of Acute Muscle Injuries? A Systematic Review and Meta-Analysis. *Sports Med*. 2018 Jan 23. (IF: 6.832, Ranking: Q1)
59. Roffi A, Krishnakumar GS, Gostynska N, Kon E, **Candrian C**, Filardo G. The Role of Three-Dimensional Scaffolds in Treating Long Bone Defects: Evidence from Preclinical and Clinical Literature-A Systematic Review. *Biomed Res Int*. 2017; Epub 2017 Aug 9. Review (IF: 2.476, Ranking: Q2)
60. Arrigoni C, Gilardi M, Bersini S, **Candrian C**, Moretti M. Bioprinting and Organ-on-Chip Applications Towards Personalized Medicine for Bone Diseases. *Stem Cell Rev*. 2017 Jun;13(3):407-417. (IF: 2.967, Ranking: Q2)
61. Uccella L, Zoia C, Bongetta D, Gaetani P, Martig F, **Candrian C**, Rosso R. Are Antiplatelet and Anticoagulants Drugs A Risk Factor for Bleeding in Mild Traumatic Brain Injury? *World Neurosurg*. 2018 Feb. (IF: 2.592, Ranking: Q2)
62. Scola, A., Haas, N., Stöckle, U., Giannoudis, P., Bel, J. C., Larsen, M. S., **Candrian C**. Gebhard, F. (2014). Current concepts for treating proximal femur fractures in Europe. *European orthopaedics and traumatology*. (IF: 1.56, Ranking: Q2)
63. Scotti, Celeste MD; Leumann, Andre MD; **Candrian, Christian** MD; Barbero, Andrea PhD; Croci, Davide MSc; Schaefer, Dirk J. MD; Jakob, Marcel MD; Valderrabano, Victor MD, PhD; Martin, Ivan PhD, Autologous Tissue-engineered Osteochondral Graft for Talus Osteochondral Lesions: State-of-the-Art and Future Perspectives, Techniques in Foot & Ankle Surgery: December 2011 - Volume 10 - Issue 4 - p 163-168. (IF: 0.19, Ranking: Q3)
64. Kraus, R., **Candrian, C.**, Rosso, R., Arigoni, M. (2011). Fixation of syndesmosis rupture: why wait after surgery for a 3-D position control. *British Journal of Surgery*, 98. (IF: 5.676, Ranking: Q1)
65. Haeni, D., Testa, E., Freuler, C., Kuhrmeier, A., Rosso, R., **Candrian, C.**, Arigoni, M. (2010). Trauma injury in patients over 80 years old: an epidemiological study. *British Journal of Surgery*, 97. (IF: 5.676. Ranking: Q1)

