

# Caecilia Charbonnier - CV



## 1. PERSONAL DETAILS

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Last name: **CHARBONNIER**

First name: **Caecilia**

Sex: Female

Birthdate and place of birth: 7 December 1981, Geneva

Nationality: Swiss and French

Canton of origin: Geneva

Marital status: Single

Number of children: 0

Personal address: 16, rue Dr-Alfred-Vincent  
1201 Geneva

Professional address: Artanim Foundation  
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Dreamscape Immersive  
40, chemin du Grand-Puits - 1217 Meyrin, Switzerland  
Tel: +41 (0)22 980 91 12  
E-mail: [ccharbonnier@dreamscapevr.com](mailto:ccharbonnier@dreamscapevr.com)

Website: [www.charbonnier.ch](http://www.charbonnier.ch)

## 2. ACTUAL POSITIONS

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**Founder, President and Research Director** **04.2011**

**Artanim Foundation - Switzerland**

Founder, president and research director of Artanim, a foundation dedicated to the development and promotion of motion capture.

Fundraising and development of research projects (EU H2020, CTI/InnoSuisse, SNF Div. II) in computer graphics, virtual reality and medicine.

Development of educational programs in motion capture, 3D animation, biomechanics and medical imaging. Production activities such as the creation of audiovisual projects and events (3D animations, video games, live performances, interactive applications, etc.).

Portfolio available at: [www.artanim.ch](http://www.artanim.ch)

**Founder and CTO** **12.2016**

**Dreamscape Immersive Inc. - USA**

Founder and CTO of Dreamscape Immersive Inc., a VR entertainment company commercializing Artanim's *Real Virtuality* technology.

Website: [www.dreamscapeimmersive.com](http://www.dreamscapeimmersive.com)

### 3. DIPLOMAS

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**Federal Maturity, type C** **2001**

**License in Information and Communication Systems (master equivalent)  
with a minor in International Relations (HEI)** **2001-2005**

University of Geneva, Faculty of Economics and Social Sciences (SES)

- License thesis: "Registration of 3D models from MRI using geometric constraints for the anatomical modeling of soft tissues", Thesis Director: Prof. Nadia Magnenat-Thalmann
- Indicative units attended: Databases, Networking, Internet and Multimedia, Object Oriented Programming with Java, Systems Programming, Computer Graphics, Animation and Virtual Reality, Graphical User Interfaces, International Public Law, Political Economy, Political Sciences, Economics History, Political Geography, Sociology

**Master of Advanced Studies (MAS) in Computer Graphics** **2005-2006**

Polytechnic School of Lausanne (EPFL), Faculty of Sciences, Department of Computer Science

- Master thesis: "Virtual Mirror: A real-time motion capture application for virtual-try-on", Thesis Director: Prof. Nadia Magnenat-Thalmann
- Indicative units attended: Computer Graphics, Image Processing and Computer Vision, VR Programming with Java and C++, Visualization, Animation and Virtual Reality, Internet and Multimedia, Scientific and Medical Communication

**PhD in Science, interdisciplinary mention (*summa cum laude*)** **2007-2010**

University of Geneva, Faculty of Sciences, Department of Computer Science

Title of the thesis: "Extreme Hip Movements Based on Optical Motion Capture"

Thesis director: Prof. Nadia Magnenat-Thalmann, University of Geneva

Jury members: Prof. José Rolim (University of Geneva), Prof. Franz-Erich Wolter (Leibniz Hannover University), Dr. Mark de Zee (Aalborg University) and Dr. Eric Stindel (University Hospital of Brest)

**Certificate of Good Clinical Practice for co-investigators** **2014**

University Hospitals of Geneva / Faculty of Medicine, University of Geneva

Approved by Swissmedic, AGEK, SAMS, ISFM, SSIC, SCTO

**Good Clinical Practice Course for sponsors-investigators / investigators** **2015**

University Hospitals of Geneva / Faculty of Medicine, University of Geneva

Approved by Swissmedic, AGEK, SAMS, ISFM, SSIC, SCTO

### 4. PROFESSIONAL ACTIVITIES

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**Founder and CEO** **2015-2016**

**Artanim Interactive Sàrl - Switzerland**

Founder and CEO of Artanim Interactive Sàrl, a VR tech company set up as the spin-off of Artanim Foundation.

**Founder and Co-Director** **2010-2015**

**ArtiFX Sàrl - Switzerland**

Founder and co-director of ArtiFX Sàrl, a company specialized in extreme filming, visual effects and postproduction.

Participation in the production of movies and documentaries as scriptwriter, photographer and cameraman both terrestrial and underwater (PADI Rescue diver).

Portfolio available at: [www.artifx.ch](http://www.artifx.ch)

**Secretary General****2010-2013****Agalma Foundation - Switzerland**

Secretary General of Agalma Foundation, a space for reflection and research in neuroscience, psychoanalysis and art.

Management and supervision of the administration, foundation's activities, finances and human resources.

Head of communications and external relations, organizer of international conferences and events.

**Member of the Communication Team****2006-2012****Antinea Foundation - Switzerland**

Volunteer for the Antinea Foundation that seeks to improve the scientific knowledge of the oceans in order to protect the marine environment.

3D designer and video maker for the communication projects that aim to sensitize the public to the protection of the environment.

Webmaster of "The Changing Oceans Expedition" website: [www.changingoceans.org](http://www.changingoceans.org)

**Founder and Co-Director****2009-2011****ArtificiElles Sàrl - Switzerland**

Founder and co-director of ArtificiElles Sàrl, a company specialized in 3D and web development.

Design and creation of websites in Flash, PHP, Ajax, 3D modeling and animation, virtual environments, movies and commercials, etc.

Portfolio available at: [www.charbonnier.ch](http://www.charbonnier.ch)

**Research Assistant****2004-2010****MIRALab - University of Geneva**

Working at an internationally well-known interdisciplinary graphics and virtual reality research center, interacting with numerous researchers world-wide. Medical research and simulation, including the following topics: optical motion capture and motion analysis, 3D body scanning, biomechanics, ontology, image processing, segmentation, surface deformation and registration.

Publishing research results in international refereed journals and conferences.

Contribution in the following projects:

- CO-ME (SNSF NCCR project): Development of a semantic-driven clinical examination platform, integrating various acquisition modalities (MRI, 3D scanner, motion capture, etc.). Motion study of the hip joint in extreme postures.
- 3D ANATOMICAL HUMAN (UE project, MRTN-CT-2006-035763): Creation of a medical ontology of the musculoskeletal system, manual segmentation and 3D reconstruction of the lower limb from MRI.
- FOCUS K3D (UE project, ICT-2007-214993): Evaluation of knowledge systems and dissemination actions for the adoption and the use of those technologies, in order to foster the coding and sharing of 3D media content.

Actively authoring, contributing and co-managing several Swiss and EU research projects (EU FP6, FP7, CH SNSF Div. II).

Presenter at and co-organizer of international conferences, fairs and events.

Bachelor and master students' co-supervision. Assistant for the courses "Outils Informatiques" and "Animation et Multimedia", B.Sc. courses, years 2004 - 2008, University of Geneva.

Webmaster and system administrator of the lab.

**Consultant****2001-2009****Télévision Suisse Romande (TSR) - Switzerland**

Consultant and live interviews for sport-related programs, such as Roland-Garros and Wimbledon.

**Project Manager** **2005-2006**  
**MIRALab - University of Geneva**

Responsible for the administrative management and coordination of EU and Swiss projects in the lab. Tasks including the accountancy and the management of human resources, the redaction of EU and SNSF reports, and the administrative coordination between the various project's partners.

**Editor in Chief** **2002-2004**  
**Jet d'Encres - University of Geneva**

Editor in chief of the bi-annual newsletter of the Political Sciences and International Relations Department. Coordination of the team, journalist and edition of the journal template.

**Tennis Teacher** **2001-2004**  
Tennis teacher for Youth & Sport, group and individual courses.

**Trainee** **2002**  
**Tribune de Genève - Switzerland**

Trainee (2 months) for the daily newspaper at the Tribune de Genève, Sports Department.

## 5. TEACHING / STUDENT SUPERVISION

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### Pre-graduate academic program

- Technologie et simulation 3D en orthopédie et médecine du sport, B.M. course 2230323, 3 ECTS credits, Faculty of medicine, University of Geneva, since 2014 (20 hours / year)
- Visualisation et reconstruction 3D en imagerie médicale: techniques et applications, B.M. course 2230322, 3 ECTS credits, Faculty of medicine, University of Geneva, years 2015-2017 (14 hours / year)
- Mouvement et la mode, workshop M.A Media Design, 3 ECTS credits, Geneva University of Art and Design, semester 2016-2017 (9 hours)
- 3D Modeling and Animation, M.A course in Media Design, 3 ECTS credits, Geneva University of Art and Design, years 2014-2016 (30 hours / year)
- 3D Modeling and Animation, M.A course in Media Design, 6 ECTS credits, Geneva University of Art and Design, semester 2013-2014 (42 hours)
- Outils Informatiques, B.Sc. course 4104002, 6 ECTS credits, University of Geneva, years 2004-2008 (22 hours / year)
- Animation et Multimédia, B.Sc. course 4204003, 6 ECTS credits, University of Geneva, years 2004-2008 (22 hours / year)

### Post-graduate academic program and continuing training

- Capture de mouvement et simulation de l'épaule: applications, continuing training course of the Orthopedics Department, HUG, June 19<sup>th</sup> 2015 (1 hour)
- Imagerie 3D en radiologie ostéoarticulaire, post-graduate and continuing training course of the Radiology Department, HUG, May 26<sup>th</sup> 2014 (1 hour)
- La modélisation des articulations en 3D, continuing training course for physiotherapists, HUG, November 10<sup>th</sup> 2009 (1 hour)

