

## CURRICULUM VITAE

**Name** JON MARTIN COLLINSON

**Contact details** UNIVERSITY OF ABERDEEN  
SCHOOL OF MEDICAL SCIENCES  
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**Staff webpage** <http://www.abdn.ac.uk/sms/staffprofile.php?id=m.collinson>  
**Google Scholar** <http://scholar.google.co.uk/citations?user=eOPuANMAAAAJ&hl=en>

**Date of Birth** 2 October 1969

## EDUCATIONAL BACKGROUND AND QUALIFICATIONS

June 2005 **Postgraduate Certificate in Higher Education Teaching**  
University of Aberdeen

January 1996 **Doctor of Philosophy**  
*Experimental investigation of the control and function of  
vertebrate muscle-segment homeobox genes.*  
Supervisors: *Prof R. E. Hill, Dr D. Davidson*  
University of Edinburgh/MRC Human Genetics Unit

March 1995 **Master of Arts**  
University of Cambridge

June 1991 **Bachelor of Arts (Hons.)**  
Natural Sciences (Genetics) Class I  
Fitzwilliam College, University of Cambridge

## MEMBERSHIP OF PROFESSIONAL ORGANISATIONS

British Society for Developmental Biology  
Genetics Society  
British Ornithologists' Union (BOU)  
The Anatomical Society

## EMPLOYMENT

**April 2002-present UNIVERSITY OF ABERDEEN**  
**Personal Chair in Genetics**  
(Appointed as Lecturer B, 2002, promotion Senior Lecturer 2005, Reader 2008, Personal Chair 2013).

School of Medical Sciences  
Responsible for research laboratory with 4 PhD students (2017).  
Undergraduate teaching.

**Teaching BSc Biomedical Science (Developmental Biology) and BSc. Human Embryology and Developmental Biology.**  
Course Organiser for DB3804 Development of Organ Systems, BM4010 Core Course Stem Cells and Regeneration.  
Teaching on 2<sup>nd</sup>/3<sup>rd</sup>/4<sup>th</sup> year Biomedical Sciences, 4<sup>th</sup> Year SBS Courses, 2<sup>nd</sup>/3<sup>rd</sup> Year Molecular and Cellular Biology  
1st year Medical and Dental Programmes.

**Administration** Foresterhill Genetic Modification Safety Committee.  
Genetic Modification Safety Advisor. 2007-present  
Ethical Review Panel (Animals Act) member.  
Cell and Developmental Biology Seminar Programme 2002-6

**Jun 1998 – Apr 2002 UNIVERSITY OF EDINBURGH**  
**Postdoctoral Research Fellow**  
Department of Reproductive and Developmental Sciences  
Laboratory-based preclinical research

**Jul 1995 - Jun 1998 Postdoctoral Research Fellow**  
Department of Preclinical Veterinary Sciences  
Laboratory-based preclinical research

**Oct 1991 - Jun 1995 Postgraduate Student**  
MEDICAL RESEARCH COUNCIL - HUMAN GENETICS UNIT

## PUBLICATIONS (\*\* indicates highlighted papers)

### Medical Science Research Papers:

West JD, Mort RL, Hill RE, Morley SD and **Collinson JM**. 2018. Computer simulation of neutral drift among limbal epithelial stem cells of mosaic mice. *Stem Cell Res.* 30: 1-11.

**Collinson, JM**, Lindstrom, NO, Neves C, Wallace K, Meharg C, Charles RH, Ross ZK, Fraser AM, Mbogo I, Oras K, Nakamoto M, Barker S, Duce S, Miedzybrodzka Z, Vargesson N. 2018. The developmental and genetic basis of 'clubfoot' in the peroneal muscular atrophy mouse. *Development* 145: dev160093 doi: 10.1242/dev.160093 Published 8 February 2018.

