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**2021****Mechanical Stimulation Modulates Osteocyte Regulation of Cancer Cell Phenotype.**

Verbruggen SW, Thompson CL, Duffy MP, Lunetto S, Nolan J, Pearce OMT, Jacobs CR and Knight MM. *Cancers* vol. 13, (12).Mdpi.

**Polycystin-2 is required for chondrocyte mechanotransduction and traffics to the primary cilium in response to mechanical stimulation.**

Thompson C, Mcfie M, Chapple J, BEALES P and Knight M. *International Journal of Molecular Sciences*.Mdpi Ag.

**Sub-toxic levels of cobalt ions impair mechanotransduction via HDAC6-dependent primary cilia shortening.**

Wu H, Wang Z, Liu S, Meng H, Liu S, Shelton JC, Thompson CL, Fu S and Knight MM. *Biochem Biophys Res Commun*.

**Corrigendum: Mechanical Stimulation: A Crucial Element of Organ-on-Chip Models.**

Thompson CL, Fu S, Heywood HK, Knight MM and Thorpe SD. *Frontiers in Bioengineering and Biotechnology* vol. 9,.Frontiers.

**Activation of TRPV4 by mechanical, osmotic or pharmaceutical stimulation is anti-inflammatory blocking IL-1 mediated articular cartilage matrix destruction.**

Fu S, Meng H, Inamdar S, Das B, Gupta H, Wang W, Thompson C and Knight M. *Osteoarthritis and Cartilage*.Block JA. Elsevier.

**2020****Mechanical Stimulation: A Crucial Element of Organ-on-Chip Models.**

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**Nanoscale mapping reveals functional differences in ion channels populating the membrane of primary cilia.**

Torres-Pérez JV, Naeem H, Thompson CL, Knight MM and Novak P. *Cellular Physiology and Biochemistry* vol. 54, (1) 15-26.

**Chapter 2.2 Primary Cilia Mechanobiology.**

Ahern DP, Fie MRM, Thompson CL, Duffy MP, Butler JS and Hoey DA. *Mechanobiology* 99-115.

**2019****Mechanical loading inhibits cartilage inflammatory signalling via an HDAC6 and IFT-dependent mechanism regulating primary cilia elongation.**

Fu S, Thompson CL, Ali A, Wang W, Chapple JP, Mitchison HM, Beales PL, Wann AKT and Knight MM. *Osteoarthritis and Cartilage* vol. 27, (7) 1064-1074.Elsevier.

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Harris C, THORPE SD, Rushwan S, Wang W, THOMPSON C, Peacock J, KNIGHT M, Gooptu B and Greenough A. *Journal of Biomechanics*.Elsevier.

**Oncometabolite induced primary cilia loss in pheochromocytoma.**

O Toole SM, Watson DS, Novoselova TV, Romano LEL, King PJ, Bradshaw TY, Thompson CL, Knight MM, Sharp TV, Barnes MR, Srirangalingam U, Drake WM and Chapple JP. *Endocrine-Related Cancer* vol. 26, (1) 165-180.

**Primary cilia mechanobiology.**

Ahern DP, Mc Fie MR, Thompson CL, Duffy MP, Butler JS and Hoey DA. *Mechanobiology: From Molecular Sensing to Disease* 99-115.

**2017**

**Chondrocyte expansion is associated with loss of primary cilia and disrupted hedgehog signalling.**

Thompson CL, Plant JC, Wann AK, Bishop CL, Novak P, Mitchison HM, Beales PL, Chapple JP and Knight MM. *Eur Cell Mater* vol. 34, 128-141.

**Arl3 and RP2 regulate the trafficking of ciliary tip kinesins.**

Schwarz N, Lane A, Jovanovic K, Parfitt DA, Aguila M, Thompson CL, da Cruz L, Coffey PJ, Chapple JP, Hardcastle AJ and Cheetham ME. *Hum Mol Genet* vol. 26, (13) 2480-2492. *Oxford University Press*.

**Arl3 and RP2 regulate the trafficking of ciliary tip kinesins. (CORRIGENDUM).**

Schwarz N, Lane A, Jovanovic K, Parfitt DA, Aguila M, Thompson CL, da Cruz L, Coffey PJ, Chapple JP, Hardcastle AJ and Cheetham ME. *Hum Mol Genet* vol. 26, (17) 3451-3451. *Oxford University Press*.

**Smoothed antagonists reverse homogenetic acid-induced alterations of Hedgehog signaling and primary cilium length in alkaptonuria.**

Gambassi S, Geminiani M, Thorpe SD, Bernardini G, Millucci L, Braconi D, Orlandini M, Thompson CL, Petricci E, Manetti F, Taddei M, Knight MM and Santucci A. *Journal of Cellular Physiology* vol. 232, (11) 3103-3111. *Wiley*.

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**2016**

**IFT88 influences chondrocyte actin organization and biomechanics.**

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**Lithium chloride modulates chondrocyte primary cilia and inhibits Hedgehog signaling.**

Thompson CL, Wiles A, Poole CA and Knight MM. *Faseb Journal* vol. 30, (2) 716-726.

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Sliogeryte K, Thorpe SD, Wang Z, Thompson CL, Gavara N and Knight MM. *Journal of Biomechanics* vol. 49, (2) 310-317. *Elsevier*.

**2015**

**Hedgehog signalling does not stimulate cartilage catabolism and is inhibited by Interleukin-1.**

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**Lithium chloride modulates chondrocyte primary cilia and inhibits Hedgehog signaling.**

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Thompson CL, Chapple JP and Knight MM. *Osteoarthritis Cartilage* vol. 22, (3) 490-498.

## 2013

**Surface topography regulates wnt signaling through control of primary cilia structure in mesenchymal stem cells.**

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**Interleukin-1 sequesters hypoxia inducible factor 2 to the primary cilium.**

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## 2012

**Heat shock induces rapid resorption of primary cilia.**

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**Heat-shock induces rapid resorption of primary cilia.**

Thompson C, Prodromou N, Osborn D, Ashworth R, Knight M, Beales P and Chapple J. *Cilia* vol. 1, (Suppl 1). *Springer Nature*.

**Mechanical strain disrupts primary cilia structure and modulates hedgehog signalling in adult chondrocytes.**

Thompson C, Chapple J and Knight M. *Cilia* vol. 1, (Suppl 1). *Springer Nature*.

**The Role of the Primary Cilium in Chondrocyte Response to Mechanical Loading.**

Wann AKT, Thompson C and Knight MM. *Mechanically Gated Channels and Their Regulation* 405-426. *Springer Nature*.