66. Francioli SE, **Candrian C**, Martin K, Heberer M, Martin I, Barbero A. Effect of three-dimensional expansion and cell seeding density on the cartilage-forming capacity of human articular chondrocytes in type II collagen sponges. *J Biomed Mater Res A*. 2010 Dec. (IF: 2.147, Ranking: Q1)
67. Hirschmann MT, Zimmermann N, Rychen T, **Candrian C**, Hudetz D, Lorez LG, Amsler F, Muller W, Friederich NF. Clinical and radiological outcomes after management of traumatic knee dislocation by open single stage complete reconstruction. *BMC Musculoskelet Disord*. 2010 May 27. (IF: 1.577, Ranking: Q2)
68. Ströbel S, Loparic M, Wendt D, Schenk AD, **Candrian C**, Lindberg RL, Moldovan F, Barbero A, Martin I. Anabolic and catabolic responses of human articular chondrocytes to varying oxygen percentages. *Arthritis Res Ther*. 2010 Mar. (IF: 4.445, Ranking: Q2)
69. Scotti C, Wirz D, Wolf F, Schaefer DJ, Bürgin V, Daniels AU, Valderrabano V, **Candrian C**, Jakob M, Martin I, Barbero A. Engineering human cell based, functionally integrated osteochondral grafts by biological bonding of engineered cartilage tissues to bony scaffolds. *Biomaterials*. 2009 Dec 16 (IF: 7.883, Ranking: Q1)
70. Miot S, Gianni-Barrera R, Pelttari K, Acharya C, Mainil-Varlet P, Juelke H, Jaquery **C**, **Candrian C**, Barbero A Martin I. In vitro and in vivo validation of human and goat chondrocyte labeling by GFP lentivirus transduction. *Tissue Engineering Part C Methods*. 2009 Mar 27. (IF: 4.699, Ranking: Q1)
71. Leumann A, Wiewiorski M, Egelhof T, Rasch H, Magerkurth O, **Candrian C**, Schaefer DJ, Martin I, Jakob M, Valderrabano V. Radiographic evaluation of frontal talar edge configuration for osteochondral plug transplantation. *Clin Anat*. 2009 Mar. (IF: 1.352, Ranking: Q3)
72. Gottardi, R., Raiteri, R., Stoltz, M., Kilger, R., **Candrian, C.**, Loparic, M, Aeschimann, L. (2008). Assessment of early osteoarthritis in human knee cartilage by scanning force microscopy. *Journal of Biomechanics*. (IF: 2.32, Ranking: Q1)
73. Wolf F, Haug M, Farhadi J, **Candrian C**, Martin I, Barbero A. A low percentage of autologous serum can replace bovine serum to engineer human nasal cartilage. *European Cell & Material Journal*. 2008 Feb. (IF: 5.378, Ranking: Q1)
74. Strobel, S., Barbero, A., Wendt, D., **Candrian, C.**, Lindbergh, R., Heberer, M., Martin, I. (2007). 4.2 Anabolic and catabolic responses of human articular chondrocyte from aged donors to culture under low oxygen tension. *Osteoarthritis and Cartilage*, 15, B62. (IF: 4.793, Ranking: Q1)
75. Francioli S, Sie C, Haag R, Tommasini R, **Candrian C**, Heberer M. Growth factors for clinical-scale expansion of human articular chondrocytes: relevance for automated bioreactor systems. *Tissue Engineering*. 2007 Volume 13, Number 6, 1227-31. (IF: 4.699, Ranking: Q1)
76. Bocelli-Tyndall C, Barbero A, **Candrian C**, Ceredig R, Tyndall A, Martin I. Human articular chondrocytes suppress in vitro proliferation of anti-CD3 activated peripheral blood mononuclear cells. *J Cell Physiol*. 2006 Dec; 209. (IF: 3.643, Ranking: Q2)

#### Publications without impact factor as first or co-author

1. Sangiorgio A, Oldrini LM, **Candrian C**, Errani C, Filardo G. Answer to the Letter to the Editor of A. Takata, et al. concerning "Radiofrequency ablation is as safe and effective as

- surgical excision for spinal osteoid osteoma: a systematic review and meta-analysis" by Sangiorgio A, et al. Eur Spine J. 2023 Apr;32(4):1481-1482.
2. Martin Riegger, Marco Guidi, Giuseppe Filardo, **Christian Candrian**, "Splay Toe after Freiberg-Köhler's Osteonecrosis: A Case Report of a Successful Operative Treatment in a Rare Multiplanar Foot Deformity", Case Reports in Orthopedics, vol. 2020, Article ID 8830166, 5 pages, 2020
  3. Previtali D., Filardo G., Napoli F., Di Laura Frattura G., Marbach F., **Candrian C.** L'evidenza scientifica sul trattamento della cuffia dei rotatori. Tribuna Medica Ticino, Febbraio 2019
  4. Giorgio di Laura Frattura, Giuseppe Filardo, Dario Giunchi, Augusto Fusco, Stefano Zaffagnini, **Christian Candrian**. Risk of falls in patients with knee osteoarthritis undergoing total knee arthroplasty: A systematic review and best evidence synthesis. Journal of Orthopaedics, Volume 15, Issue 3, September 2018
  5. Giunchi D., Marcoli N., Deabate L., Delcogliano M., Testa E., **Candrian C.**, Gaffurini P. Isolated knee arthritis as early and only symptom of Whipple's disease. Hindawi, Case Reports in Medicine, Volume 2018, Article ID 3417934
  6. F. Marbach, N. Schiavone, F. Del Grande, G. Walch, **Candrian C.** La periartropatia omeroscapolare non esiste più "Spalla rigida/congelata". Giugno 2016, Tribuna medica Ticino
  7. E.A. Testa, J. Müller, P. Gaffurini, **Candrian C.** "Tendinopatia achillea: di cosa stiamo parlando e come ci dobbiamo comportare", Aprile 2016, Tribuna medica Ticinese
  8. **Candrian C.**, Schiavone N., Del Grande F., Marbach F., Walch G. La periartropatia omeroscapolare non esiste più-le patologie dell'articolazione acromio-claveari. Tribuna Medica Ticino. 11/2014, 279-282
  9. **Candrian C.**, Schiavone N., Del Grande F., Marbach F., Walch G. La periartropatia omeroscapolare non esiste più- la tendinite calcarea. Tribuna Medica Ticino. 5/2014, 147-149
  10. Dessi K., Arigoni M., **Candrian C.** Le fratture costali-intervenire chirurgicamente? Tribuna Medica Ticinese, 4/2014. 119-122
  11. **Candrian C.**, Schiavone N., Del Grande F., Marbach F., Walch G. La periartropatia omeroscapolare non esiste più - L'artrosi gleno-omerale. Tribuna Medica Ticino. 11/2013.301-308.
  12. **Candrian C.**, Schiavone N., Del Grande F., Marbach F., Walch G. La periartropatia omeroscapolare non esiste più-La cuffia dei rotatori. Tribuna Medica Ticino. 9/2013. 187-192
  13. Potocnik P., Puig L, **Candrian C.** Periprosthetic fractures of the proximal femur - Vancouver A type fracture. European Orthopaedics and Traumatology. June 2013, Volume 4, Issue 2, pp 73–75
  14. **Candrian C.**, Schiavone N., Del Grande F., Marbach F., Walch G. La periartropatia omeroscapolare non esiste più-Le lesioni del bicipite. Tribuna Medica Ticino. 4/2013. 113-120
  15. **Candrian C.**, Schiavone N., Del Grande F., Marbach F., Walch G. La periartropatia omeroscapolare non esiste più- L'impingement sottoacromiale. Tribuna Medica Ticino. 3/2013. 77-82
  16. **Candrian C.**, Schiavone N., Del Grande F., Marbach F., Walch G. La periartropatia omeroscapolare non esiste più. Tribuna Medica Ticino. 2/2013. 41-46

