

Andrew S. French - Publications

Refereed papers published or in press:

180. Ignatova, I, French, A.S. and Frolov, R. (2018) Effects of phase correlations in naturalistic stimuli on quantitative information coding by fly photoreceptors. *Journal of Neurophysiology* (in press).
179. Fabian-Fine R., Anderson C., Roush M., Johnson, J.A.G. Liu H., French A.S. and Torkkeli P.H. (2017) The distribution of cholinergic neurons, and their co-localization with FMRFamide in central and peripheral neurons of the spider *Cupiennius salei*. *Cell and Tissue Research* **370**: 71-88. doi: 10.1007/s00441-017-2652-6.
178. Saari, P., French, A.S., Torkkeli, P.H., Liu, H., Immonen, E.V. and Frolov, R. (2017) Distinct roles of light-activated channels TRP and TRPL in photoreceptors of *Periplaneta americana*. *Journal of General Physiology* **149**: 455-464. doi: 10.1085/jgp.201611737.
177. Immonen, E.V., French, A.S., Torkkeli, P.H. Liu, H., Vähäsöyrinki, M. and Frolov, R.V. (2017) EAG channels expressed in microvillar photoreceptors are unsuited to diurnal vision. *Journal of Physiology* **595**: 5465-5479. doi: 10.1113/JP273612.
176. Liu, H., French, A.S. and Torkkeli, P.H. (2017) Expression of Cys-loop receptor subunits and acetylcholine binding protein in the mechanosensory neurons, glial cells and muscle of the spider *Cupiennius salei*. *Journal of Comparative Neurology* **525**: 1139-1154. doi: 10.1002/cne.24122.
175. French, A.S., Immonen, E.V. and Frolov, R.V. (2016) Static and dynamic adaptation of insect photoreceptor responses to naturalistic stimuli. *Frontiers in Physiology* **7**: 477. doi: 10.3389/fphys.2016.00477.
174. Pfeiffer, K. and French, A.S. (2015) Naturalistic stimulation changes the dynamic response of action potential encoding in a mechanoreceptor. *Frontiers in Physiology* **6**: 303. doi: 10.3389/fphys.2015.00303.
173. Torkkeli, P.H., Liu, H. and French, A.S. (2015) Transcriptome analysis of the central and peripheral nervous systems of the spider *Cupiennius salei* reveals multiple putative Cys-loop ligand gated ion channel subunits and an acetylcholine binding protein. *PLoS ONE*. doi: 10.1371/journal.pone.0138068.
172. French, A.S., Meisner, S., Liu, H., Weckström, M. and Torkkeli, P.H. (2015) Transcriptome analysis and RNA interference of cockroach phototransduction indicate three opsins and suggest a major role for TRPL channels. *Frontiers in Physiology* **6**: 207. doi: 10.3389/fphys.2015.00207.

171. French, A.S. and Torkkeli, P.H. (2015) Some recent advances in spider sensory physiology. *Physiology News* **99**: 34-37.
170. Ignatova, I., French, A.S., Frolov, R. and Weckström, M. (2014) Equilibrating errors: reliable estimation of information transmission rates in biological systems. *Biological Cybernetics* **108**: 305-320.
169. French, A.S., Li, A.W., Meisner, S. and Torkkeli, P.H. (2014) Upstream open reading frames and Kozak regions of a set of assembled transcriptome sequences from the spider *Cupiennius salei*. *Gene* **539**: 203–208.
168. French, A.S., Meisner, S., Su, C-Y and Torkkeli, P.H. (2014) CO₂ and fruit odor transduction in *Drosophila* olfactory neurons. What controls their dynamic properties? *PLoS ONE* **9**: e86347.
167. French, A.S. (2012) Transcriptome walking: A laboratory-oriented GUI-based approach to mRNA identification from deep-sequenced data. *BMC Research Notes* **5**:673-680
166. Torkkeli, P.H., Meisner, S., Pfeiffer, K. and French, A.S. (2012) GABA and glutamate receptors have different effects on excitability and are differentially regulated by calcium in spider mechanosensory neurons. *European Journal of Neuroscience* **36**: 3602-3614.
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164. Pfeiffer, K., Torkkeli, P.H. and French, A.S. (2012) Activation of GABA_A receptors modulates all stages of mechanoreception in spider mechanosensory neurons. *Journal of Neurophysiology* **107**:196-204.
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162. French, A.S., Torkkeli, P.H. and Schuckel, J. (2011) Dynamic characterization of *Drosophila* antennal olfactory neurons indicates multiple opponent signaling pathways in odor discrimination. *Journal of Neuroscience* **31**: 861-869.
161. Höger, U., Torkkeli, P.H. and French, A.S. (2010) Feedback modulation of transduction by calcium in a spider mechanoreceptor. *European Journal of Neuroscience* **32**: 1473-1479.

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