Cao L, Liu J, Pu J, **Collinson JM**, Forrester JV, McCaig CD. 2018. Endogenous bioelectric currents promote differentiation of the mammalian lens. *J Cellular Physiology* 233: 2202–2212.

Arocena, M., Rajnicek, A. M. and **Collinson, J. M.** 2017. Requirement of Pax6 for the integration of guidance cues in cell migration. *R. Soc. open sci.* 4: 170625 <http://dx.doi.org/10.1098/rsos.170625>

Panzica, D. A., Findlay, A.S., van Ladesteijn, R. and **Collinson, J. M.** 2017. The core Planar Cell Polarity gene, *Vangl2*, maintains apical-basal organisation of the corneal epithelium. *J. Anat.* (in press) doi: 10.1111/joa.12676

Findlay, A.S., Panzica, D. A., Walczysko, P., Holt, A. B., Henderson, D. J., West, J. D., Rajnicek, A. M. and **Collinson, J. M.** 2016. The core planar cell polarity gene, *Vangl2*, directs adult corneal epithelial cell alignment and migration. *R. Soc. open sci.* 3: 160658. [dx.doi.org/10.1098/rsos.160658](http://dx.doi.org/10.1098/rsos.160658)

Walczysko, P., Rajnicek, A. M. & **Collinson, J. M.** 2016. Contact-mediated control of radial migration of corneal epithelial cells. *Molecular Vision* 22: 990-1004.

Dorà, N. D., Hill, R. E., **Collinson, J.M.** & West, J. D. (2015). Lineage tracing in the adult mouse corneal epithelium supports the limbal epithelial stem cell hypothesis with intermittent periods of stem cell quiescence. *Stem Cell Res.* 15: 665–677.

West, J. D., Dorà, N. D. & **Collinson, J.M** (2015). Evaluating alternative stem cell hypotheses for adult corneal epithelial maintenance. *World J. Stem Cells* 7: 281–299.

Dorà, N. D., **Collinson, J.M.**, Hill, R.E. & West, J. D. (2014). Hemizygous Le-Cre Transgenic Mice Have Severe Eye Abnormalities on Some Genetic Backgrounds in the Absence of LoxP Sites. *PLoS One* 9: e109193

Pei Z, Lang B, Fragoso YD, Shearer KD, Zhao L, McCaffery PJA, Shen S, Qing YQ, McCaig CD & **Collinson JM**. (2014) The expression and roles of *Ndel* and *Ndel1* in the adult mammalian central nervous system. *Neuroscience* 271, 119-136.

Duce SL, D'Alessandro M, Du Y, Jagpal B, Gilbert FJ, Crichton L, Barker S, **Collinson JM**, Miedzybrodzka Z. 2013. 3D MRI Analysis of the lower legs of treated idiopathic congenital talipes equinovarus (clubfoot). *PLoS One* 8, e54100.

Arocena, M & **Collinson, JM** 2012. Neural stem cell migration: Role of directional cues and electric fields. *Stem Cells and Cancer Stem Cells* 8: 297-303.

Parisi I, **Collinson JM**. 2012. Regulation of Merkel cell development by Pax6. *Int. J Dev Biol* 56:341-50.

Mort RL, Douvaras P, Morley SD, Dorà N, Hill RE, **Collinson JM**, West JD. 2012. Stem cells and corneal epithelial maintenance: insights from the mouse and other animal models. *Results Probl Cell Differ* 55:357-94.

Kucerova R, Dorà N, Mort RL, Wallace K, Leiper LJ, Lowes C, Neves C, Walczysko P, Bruce F, Fowler PA, Rajnicek AM, McCaig CD, Zhao M, West JD, **Collinson JM**. 2012. Interaction between

hedgehog signaling and PAX6 dosage mediates maintenance and regeneration of the corneal epithelium. *Molec. Vision* 18, 139-150.