### Workshops / tutorials

- Workshop Montreux Jazz Festival 2014: "3DInMotion – Mapping motion capture with musical expression", Montreux Jazz Festival, July 12<sup>th</sup> 2014 (1 hour)
- Workshop Electron 2014: "3DIM – Mocap and multichannel audio", Electron Festival, April 20<sup>th</sup> 2014 (3 hours)

- Workshop WEP2014: "Behind the scene: from motion capture to 3D character animation", King Abdullah University of Science and Technology, Jeddah, January 23rd-26th-27th 2014 (10 hours)
- Workshop FOCAL: "Introduction à la motion capture: de la capture à l'intégration des données", Neuchâtel International Fantastic Film Festival (NIFFF), July 8<sup>th</sup> 2013 (6 hours)
- Workshop FOCAL: "Motion Capture: de la capture à l'intégration des données", Artanim, December 21<sup>st</sup> 2011 (6 hours)
- Tutorial: "3D Body Scanning and Motion Analysis", 3D Physiological Human Workshop, Zermatt, December 3<sup>rd</sup> 2008 (1 hour)

#### **Student supervision**

- Jacky C.K. Chow, Development of a new motion tracking technique of the shoulder in fluoroscopic imaging sequences, 2013, PhD internship, University of Calgary
- Alexandre Corsini, Création d'un manuel d'utilisateur en Flash pour un programme d'animation de cheveux en temps réel, 2007, Bachelor Project, MIRALab, University of Geneva
- Maryam Arasteh, Evaluation and Comparison of latest 2D/3D Web Technologies, 2008, Master Thesis, MIRALab, University of Geneva

## **6. RESEARCH / FUNDED R&D PROJECTS**

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The team of Artanim Foundation includes five researchers and one legal/administrative collaborator. The research activities of the laboratory concerned or concern for the most part the following fields:

- Joint biomechanics, in particular the 3D modeling and motion analysis of the hip, knee and shoulder
- 3D simulation and computer-assisted surgical planning of native or prosthetic joints
- 3D body scanning and motion capture from different technologies (optical, inertial, markerless)
- Virtual and augmented reality, real-time motion interaction and 3D animation

List of completed or ongoing R&D projects:

#### ***VR-Together***

Duration: October 2017 - September 2020

Funding: EU H2020, ICT-19-2017 - € 3,929,937 (total budget) and € 445,000 (Artanim's budget)

Coordinator: Sergi Fernandez Langa, Fundació i2CAT

Description: Development of software tools for the production and delivery of social VR experiences combining photographic-quality content with a strong feeling of co-presence.

Partners: Fundació i2CAT (Spain), Nederlandse Organisatie voor toegepast-natuurwetenschappelijk Onderzoek (The Netherlands), Centrum Wiskunde & Informatica (The Netherlands), Centre for Research & Technology Hellas (Greece), Viaccess-Orca (France), Future Lighthouse (Spain), Entropy (Spain), Motion Spell (France), [Artanim Foundation](#)

#### ***Multiparametric and quantitative imaging in head and neck squamous cell carcinoma***

Duration: May 2017 - April 2020

Funding: SNF project n°320030\_173091 / 1 - CHF 368'630 (total budget) and CHF 60,000 (Artanim's budget)

Main applicant / coordinator: Prof. Minerva Becker, University Hospitals of Geneva

Description: 3D reconstruction of ORL tumors and development of a histologically validated computer-aided tumor model for the accurate contouring of gross tumor volume for radiotherapy planning.

Partners: University Hospitals of Geneva – Service of Radiology, [Artanim Foundation](#), University Hospitals of Geneva – Service of Nuclear Medicine, University of Geneva – Department of Clinical Pathology, University Hospitals of Geneva – Unit of Rhinology-Olfactology Otorhinolaryngology

#### ***Real Virtuality***

Duration: April 2015 - April 2018

Funding: Artanim Foundation

Description: Development of an immersive platform combining virtual reality headsets with motion capture for interactive applications and virtual visits.

### ***Reverse Shoulder Arthroplasty***

Duration: January 2017 - December 2017

Funding: Clinique La Colline - CHF 60,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Effect of critical shoulder angle, glenoid lateralization and humeral inclination on range of motion in reverse shoulder arthroplasty.

Partners: [Artanim Foundation](#), Clinique La Colline – Division of Orthopedic and Trauma Surgery

### ***HoloMed***

Duration: September 2016 - August 2017

Funding: FORE Foundation / La Tour Hospital, Clinique La Colline - CHF 260,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Development of an augmented reality tool for sport medicine and rehabilitation allowing the visualization and analysis of the anatomy in real time and in motion.

Partners: [Artanim Foundation](#), La Tour Hospital – Division of Orthopedic and Trauma Surgery

### ***3D Proto – Strategic Enhancement of Garment Prototyping Processes for the Active Sportswear Sector by Means of Virtual 3D Simulations***

Duration: December 2015 - December 2016

Funding: CTI project n°18124.1 PFES-ES - CHF 97,856 (total budget) and CHF 47,960 (Artanim's budget)

Main applicant / coordinator: Prof. Christiane Luble, Geneva University of Art and Design

Description: Enhancement of sports garment prototyping by means of virtual 3D simulations.

Partners: Geneva University of Art and Design, [Artanim Foundation](#), Odlo International SA

### ***Motion and Unconsciousness***

Duration: January 2013 - December 2016

Funding: Agalma Foundation - Approx. CHF 310,000 (total budget) and CHF 230,000 (Artanim's budget)

Coordinators: Prof. François Ansermet, University Hospitals of Geneva and Prof. Pierre Magistretti, Brain Mind Institute – EPFL

Description: Study of behavioral correlates on the subjective sensation of synchrony using motion capture, respiration measurements and EEG.

Partners: Agalma Foundation, [Artanim Foundation](#), University Hospitals of Geneva – Service of Child and Adolescent Psychiatry, Department of Child and Adolescent, Brain Mind Institute – EPFL

### ***ArthroPlanner***

Duration: November 2014 - October 2016

Funding: Private - CHF 290,000

Main applicant / coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Development of dynamic surgical planning solutions for the hip, shoulder and knee.

### ***Shoulder Instability***

Duration: August 2014 - July 2016

Funding: FORE Foundation / La Tour Hospital - CHF 40,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Kinematic study of glenohumeral anterior instability before and after surgical treatment.

Partners: [Artanim Foundation](#), La Tour Hospital – Division of Orthopedic and Trauma Surgery, Rive Droite Radiology Center SA

### ***Fashioning Movement***

Duration: November 2013 - October 2015

Funding: HES-SO - CHF 152,000 (total budget) and CHF 44,000 (Artanim's budget)

Main applicant / coordinator: Prof. Christiane Luble, Geneva University of Art and Design

Description: Objective analysis of garment comfort using 3D simulation tools on animated bodies.

Partners: Geneva University of Art and Design, [Artanim Foundation](#)

**To Fit**

Duration: June 2014 - April 2015

Funding: ToFit Sàrl - CHF 40,000

Coordinator: Sylvain Chagué, Artanim Foundation

Description: Development of a complete 3D body and head scanning solution.

Partners: [Artanim Foundation](#), ToFit Sàrl

**Shoulder Rehabilitation**

Duration: April 2014 - December 2014

Funding: University Hospitals of Geneva - CHF 16,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Impact of strengthening shoulder exercises on the glenohumeral joint and rotator cuff.

Partners: [Artanim Foundation](#), University Hospitals of Geneva – Department of Orthopedic Surgery and Traumatology, Unit of Physical Medicine and Orthopedic Rehabilitation

**Thoracic Outlet Syndrome**

Duration: March 2014 - December 2014

Funding: FORE Foundation / La Tour Hospital - CHF 16,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Kinematic study of the thoracic outlet syndrome, a rare condition involving nerves compression in the costoclavicular area.

Partners: [Artanim Foundation](#), La Tour Hospital – Division of Orthopedic and Trauma Surgery, Rive Droite Radiology Center SA

**Taylormatic**

Duration: December 2012 - October 2014

Funding: NoBrandSolution Sàrl - CHF 187,000

Coordinator: Sylvain Chagué, Artanim Foundation

Description: Development of a virtual mirror and an interactive cross-platform retail solution, including a high quality 3D product viewer and configurator.

Partners: [Artanim Foundation](#), NoBrandSolution Sàrl

**Shouder3D – Kinematic Modeling of the Human Shoulder**

Duration: June 2012 - March 2014

Funding: La Tour Hospital, European Society of Shoulder and Elbow Surgery - CHF 125,000

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Development of a new kinematic model of the shoulder complex coupling magnetic resonance imaging (MRI) and motion capture.

Partners: [Artanim Foundation](#), La Tour Hospital – Division of Orthopedic and Trauma Surgery, Rive Droite Radiology Center SA

**MyHip – Patient-Specific Pre-operative Planning and Intra-operative Surgical Guidance for Total Hip Arthroplasty**

Duration: February 2012 - January 2014

Funding: CTI project n°13573.1 PFFLE-LS - CHF 274,760 (total budget) and CHF 118,000 (Artanim's budget)

Main applicant / coordinator: Prof. Jérôme Schmid, Geneva Health School (HEdS)

Description: Development of a dynamic simulation module based on motion capture and integrated to the preoperative planning of total hip arthroplasty.

Partners: Geneva Health School (HEdS), [Artanim Foundation](#), University Hospitals of Geneva – Department of Orthopedic Surgery and Traumatology, Medacta International SA

**Sexual Activity after Total Hip Arthroplasty: A Motion Capture Study**

Duration: January 2013 - April 2013

Funding: Artanim Foundation

Coordinator: Dr. Caecilia Charbonnier, Artanim Foundation

Description: Study of the relative risks of sexual activity in patients implanted with hip prosthesis.

