

Publications, travaux en cours et communications scientifiques

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En cours

- Bostelmann, M., Circelli, A., Costanza, F., Menghini, D., Martorana, L., Ruggeri, P., Vicari, S., Lavenex, P., **Banta Lavenex, P.** *Path integration and cognitive mapping capacities in Down and Williams syndromes.* (Submitted to *Frontiers in Psychology*).
- Bochud-Fragnière, E., Menghini, D., Vicari, S., Lavenex, P., **Banta Lavenex P.** *Dissecting the expression of different learning and memory systems in Williams and Down syndromes.* (In preparation).
- Bochud-Fragnière, E., Lavenex, P., **Banta Lavenex P.** *Dissecting the development of different learning and memory systems in typically developing children.* (In preparation).
- Jabès, A., Ruggeri, P., Michel, C.M., **Banta Lavenex, P.**, Lavenex, P. *Resting-state EEG microstates in Down syndrome and Williams syndrome.* (In preparation).
- Jabès, A., Klencklen, G., Ruggeri, P., Antonietti, J.-P., **Banta Lavenex, P.**, Lavenex, P. Age-related differences in resting-state EEG and allocentric spatial working memory performance. (In preparation).
- Jabès, A., Klencklen, G., Ruggeri, P., Michel, C.M., Banta Lavenex, P., Lavenex, P. Resting-state EEG microstates parallel age-related differences in allocentric spatial working memory performance (In preparation).
- Banta Lavenex, P., Ribordy Lambert, F., Bostelmann, M., Lavenex, P. Le développement de la mémoire spatiale chez les enfants entre 2 et 9 ans. (In preparation ; Article de revue invitée ; Enfance)

Articles et contributions à des ouvrages

- Bostelmann, M., Lavenex, P., **Banta Lavenex, P.** (2020). *Children five-to-nine years old can use path integration to build a cognitive map without vision.* *Cognitive Psychology*, 121 doi.org/10.1016/j.cogpsych.2020.101307.
- Piguet, O., Chareyron, L., **Banta Lavenex, P.**, Amaral, D., Lavenex, P. (2020). *Postnatal development of the entorhinal cortex: A stereological study in macaque monkeys.* *Journal of Comparative Neurology*, 528:2308-2332. doi: 10.1002/cne.24897.
- Bostelmann, M., Bochud-Fragnière, E., Lavenex, P., **Banta Lavenex, P.** (2019). *Les systèmes de mémoire spatiale et le syndrome de Williams.* *Approche Neuropsychologique des Apprentissages chez l'Enfant*, 160:358-368.
- Bostelmann, M., Costanza, F., Martorana, L., Menghini, D., Vicari, S., **Banta Lavenex, P.**, Lavenex, P. (2018). *Low-resolution place and response learning capacities in Down syndrome.* *Frontiers in Psychology*, 9:1-17. doi: 10.3389/fpsyg.2018.02049.
- Piguet, O., Chareyron, L.J., **Banta Lavenex, P.**, Amaral, D., Lavenex, P. (2018). *Stereological analysis of the rhesus monkey entorhinal cortex.* *Journal of Comparative Neurology*, 526:2115-2132.

