Accepted Manuscript

Patched receptors sense, interpret and establish an epidermal Hedgehog signalling gradient

Christelle Adolphe, Jan Philipp Junker, Anna Lyubimova, Alexander van Oudenaarden, Brandon Wainwright

PII: S0022-202X(16)32238-2

DOI: 10.1016/j.jid.2016.06.632

Reference: JID 478

To appear in: *The Journal of Investigative Dermatology*

Received Date: 18 October 2015

Revised Date: 1 June 2016

Accepted Date: 14 June 2016

Please cite this article as: Adolphe C, Junker JP, Lyubimova A, van Oudenaarden A, Wainwright B, Patched receptors sense, interpret and establish an epidermal Hedgehog signalling gradient, *The Journal of Investigative Dermatology* (2016), doi: 10.1016/j.jid.2016.06.632.

Patched receptors sense, interpret and establish an epidermal Hedgehog signalling gradient

Christelle Adolphe[1,4], Jan Philipp Junker[2,3,4], Anna Lyubimova[2], Alexander van Oudenaarden[2] and Brandon Wainwright[1].

1. *Division of Molecular Genetics and Development, Institute for Molecular Bioscience, The University of Queensland, Brisbane, QLD 4072, Australia*
2. *Hubrecht Institute, KNAW and University Medical Centre Utrecht, 3584 CT Utrecht, the Netherlands.*
3. *Berlin Institute for Medical Systems Biology, Max Delbrück Center for Molecular Medicine; 13092 Berlin-Buch, Germany*
4. Co-first author

Correspondence: Brandon Wainwright, *Division of Genomics, Disease and Development, Institute for Molecular Bioscience, The University of Queensland, Brisbane, QLD 4072, Australia.* Email: b.wainwright@imb.uq.edu.au

Running title: An epidermal Hedgehog signalling gradient

Abbreviations: Hedgehog (Hh), hair follicle (HF), interfollicular epidermis (IFE), ligand-dependent antagonism (LDA), ligand-independent antagonism (LIA)