Mort RL, Bentley AJ, Martin FL, **Collinson JM**, Douvaras P, Hill RE, Morley SD, Fullwood NJ, West JD. 2011. Effects of aberrant Pax6 gene dosage on mouse corneal pathophysiology and corneal epithelial homeostasis. *PLoS One* 6: e28895.

Lindström N, Neves C, McIntosh R, Miedzybrodzka Z, Vargesson N, **Collinson JM**. 2011. Tissue-specific characterization of Lim-kinase 1 expression during mouse embryogenesis. *Gene Expr. Patterns* 11: 221-32.

\*\*Kucerova R, Walczysko P, Reid B, Ou J, Leiper LJ, Rajnicek AM, McCaig CD, Zhao M & **Collinson JM**. 2011. The role of electrical signals in murine corneal wound re-epithelialisation. *J Cell Physiol* 226: 1544-53.

This paper performed the first in vivo genetic disruption of endogenous wound-induced electric currents and showed for the first time that the primary role of wound induced currents was to initiate the wound healing process.

Carmona FD, Ou J, Jiménez R, **Collinson JM**. 2010. Development and structure of the corneas of true moles (Talpidae). *J Anat.* 217: 488–500.

\*\*Arocena M, Zhao M., Song B, **Collinson JM**. 2010. A Time-lapse and quantitative modeling analysis of neural stem cell motion in the absence of directional cues and in electric fields. *J. Neurosci Res.* 88, 3267-3274.

This systems biology paper introduced a new mathematical model of neural stem cell migration and validated it experimentally. The programme was made freely available to researchers worldwide.

Ou, J., Lowes, C. & **Collinson JM**. 2010. Cytoskeletal and cell adhesion defects in wounded and Pax6<sup>+/−</sup> corneal epithelia. *Invest. Ophthalmol. Vis. Sci.* 51: 1415-1423.

\*\*Carmona FD, Glösmann M, Ou J, Jiménez R & **Collinson JM**. 2010. Retinal development and function in a 'blind' mole. *Proc. R. Soc (Lond) B* 277, 1513-1522.

This paper, which answered the question, 'Why do moles have eyes?' was press-released and covered internationally. [http://news.bbc.co.uk/1/hi/scotland/north\\_east/8402100.stm](http://news.bbc.co.uk/1/hi/scotland/north_east/8402100.stm)

Chanas, S. A., **Collinson, J. M.**, Ramaesh, T., Dorà, N., Kleinjan, D. J., Hill, R. E., West, J. D. 2009. Effects of elevated Pax6 expression and genetic background on mouse eye development. *Invest. Ophthalmol. Vis. Sci.* 50: 4045-4059.

Leiper, L.J., Ou, J., Walczysko, P., Kucerova, R., Lavery, D. N., West, J. D. and **Collinson, J. M.** 2009. Control of patterns of corneal innervation by Pax6. *Invest. Ophthalmol. Vis. Sci.* 50:1122-1128.

\*\*Carmona, F.D., Jiménez, R. & **Collinson, J. M.** 2008. The molecular basis of defective lens development in the Iberian Mole. *BMC Biol.* 6:44.

This 'Highly Accessed' publication was in fact the most downloaded paper in the entire BMC catalogue in the month of publication. It featured in New Scientist magazine and was highlighted on Richard Dawkin's website. <http://www.newscientist.com/article/dn14994-blind-mole-can-still-tell-night-from-day.html>

\*\*Ou, J., Walczysko, P., Kucerova, R., Rajnicek, A. M., McCaig, C. D., Zhao, M. & **Collinson, J. M.** 2008. Chronic wound state exacerbated by oxidative stress in Pax6<sup>+/−</sup> aniridia-related keratopathy. *J. Pathol.* 215: 421–430.

This paper, which demonstrates the etiological basis of Pax6 eye disease, was press-released and reported nationally

Dorà, N., Ou J., Kucerova, R., Parisi, I., West, J. D. & **Collinson, J. M.** 2008. PAX6 dosage effects on corneal development, growth and wound healing. *Dev. Dyn.* 237,1295–1306.

