



GENERAL INFORMATION

Nationality: Swiss

Working address:
University of Geneva
FAPSE – Tecfa
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1211 Genève 4
Switzerland

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EDUCATION

February 2014 **PhD in Psychology**

TECFA, Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland
Dissertation Title: "Learning complex information and 3D objects with animation: Effect of learners' visuo-spatial abilities and design factors"
Supervisor: Prof. Mireille Bétrancourt

August 2006 **MA Degree in Cognitive Experimental Psychology**

Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland
Dissertation Title: "Gyrus fusiforme et reconnaissance des visages chez une population affectée par le syndrome vélo-cardio-facial"
Technique/Equipment: fMRI
Supervisors: Prof. Patrik Vuilleumier and Prof. Stephan Eliez

May 2003 **American Studies, Smith College, Northampton, MA, USA**
Diploma in American Studies

PRESENT POSITIONS

September 2013 **Lecturer in Psychology (part-time)**

Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland
Course: Perspectives and career paths in psychology (Bachelor of Psychology)

February 2014 **Associate Researcher**

TECFA, Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland
Research area: Interplay of spatial ability and dynamic visualizations in learning context, spatial ability training
Technique/equipment: Eye-tracker, 3D immersive gaming, haptic

WORKING EXPERIENCE

2015 – 2016 **Scientific Collaborator**

Psychology, Distance Learning University Switzerland - UniDistance
Project: Feasibility study for the implementation of a Master Degree in Psychology in the curricula
Supervisor: Prof. Ulrich Frauenfelder

- 2015 – 2016 **Teaching Assistant in Psychology**
Psychology, Distance Learning University Switzerland - UniDistance
Course: M00 – Savoir-faire et savoir-devenir
Supervisor: Dr. Laurence Gagnière
- 2013 **Teaching Assistant in Psychology**
Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland
Course: Overview of professional fields of psychology (Bachelor of Psychology)
Supervisor: Nora Schneider El-Geddari
- 2011 – present **Speaker and tutor for e-learning certificate program**
[Continuing education](#), University of Geneva, Geneva, Switzerland
Course: Conception and development of E-learning courses
- 2008 –2013 **E-learning and research assistant**
Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland
Supervisor: Prof. Uli Frauenfelder
Projects: Educational Landscape Psychology Project; creation of [InForMPsy](#), a web-based platform providing resources for students on career paths in psychology.
- 2006 – 2009 **Section coordinator (volunteer work)**
[Terre des hommes](#), Lausanne section, Lausanne, Switzerland
- 2007 – 2008 **Psychology support worker for family**
[Groupe romand d'accueil et d'action psychiatrique](#) (Graap), Yverdon, Switzerland
- 2005 – 2006 **Research assistant**
Medical neuroimaging research group of Service Médico-Pédagogique de Genève, Geneva, Switzerland
Supervisor: Prof. Stephan Eliez
Research Area: Fusiform gyrus and 22q11.2 deletion syndrome in youths.
Technique/Equipment: fMRI
- 2003 – 2005 **Research assistant**
[International Bureau of Education](#) – Unesco, Geneva, Switzerland
Research area: HIV/Aids prevention education

PUBLICATIONS

PEER-REVIEWED ARTICLES

Berney, S. & Bétrancourt, M. (2016). Does animation enhance learning? A meta-analysis. *Computers & Education*. 101, 150-167.

Berney, S., Bétrancourt, M., Molinari, G. & Hoyek, N. (2015). How spatial abilities and dynamic visualizations interplay when learning functional anatomy with 3D anatomical models. *Anatomical Sciences Education*. DOI 10.1002/ase.1524. [pdf](#)

Berney, S. Groff, J. & Gagnière, L. (2015). L'animation 3D, un soutien à l'apprentissage d'informations spatiales ? *Short paper submitted for the Conference on Environnements Informatiques pour l'Apprentissage Humain (EIAH), 2015, June 2-5, Agadir, Morocco.*

Glaser, B., Schaer, M., **Berney, S.**, Debbané, M., Vuilleumier, P. & Eliez, S. (2007). Structural changes to the fusiform gyrus: a cerebral marker for social impairments in 22q11.2 deletion syndrome? *Schizophrenia Research*, 96 (1-3), 82-86. [pdf](#)

BOOK CHAPTERS

Berney, S. & Bétrancourt, M. (manuscript accepted, in the publication process). Learning three-dimensional anatomical structures with animation. Effect of orientation references and learners' visuo-spatial abilities. In R. Lowe and R. Ploetzner (Eds.) *Learning from dynamic visualizations: Innovations in research and application*.

