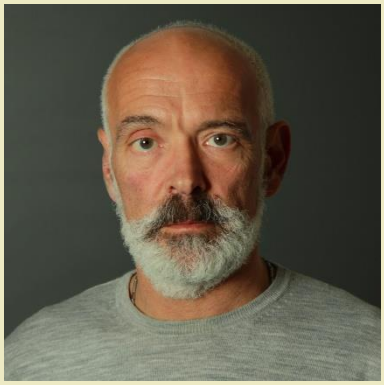
Curriculum Vitae



Daniel C. Kiper
Date of birth: 19.10.1960
Birthplace: Geneva
Nationality: Swiss (Stein, AG).
Marital status: Married, two children

Email: kiper@ini.uzh.ch

.

Education:

1975-1979: Collège Rousseau (Geneva, Switzerland). "Maturité de type scientifique", with honors, june 1979.

1980-1984: University of Geneva (Switzerland). "Licence en Psychologie génétique et ses applications." October 1984.

1985-1986: New York University (New York, USA). Master of Arts in General Psychology. October 1986.

1986-1991: New York University (New York, USA). Phd in Experimental Psychology and Neuroscience. October 1991.

1991-1993: Howard Hughes Medical Institute, Center for Neural Science, New York University. Post-Doctoral training in Visual Neuroscience.

2004: Medical Faculty of the University of Zurich and Mathematics and Natural Sciences Faculty of the University of Zurich. Habilitation. "Pattern and color vision in the primate visual system".

Employment history:

1994-1998: (100 % position) First Assistant, School of Medicine, Institute of Cellular Biology and Morphology (formerly: Institute of Anatomy), University of Lausanne.

1998-2012: (100% position) Research Associate (Wissenschaftlicher Mitarbeiter), Institute of Neuroinformatics, University of Zürich and Swiss Federal Institute of Technology of Zürich.

2012-2016: (20% position) Research Associate (Wissenschaftlicher Mitarbeiter), Institute of Neuroinformatics, University of Zürich and Swiss Federal Institute of Technology of Zürich.

2016-present: **(20% position)** Associate (Titular) Professor, Institute of Neuroinformatics, University of Zürich and Swiss Federal Institute of Technology of Zürich.

2012-present (80% position): Director of the Lifescience Zurich Learning Center, University of Zürich and Swiss Federal Institute of Technology of Zürich.

Additional Professional experience:

1986-1987: Teaching assistant for Introductory Psychology, New York University.

Fall 1987: Teaching assistant for Statistics, New York University.

Spring 1988: Lecturer for the post-graduate course of Neuroanatomy, New York University.

1988-1991: Research Assistant for Prof. J.A. Movshon and Prof. L. Kiorpes. Center for Neural Science, New York University.

1990-1991: Programmer for “Expert Systems Inc.”. New York, USA

1991-1993: (Associate with the Howard Hughes Medical Institute, group of Prof. J.A. Movshon, Center for Neural Science, New York University.

1992-1993: (Assistant Professor (Adjunct), School of Continuing Education, New York University.

1995-1998: Lecturer of Anatomy. “Ecole Cantonale Vaudoise de Physiothérapie”, Lausanne.

2004-2008: Privat-Dozent. Medical Faculty of the University of Zurich.

2008-present: Privat-Dozent. Faculty of Mathematics and Natural Sciences of the University of Zurich.

Teaching experience:

1992-1993: "Sensation and Perception". New York University School of Continuing Education.

1994-1998: "Practicals of anatomy" for second year medical students. University of Lausanne, Switzerland.

1995-1998: "Descriptive anatomy", School of physiotherapy, Lausanne, Switzerland.

April 1997: Post-Graduate module of Cognitive Neuroscience, "Biological and Psychological aspects of Neural Development", University of Geneva, Switzerland.

March 1997: Post-Graduate course in Biomedical Engineering, "Anatomy of the Central Nervous System", University of Lausanne and Swiss Federal Institute of Technology of Lausanne.

January 1997: Post-Graduate module of Cognitive Neuroscience, "Functional Imaging of the Cerebral Cortex", University of Geneva, Switzerland.

1997-1998: Neuroscience certificate, University of Lausanne, Switzerland.