Fowler, P. A., Cassie, S., Rhind, S. M., Brewer, M. J., **Collinson, J. M.**, Lea, R. G., Baker, P. J., Bhattacharya S. & O'Shaughnessy P. J. 2008. Maternal smoking during pregnancy specifically

reduces human fetal Desert hedgehog gene expression during testis development. *J. Clin. Endocrinol. Metab.* 93, 619–626.

Miller, K.A., Barrow, J., **Collinson J. M.**, Davidson, S., Lear, M., Hill, R. E. & Mackenzie, A. 2007. A highly conserved Wnt-dependent TCF4 binding site within the proximal enhancer of the anti-myogenic *Msx1* gene supports expression within Pax3-expressing limb bud muscle precursor cells *Dev. Biol.* 311, 665-678.

Kucerova, R., Ou, J., Lawson, D., Leiper, L. & **Collinson, J. M.** 2006. Cell surface glycoconjugate abnormalities and corneal epithelial wound healing in the *Pax6*<sup>+/-</sup> mouse model of aniridia-related keratopathy. *Invest. Ophthalmol. Vis. Sci.* 47, 5276-5282..

\*\*Ambati, B. K., Nozaki, M., Singh, N., Takeda, A., Jani, P. D., Suthar, T., Albuquerque, R. J. C., Richter, E., Sakurai, E., Newcomb, M. T., Kleinman, M. E., Caldwell, R. B., Lin, Q., Ogura, Y., Orecchia, A., Samuelson, D. A., Agnew, D. W., St. Leger, J., Green, W. R., Mahasreshti, P. J., Curiel, D. T., Kwan, D., Marsh, H., Ikeda, S., Leiper, L. J., **Collinson, J. M.**, Bogdanovich, S., Khurana, T. S., Shibuya, M., Baldwin, M. E., Ferrara, N., Gerber, H.-P., De Falco, S., Witta, J., Baffi, J. Z., Raisler, B. J. & Ambati, J. 2006. Corneal avascularity is due to soluble VEGF receptor-1. *Nature* 443: 993-997  
This paper received Faculty of 1000 Biology evaluation and has subsequently been cited nearly 300 times. The data on corneal vascularisation now underlie the use of the cornea as a model for antiangiogenic assay of cancer drugs. <http://www.f1000biology.com/article/id/1049257/evaluation>. It was also carried by international media.

272 citations (22 March 2013)

Zaki, P. A., **Collinson, J. M.**, Toraiwa, J., Simpson, T. I., Price, D. J. & Quinn, J. C., 2006. Penetrance of eye defects in mice heterozygous for mutation of *Gli3* is enhanced by heterozygous mutation of *Pax6*. *BMC Dev. Biol.* 6: 46.

Leiper, L. J., Walczysko, P., Kucerova, R., Ou, J., Shanley, L. J., Lawson, D., Forrester, J. V., McCaig, C. D., Zhao, M. & **Collinson, J. M.** 2006. The roles of calcium signaling and ERK1/2 phosphorylation in a *Pax6*<sup>+/-</sup> mouse model of epithelial wound-healing delay. *BMC Biol.* 4:27.

Neethirajan, G., Nallathambi, J., Krishnadas, S. R., Vijayalakshmi, P., Shashikanth, S., **Collinson, J. M.** & Sundaresan, P. 2006. Identification of novel mutant *PAX6* alleles in Indian cases of familial aniridia. *BMC Ophthalmology* 2006, 6:28.

Ramaesh, T., West, J. D., Ramaesh, J. **Collinson, J. M.**, Chanas, S. A. and Dhillon, B. (2005) Developmental and cellular factors underlying corneal epithelial dysgenesis in the *Pax6*<sup>+/-</sup> mouse model of aniridia. *Exp. Eye Res.* 81, 224-235.