- Thevenot, C., Dewi, J. **Banta Lavenex, P.**, Bagnoud, J. (2018). *Spatial-numerical associations enhance the short-term memorization of digit locations*. *Frontiers in Psychology*, 9:1-6. doi:10.3389/fpsyg.2018.00636.
- Klencklen, G., **Banta Lavenex, P.**, Brandner, C., Lavenex, P. (2017). *Working memory decline in normal aging: Memory load and representational demands affect performance*. *Learning and Motivation*, 60:10-22.
- Bostelmann, M., Fragnière, E., Costanzo, F., Di Vara, S., Menghini, D., Vicari, S., Lavenex, P., **Banta Lavenex, P.** (2017). *Dissociation of spatial memory systems in Williams syndrome*. *Hippocampus*, 27(11):1192-1203; doi.org/10.1002/hipo.22764.
- Chareyron, L., **Banta Lavenex, P.**, Amaral, D.G., Lavenex, P. (2017). *Functional organization of the medial temporal lobe memory system following neonatal hippocampal lesion in rhesus monkeys*. *Brain Structure and Function*, doi:10.1007/s00429-017-1441-z.
- Klencklen, G. **Banta Lavenex, P.**, Brandner, C., Lavenex, P. (2017). *Working memory decline in normal aging: Is it really worse in space than in color?* *Learning and Motivation*, 57: 48-60.
- Ribordy F., Lavenex, P., **Banta Lavenex, P.** (2016). *The 'when' and the 'where' of single-trial allocentric spatial memory performance in young children: insights into the development of episodic memory*. *Developmental Psychobiology*, 59(2): 185-196.
- Lavenex, P., **Banta Lavenex, P.**, Cachat, F., Gehri, M., Juvet, T. (2016). *No association between ApoE polymorphism and febrile seizures*. *Neurological Sciences*, 37:21-36. doi:10.1007/s10072-015-2351-6.
- **Banta Lavenex, P.**, Bostelmann, M, Brandner, C., Costanzo, F., Fragnière, E., Klencklen, G., Lavenex, P., Menghini, D., Vicari, S. (2015). *Allocentric spatial learning and memory deficits in Down Syndrome*. *Frontiers in Psychology*, 6:1-17. doi: 10.3389/fpsyg.2015.00062.
- **Banta Lavenex, P.**, Boujon, V., Ndarugendamwo, A., Lavenex, P. (2015). *Human short-term spatial memory: Precision predicts capacity*. *Cognitive Psychology*, 77:1-19.
- Ribordy Lambert, F., Lavenex, P., **Banta Lavenex, P.** (2015). *Improvement of allocentric spatial memory resolution in children from 2 to 4 years of age*. *International Journal of Behavioral Development*, 39(4): 318-331, 2015. doi: 10.1177/0165025415584808.
- **Banta Lavenex, P.**, Lavenex, P. (2015). *The ontogeny of human memory: Where are we going?* *International Journal of Behavioral Development*, 39(4): 308-309, 2015. doi: 10.1177/0165025415573645.
- **Banta Lavenex, P.**, Colombo, F., Ribordy Lambert, F., Lavenex, P. (2014). *The human hippocampus beyond the cognitive map: evidence from a densely amnesic patient*. *Frontiers in Human Neuroscience*, 8:1-18, doi: 10.3389/fnhum.2014.00711.
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- Ribordy, F., Jabès, A., **Banta Lavenex, P.**, Lavenex, P. (2013). *Developmental of allocentric spatial memory abilities in children from 18 months to 5 years of age*. *Cognitive Psychology*, 66(1):1-29.
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- **Banta Lavenex, P.**, Lavenex, P. (2010). *Spatial relational learning and memory abilities do not differ between men and women in a real-world, open-field environment*. Behavioural Brain Research, 207: 125-137.
- Jabès, A., **Banta Lavenex, P.**, Amaral, D.G., Lavenex, P. (2010). *Quantitative analysis of postnatal neurogenesis and neuron number in the macaque monkey dentate gyrus*. European Journal of Neuroscience, 31: 273-285.
- **Banta Lavenex, P.**, Lavenex, P. (2009). *Spatial memory and the monkey hippocampus: Not all space is created equal*. Hippocampus, 19: 8-19.
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- **Banta Lavenex, P.** (2000). *Lesions in the budgerigar vocal control nucleus NLC affect production, but not memory, of English words and natural vocalizations*. Journal of Comparative Neurology, 421: 437-460.
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Conférences invitées

- *Learning to remember our past: The development of the spatial and temporal components of episodic memory*. 2018. Max Planck Institute for Human Development (MPIB) Workshop: 'Hippocampal Network and Memory Across the Lifespan: Circuit, Code, Cognition', Budapest.
- *Learning to remember our past: The development of the spatial and temporal components of episodic memory*. 2017. Institute of Anatomy, University of Zurich.
- *Deciphering distinct "hippocampus-dependent" spatial memory processes in Down Syndrome*. T21RS International Conference 2017: 'Paving the way for therapy', Chicago.
- *Learning to remember our past: The development of the spatial and temporal components of episodic memory*. 2016. EMBL/EMBO Science and Society Conference 'The Past in Present – The Making of Memories', Heidelberg.
- *Allocentric spatial learning and memory deficits in Down Syndrome*. Inaugural T21RS International Conference 2015: 'Changing paradigms in Down syndrome', Paris.
- *The development of human spatial memory: a window into childhood amnesia*. 2014. Spatial Intelligence and Learning Center (SILC), Temple University, Philadelphia.
- *Allocentric spatial memory in primates*. 2012. Centre for Developmental Neuroscience workshop 'Navigation and Spatial Memory in Terrestrial Species', UCL, London.
- *The development of spatial memory in children*. 2012. Laboratoire de Psychologie et NeuroCognition, Université de Grenoble Alpes.
- *La mémoire de notre enfance - des souvenirs dont on ne se souvient pas ?* 2011. Brain Awareness Week, Public Lecture, Université de Fribourg.
- *The development of spatial memory in children*. 2010, University of Fribourg, Dept of Psychology