June 1999: "Les nouvelles espèces dans l'expérimentation animale: les furets." Training course for animal technician. ARFPGA, Lausanne, Switzerland.

2000-2002: “Einführung in die Neurophysiologie II”, University of Zürich, Switzerland.

2000-2003: “EEG felder und Hirnfunktion”, block course of the Neuroscience Center of Zürich (ZNZ), Zürich, Switzerland.

Spring 2001: "Primary visual cortex: Paths through the literature I". Postgraduate seminar. University and ETH, Zürich, Switzerland.

Fall 2001: "Cognitive neuroscience of attention and consciousness". Undergraduate seminar. University of Zürich, Switzerland.

Fall 2001: "Primary visual cortex: Paths through the literature II". Postgraduate seminar. University and ETH, Zürich, Switzerland.

Fall 2002-present: “Consciousness: from philosophy to neuroscience” or "The neurobiology of consciousness. Univ. and ETH Zurich, with Prof. C. Koch, Dr. H. Berlin and Dr. A. Gamma.

Fall 2003-present: “Introduction to Neuroscience I”. Post-graduate, mandatory course for PhD students of the Zentrum für Neurowissenschaften Zürich (ZNZ).

Fall 2003-2005: “Preparatory course on computational neuroscience: module Optics”. Neuroscience Center of Zurich (ZNZ).

2004-2008: “Sensory physiology II: from signal transduction to perception”. Biology Dept, ETH Zurich.

2005-2008: “Sensory physiology I”, Biology Dept. ETH Zurich.

Spring 2005: “Neuroscience of action and performance”, Biology Dept. ETH Zurich.

Spring 2006: “Functional Neuroanatomy”. Module on the Visual System, ZNZ graduate course.

2006-present. “Advanced course in Neurobiology”, Univ. and ETH, Zurich. lectures on visual system and the neurobiology of consciousness.

Fall 2007-present: “Introduction to Systems Neuroscience”. University and ETH Zurich.

Fall 2005-2015: Block course “Computational neuroscience”. University and ETH Zurich.

Fall 2005-2015: Block course “Systems neuroscience”. University and ETH Zurich.

1999-present: "Computations in the nervous system: computational and biological vision". University of Zürich, ETH, Zürich, Switzerland.

Fall 2013-2015: Block course "Insights into Neuroinformatics" ETH Zurich.

Spring 2014: Modern Approaches to Neurorehabilitation. Center for Neural Science, Univ. and ETH Zurich.

Publications:

• The spatial vision of monkeys with experimental strabismus. D.C. Kiper . 1991. Doctoral dissertation. New York University.

• Contrast detection in luminance and chromatic noise. K. Gegenfurtner and D.C. Kiper. 1992. **J. Opt. Soc. Am. A**, 9(11): 1880-1888.

• Contrast sensitivity and Vernier acuity in amblyopic monkeys. L. Kiorpes, D.C. Kiper and J.A. Movshon. 1993. **Vision Res.** 33(16):2301-2311.

• Spatial phase discrimination in experimentally strabismic monkeys. D.C. Kiper. 1994. **Vision Res.** 34(4):437-447.

• Receptive fields and functional architecture of macaque V2. J.B. Levitt, D.C. Kiper and J.A. Movshon. 1994. **J. Neurophysiol.** 71(6):2517-2542.

• Chromatic properties of neurons in macaque MT. K. Gegenfurtner, D.C. Kiper, J.M.H. Beusmans, M. Carandini, Q. Zaidi and J.A. Movshon. 1994. **Visual Neurosci.** 11: 455-466.

• Suprathreshold contrast sensitivity in experimentally strabismic monkeys. D.C. Kiper and L. Kiorpes. 1994. **Vision Res.** 34**(**12):1575-1583.

• Spatial frequency channels revealed by oblique masking in monkeys with experimental strabismus. 1995. D.C. Kiper, K. Gegenfurtner and L. Kiorpes. **Vision Res.** 35(19): 2737-2742.

• Cortical oscillations do not affect visual segmentation. D.C. Kiper, K. Gegenfurtner and J.A. Movshon. 1996. **Vision Res.** 36(4):539-544.

• Processing of color, form and motion in macaque area V2. K. Gegenfurtner, D.C. Kiper and S.B. Fenstemaker. 1996. **Visual Neurosci.** 13:161-172.