Berney, S., Thiriet, P. & Hoyek, N. (2014). Quel rôle pour les supports multimédias dans un contexte d'apprentissage ? De la naissance à la validation scientifique d'une ingénierie pédagogique. In G. Lameul & C. Loisy (Eds.), [La pédagogie universitaire à l'heure du numérique. Une intelligibilité à trouver dans l'articulation entre recherché, action et formation](#) (pp. 147 - 156). De Boek, Bruxelles, Belgium. [pdf](#)

CONFERENCES

Berney, S., & Bétrancourt, M. (2016). Does animation enhance learning? A meta-analysis. *Presentation submitted for the EARLI SIG 2 Conference 2016 on the Comprehension of Text and Graphics*, July 11-13, Geneva, Switzerland. [pdf](#)

Berney, S., Groff, J. & Gagnière L. (2015). Does instructional 3D animation support learning three-dimensional complex information?. *Presentation submitted for the Conference SSP/SCG 2015. The Future of Psychology, 2015*, September 8-9, Geneva, Switzerland. [pdf](#)

Gagnière, L., **Berney, S.** & Frauenfelder, U. (2015). Career path planning in psychology: 2 pilot academic swiss approaches. *Presentation submitted for the Conference SSP/SCG 2015. The Future of Psychology, 2015*, September 8-9, Geneva, Switzerland. [pdf](#)

Berney, S., Desrichard, O., Frauenfelder, U. & Schneider-El Gueddari, N. (2015). Discovering psychology jobs: a three-year approach. *Poster submitted for the Conference SSP/SCG 2015. The Future of Psychology, 2015*, September 8-9, Geneva, Switzerland.

Berney, S. Groff, J., Bétrancourt, M. & Boucheix, J.M. (2015). Extracting pertinent and useful spatial information from an animation of a 3D anatomical structure: an eye-tracking pilot study. *Paper submitted for the Biennial Conference of the European Association for Research on Learning and Instruction (Earli), 2015*, August 25-29, Limassol, Chyprus. [pdf](#)

Berney, S. Haddad, R., Hauck, R. & Gradl, G. (2015). Improving spatial abilities with a 3D immersive environment. A pilot study. *Paper submitted for the Biennial Conference of the European Association for Research on Learning and Instruction (Earli), 2015*, August 25-29, Limassol, Chyprus. [pdf](#)

Groff, J., **Berney, S.** & Boucheix, J.M. (2015). A pictogram is better than thousand words?. *Paper submitted for the Biennial Conference of the European Association for Research on Learning and Instruction (Earli), 2015*, August 25-29, Limassol, Chyprus.

Berney, S. Groff, J. & Gagnière, L. (2015). L'animation 3D, un soutien à l'apprentissage d'informations spatiales ? *Short paper submitted for the Conference on Environnements Informatiques pour l'Apprentissage Humain (EIAH), 2015*, June 2-5, Agadir, Morocco.

Gradl, G., **Berney, S.**, Hauck, R., Haddad Zubeil, R., Pape, H.C., Knobe, M. & Pfeifer, R. (2015). Spatial ability training in a 3D immersive environment. A pilot study. *Paper submitted for the 16th European Congress of Trauma & Emergency Surgery (ECTES) 2015*, May 10-12, Amsterdam, Netherlands.

Berney, S. & Bétrancourt, M. (2014). The role of visuo-spatial abilities in learning three-dimensional anatomical structures from animation. *Paper presented at the Conference of the European Association for Research on Learning and Instruction (Earli), Sig 2, 2014*, August 25-27, Rotterdam, The Netherlands. [pdf](#)

Berney, S., Molinari, & Bétrancourt, M. (2013). Supporting the processing of 3D objects in different orientations with animation: The case of functional anatomy. *Paper presented at the symposium "Rethinking Learning with Animation" at the Biennial Conference of the European Association for Research on Learning and Instruction (Earli), 2013*. August 27-31, Munich, Germany. [pdf](#)

Bétrancourt, M., Molinari, G. & **Berney, S.** (2013). Students' preferences and beliefs regarding visual displays as component of graphicacy. *Paper presented at the symposium "Toward a framework for studying graphicacy" at the Biennial Conference of the European Association for Research on Learning and Instruction (Earli), 2013*. August 27-31, Munich, Germany. [pdf](#)