Neethirajan, G, **Collinson, J. M.**, Krishnadas S. R., Vijayalakshmi, P, Shetty, S., Chandrashekhar, R. & Sundaresan P. (2004). *De-novo* deletions in the paired domain of *PAX6* in south Indian aniridic patients. *J. Human Genet.* 49, 647-649.

**Collinson, J. M.**, Chanas, S. A., Hill, R. E. and West, J. D. (2004). Corneal development, limbal stem cell function and corneal epithelial cell migration in the *Pax6*<sup>+/-</sup> mouse. *Invest. Ophthalmol. Vis. Sci.* 45, 1101-1108.

79 citations (22 March 2013)

**Collinson, J. M.**, Quinn, J. C., Hill, R. E. and West, J. D. (2003). The roles of *Pax6* in the cornea, retina and olfactory epithelium of the developing mouse embryo. *Dev. Biol.* 255, 303-312.  
93 citations (22 March 2013)

Ramaesh, T., **Collinson, J. M.**, Ramaesh, K., Kaufman, M. H., West, J. D., and Dhillon, B. (2003). Corneal abnormalities in *Pax6*<sup>+/-</sup> (small eye) mice mimic human aniridia-related keratopathy. *Invest. Ophthalmol. Vis. Sci.* 44, 1871-1878.

74 citations (22 March 2013)

Talamillo A. Quinn, J. C., **Collinson, J. M.**, Carić, D., Price, D. J., West, J. D. and Hill, R. E. 2003. *Pax6* regulates regional development and neuronal migration in the cerebral cortex. *Dev. Biol.* 255,

151-163.

**\*\*Collinson, J. M.**, Morris, L., Reid, A. I., Ramaesh, T., Keighren, M. A., Flockhart, J. H., Hill, R. E., Tan, S.-S., Ramaesh, K., Dhillon, B. and West, J. D. (2002). Clonal analysis of patterns of growth, stem cell activity and cell movement during the development and maintenance of the murine corneal epithelium. *Dev. Dyn.* 224, 432-440.

This highly cited paper was demonstrated normal in vivo patterns of clonal cell analysis in the cornea that subsequently has underlain virtually all studies of patterns of regeneration in the injured cornea.

Jaskoll, T., Zhou, Y. M., Chai, Y., Makarenkova, H. P., **Collinson, J. M.**, West, J. D., Hajihosseini, H. P., Lee, J. and Melnick, M. (2002) Embryonic submandibular gland morphogenesis: stage-specific protein localization of FGFs, BMPs, Pax6 and Pax9 in normal mice and abnormal SMG phenotypes in *FgfR2-IIIc<sup>+/-</sup>*, *BMP7<sup>-/-</sup>* and *Pax6<sup>-/-</sup>* mice. *Cell, Tissues, Organs* 170, 83-98.

74 citations (22 March 2013)

**\*\*Collinson, J. M.**, Quinn, J. C., Buchanan, M. A., Wedden, S. E., Kaufman, M. H., West, J. D. and Hill, R. E. (2001) Primary defects in the lens underlie complex anterior segment abnormalities in the *Pax6* heterozygous eye. *Proc. Natl. Acad. Sci. (USA)* 98, 9688-93.

This paper demonstrated that the lens is acutely sensitive to Pax6 gene dosage and that this underlies the clinically relevant defects in the Pax6 mutant mice.

70 citations (22 March 2013)

Tait, S., Gunn-Moore, F., **Collinson, J. M.**, Huang, J., Lubetzki, C., Pedraza, L., Sherman, D. L., Colman, D. R. and Brophy, P. J. (2000) An oligodendrocyte cell adhesion molecule at the site of assembly of the paranodal axo-glial junction. *J. Cell Biol.* 150, 657- 666.

172 citations (22 March 2013)

**Collinson, J. M.**, Hill, R. E. and West J. D. (2000) Different roles for *Pax6* in the optic vesicle and facial epithelia mediate early morphogenesis of the murine eye. *Development* 127, 945-956.