• Development of contrast sensitivity across the visual field in macaque monkeys. L. Kiorpes and D.C. Kiper. 1996. **Vision Res.** 36(2):239-247.

• Growth of terminal arbors in primary visual areas of the cat. D. Aggoun-Zouaoui, D.C. Kiper and G.M. Innocenti. 1996. **Eur. J. Neurosci.** 8(6):1132-1148.

• Functional properties of neurons in macaque area V3. K.R. Gegenfurtner, J.B. Levitt and D.C. Kiper. 1997. **J. Neurophysiol.** 77:1906-1923.

• Chromatic properties of neurons in macaque area V2. D.C. Kiper, S.B. Fenstemaker, and K.R. Gegenfurtner. 1997. **Visual Neurosci.** 14:1061-1072.

• Functional organization of owl monkey lateral geniculate nucleus and visual cortex. L.P. O'Keefe, J.B. Levitt, D.C. Kiper, R.M. Shapley and J.A. Movshon.1998. **J. Neurophysiol.** 80: 594-609.

• Neuronal correlates of amblyopia in the visual cortex of macaque monkeys with experimental strabismus and anisometropia. L. Kiorpes, D.C. Kiper, L.P. O'Keefe, J.R. Cavanaugh, and J.A. Movshon. 1998. **J. Neurosci.** 18: 6411-6424.

• On nature and limits of cortical developmental plasticity after an early lesion in a child. Special issue on "Visual system damage: Residual vision and plasticity." G.M. Innocenti, D.C. Kiper, M. Knyazeva, and T. Deonna. 1999. **Restor. Neurol. and Neurosci**. 15(2,3): 219-227.

• Visual-stimulus-dependent interhemispheric EEG coherence in ferrets. D.C. Kiper, M. Knyazeva, L. Tettoni and G.M. Innocenti. 1999. **J. Neurophysiol.** 82:3082-3094.

• Visual-stimulus-dependent interhemispheric EEG coherence in humans. M. Knyazeva, D.C. Kiper, V. Vildavski, M. Maeder, P. Desplands and G.M. Innocenti. 1999. **J. Neurophysiol.** 82:3095-3107.

• The representation of the visual field in three extrastriate areas of the ferret *(Mustela Putorius)*, and the relationship of retinotopy and field boundaries to callosal connectivity. P. Manger, D.C. Kiper, I. Masiello, L. Murillo, L. Tettoni, Z. Hunyadi, and G.M. Innocenti. 2002. **Cereb. Cortex**. 12:423-437.

• Suppression without inhibition in visual cortex. T.C.B. Freeman, S. Durand, D.C. Kiper, and M. Carandini. 2002**. Neuron.** 35:759-771.

• Testing the bayesian model of perceived speed. F. Hürlimann, D.C. Kiper, and M. Carandini. 2002. **Vision Res.** 42(19): 2253-2257.

• Preserved visual function in a case of occipito-parietal microgyria. P. Zesiger, D.C. Kiper, P. Maeder, T. Deonna, G. M. Innocenti. 2002. **Ann. Neurology**. 52(4): 492-498.

• Vision after early-onset lesions of the occipital cortex. I) Neuropsychological and psychophysical studies. D.C. Kiper, P. Zesiger, P. Maeder, T. Deonna, and G.M. Innocenti. 2002. **Neur. Plasticity**. 9(1): 1-25.

• Vision after early-onset lesions of the occipital cortex. II) Physiological studies. M. Knyazeva, P. Maeder, D.C. Kiper, T. Deonna, and G.M. Innocenti. 2002. **Neur. Plasticity**. 9(1): 27-40.

• The effect of surround textures on the responses of LGN cells in the cat. C.C. Girardin, D.C. Kiper, and K.A.C. Martin. 2002. **Eur. J. Neurosci**. 16(11):2149-2156.

• The detection of colored Glass patterns. K.S. Cardinal and D.C. Kiper. 2003. **Journal of Vision**. 3(3), 199-208, http://journalofvision.org/3/3/2/, DOI 10.1167/3.3.2.

• Color and form in the early stages of cortical processing. D.C. Kiper. 2003. **J. Physiol.** 548: 335.

• Color vision. K.R. Gegenfurtner and D.C. Kiper. 2003. **Annual Rev. Neurosci.** 26:181-206.

