

# Stanford

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## Eamon Francis Xavier Byrne

Postdoctoral Research Fellow, Bioengineering

### Bio

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#### PROFESSIONAL EDUCATION

- Bachelor of Arts, University Of Melbourne (2013)
- Bachelor of Science, University Of Melbourne (2013)
- Doctor of Philosophy, University of Oxford (2018)

#### STANFORD ADVISORS

- Karl Deisseroth, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Structural basis of Smoothened regulation by its extracellular domains.** *Nature*  
Byrne, E. F., Sircar, R., Miller, P. S., Hedger, G., Luchetti, G., Nachtergaele, S., Tully, M. D., Mydock-McGrane, L., Covey, D. F., Rambo, R. P., Sansom, M. S., Newstead, S., Rohatgi, et al  
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- **A serine in the first transmembrane domain of the human E3 ubiquitin ligase MARCH9 is critical for down-regulation of its protein substrates** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Tan, C., Byrne, E. X., Ah-Cann, C., Call, M. J., Call, M. E.  
2019; 294 (7): 2470–85
- **Lentiviral transduction of mammalian cells for fast, scalable and high-level production of soluble and membrane proteins.** *Nature protocols*  
Elegheert, J., Behiels, E., Bishop, B., Scott, S., Woolley, R. E., Griffiths, S. C., Byrne, E. F., Chang, V. T., Stuart, D. I., Jones, E. Y., Siebold, C., Aricescu, A. R.  
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- **Cilia-Associated Oxysterols Activate Smoothened.** *Molecular cell*  
Raleigh, D. R., Sever, N., Choksi, P. K., Sigg, M. A., Hines, K. M., Thompson, B. M., Elnatan, D., Jaishankar, P., Bisignano, P., Garcia-Gonzalo, F. R., Krup, A. L., Eberl, M., Byrne, et al  
2018; 72 (2): 316
- **Multiple ligand binding sites regulate the Hedgehog signal transducer Smoothened in vertebrates.** *Current opinion in cell biology*  
Byrne, E. F., Luchetti, G., Rohatgi, R., Siebold, C.  
2017; 51: 81–88
- **Cholesterol activates the G-protein coupled receptor Smoothened to promote morphogenetic signaling.** *eLife*  
Luchetti, G., Sircar, R., Kong, J. H., Nachtergaele, S., Sagner, A., Byrne, E. F., Covey, D. F., Siebold, C., Rohatgi, R.  
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