Partners: [Artanim Foundation](#), University Hospitals of Geneva – Department of Orthopedic Surgery and Traumatology, Medacta International SA

## 7. OTHER FUNDED PROJECTS

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### 3D animations, films, video games

- Motion capture and animation for the virtual dance piece "VR\_I", Cie Gilles Jobin, May 2017.
- Motion capture for a short-animated film at the exhibition "Niklaus Manuel and the Reformation Period", Historical Museum of Bern, November 2016.
- Motion capture for a video fiction "The Next Round", Quentin Lannes, June 2016.
- Motion capture for a contemporary dance performance "Força Forte", Cie Gilles Jobin, September 2015.
- Téo & Léonie Trailer, Kenzan, February 2015.
- Short 3D animations for Gexfix, January 2015.
- Motion capture and animation for a mobile video game, Pom Pom Interactive, September 2014.
- Short 3D animation of winter sports, Olympic Games Sochi 2014, Sochi, February 2014.

### Interactive installations

- *In collaboration with the Cie Gilles Jobin: "VR\_I"*, Sundance Film Festival New Frontier 2018, Park City, January 18<sup>th</sup>-28<sup>th</sup> 2018.
- *In collaboration with the Cie Gilles Jobin: "VR\_I"*, HeK – House of electronic Arts, Basel, October 25<sup>th</sup>-29<sup>th</sup> 2017.
- *In collaboration with the Cie Gilles Jobin: "VR\_I"*, Théâtre Forum Meyrin, Meyrin, October 12<sup>th</sup>-15<sup>th</sup> 2017.
- *In collaboration with the Cie Gilles Jobin: "VR\_I"*, Festival du nouveau cinéma, Montreal, October 6<sup>th</sup>-10<sup>th</sup> 2017.
- "Wake up and dream", WVR17, Crans Montana, May 10<sup>th</sup>-14<sup>th</sup> 2017.
- "Inside Real Virtuality", Swissnex, Bangalore and Mumbai, January 14<sup>th</sup>-21<sup>st</sup> 2017.
- *In collaboration with the Cie Gilles Jobin: "VR\_I"*, Experimenta 2016, Grenoble, October 5<sup>th</sup>-8<sup>th</sup> 2016.
- "Real Virtuality", Cannes Festival 2016, Cannes, May 11<sup>th</sup>-14<sup>th</sup> 2016.
- "Real Virtuality", FMX 2016, Stuttgart, April 26<sup>th</sup>-29<sup>th</sup> 2016.
- "Real Virtuality", Laval Virtual 2016, Laval, March 23<sup>rd</sup>-27<sup>th</sup> 2016.
- "Real Virtuality: Immersive Explorers", Lift 16, Geneva, February 11<sup>th</sup>-12<sup>th</sup> 2016.
- "Real Virtuality: Immersive Explorers", Sundance Film Festival New Frontier 2016, Park City, January 22<sup>nd</sup>-30<sup>th</sup> 2016.
- "Real Virtuality", Tous Ecrans Festival 2015, Geneva, November 6<sup>th</sup>-7<sup>st</sup> 2015.
- "Inside Real Virtuality", Swissnex, San Francisco, August 17<sup>th</sup>-21<sup>st</sup> 2015.
- "Montreux Jazz Video Jukebox", Montreux Jazz Festival 2015, Montreux, July 3<sup>rd</sup>- 18<sup>th</sup> 2015.
- "3D In Motion", Caprices Festival 2015, Crans-Montana, April 9<sup>th</sup>- 12<sup>th</sup> 2015.
- "Omega Light Tracking", Baselworld 2013, Basel, April 25<sup>th</sup>-May 2<sup>nd</sup> 2013.
- *In collaboration with the Geneva University of Art and Design and Trivial Mass Production: "Tissot Wrist Watch"*, Baselworld 2012, Basel, March 8-15<sup>th</sup> 2012.

### Live performances

- Dance show "Star Wars", Grand Prix d'Horlogerie de Genève, Grand Théâtre de Genève, Geneva, November 19<sup>th</sup> 2011.
- *In collaboration with the MIRALab-team, the University Hospitals of Geneva and the Grand Théâtre de Genève: "La danse dans tous ses états"*, Centre Médical Universitaire, Geneva, June 13<sup>th</sup> 2009.



## 8. AWARDS

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- **Finalist of the Swiss ICT Award 2017** for the VR platform "Real Virtuality", Swiss ICT Award, Lucerne, 2017.
- *In collaboration with the Cie Gilles Jobin: Winner of the Innovation Award and of the Public Award* for the virtual reality dance piece "VR\_I", Festival du nouveau cinéma, Montreal, 2017.
- **Winner of the 2016 Laval Virtual Award** in the category 3D Game and Entertainment for the VR platform "Real Virtuality", Laval Virtual 2016, Laval, 2016.
- **Finalist of the "Immersive Realities (VR/AR) contest"** awarding the best augmented/virtual reality experiences possible using today's technologies for the VR platform "Real Virtuality", SIGGRAPH 2015, Los Angeles, 2015.
- *In collaboration with La Tour Hospital and the Rive Droite Radiology Center SA: Best Technical Paper Award* for the paper entitled "*A Patient-Specific Measurement Technique to Model the Kinematics of the Shoulder in Tennis Players*", 14<sup>th</sup> Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery (CAOS), Milan, 2014.
- *In collaboration with the University Hospitals of Geneva and Medacta International SA: Special distinction for the best discussion of the poster* entitled "*Sexual Activity after Total Hip Arthroplasty: A Motion Capture Study*" ", 15<sup>th</sup> Annual Congress of the European Federation of National Associations of Orthopaedics and Traumatology (EFORT), London, 2014.
- *In collaboration with the University Hospitals of Geneva: ISAKOS Achilles Orthopaedic Sports Medicine Research Award* for the paper entitled "*Clinical and MRI Findings in Professional Dancers' Hip: A New Femoro-acetabular Impingement?*" ", 8<sup>th</sup> Annual Congress of the International Society of Arthroplasty, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS), Rio de Janeiro, 2011.
- *In collaboration with the MIRALab-team and the University Hospitals of Geneva: Eurographics Medical 1<sup>st</sup> Prize* for the paper entitled "*Virtual Hip Joint: from Computer Graphics to Computer-Assisted Diagnosis*", 30<sup>th</sup> Annual Conference of the European Association for Computer Graphics, Munich, 2009.
- **2009 Walthard Prize** from the University of Geneva. This prize is given to a student conducting with success a sport career and academic studies.

## 9. SOCIETIES

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- International Society for Computer Aided Surgery (ISCAS)
- Eurographics

## 10. OFFICIAL FUNCTIONS

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- **Member of the scientific advisory board, Surgical Devices Innovation Platform, from 05.2017**  
Member of the scientific advisory board of the Surgical Devices Innovation Platform, University Hospitals of Geneva.
- **President, Virtual Switzerland Association, from 10.2016**  
President of the National Thematic Network (NTN) *Virtual Environments Interaction and Simulation* that aims to be a catalyzer of innovation in the fields of immersive technologies and virtual environments simulation by promoting dialogue and knowledge exchange between academic and industrial Swiss players in the medtech, architecture & construction, manufacturing and tourism & culture sectors.  
Network funded by the CTI, period 2017-2020, CHF 1,320,000.

## 11. TECHNICAL AND SCIENTIFIC FUNCTIONS

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### Member of scientific program committees

- 33<sup>rd</sup> International Conference on Biomechanics in Sports, 2015
- 3D Physiological Human Workshop, 2009
- 3D Physiological Human Workshop, 2008
- Research Networking Workshop 2008 in the context of NCCR CO-ME project

### Reviewer for specialized journals or international conferences

- American Journal of Sports Medicine (IF: 4.3)
- Journal of Orthopedic Research (IF: 2.9)
- Journal of Biomechanics (IF: 2.7), Journal of Applied Biomechanics (IF: 0.9)
- International Conference in Sport Biomechanics 2015
- Medical Imaging Computing and Computer-Assisted Intervention (MICCAI) conference 2011

## 12. FUNDING / GRANTS

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### Funding

- 4'200'000 CHF in competitive third-party funding since 2011 (CTI, industry, public and private funds), see Sections 6 and 10 for details.

### Grants

- *Hans Wilsdorf Foundation*, grant to participate to the 10<sup>th</sup> International Symposium on 3D Analysis of Human Movement, Amsterdam, October 2008.
- *Hans Wilsdorf Foundation*, research grant, years 2007-2009.