• Colour and form in the cortex. D.C. Kiper. 2003. **Physiol. News Mag**. 52:19-20.

• Visual awareness does not contribute to the formation of negative afterimages. C. Hofstötter, C. Koch, and D.C. Kiper. 2004. **Consciousness and Cognition**. 13(4): 691-708.

• The local and global processing of colored Glass patterns. MJ. Mandelli and D.C. Kiper. 2005. **Journal of Vision**. 5(5): 405-416.

• Cognitive Virtual-Reality Based Stroke Rehabilitation. Eng, K and Siekierka, E and Cameirao, M and Zimmerli, L and Pyk, P and Duff, A and Erol, F and Schuster, C and Bassetti, C and Kiper, D and Verschure, P F M J. 2006. **World Congress on Medical Physics and Biomedical Engineering**, 2718-2721.

• Cortical Plasticity: A view from non-human primates. D.C. Kiper, K.A.C. Martin, and H.J. Scherberger. 2007. **Neurodegenerative Diseases**. 4(1): 34-42.

• A Model of Grid Cells Based on a Twisted Torus Topology. A. Guanella, D.C. Kiper, and P. Verschure. 2007. **Int. J. Neural Systems.** 17(4): 231-240..

• Interactive Cognitive Motor Therapy System for Stroke Rehabilitation. K. Eng, E. Siekierka, P. Pyk, E. Chevrier,Y. Hauser, M. Cameirao, K. Hägni, L. Zimmerli, A. Duff, C. Schuster, C. Bassetti, P.F.M.J. Verschure, and D.C. Kiper. 2007. **Med. Biol. Eng. and Computing,** 45(9): 901-907.

• Observing Virtual Arms that You Imagine Are Yours Increases the Galvanic Skin Response to an Unexpected Threat. 2008. Hägni K, Eng K, Hepp-Reymond MC, Holper L, Keisker B, Siekierka E, Kiper DC. **PLoS One** 3(8):e3082.

• A Paediatric Interactive Therapy System for arm and hand rehabilitation. 2008. Pyk P, Wille D, Chevrier E, Hauser Y, Holper L, Fatton I, Greipl R, Schlegel S, Ottiger L, Pescatore A, Meyer-Heim A, Kiper D, and Eng K. **Virtual Rehabilitation 2008,** 127-132.

• A Display for Supporting Ownership of Virtua Arms. 2008. Pescatore, A, Holper, L, Pyk, P, Kiper, D and Eng, K. **Presence** (Spagnolli, A, Gamberini, L, eds.), 270-273.

• An extended drawing test for the assessment of arm and hand function with a performance invariant for healthy subjects. 2009. Vuillermot S, Pescatore A, Holper L, Kiper DC, Eng K. **J Neurosci Methods**. 177(2): 452-460.

• Virtual Reality based Paediatric Interactive Therapy System (PITS) for improvement of arm and hand function in children with motor impairment – a pilot study. 2009. Wille D, Eng K, Holper L, Chevrier E, Hauser Y, Kiper D, Pyk P, Schlegel S, Meyer-Heim A. **Developmental Neurorehabilitation,** 12(1): 44-52.

• The spider glove: patient-optimized modular data gloves for pediatric and adult rehabilitation. 2009. Pyk, P, Holper, L., Mochancki D., Kiper, D.C., and Eng K. **Cybertherapy and Rehabilitation** 1: 24-25.

• Patient Evaluation of a Mirrored Display for Viewing of Co-located Virtual Arms. 2009. Eng, K, Pescatore, A, Chevrier, E, Pyk, P, Holper, L, Schuster, C, Heinrichs, A and Kiper, D C. **World Congress on Med. Phys. Biomed. Eng.** 25/IV: 1861-1864.

• Evidence for color and luminance invariance of global form mechnaisms. 2010. Rentzeperis I, and Kiper, D.C.. **J. Vision.** 10(12): 6.