17. **Candrian C.** Ginocchio e spalla, snodi delicati. Ambiente e Benessere, Settimanale della Cooperativa MigrosTicino, Nr 37. 13.9.2010
18. **Candrian C.,** Jakob M. Immer nur Prothesen, Die Chirurgie der Zukunft arbeitet mit biologischem Ersatz. The Medical Journal (TMJ). 2009 Jun;3; 7-10
19. **Candrian C.,** A. Barbero, M. Heberer, I. Martin, M. Jakob. Wann kommen stabile Konstrukte? Leading Opinions, Orthopädie, 2007, Mar; 34-35
20. **Candrian C.,** Book review, Swiss Surg 2003, Photographischer Atlas, Walther Thiel. 2. Ausgabe
21. **Candrian C.,** Rüedi T, Furrer M. Merkel cell carcinoma. Retrospective analysis of 4 cases with special reference to diagnosis, therapy and long-term outcome. Swiss Surg. 2002;8(5):215-9
22. **Candrian C.,** Nussbaumer P, Furrer M. Bilateral popliteal artery entrapment syndrome. Is preventive operation on the asymptomatic side indicated? Swiss Surg. 2002;8(5): 224-9
23. Nussbaumer P, **Candrian C,** Furrer M. Das popliteale Entrapment Syndrom. Swiss Medical Forum, 2002.
24. Nussbaumer P, **Candrian C,** Hollinger A. Endoscopic bursa shaving in acute bursitis Swiss Surg. 2001;7(3):121-5

### **Book/s, chapter/s, reviews**

2020: Title "Imaging modalities for post-traumatic arthritis." Chapter "Management of post-traumatic arthritis." Del Grande F, MD, Deabate L, MD, **Candrian C**, MD. Jaypee brothers Medical Publishers (P) Ltd.