## 13. INVITED CONFERENCES

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1. World VR Forum 2017, "From Research to State-of-the-art Entertainment", Crans Montana, May 12<sup>th</sup> 2017
2. MGM Center of Human Movement Science, "Combining motion capture and medical imaging to improve diagnosis and treatment of Osteoarticular Structures", Mumbai, January 20<sup>th</sup> 2017
3. National Center for Biological Sciences, "Inside Real Virtuality", Bangalore, January 16<sup>th</sup> 2017
4. Digital Health 2016, The Role of Digital Health in Early Diagnosis and Prevention, June 24<sup>th</sup> 2016
5. Cannes Festival 2016: "Beyond Cinema: the Swiss Digital Revolution", Cannes, May 13<sup>th</sup> 2016
6. Lift 16: "Enter the Anti-Disciplinary Space: A Life in Motion", Geneva, February 11<sup>th</sup> 2016
7. Sundance Film Festival 2016: Round table "Hacking your senses", Park City, January 23<sup>rd</sup> 2016
8. GameZFestival 2015: "Real Virtuality Multiplayer", Zürich, October 4<sup>th</sup> 2015
9. 33<sup>rd</sup> International Conference on Biomechanics in Sports: "Hip and dancing", Round table "Sport and security", University of Poitiers, Poitiers, June 30<sup>th</sup> 2015
10. 33<sup>rd</sup> International Conference on Biomechanics in Sports: "Patient-specific analysis of shoulder kinematics and impingement in tennis players", University of Poitiers, Poitiers, June 29<sup>th</sup> 2015
11. Annual Conference of the French Society of Orthopedic and Trauma Surgery (SOFOT): "Hip and dancing", Round table "Sport and security", Palais des Congrès, Paris, November 15<sup>th</sup> 2012
12. Prophysics User Meeting: "Motion Capture at Artanim: from 3D Animation to Movement Science", Orthopedic Hospital of Speising, Vienna, September 29<sup>th</sup> 2012
13. Meeting Agalma - Between art, science et psychoanalysis: "Body and movement: between art, science et technology", Swiss Institute of Roma, September 6<sup>th</sup> 2012

14. Workshop Centre d'Expression Numérique et Corporelle (CENC) - Les rapports entre l'art numérique et l'art corporel: "Capture de mouvement en temps réel", Fonderie Kugler, March 10<sup>th</sup> 2012
15. VIEW Conference 2011: "Using Motion Capture to Improve Analysis and Diagnosis of Joint Disorders", Torino, October 18<sup>th</sup> 2011
16. Annual Congress of the Swiss Orthopedic and Traumatology Society (SSOT): "Extreme Hip Motion in Professional Ballet Dancers", Lausanne, June 24<sup>th</sup> 2011
17. Lift 11: "From Ballet Dancing to 3D Hip Simulation", Geneva, February 4<sup>th</sup> 2011
18. European Federation of National Associations of Orthopaedics and Traumatology (EFFORT) meeting: "Professional Dancer's Hip: A Motion Capture Study", HUG, October 22<sup>nd</sup> 2010
19. European Society of Sports Traumatology, Knee Surgery & Arthroscopy (ESSKA) meeting: "Professional Dancer's Hip: A Motion Capture Study", HUG, June 1<sup>st</sup> 2010
20. Workshop on Semantic User Descriptions and their Influence on 3D Graphics and VR: "A Semantic-Driven Platform for Medical Applications", EPFL, November 13<sup>th</sup> 2008

#### 14. CONGRESSES

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1. 33<sup>rd</sup> International Conference on Biomechanics in Sports: "Impact of Strengthening Exercises on the Shoulder Joint", University of Poitiers, Poitiers, June 30<sup>th</sup> 2015
2. Annual Conference of Computer Assisted Radiology and Surgery (CARS) 2015: "A Simplified Technique to Estimate Rotator Cuff Elongation during Complex Shoulder Motion", Barcelona, June 27<sup>th</sup> 2015
3. Annual Congress of the French-speaking Society on Motion Analysis in Children and Adults (SOFAMEA): "Sexual Activity after Total Hip Arthroplasty (THA)", Geneva, February 6<sup>th</sup> 2015
4. International Symposium on 3D Analysis of Human Movement: "Analysis of Shoulder Impingement and Stability in Tennis Players", Lausanne, July 16<sup>th</sup> 2014
5. Annual Conference of the Swiss Orthopedic and Traumatology Society (SSOT): "Post-operative Kinematics Assessment in Patients after Total Hip Arthroplasty: A Pilot Study", St-Gallen, June 27<sup>th</sup> 2014
6. Annual Conference of the Swiss Orthopedic and Traumatology Society (SSOT): "Risk Assessment of Sexual Activity after Total Hip Arthroplasty (THA)", St-Gallen, June 27<sup>th</sup> 2014
7. Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery (CAOS): "A Patient-Specific Measurement Technique to Model the Kinematics of the Shoulder in Tennis Players", Milan, June 20<sup>th</sup> 2014
8. Annual Congress of the European Federation of National Associations of Orthopaedics and Traumatology (EFFORT): "Sexual Activity after Total Hip Arthroplasty: A Motion Capture Study", London, June 5<sup>th</sup> 2014
9. Annual Conference of the International Society for Technology in Arthroplasty (ISTA): "Using Motion Capture and MRI to Accurately Determine the Hip Range of Motion in Everyday Life", Palm Beach, October 19<sup>th</sup> 2013
10. Annual Conference of the International Society for Technology in Arthroplasty (ISTA): "Congruence and Impingement in Total Hip Arthroplasty during Everyday Tasks", Palm Beach, October 19<sup>th</sup> 2013
11. Annual Conference of the Swiss Orthopedic and Traumatology Society (SSOT): "Assessment of Congruence and Impingement of Prosthetic Hips during Everyday Tasks", Lausanne, June 28<sup>th</sup> 2013
12. Annual Conference of Computer Assisted Radiology and Surgery (CARS) 2010: "An Integrated Platform for Hip Joint Osteoarthritis Analysis: Design, Implementation and Results", Geneva, June 24<sup>th</sup> 2010
13. Annual Conference of the Orthopaedic Research Society (ORS): "Professional Dancer's Hip: A Motion Capture Study", New Orleans, January 28<sup>th</sup> 2010
14. Annual Conference of the Swiss Orthopedic and Traumatology Society (SSOT): "Extreme Motion as a Potential Initiator of Hip Osteoarthritis", Geneva, June 25<sup>th</sup> 2009
15. Eurographics 2009: "Virtual Hip Joint: from Computer Graphics to Computer-Assisted Diagnosis", Munich, April 1<sup>st</sup> 2009

16. 3D Physiological Human Workshop: "Motion Study of the Hip Joint in Extreme Postures", Zermatt, December 4<sup>th</sup> 2008
17. International Symposium on 3D Analysis of Human Movement: "Analysis of Extreme Hip Motion in Professional Ballet Dancers", Amsterdam, October 15<sup>th</sup> 2008
18. Surgetica'2007: "A Semantic-Driven Clinical Examination Platform", Chambéry, September 17<sup>th</sup> 2007

## 15. SEMINARS

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1. Master seminar in computer science: "Research at Artanim: from medicine to virtual reality", University of Geneva, Geneva, November 28<sup>th</sup> 2016
2. Master seminar in computer science: "Research at Artanim: from medicine to virtual reality", University of Geneva, Geneva, Avril 4<sup>th</sup> 2016
3. Agalma's internal research seminar: "Introduction to Motion Capture and Applications", Agalma Foundation, Geneva, May 3<sup>rd</sup> 2015

## 16. WORKSHOPS / EVENTS ORGANISATION

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1. "Le regard de Narcisse: la perception, le miroir et la mort", Le Cénacle, Geneva, November 15<sup>th</sup> 2013, seminar organizer
2. "Warburg seminar: between neuroscience, art and psychoanalysis", New York Psychoanalytic Institute, New York, October 12-13<sup>th</sup> 2013, seminar organizer
3. "Ferdinand de Saussure: entre neurosciences, psychanalyse et sémiologie", Le Cénacle, Geneva, October 3<sup>rd</sup> 2013, seminar organizer
4. Workshop: "Rencontre Agalma: Arts, sciences et psychanalyse", Institut Suisse de Rome, September 6-7<sup>th</sup> 2012, workshop organizer
5. The Freudian Unconscious: Between Neuroscience and Psychoanalysis, EPFL, October 28-29<sup>th</sup> 2011, workshop organizer
6. Swiss and International Alpine and Nordic University Skiing Championships (U-Games 2010), Veysonnaz, March 6-14<sup>th</sup> 2010, IT manager
7. 3D Physiological Human Workshop, Zermatt, November 28<sup>th</sup> - December 4<sup>th</sup> 2009, local committee co-chair
8. Swiss and International Alpine and Nordic University Skiing Championships (U-Games 2009), Veysonnaz, March 11-15<sup>th</sup> 2009, IT manager
9. 3D Physiological Human Workshop, Zermatt, December 1-4<sup>th</sup> 2008, local committee co-chair
10. Research Networking Workshop'08 (CO-ME), Zermatt, August 5-7<sup>th</sup> 2008, workshop chair

## 17. MEDIA

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### Press articles

1. VR\_I, le trip extracorporel qui fait danser Sundance, January 2018, 20 Minutes
2. Des géants virtuels mènent la danse, October 2017, Tribune de Genève
3. So kann es mit dem Schweizer Film nicht mehr weitergehen, June 2017, Frame Magazine
4. La virtualisation du secteur médical, révolution du siècle?, June 2017, Quotidien salon EPHJ-EPMT-SMT
5. Wenn das Kinoerlebnis zum Trip wird, May 2017, NZZ am Sonntag
6. D'Artanim à Dreamscape Immersive: Des chercheurs genevois sur les chemins de la réussite, March 2017, Fédération des Entreprises Romandes
7. Dreamscape tape dans l'oeil de Spielberg, February 2017, Tribune de Genève