Berney, S., Molinari, G. Hoyek, N & Bétrancourt, M. (2012). Using 3D animation for learning functional anatomy. *Paper presented at the Conference of the European Association for Research on Learning and Instruction (Earli) – SIG 2, 2012*. August 28-31, Grenoble, France. [pdf](#)

Berney, S. & Bétrancourt, M. (2009). When and why does animation enhance learning ? A meta-analysis. *Paper presented at the 13th Biennial Conference of the European Association for Research on Learning and Instruction (Earli) 2009*. August 25-29, Amsterdam, Netherlands. [pdf](#)

Glaser, B., Debbané, M., Schaer, M., Martinez, S., **Berney, S.** & Andersson, F. (2006). What can face processing tell us about cognitive and social development in VCFS? *Paper presented at the 12th Annual International Scientific Meeting of the Velo-Cardio-Facial Syndrome Educational Foundation*, July 8-9, 2006, Strasbourg, France.

Berney, S. (2006). Gyrus fusiforme et reconnaissance des visages dans le syndrome vélo-cardio-facial. *Poster présenté à la 9^{ème} journée de recherche des départements de psychiatrie de Lausanne et Genève, 22 juin 2006, Genève.*

Berney, S., Bétrancourt, M. & Rebetez, C. (2005). Effect of verbalization and self-explanation on learning from multimedia instruction. *Presentation to the Interlearn 2005 Conference: Multidisciplinary Approaches to Learning*, December 1-2, 2005, Helsinki (Finland).

TEACHING ACADEMIC EXPERIENCES

- 2016 **Berney, S.** (2016). A meta-analysis in 2 minutes ? well almost ! Seminar – workshop presented at the EARLI SIG 2 2016 Comprehensions of Text and Graphics, July 11-13, Geneva, Switzerland
- 2016 **Berney, S.** (2016). Apprentissage d'informations complexes à partir d'animations: Effets des habiletés spatiales et des facteurs de design. Seminar presented at GIPSA Lab, Université de Grenoble, May 3rd, Grenoble, France.
- 2013 Bailly, B., **Berney, S.**, Thiriet, P., Batier, C. & Bédard, D. (2013). Quel rôle les supports multimédias peuvent-ils jouer dans un contexte d'apprentissage? *Workshop presented at Journées scientifiques - Pédagogie universitaire à l'heure du numérique (JS-PUN)*. January 16-17, Lyon, France.

Heiz, J., **Berney, S.** & Barisnikov, K. Influence of stimuli on visuospatial tasks with multiple frames of reference in the Williams syndrome population and children. In Research in Developmental Disabilities Journal.

PEER-REVIEWING

Ad-hoc article for Computers & Education (CAE), British Journal of Educational Technology (BJET), EARLI Sig 2 Conference, EARLI Sig 6 Conference, ANR.

SUMMER SCHOOL

2013 2ND International Spatial Cognition Summer Institute (ISCSI), UCSB, Santa Barbara, CA, USA – August 11 – 25, 2013.

JURY MEMBER

2016 Rollier, A. (2016). Capacités visuo-spatiales statiques et traitement des unites dynamiques. Master thesis presented for M Sc MALTT, Master in Science in Learning and Teaching Technologies TECFA, Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland

2011 Heiz, J. (2011). Formation à distance: Relations entre responsables et tuteurs. Master thesis presented for M Sc MALTT, Master in Science in Learning and Teaching Technologies TECFA, Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland

AFFILIATION

European Association for Research on Learning and Instruction (EARLI), Eduhub.ch

OTHER ACADEMIC SERVICE

2016 **Co-chair** (with Mireille Bétrancourt) of the EARLI SIG 2 conference, July 11-13, Geneva, Switzerland

2014 - present **Vice-president** of the Association of Psychology Junior Academic Staff (ACIP) Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland

2014 - present **Regular contributor** of the Psychology and Educational Sciences newsletter Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland

2011 - 2013 **Regular contributor** of news brief for the University Magazine Press service, University of Geneva, Geneva, Switzerland

2009 – 2011 **Instructor and coordinator** of Tecfa Hour Workshops and seminars on educational technology web 2.0 tools. TECFA, Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland

LANGUAGES

French – native language
English – fluent written and spoken
German – basic working knowledge