2021: Title "Orthobiologics: Injectable Therapies for the Musculoskeletal System" Chapter "Injections: Orthobiologics and the Power of Placebo", Previtali D, Cuzzolin M, Di Laura Frattura G, **Candrian C**, Filardo G. (SpringerLink)

### **Media**

- 2021 Ticinoscienza - "Rebuilding joints with staminal cells: a hope is coming"
- 2019 RSI - Filo Diretto: prosthetics
- 2018 RTSI - "Il quotidiano": Prostheses
- 2012 RTSI - Documentary on EOC, polytrauma patient
- 2011 RTSI - "Violenza sulle donne" Bonfire
- 2010 Radio - "Knee problems"
- 2009 Radio - "Knee and hip problems"
- 2009 Teleticino - "Politrauma patients"
- 2008 , Puls, "Expert for cartilage problems"

### **4. TEACHING AND MANAGEMENT EXPERIENCE**

- 2021 Organizator/ Coordinator/Speaker of Skeleton course,3<sup>rd</sup> Semester USI
- 2020 Skeleton module manager USI 2020
- Professor at Università della Svizzera Italiana (USI)
- Vorsitzender der Kommission für Fortbildung swiss orthopaedic (SO)

- Professor at SUPSI
- Continuous training of chief orthopaedic physicians and assistants
- Management course and conduct seminar for chief physicians (8 days, Zenger and Biaggi)
- Personalized coaching of the ARU company for 3 years
- University course, University of Basel: Conduct of discussion in academic teaching
- University course, University of Basel: Planning-organising-evaluating teaching events
- University course, University of Basel: Learning in the field of perspectives
- University teaching course, University of Basel: rhetorical communication
- University course, University of Basel: Perceiving-evaluating-qualifying in teaching situations
- Instructor and director of AO courses (Arbeitsgemeinschaft für Osteosynthesefragen)
- Accompaniment of doctoral students and PhD students
- Head of courses for medical students
- FMH Orthopedics Examiner since 2013

## 5. MAIN INTERESTS

- Organisation/management
- Complex traumatology
- Shoulder surgery, elbow and revision surgery
- Research in the field of cartilage

## 6. MEMBERSHIPS AND ASSOCIATIONS

- Member of the Management Board, Head of the Training Committee, Member of the Shoulder and Traumatology Expert Groups of the Swiss Orthopedic Society (Swissorthopaedics)
- Member of Arbeitsgemeinschaft für Arthroskopie (AGA)
- Member of International Cartilage Repair Society (ICRS)
- Member of the steering committee of the Orthopedic Society of Ticino (SOTI) 2010
- Swiss delegate and member of the Traumatology Task Force EFORT (European Federation of National Associations of Orthopedics and Traumatology) 2009
- Member of the scientific committee of the TMT (Tribuna medica Ticino) since 2013

## 7. REFERENCES, NATIONAL AND INTERNATION CONTACTS

### References

Prof. Dr. Med. Pietro Majno  
Chief of Surgery  
Regional Hospital of Lugano

+41 91 811 61 24

Prof. Dr. med. P. Regazzoni  
Former Chief of Traumatology  
Basel University Hospital  
Spitalstrasse 21  
4031 Basel

+41 61 328 72 31  
+41 61 265 72 32

Prof. I. Martin  
Head of the Tissue Engineering Group, ICFS  
Basel University Hospital  
Hebelstrasse 20  
4031 Basel

+41 61 265 23 84

Dr. med. H. Bereiter  
Former Head of Orthopedics  
Chur Cantonal Hospital  
7000 Chur

+41 79 418 21 70

**National and international Contacts**

Prof. F. Gebhard, Head of the University Hospital of Ulm, Germany

Prof U. Stoeckle, Head of the University Hospital La Charite, Berlin, Germany

Prof. Dr. Jean Christoph Bel, Head of the University Hospital of Lyon, France

Prof. P. Giannoudis, Head of the University Hospital, Leeds, England

Dr. G. Walch, Santy Orthopedic Centre, Shoulder Surgery, Lyon, France

Prof. Ochsner (revision surgery), St. Anna Hospital, Lucerne, Switzerland

Prof. Dr. med. A. Mueller, Musculoskeletal treatment center, Basel University Hospital, Basel, Switzerland

Prof. Dr. I. Martin, Institute for Biomedicine, University Hospital of Basel, Basel, Switzerland

Prof. M. Hirschmann, Department of Orthopedic Surgery and Traumatology, Baselland Cantonal Hospital, Liestal, Switzerland

Dr. med. C. Sommer and Dr. med. H. Bereiter, Surgery and Orthopedics of the Chur Cantonal Hospital, Chur, Switzerland

Prof. Mauro Alini, Tissue Engineering, AO Institute, Davos, Switzerland

Prof. A. Hollander and Dr. S. Dickinson, Avon Orthopaedic Center, University of Bristol, Southmead Hospital, Bristol, England

**Lugano, 05.08.2023**

**Prof. Dr. Med. Christian Candrian**