8. Regisseur Spielberg investiert 11 Millionen in Schweizer Jungunternehmen, February 2017, Aargauer Zeitung
9. This is how multiplayer VR of the future will look like, January 2017, The Economic Times – Bangalore
10. A whole new world of virtual reality in the city, January 2017, Times News Network – Bangalore
11. Sneak peek into the real virtual world, January 2017, Deccan Chronicle – Bangalore
12. Plongée, Islande et réalité virtuelle, December 2016, Swissquote Magazine
13. Ces start-up suisses qui inventent le cinéma de demain, June 2016, Bilan
14. Schweizer Flüge in die Kinozukunft, May 2016, Berner Zeitung
15. Das Starsystem wankt, May 2016, NZZ
16. La réalité virtuelle sur la Croisette, May 2016, Tribune de Genève
17. Des Suisses brillent dans la réalité virtuelle, January 2016, Le Temps
18. La réalité virtuelle genevoise honorée à Los Angeles, September 2015, Tribune de Genève
19. Une immersion totale dans un monde virtuel, July 2015, Tribune de Genève
20. En visite chez un faux pharaon, April 2015, Le Temps
21. Radiologie du futur: L'exemple de la danseuse, March 2015, L'illustré (www.santedelafemme.ch)
22. Créer son clone devient possible, November 2014, Le Nouvelliste
23. La technologie 3D au service de la médecine, January 2012, Migros Magazine
24. Sportifs d'élite: se relever après une blessure, September 2011, Migros Magazine
25. Genève accueille un centre d'imagerie 3D unique en Suisse, September 2011, Tribune de Genève
26. "Il n'y a pas de limites à la capture du mouvement", February 2011, Tribune de Genève
27. "Adolescente, je rêvais de petites balles jaunes", July 2009, Tribune de Genève
28. Deux licences, un master et bientôt un doctorat..., March 2009, Tribune de Genève
29. Sport et carrière: l'art du rebond, June 2008, La Vie Protestante
30. MIRALab pilote l'humain virtuel animé, May 2008, Campus
31. Dossier recherche médicale, December 2007, L'Internat de Paris
32. Diagnostiquer les pathologies articulaires en 3D, October 2007, Le Monde
33. Vous cherchez?, June 2007, Tribune de Genève
34. Mon corps en 3D?, May 2007, Revue de Presse de l'UNIGE

#### Articles on Internet

1. [Dreamscape's Alien Zoo Creates A Sense Of Awe And Wonder](#), February 2018, UploadVR
2. [Dreamscape Immersive Debuts Group VR Experience at Westfield Mall](#), February 2018, VRScout
3. [Play with frogcats and fight Sicari at Dreamscape Immersive's VR 'Alien Zoo'](#), February 2018, L.A. Biz
4. [Virtual Alien Jungle Raises Hopes for Malls, Hollywood Producers](#), February 2018, Bloomberg
5. [Virtual Reality Experience Debuts at Westfield Century City From Dreamscape Startup](#), February 2018, The Hollywood Reporter
6. [Virtual Reality Gets Social: At Sundance, Proof that the Future of VR is Shared Experiences](#), February 2018, IndieWire
7. [Swiss startups stir up public excitement](#), January 2018, startupticker.ch
8. [Dreamscape Raises \\$30 Million For Location-based VR](#), December 2017, UploadVR
9. [Dreamscape Immersive Partners With Nickelodeon for Location-Based VR Experience](#), December 2017, Variety
10. [Dreamscape VR startup ups Series B to \\$30 million, will make VR content with Nickelodeon](#), December 2017, L.A. Biz
11. [HoloMed: Mixed reality anatomical motion capture for healthcare](#), October 2017, HealthiAR

12. [Un deal pour booster la réalité virtuelle d'Artanim](#), October 2017, startupticker.ch
13. [Hololens Provides New Tool For Sports Medicine](#), October 2017, VR Focus
14. [Plongée dans le mouvement](#), October 2017, Le Courrier
15. [World's Largest Cinema Chain, AMC, Leads \\$30M Investment to Bring VR to Movie Theaters](#), September 2017, Road to VR
16. [Virtual Reality Installations to Start Arriving at AMC Movie Theaters Next Year](#), September 2017, Wall Street Journal
17. [AMC Theaters Buys Into VR With Dreamscape Immersive Deal](#), September 2017, VR Scout
18. [Hoping to bring VR to the multiplex, AMC joins Spielberg in backing Culver City startup](#), September 2017, Los Angeles Times
19. [Coming Soon to AMC Theaters: Virtual Reality Experiences](#), September 2017, New York Times
20. [Hollywood and AMC theaters are betting on VR with Dreamscape Immersive](#), September 2017, The Verge
21. [AMC Strikes \\$20 Million Pact With Dreamscape Immersive for 6 VR Centers, Content Production](#), September 2017, Variety
22. [Réelle virtualité](#), September 2017, Platinn Magazine
23. [Hollywood studios dip their toes in virtual reality](#), July 2017, The Economist
24. [Une invention suisse séduit Spielberg](#), June 2017, Le Matin Dimanche
25. [5 Reasons Virtual Reality Will Survive and Thrive](#), May 2017, Creators
26. [Dreamscape's Big Dreams for Immersive VR](#), March 2017, Forbes
27. [Investissement du troisième type pour une start-up genevoise](#), February 2017, ICT Journal
28. [Dreamscape : quand Hollywood s'associe à Artanim pour amener la réalité virtuelle dans les grands centres commerciaux](#), February 2017, Enter the Rift
29. [VR Venture Dreamscape Immersive to Create Immersive Multiplex in Los Angeles](#), February 2017, VR Focus
30. [Une start-up genevoise de réalité virtuelle à l'assaut d'Hollywood](#), February 2017, RTS Info
31. [Dreamscape Immersive Wants to Bring Virtual Reality Multiplex to Los Angeles](#), February 2017, Variety
32. [Startup Backed by Spielberg and Studios Seeks to Create VR Experiences for Malls](#), February 2017, Wall Street Journal
33. [Opening the door of perception](#), January 2017, The Hindu
34. [This VR experience plugged with motion capture will shape your reality](#), January 2017, Stuff
35. [Act in your own avatar inside a virtual world at Mahalaxmi](#), January 2017, mid-day.com
36. [Q&A with Artanim](#), December 2016, The Standard magazine, Vicon Motion Systems Ltd
37. [Cannes Film Festival 2016: Our pick of the best VR films and experiences](#), May 2016, Wareable
38. [Real Virtuality : une expérience de VR pas comme les autres](#), March 2016, Les Numériques
39. [On a testé la réalité virtuelle de nouvelle génération à Laval Virtual](#), March 2016, 01net
40. [Les startups suisses se lancent dans la réalité virtuelle](#), March 2016, Bilan
41. [Swiss Startups Delving Into Virtual Reality](#), February 2016, Techcrunch
42. [Robert Redford séduit par une start-up genevoise](#), February 2016, Bilan
43. [Sundance 2016: Nine new VR pieces you need to know](#), January 2016, Los Angeles Times
44. [Virtual Reality at Sundance Offers a Glimpse Into the Future](#), January 2016, Paste Magazine
45. [This is the Future of VR Escape Rooms](#), January 2016, VR Scout
46. [Pillow Talk with Sylvain Chagué and Caecilia Charbonnier](#), January 2016, Adobe Pillow Talk
47. [The VR arcade of the future will look something like this](#), January 2016, Engadget
48. [Artanim the Swiss VR Experience](#), January 2016, swissnex
49. [Real Virtuality: "The Void" aus der Schweiz](#), January 2016, Rodo
50. [Die Zeit des Bastelns ist vorbei](#), January 2016, 20 Minuten

51. [How to use Virtual Reality in Tourism](#), January 2016, Gamification in tourism (blog)
52. [Watch Two Real People Pass A Torch In A Virtual Reality World](#), August 2015, Popular Science
53. [Somebody else's body](#), August 2015, Ken Perlin's blog
54. [VR 3.0: Artanim's Real Virtuality](#), August 2015, <http://johnwburge.com>
55. [From tradeshow to ancient pharaoh's tomb](#), August 2015, Red Lorry Yellow Lorry
56. [Playing with Real Virtuality at swissnex SF](#), August 2015, rangerrick.com
57. [Multi-user Wireless Virtual Reality System: Real Virtuality](#), August 2015, Technabob
58. [Multi-user Wireless Virtual Reality System: Real Virtuality](#), August 2015, GA2
59. [Hands-on: Real Virtuality Multiplayer VR demo](#), August 2015, Tested.com
60. [Vicon Vantage Mocap Cameras Will Make U.S. Debut at SIGGRAPH](#), July 2015, StudioDaily
61. [Real Virtuality will be at swissnex](#), July 2015, VR Focus
62. [Real Virtuality gives glimpse at VR's multiplayer future](#), July 2015, wired.co.uk
63. [Real Virtuality shows us what multiplayer VR might look like](#), July 2015, Engadget
64. [SIGGRAPH Finalist Releases Gameplay Footage](#), July 2015, VR Focus
65. [Real Virtuality : L'Oculus Rift poussé à son paroxysme](#), July 2015, jeuxvideo.com
66. [SIGGRAPH 2015 AR/VR Contest Finalist Shows Multiplayer Widescale Mixed Reality System](#), July 2015, Road To VR
67. [Real Virtuality : démonstration du mode Coopération](#), July 2015, Enter the Rift
68. [Real Virtuality selected for SIGGRAPH 2015 VR Competition](#), June 2015, VR Focus
69. [Vidéo : ce dispositif de réalité augmentée fait de vous un Indiana Jones des musées](#), April 2015, Konbini
70. [Kenzan et Artanim ajoutent le tactile à la réalité virtuelle](#), April 2015, Bilan
71. [A la lueur d'une torche la real Virtuality](#), April 2015, Enter The Rift
72. [Widescale Tracking and Real Props Make for an Even More Immersive VR Experience](#), April 2015, Road To VR
73. [Kenzan : projet mêlant réalité virtuelle et motion capture](#), April 2015, 3DVF
74. [Walking Through a Motion Capture Tomb With Oculus](#), April 2015, VR Scout
75. [An affordable full body studio grade 3D scanner](#), March 2014, Hackaday.com
76. [Hip Replacement Safe Sex](#), November 2013, Glory Surgery
77. [Motion capture used to assess best sexual positions after hip surgery](#), November 2013, wired.co.uk
78. [Swiss researchers look at how dangerous sex is for hip replacements](#), October 2013, news.com.au
79. [Sex Positions That Won't Break Your Artificial Hip](#), According To Science, October 2013, Popular Science
80. [Sex Positions after Hip Surgery](#), October 2013, about.com
81. [An orthopedic guide to the Kama-Sutra](#), September 2013, Ronan Kavanagh's Blog
82. [Les mouvements de votre hanche \(en titane\) durant l'activité sexuelle](#), September 2013, gurumed.org
83. [New Hip, Safe Sex Motion study](#), September 2013, Improbable Research

