

Dr Hugh Matthews: Publications

Papers & Reviews:

1. Matthews, H. R. & Fain, G. L. (2003). The effect of light on outer segment calcium in salamander rods. *Journal of Physiology* **552**, 763-776.
2. Matthews, H.R. & Reisert, J (2003). Calcium, the two-faced messenger of olfactory transduction and adaptation. *Current Opinion in Neurobiology* **13**, 469-475.
3. Brockerhoff, S. E., Rieke, F., Matthews, H. R., Taylor, M. R., Kennedy, B., Ankoudinova, I., Niemi, G. A., Tucker, C. L., Xiao, M., Cilluffo, M. C., Fain, G. L. & Hurley, J. B. (2003). Light stimulates a transducin-independent increase of cytoplasmic Ca^{2+} and suppression of current in cones from the zebrafish mutant *nof*. *Journal of Neuroscience* **23**, 470-480.
4. Matthews, H. R. & Fain, G. L. (2002). Time course and magnitude of light-induced calcium release in salamander rods. *Journal of Physiology* **542**, 829-841.
5. Woodruff, M. L., Sampath, A. P., Matthews, H. R., Krasnoperova, N. V., Lem, J. & Fain, G. L. (2002). Measurement of cytoplasmic calcium concentration in the rods of wild-type and transducin knock-out mice. *Journal of Physiology* **542**, 843-854.
6. Reisert, J. & Matthews, H.R. (2001). Response properties of isolated mouse olfactory receptor cells. *Journal of Physiology* **530**, 113-122.
7. Matthews, H. R. & Fain, G. L. (2001). A light-dependent increase in free Ca^{2+} concentration in the salamander rod outer segment. *Journal of Physiology* **532**, 305-321.
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9. Reisert, J. & Matthews, H. R. (2001). Simultaneous recording of receptor current and intraciliary Ca^{2+} concentration in salamander olfactory receptor cells. *Journal of Physiology* **535**, 637-645.
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11. Fain, G.L., Matthews, H.R., Cornwall, M.C. & Koutalos, Y. (2001). Calcium and adaptation in vertebrate photoreceptors. *Physiological Reviews* **81**, 117-151.
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15. Sampath, A.P., Matthews, H.R., Cornwall, M.C., Bandarchi, J. & Fain, G.L. (1999). Light-dependent changes in outer segment free Ca^{2+} concentration in salamander cone photoreceptors. *Journal of General Physiology* **113**, 267-277.
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17. Sampath, A.P., Matthews, H.R., Cornwall, M.C. & Fain, G.L. (1998). Bleached pigment produces a maintained decrease in outer segment Ca^{2+} in salamander rods. *Journal of General Physiology* **111**, 53-64.
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Abstracts:

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