• Testing the potential of a virtual reality neurorehabilitation system during performance of observation, imagery and imitation of motor actions recorded

by wireless functional near-infrared spectroscopy (fNIRS). 2010. Holper, L, Muehlemann, T, Scholkmann, F, Eng, K, Kiper, D, and Wolf, M. **Journal of NeuroEngineering and Rehabilitation. 7:**57

• Trial-to-trial variability differentiates motor imagery during observation between low versus high responders: A functional near-infrared spectroscopy study. 2012. Holper L, Kobashi N, Kiper D, Scholkmann F, Wolf M, Eng K. **Behav Brain Res.** 229(1):29-40

• Enhancement of motor imagery-related cortical activation during first-person observation measured by functional near-infrared spectroscopy. 2012. Kobashi N.,Holper L. Scholkmann F., Kiper D.C. and Eng K. **Eur. J. Neurosci**. 35(9). 1513-1521

• Relationship between neural response and adaptation selectivity to form and color: an ERP study. 2012. Rentzeperis I., Nikolaev AR, Kiper DC, Van Leeuwen C. **Frontiers in Human Neurosciences**. DOI=10.3389/fnhum.2012.00089

• LifeScience Zurich Learning Center - a new symbiosis of research institutions and schools. Kiper DC, Klusman I, Kunfermann C, Sarraf-Zadeh L, Butschi A, Leumann.2012. **Chimia**. 66(11):853-6.

• Virtual reality-augmented neurorehabilitation improves motor function and reduces neuropathic pain in patients with incomplete spinal cord injury. Villiger M, Bohli D, Kiper D, Pyk P, Spillmann J, Meilick B, Curt A, Hepp-Reymond MC, Hotz-Boendermaker S, Eng K. **Neurorehabil Neural Repair**. 2013, 27(8):675-83

• Enhanced activation of motor execution networks using action observation combined with imagination of lower limb movements. Villiger M, Estévez N, Hepp-Reymond MC, Kiper D, Kollias SS, Eng K, Hotz-Boendermaker S. **PLoS One**. 2013 Aug 28;8(8)

• Intensive virtual reality-based training for upper limb motor function in chronic stroke: a feasibility study using a single case experimental design and fMRI. C. Schuster-Amft, A. Hennecke, B. Hartog-Keisker, L. Holper, E. Siekierka, E. Chevrier, P. Pyk, S. Kollias, D.C. Kiper, K. Eng. **Disabil. Rehabil. Assist. Technol.** 2014. Epub ahead of print.

• Using mixed methods to evaluate efficacy and user expectations of a virtual reality-based training system for upper-limb recovery in patients after stroke: a study protocol for a randomised controlled trial. Schuster-Amft C, Eng K, Lehmann I, Schmid L, Kobashi N, Thaler I, Verra ML, Henneke A, Signer S, McCaskey M, Kiper D. **Trials.** 2014 Sep 6;15:350. doi: 10.1186/1745-6215-15-350.

• Distributed processing of color and form in the visual cortex. I. Rentzeperis, A.. R. Nikolaev, D. C. Kiper, C. van Leeuwen. 2014. **Frontiers in Psychology**, 5:932.

• Relationship between structural brainstem and brain plasticity and lower-limb training: a longitudinal pilot study. M. Villiger, P. Grabher, MC. Hepp-Reymond, D. Kiper, A.Curt, M. Bolliger, S. Hotz-Boendermaker, S. Kollias, K. Eng, P. Freund. 2015. **Frontiers in Human Neuroscience**. http://dx.doi.org/10.3389/fnhum.2015.00254

• Orientation perception anisotropies indicate functional segregation within the color system. Rentzeperis I, Alexander DM, van Leeuwen C*, Kiper D.C*. 2015. **J. of Vision**. 15(9): 13 *Co-last authors.

• Neural correlates of visuomotor adjustments during scaling of human finger movements. Brand J, Michels L, Bakker R, Hepp-Reymond MC, Kiper D, Morari M, Eng K. **Eur J Neurosci.** 2017 Jul;46(1):1717-1729. doi: 10.1111/ejn.13606.

•Effect of a four-week virtual reality-based training versus conventional therapy on upper limb motor function after stroke: a multicenter parallel group randomized trial. McCaskey M.A,, Eng K., Suica Z., Thaler I., Signer. S, Lehmann. I, Schmid L., Schuster-Amft C., Hawkins M., Verra M.L.* and Kiper D.C.* **PLoS One**, 2018, PONE-D-18-11539R2. *Co-last authors.