#### **TV/Radio programs**

1. Comment faire l'amour avec une prothèse de hanche ?, December 2017, Allodocteurs.fr / France 5
2. Virtual Reality: Technologische Revolution oder nur Spielerei?, November 2017, Einstein / SRF
3. Digitale Choreografie - Virtual Reality macht Tanz zum Erlebnis, October 2017, KulturPlatz / SRF
4. Pour la première fois Viviane Fontaine rencontre Caecilia Charbonnier, June 2017, Premier rendez-vous / RTS la 1ère
5. Notre invitée : Caecilia Charbonnier, March 2017, TTC / RTS
6. Une start-up genevoise de réalité virtuelle à l'assaut d'Hollywood, February 2017, TV news / RTS

7. La réalité virtuelle sous le sapin, December 2016, 3D Eco / Léman Bleu
8. La réalité virtuelle, August 2016, CQFD / RTS la 1ère
9. Laval Virtual: le boum des lunettes 3D, March 2016, France 3
10. Virtuelle Réalité, February 2016, Néophiles / RTS la 1ère
11. Real Virtuality on Daily Planet, February 2016, Discovery Channel
12. Le Festival Tous Ecrans permet d'expérimenter la réalité virtuelle, November 2015, TV news / RTS
13. Elle est belle la réalité virtuelle, September 2015, Nouvo / RTS
14. Nouvo: Genève accueille une conférence mondiale dédiée aux musées, April 2015, TV news & Nouvo / RTS
15. Les enfants malades du sport intensif, April 2015, 36.9° / RTS
16. 3D modeling of articulations, February 2014, Sport et Santé / Léman Bleu
17. The tennis player's shoulder, January 2014, Sport et Santé / Léman Bleu
18. Des chevaux de lumière, du dessin électrique et le kamasutra de la hanche, December 2013, Nouvo / RTS
19. Sex after hip transplants - scientists reveal new guidelines, November 2013, Reuters TV
20. Interview at VIEW Conference 2011, October 2011, Web TV OndeQuadre
21. La 3D révolutionne la médecine, July 2010, Nouvo / TSR
22. 3D Anatomical Human, November 2006, TV news / TSR

## 18. LANGUAGES

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- French (mother tongue), English (written and oral fluently), German (excellent knowledge, written and oral), Spanish (excellent knowledge, written and oral)
- Language Diploma: Cambridge Advanced Certificate (Grade A)

## 19. FORMERLY

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From 1996 to 1999: Professional tennis player (4<sup>th</sup> in Switzerland, WTA 276)  
 1999: Member of the Fed Cup Team Switzerland

## 20. REFERENCES

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## **21. DATE AND SIGNATURE**

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Geneva, the 7<sup>th</sup> of February 2018

A handwritten signature in black ink, appearing to read 'C. De Saussure', is centered on the page.

## PUBLICATIONS LIST

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### Original articles

1. Charbonnier C, Chagué S, Kevelham B, Preissmann D, Kolo FC, Rime O, Lädermann A. *ArthroPlanner: A Surgical Planning Solution for Acromioplasty*, Int J CARS, In Press, 2018 (IF: **1.86**)
2. Charbonnier C, Lädermann A, Kevelham B, Chagué S, Hoffmeyer P, Holzer N. *Shoulder Strengthening Exercises Adapted to Specific Shoulder Pathologies Can Be Selected Using New Simulation Techniques: A Pilot Study*, Int J CARS, 13(2):321-330, 2018 (IF: **1.86**)
3. Mert E, Psikuta A, Arevalo M, Charbonnier C, Luible-Bär C, Bueno MA, Rossi R. *A validation methodology and application of 3D garment simulation software to determine the distribution of air layers in garments during walking measurement*, Measurement, In Press, 2017 (IF: **2.35**)
4. Charbonnier C, Chagué S, Kolo FC, Duthon VB, Menetrey J. *Multi-body Optimization with Subject-Specific Knee Models: Performance at High Knee Flexion Angles*, Comput Meth Biomech Biomed Eng, 20(14):1571-1579, 2017 (IF: **1.90**)
5. Luible C, Charbonnier C. *Fashioning Movement: a new approach to Fashion Design*, In Unfrozen - Design Research Today, Edited by Swiss Design Network, Triest Verlag, 2017 (IF: **0**)
6. Kolo FC, Schwitzguébel AJP, Kourhani A, Denard PJ, Charbonnier C, Lädermann A. *Fosbury Flop Tear of the Rotator Cuff: Diagnostic Assessment with Magnetic Resonance Arthrography*, Br J Radiol, 90(1077):20170146, 2017 (IF: **2.05**)
7. Cereatti A, Bonci T, Akbarshahi M, Aminian K, Barré A, Begon M, Benoit DL, Charbonnier C, Dal Maso F, Fantozzi S, Lin C-C, Lu T-W, Pandy MG, Stagni R, van den Bogert AJ, Camomilla V. *Standardization proposal of soft tissue artefact description for data sharing in human motion measurements*, J Biomech, 62:5-13, 2017 (IF: **2.43**)
8. Preissmann D, Charbonnier C, Chagué S, Antonietti JP, Llobera J, Ansermet F, Magistretti PJ. *A motion capture study to measure the feeling of synchrony in romantic couples and in professional musicians*, Front Psychol, 7:1673, 2016 (IF: **2.46**)
9. Lädermann A, Denard PJ, Tirefort J, Kolo FC, Chagué S, Cunningham G, Charbonnier C. *Does Surgery for Instability of the Shoulder Truly Stabilize the Glenohumeral Joint? A Prospective Comparative Cohort Study*, Medicine, 95(31):e4369, 2016 (IF: **2.13**)
10. Llobera J, Charbonnier C, Chagué S, Preissmann D, Antonietti JP, Ansermet F, Magistretti P. *The Subjective Sensation of Synchrony: An Experimental Study*, PLoS ONE, 11(2):e0147008, 2016 (IF: **3.23**)
11. Jaquet D, Bonnefoy-Mazure A, Armand S, Charbonnier C, Ziltener JL, Kayser B. *Range of motion and energy cost of locomotion of the late medieval armoured fighter: confronting the medieval technical literature with modern movement analysis*, Hist Meth, 49(3):1-18, 2016 (IF: **0.72**)
12. Lädermann A, Chagué S, Kolo FC, Charbonnier C. *Kinematics of the Shoulder Joint in Tennis Players*, J Sci Med Sport, 19(1):56-63, 2016 (IF: **3.19**)
13. Christofilopoulos P, Charbonnier C. *CORR Insights®: High Rates of Interest in Sex in Patients With Hip Arthritis*, Clin Orthop Relat Res, 374(2):300-301, 2016 (IF: **2.77**)
14. Lädermann A, Gueorguiev B, Charbonnier C, Stimec BV, Fasel JHD, Zderic I, Hagen J, Walch G. *Scapular Notching on Kinematic Simulated Range of Motion after Reverse Shoulder Arthroplasty is not the Result of Impingement in Adduction*, Medicine, 94(38):e1615, 2015 (IF: **5.72**)
15. Lädermann A, Charbonnier C. *Kinematics of the Shoulder Joint*, Leading Opinions, 2015 (IF: **0**)
16. Schmid J, Chênes C, Chagué S, Hoffmeyer P, Christofilopoulos P, Bernardoni M, Charbonnier C. *MyHip: Supporting Planning and Surgical Guidance for a Better Total Hip Arthroplasty: A Pilot Study*, Int J CARS, 10(10):1547-1556, 2015 (IF: **1.71**)
17. Charbonnier C, Chagué S, Kolo FC, Lädermann A. *Shoulder Motion During Tennis Serve: Dynamic and Radiological Evaluation Based on Motion Capture and Magnetic Resonance Imaging*, Int J CARS, 10(8):1289-1297, 2015 (IF: **1.71**)
18. Charbonnier C, Chagué S, Schmid J, Kolo FC, Bernardoni M, Christofilopoulos P. *Analysis of Hip Range of Motion in Everyday Life: A Pilot Study*, Hip Int, 25(1):82-90, 2015 (IF: **0.76**)

19. Charbonnier C, Chagué S, Kolo FC, Chow JCK, Lädermann A. *A Patient-Specific Measurement Technique to Model Shoulder Joint Kinematics*, Orthop Traumatol Surg Res, 100(7):715-719, 2014 (IF: 1.26)
20. Charbonnier C, Chagué S, Kolo FC, Chow JCK, Lädermann A. *Évaluation personnalisée de l'épaule par modélisation de la cinétique articulaire*, Revue de chirurgie orthopédique et traumatologique, 100(7):521, 2014 (IF: 0)
21. Charbonnier C, Chagué S, Ponzoni M, Bernardoni M, Hoffmeyer P, Christofilopoulos P, *Sexual Activity after Total Hip Arthroplasty: A Motion Capture Study*, J Arthroplasty, 29(3):640-647, 2014 (IF: 2.67)
22. Duthon VB, Charbonnier C, Kolo FC, Magnenat-Thalmann N, Becker CD, Bouvet C, Coppens E, Hoffmeyer P, Menetrey J, *Correlation of Clinical and MRI Findings in Hips of Elite Female Ballet Dancers*, Arthroscopy: The Journal of Arthroscopic and Related Surgery, 29(3):411-419, 2013 (IF: 3.21)
23. Kolo FC, Charbonnier C, Pfirrmann CWA, Duc SR, Lubbeke A, Duthon VB, Magnenat-Thalmann N, Hoffmeyer P, Menetrey J, Becker CD, *Extreme Hip Motion in Professional Ballet Dancers: Dynamic and Morphologic Evaluation Based on MRI*, Skeletal Radiol, 42(5):689-698, 2013 (IF: 1.51)
24. Duthon VB, Charbonnier C, Kolo FC, Magnenat-Thalmann N, Becker CD, Bouvet C, Coppens E, Hoffmeyer P, Menetrey J, *Correlation of Clinical and MRI Findings in Professional Dancers' Hip: A New Femoro-acetabular Impingement?*, Arthroscopy: The Journal of Arthroscopic and Related Surgery, 28(6):e53, Suppl. 2, 2012 (IF: 3.21)
25. Charbonnier C, Kolo FC, Duthon VB, Magnenat-Thalmann N, Becker CD, Hoffmeyer P, Menetrey J, *Assessment of Congruence and Impingement of the Hip Joint in Professional Ballet Dancers: A Motion Capture Study*, Am J Sports Med, 39(3):557-566, 2011 (IF: 4.36)
26. Charbonnier C, Magnenat-Thalmann N, Becker CD, Hoffmeyer P, Menetrey J, *An Integrated Platform for Hip Joint Osteoarthritis Analysis: Design, Implementation and Results*, Int J CARS, 5(4):351-358, 2010 (IF: 1.71)
27. Charbonnier C, Assassi L, Volino P, Magnenat-Thalmann N, *Motion Study of the Hip Joint in Extreme Postures*, Vis Comput, 25(9):873-882, 2009 (IF: 0.96)
28. Assassi L, Charbonnier C, Schmid J, Volino P, Magnenat-Thalmann N, *From MRI to Anatomical Simulation of the Hip Joint*, Computer Animation and Virtual Worlds Journal, Special Issue on Physiological Human, 20(1):53-66, 2009 (IF: 0.46)

#### Book chapters

1. Lädermann A, Bonnevalle N, Charbonnier C, *The Shoulder in Tennis: The Different Types of Impingement & Instability*, In Shoulder Concepts 2016 – Arthroscopy, Arthroplasty & Fractures, Edited by P. Boileau Sauramps Medical Montpellier.

#### Theses

1. Charbonnier C, Combining Medical Imaging and Motion Capture for the Dynamic Analysis of Personalized Osteoarticular Structures, Privat-Docent Thesis, University of Geneva, 2017
2. Charbonnier C, Extreme Hip Movements Based on Optical Motion Capture, PhD Thesis, University of Geneva, 2010
3. Charbonnier C, Lo C, Virtual Mirror: A real-time motion capture application for virtual-try-on, M.Sc. Thesis, EPFL, 2006

#### International peer reviewed conference proceedings

1. Elias de Oliveira M, Galvan Debarba H, Lädermann A, Chagué S, Charbonnier C. *Development of a Hand-Eye Calibration Method for Augmented Reality Applied to Computer-Assisted Orthopedic Surgery*, 32nd International Congress of Computer Assisted Radiology and Surgery, Heidelberg, Germany, Int J CARS, June 2018
2. Galvan Debarba H, Elias de Oliveira M, Lädermann A, Chagué S, Charbonnier C. *Augmented Reality Visualization of Joint Movements for Physical Examination and Rehabilitation*, Proc. 2018 IEEE Virtual Reality, IEEE Comput. Soc, March 2018
3. Galvan Debarba H, Elias de Oliveira M, Lädermann A, Chagué S, Charbonnier C. *Tracking a Consumer HMD with a Third Party Motion Capture System*, Proc. 2018 IEEE Virtual Reality, IEEE Comput. Soc, March 2018

4. Lädermann A, Kolo FC, Chagué S, Charbonnier C. *Is acromioplasty planification useful? A prospective randomized trial*, XIVe Congrès de la Société Francophone d'Arthroscopie, Paris, France, Revue de chirurgie orthopédique et traumatologique, 103(8):S268, September 2017
5. Charbonnier C, Kolo FC, Lädermann A. *Acromioplasty Planification: A Randomized Prospective Study*, 27th Annual Congress of the European Shoulder and Elbow Society (SECEC), Berlin, Germany, September 2017
6. Oztürk M, Paulin E, Cunningham G, Charbonnier C, Dupuis Lozeron E, Holzer N. *Indication for Clavicle Fracture Osteosynthesis Based on Shortening: How to Measure it?*, 27th Annual Congress of the European Shoulder and Elbow Society (SECEC), Berlin, Germany, September 2017
7. Cunningham G, Charbonnier C, Chagué S, Lädermann A, Sonnabend DH. *Are Pendular Shoulder Exercises Worthwhile?*, 27th Annual Congress of the European Shoulder and Elbow Society (SECEC), Berlin, Germany, September 2017
8. Cunningham G, Charbonnier C, Chagué S, Lädermann A, Sonnabend DH. *Are Pendular Shoulder Exercises Worthwhile?*, 18th EFORT Congress, Vienna, Austria, June 2017. Cunningham G, Charbonnier C, Chagué S, Lädermann A, Sonnabend DH, *Are Pendular Shoulder Exercises Worthwhile?*, 18th EFORT Congress, Vienna, Austria, June 2017
9. Mert E, Psikuta A, Arevalo M, Charbonnier C, Luible C, Bueno MA, Rossi RM. *Quantitative validation of 3D garment simulation software for determination of air gap thickness in lower body garments*, IOP Conf. Series: Materials Science and Engineering, 254, May 2017
10. Cunningham G, Charbonnier C, Chagué S, Lädermann A, Sonnabend DH, *Are Pendular Shoulder Exercises Worthwhile?*, 18th EFORT Congress, Vienna, Austria, June 2017
11. Cunningham G, Charbonnier C, Chagué S, Lädermann A, Sonnabend DH, *Are Pendular Shoulder Exercises Worthwhile?*, 2017 AAOS Meeting, San Diego, California, March 2017
12. Charbonnier C, Chagué S, Lädermann A, Holzer N. *Évaluation des effets potentiellement délétères d'exercices de l'épaule en fonction des pathologies rencontrées*, Congrès de la Société Francophone d'Arthroscopie 2016, Paris, France, Revue de chirurgie orthopédique et traumatologique, 102(8):S307, December 2016
13. Lädermann A, Denard PJ, Tirefort J, Chagué S, Cunningham G, Charbonnier C. *Est-ce que les stabilisations d'épaule stabilisent les épaules ?*, Congrès de la Société Francophone d'Arthroscopie 2016, Paris, France, Revue de chirurgie orthopédique et traumatologique, 102(8):S284-S285, December 2016
14. Cunningham G, Charbonnier C, Chagué S, Lädermann A, Sonnabend DH. *Est-ce que les exercices pendulaires selon Codman sont utiles ?*, Congrès de la Société Francophone d'Arthroscopie 2016, Paris, France, Revue de chirurgie orthopédique et traumatologique, 102(8):S296, December 2016
15. Charbonnier C, Chagué S, Kevelham B, Kolo FC, Lädermann A. *ArthroPlanner: A Surgical Planning Solution for Acromioplasty*, 30th International Congress of Computer Assisted Radiology and Surgery, Heidelberg, Germany, Int J CARS, June 2016
16. Chagué S, Charbonnier C. *Real Virtuality: A Multi-User Immersive Platform Connecting Real and Virtual Worlds*, VRIC 2016 Virtual Reality International Conference - Laval Virtual, Laval, France, ACM New York, NY, USA, March 2016
17. Chagué S, Charbonnier C. *Digital Cloning for an Increased Feeling of Presence in Collaborative Virtual Reality Environments*, Proc. of 6th Int. Conf. on 3D Body Scanning Technologies, Lugano, Switzerland, October 2015
18. Charbonnier C, Menetrey J. *Dancing as a Potential Initiator of Early Hip Osteoarthritis*, 33rd International Conference on Biomechanics in Sports, Poitiers, France, June 2015
19. Charbonnier C, Kevelham B, Chagué S, Lädermann A, Ziltener JL, Hoffmeyer P, Holzer N. *Impact of Shoulder Strengthening Exercises on the Shoulder Joint*, 33<sup>rd</sup> International Conference on Biomechanics in Sports, Poitiers, France, June 2015
20. Charbonnier C, Kevelham B, Chagué S, Lädermann A, Ziltener JL, Hoffmeyer P, Holzer N. *A Simplified Technique To Estimate Rotator Cuff Elongation During Complex Shoulder Motion*, 29th International Congress of Computer Assisted Radiology and Surgery, Barcelona, Spain, Int J CARS, June 2015
21. Holzer N, Chagué S, Lädermann A, Ziltener JL, Hoffmeyer P, Charbonnier C. *Impact of Shoulder Strengthening Exercises on Subacromial Space Height and on Articular Cartilages and Labrum Compression Using Motion Capture Analysis*, 16th EFORT Congress, Prague, Czech Republic, June 2015