• Modulation of visual contrast sensitivity with individualized transcranial random noise stimulation is time-dependent and specific for the primary visual cortex. 2023. **eNeuro**. 2023 Jun 16;10(6):ENEURO.0177-22.2023. doi: 10.1523/ENEURO.0177-22.2023. Weronika Potok, Alain Post, Marc Bächinger, Daniel C. Kiper, and Nicole Wenderoth.

Book chapters:

• Chromatic signals in extrastriate areas V2 and V3. D.C. Kiper, J.B. Levitt and K.R. Gegenfurtner. 1999. In "Color Vision: From Genes To Perception". Gegenfurtner and Sharpe, Eds. Cambridge University Press. Chapt 13: 249-268.

• The neural basis of pattern vision. D.C. Kiper and M. Carandini. In the "Encyclopedia of Cognitive Science". London, Macmillan. 2002

• The processing of color in extrastriate cortex. K. R. Gegenfurtner and D.C. Kiper. In "The Visual Neurosciences". L. Chalupa and J.S. Werner, Eds. MIT Press. 2003. Chapt. 66, pp. 1017-1028.

• Single cell studies: monkeys. D.C. Kiper. In "The Oxford companion to consciousness" Oxford Universtiy Press, 2009, 604-605.

• The processing of color in primate extrastriate cortex. D.C. Kiper and K.R. Gegenfurtner. In "The New Visual Neurosciences". L. Chalupa and J.S. Werner, Eds. MIT Press. 2014. Chapt. 41, pp. 587-595.

.• Color processing, cortical. D. C. Kiper. Entry in the Encyclopedia of Color Science and Technology. Springer, 2016. In Press.

• Distributed processing of color and form in the visual cortex. Rentzeperis, I. Nikolaev, A. Kiper, D.C. Van der Leuwen, C. In „Color and Form perception: straddling the boundary“. Frontiers Research Topics, Paramei and Van der Leuwen Eds. 2016, 23-37.

Grants

FNRS: project number: 3100-056711.99 (1999-2002): Chromatic properties of cells in area V4 and IT cortex of the awake macaque. **D.C. Kiper** and K.R. Gegenfurtner.

FNRS: project number: 3100-056782.99 (1999-2002): Cerebral mechanisms of visual object recognition using EEG coherence, event-related potentials, and electric source localization algorithms. **A. Pegna,** C. Michel, and D.C. Kiper.

FNRS: project number: 3100-059363.99. (2000-2003). Mapping of the Human Visual System during Normal and Pathological Brain development using Event Related functional MRI. **E. Martin**, V. Marcar, K. Landau, and D.C. Kiper.

FNRS: PNR38 grant (1998-2001). The effects of early lesions to the visual cortex. **G.M. Innocenti**, P. Clarke, T. Deonna, and D.C. Kiper.

FNRS: project number: 3100-056007.98. (1999-2002). Mechanisms of pattern adaptation in the primary visual cortex. **M. Carandini** and D.C. Kiper.

Mayenfish Foundation: Research grant “Glass patterns”, March-November 2003 to **D.C. Kiper** and M.J. Mandelli.

FNRS: project number: 3100-067980.02 (2002-2005). Color constancy in macaque visual cortex. **D.C. Kiper**.

ZNZ Grant: PhD fellowship for C. Hofstötter. 2004-2005. Physiological basis of visual awareness. Awarded to **D.C. Kiper**

TH-23/04-1, ETH Research Grant: 2004-2007. “Dynamics of object identification and categorization. **D.C. Kiper**, P.F.M. Verschure, and Z. Kourtzi.

Gebert Ruf Foundation. 2005-2009. Cognitive VR therapy. **D.C. Kiper**.

Leica Microsystems. 2006-2007. New concepts for a stereomicroscope. **D.C. Kiper**

NCCR: Repair and Plasticity. 2005-2011. Project 5. **K.A.C. Martin**, A.Ishai, L. Jäncke, HJ. Scherberger, and **D.C. Kiper**

NCCR: Repair and plasticity. 2005-2011. WP 2. Cognitive Stroke Therapy. **D. C. Kiper**.

Swiss National Science Foundation. 2007-2010. 32000-116809/1. Color and form in the primate brain. **D.C. Kiper**

KTI Grant: Multicenter clinical evaluation of virtual reality based neurorehabilitation. **D.C. Kiper** and K. Eng . 2012-2015.