22. Charbonnier C, Chagué S, Ponzoni M, Bernardoni M, Hoffmeyer P, Christofilopoulos P. *Activités sexuelles après arthroplastie totale de hanche (PTH)*, XIV congrès de la SOFAMEA, Geneva, Switzerland, February 2015
23. Charbonnier C, Chagué S, Kolo FC, Lädermann A. *Analysis of Shoulder Impingement and Stability in Tennis Players*, Proceedings of the 13th International Symposium on 3D Analysis of Human Movement, Lausanne, Switzerland, July 2014
24. Renaud A, Charbonnier C, Chagué S. *3DinMotion - A mocap based interface for real time visualisation and sonification of multi-user interactions*, New Interfaces for Musical Expression (NIME) Conference, London, UK, June 2014
25. Schmid J, Chênes C, Chagué S, Hoffmeyer P, Christofilopoulos P, Bernardoni M, Charbonnier C, *Computer-assisted Total Hip Arthroplasty: from Pre-operative Planning to Post-operative Assessment*, 14th Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery (CAOS), Milan, Italy, June 2014
26. Charbonnier C, Chagué S, Kolo FC, Lädermann A. *A Patient-Specific Measurement Technique to Model the Kinematics of the Shoulder in Tennis Players*, 14th Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery (CAOS), Milan, Italy, June 2014
27. Charbonnier C, Chagué S, Ponzoni M, Bernardoni M, Hoffmeyer P, Christofilopoulos P, *Sexual Activity after Total Hip Arthroplasty: A Motion Capture Study*, 15th EFORT Congress, London, UK, June 2014
28. Charbonnier C, Chagué S, Ponzoni M, Bernardoni M, Hoffmeyer P, Christofilopoulos P, *Congruence and Impingement in Total Hip Arthroplasty during Everyday Tasks*, 26th Annual Congress of the International Society of Technology in Arthroplasty, Miami, Florida, Bone & Joint J, 95-B(Supp 34):27, October 2013 **(IF : 2.73)**
29. Christofilopoulos P, Chagué S, Schmid J, Bartolone P, Hoffmeyer P, Charbonnier C, *Using Motion Capture and MRI to Accurately Determine the Hip Range of Motion in Everyday Life*, 26th Annual Congress of the International Society of Technology in Arthroplasty, Miami, Florida, Bone & Joint J, 95-B(Supp 34):29, October 2013 **(IF : 2.73)**
30. Lädermann A, Chagué S, Kolo FC, Charbonnier C, *Kinematic Modeling of the Shoulder in Tennis Players*, 24th Annual Congress of the European Shoulder and Elbow Society (SECEC), Madrid, Spain, September 2013
31. Duthon VB, Kolo FC, Charbonnier C, Duc SR, Pfirrmann CWA, Magnenat-Thalmann N, Becker CD, Hoffmeyer P, Menetrey J, *Correlation of Clinical and MRI Findings in Professional Dancers' Hip: A New Femoro-acetabular Impingement?*, 8th Biennial ISAKOS Congress, Rio De Janeiro, Brazil, May 2011
32. Charbonnier C, Kolo FC, Duthon VB, Magnenat-Thalmann N, Becker CD, Hoffmeyer P, Menetrey J, *Professional Dancer's Hip: A Motion Capture Study*, Trans Orthop Res Soc, New Orleans, Louisiana, March 2010
33. Duthon VB, Kolo FC, Charbonnier C, Magnenat-Thalmann N, Duc SR, Pfirrmann CWA, Becker CD, Hoffmeyer P, Menetrey J, *Correlation of Clinical and MRI Findings in Professional Dancers' Hip: A New Femoro-acetabular Impingement?*, Trans Orthop Res Soc, New Orleans, Louisiana, March 2010
34. Charbonnier C, Schmid J, Kolo FC, Magnenat-Thalmann N, Becker CD, Hoffmeyer P, *Virtual Hip Joint: from Computer Graphics to Computer-Assisted Diagnosis*, Eurographics 2009 - First Medical Prize, Eurographics Association, Munich, Germany, pp. 1-4, April 2009
35. Charbonnier C, Lyard E, Magnenat-Thalmann N, *Analysis of Extreme Hip Motion in Professional Ballet Dancers*, Proceedings of the 10th International Symposium on 3D Analysis of Human Movement, Amsterdam, Netherlands, October 2008
36. Magnenat-Thalmann N, Charbonnier C, Schmid J, *Multimedia Application to the Simulation of Human Musculoskeletal System: A Visual Lower Limb Model from Multimodal Captured Data*, Proceedings of the IEEE International Workshop on Multimedia Signal Processing, Cairns, Australia, pp. 520-525, October 2008
37. Charbonnier C, Gilles B, Magnenat-Thalmann N, *A Semantic-Driven Clinical Examination Platform*, In *Surgetica'2007, Computer-Aided Medical Interventions: Tools and Applications*, Chambéry, France, pp. 183-189, September 2007

### National peer reviewed conference proceedings

1. Oztürk M, Holzer N, Cunningham G, Paulin E, Dupuis Lozeron E, Charbonnier C. *Indication for Clavicle Fracture Osteosynthesis Based on Shortening: How to Measure it?*, Swiss Med Wkly, 147(Suppl. 223):28S, 2017 (IF: 1.82)
2. Cunningham G, Charbonnier C, Chagué S, Lädermann A, Sonnabend DH. *Are Pendular Shoulder Exercises Worthwhile?*, Swiss Med Wkly, 147(Suppl. 223):41S, 2017 (IF: 1.82)
3. Luible C, Charbonnier C. *Fashioning Movement: a new approach to Fashion Design*, Unfrozen Symposium, 1st SDN Design Research Winter Summit, Giessbachwork, Giessbach, Switzerland, January 2016
4. Holzer N, Chagué S, Lädermann A, Ziltener JL, Hoffmeyer P, Charbonnier C. *High differences in subacromial space height and gleno-humeral compression according to shoulder muscle exercise type*, Swiss Med Wkly, Suppl. 210, 145:32S, 2015 (IF: 2.09)
5. Charbonnier C, Chagué S, Chênes C, Hoffmeyer P, Christofilopoulos P, Bernardoni M, Schmid J. *Post-operative Kinematics Assessment in Patients after Total Hip Arthroplasty: A Pilot Study*, Swiss Med Wkly, Suppl. 204, 144:37S, 2014 (IF: 2.09)
6. Charbonnier C, Chagué S, Ponzoni M, Bernardoni M, Hoffmeyer P, Christofilopoulos P. *Risk Assessment of Sexual Activity after Total Hip Arthroplasty (THA)*, Swiss Med Wkly, Suppl. 204, 144:35S, 2014 (IF : 2.09)
7. Lädermann A, Chagué S, Kolo FC, Charbonnier C. *Kinematic of the Shoulder Joints in Professional Tennis Players*, Swiss Med Wkly, Suppl. 204, 144:14S, 2014 (IF: 2.09)
8. Schmid J, Chênes C, Chagué S, Christofilopoulos P, Charbonnier C, Bernardoni M, *MyHip: Personalized Planning and Surgical Guidance in Total Hip Arthroplasty*, Swiss Congress for Health Professions (SCHP), Bern, Switzerland, March 2014
9. Charbonnier C, Chagué S, Ponzoni M, Bernardoni M, Hoffmeyer P, Christofilopoulos P, *Assessment of Congruence and Impingement of Prosthetic Hips during Everyday Tasks*, Swiss Med Wkly, Suppl. 198, 143:32S-33S, 2013 (IF: 2.09)
10. Christofilopoulos P, Chagué S, Schmid J, Hoffmeyer P, Charbonnier C, *Hip Range of Motion in Everyday Life*, Swiss Med Wkly, Suppl. 198, 143:27S, 2013 (IF: 2.09)
11. Christofilopoulos P, Chagué S, Schmid J, Bartolone P, Hoffmeyer P, Charbonnier C, *Accuracy Assessment of Hip Clinical Exam*, Swiss Med Wkly, Suppl. 198, 143:27S, 2013 (IF: 2.09)
12. Charbonnier C, Kolo FC, Duc SR, Pfirrmann CWA, Menetrey J, Duthon VB, Magnenat-Thalmann N, Becker CD, Hoffmeyer P, *Extreme Motion as a Potential Initiator of Hip Osteoarthritis*, Swiss Med Wkly, Suppl. 173, 139(23-24):18S, 2009 (IF: 2.09)
13. Duthon VB, Menetrey J, Kolo FC, Charbonnier C, Duc SR, Pfirrmann CWA, Magnenat-Thalmann N, Becker CD, Hoffmeyer P, *Professional Dancers' Hip: Correlation of Clinical and MRI Findings*, Swiss Med Wkly, Suppl. 173, 139(23-24):18S, 2009 (IF: 2.09)

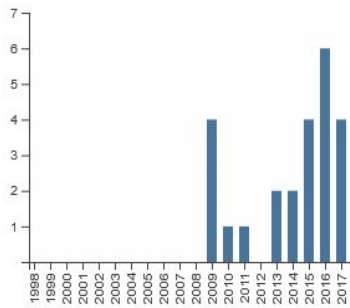
### Other articles

1. Charbonnier C, Trouche V, *Real Virtuality: Perspectives Offered by the Combination of Virtual Reality Headsets and motion Capture*, White Paper, August 2015
2. Charbonnier C, *Des athlètes du SAS clonés virtuellement pour étudier le confort de vêtements de sport*, SAS Magazin, 2014
3. Charbonnier C, *Sex after Hip Implants: A Guide Based on Motion Capture*, The Standard magazine, Vicon Motion Systems Ltd, 2014

## CITATION REPORT

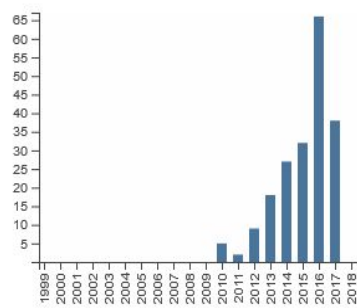
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