KFSP (CRPP) Grant from the univ. of Zurich. Neuro-Rehabilitation: Strategies for Customized Treatments. Principal Investigator: Prof. A. Curt. 2012-present

King Baudoin Foundation US “Development of education modules in personalized medicine and synthetic biology”. 2013-2015. 88 KCHF

MINT Schweiz, Swiss Academy of Sciences: «ABC des Forschens» und «Forschkiste». Mit C. Kunfermann. 2015-2016. 70 KCHF

MINT Schweiz, Swiss Academy of Sciences: «Von Mendel und Moratorien». 2015-2016. 52 KCHF

AMGEN Foundation: “MiniMoocs in biology”. 2015-2017. 84 KCHF

Supervised PhD Theses

“Chromatic properties of higher-order mechanisms in the primate visual system”. K. S. Cardinal. Doctoral thesis for the Neuroscience Center of Zurich, University of Zurich. Oct. 2003.

“The neural correlate of visual awareness in healthy human observers”. C. Hipp. Doctoral thesis for the ETH Biology dept. and the Neuroscience Center of Zurich, University of Zurich. December 2005.

"A combined coding scheme for visual stimuli". S. Roth. ETH Physics PhD thesis. 2008.

"The fusion of multiple sources of information in the organization of goal-oriented behavior". M. Ringwald. ETH El. Eng. PhD Thesis. 2009.

"A theoretical investigation into dynamic neurological disorders caused by thalamocortical dysrhythmia. H. Proske. Univ. of Zurich Psychol. PhD Thesis. 2009.

"Visual Identification, Categorization and Recollection". M. Wiesmann. ETH PhD Physics Thesis. 2009.

“Event-based processing of vision Applied to Stereo Vision and Behavioral Tracking.”. 2010. P. Rogister. Univ. of Zurich PhD Thesis.

Over 30 Diploma/MSc Theses supervised since 2000.

Societies:

Society for Neuroscience.
Vision Science Society (VSS)
European Neuroscience Association.
Société Suisse de Neuroscience
International Society for Virtual Rehabilitation

Fellowships and distinctions:

Spring 1991: ARVO travel fellowship.

1989-1990: Young Investigator Fellowship. Fonds National pour la Recherche Scientifique (Switzerland).

1994: Research fellowship from the "Fondation du 450ème anniversaire. Rectorat de l'Université de Lausanne."

2008: Best paper. Virtual Neurorehabilitation Conference. Vancouver, Canada.

Miscellaneous:

Fluent in French, English, and German.

Reviewer for: Journal of the Optical Society of America; Vision Research; Proceedings of the Royal Society, UK; J. Neurophysiology; European Journal of Neuroscience, Perception and Psychophysics, J. Physiology (UK), Journal of Vision.

Programming languages: C, Fortran, Matlab. Familiar with the DOS, Windows, Linux, and Unix platforms.

1994-1998: Coauthor of the Institute of Cellular Biology and Morphology WEB pages.

1995-1998: Coordinator of the Institute of Cell Biology and Morphology seminar series.

2000-2012: Supervisor of the Institute of Neuroinformatics' library.

2001-present: Member of the **Brainfair Zürich Task Force**.

2003-2012: Coordinator of the Institute of Neuroinformatics colloquium (with Dr. S.-C. Liu)

2003-2010: Member of the **ZNZ Doctoral Grant commission**.

2009-2012, 2016-present: **Program Coordinator**, Specialized Masters program in Neural Systems and Computation , ETH. and Univ. of Zurich

2009-2012: **Member of RITZ** “Rehabilitation and Technology Platform Zurich”.

2009-2017: **Elected member of the Swiss Society for Neuroscience (SSN) Council**.

2015-2017: **President of the Swiss Society for Neuroscience**

2005-2022: **Elected member and Vice-President of the Greifensee Primary School schoolboard ("Schulpflege")**, Greifensee, Switzerland. Resp. for Human Resources.

2014-2022: **President of the Greifensee Primary school**, elected member of the Greifensee City Council (**Gemeinderat - Ressort Bildung**).

2019-present: Member of the Literar Gymnasium Rämibühl **Schulkommission**

2021-present: **Coordinator of the Interdisciplinary Brain Sciences (IDB),** Block II specialized Masters program (UZH /ETHZ)