103 citations (22 March 2013)

**\*\*Collinson, J. M.**, Marshall, D., Gillespie C.S. and Brophy, P. J. (1998) Transient expression of neurofascin by oligodendrocytes at the onset of myelinogenesis: implications for mechanisms of axon-glial interaction. *Glia* 23, 11-23.

Identification of the cell adhesion molecule Neurofascin in the oligodendrocyte opened up a research programme that has led to the identification of the protein as an important autoantigen in MS.

Buckland, R., **Collinson, J. M.**, Graham, E., Davidson, D. R. and Hill, R. E. (1998) Antagonistic effects of FGF4 on BMP induction of apoptosis in the chick limb bud. *Mech. Dev.* 71, 143-150.

74 citations (22 March 2013)

Mackenzie, A., Purdie, L., Davidson, D., **Collinson, M.** and Hill, R. E. (1997) Two enhancer domains control early aspects of the complex expression pattern of *Msx1*. *Mech. Dev.* 62, 29-40.

#### **Ornithology/ecological genetic research papers:**

**Collinson JM**, Murcia A, Ladeira G, Dewars K, Roberts F and Shannon TJ. 2018. Siberian and Scandinavian Common Chiffchaffs in Britain and Ireland – a genetic study. *Brit. Birds* 111: 384-384.

Lewis M, Penn A and **Collinson JM**. 2018. Subspecies identification of Common Chiffchaffs wintering at Nigg Bay, North-east Scotland, in 2016/17. *Brit. Birds* 111:395-401.

McGowan, R. Y., Dougall, T. W. and **Collinson, J. M.** (2018). The first Scottish record of 'Continental Cormorant'. *Scot. Birds* 38: 136-138.

**Collinson JM**, Päckert M, Lawrie Y, Gatter W, Töpfer T, Phalan B, Fishpool L. 2018. Taxonomic status of the Liberian Greenbul *Phyllastrephus leucolepis* and the conservation importance of the Cavalla Forest, Liberia. *J. Ornithol.* 159: 19-27.

Miles WTS, Pilkington JD, Riddington R and **Collinson JM**. 2017. Allen's Gallinule, St Kilda, 26

March 2017 – first Scottish record. *Scot. Birds* 37: 279-283.

DuFour, P., Pons, J-M., [Collinson, J. M.](#), Hamza, A., Gernigon, J., Dies, J. I., Sourouille, P. & Crochet, P-A. 2017 Erratum to: [Multi-locus barcoding confirms the occurrence of Elegant Tern in Western Europe](#). *J. Ornithol.* 158:368.

**Collinson JM**, DuFour P, Hamza AA, Lawrie Y, Elliot M, Barlow C, Crochet P-A. 2017. When morphology is not reflected by molecular phylogeny: the case of three ‘orange-billed terns’ *Thalasseus maximus*, *T. bergii* and *T. bengalensis* (Charadriiformes: Laridae). *Biol. J. Linn. Soc* 121: 439-445.

Lawrie Y., Swann, R., Stronach, P., Perlman, Y. & [Collinson, J.M.](#) 2017. [The taxonomic position and breeding range of Golden Nightjar \*Caprimulgus eximius\* \(Aves: Caprimulgidae\)](#). *Ostrich: Journal of African Ornithology* 88: 281-286.

**Collinson, J. M.** (2017). CSI: Birding – DNA-based identification of birds. *Brit. Birds* 110: 8-26.

**Collinson JM**, Harris P, Harvey P, Riddington R and Stronach P. 2016. Unusual DNA of a Bonelli's Warbler trapped on Shetland. *Brit. Birds* 109, 637-638.

DuFour, P., Pons, J-M., [Collinson, J. M.](#), Gernigon, J., Dies, J. I., Sourouille, P. & Crochet, P-A. 2017 [Multi-locus barcoding confirms the occurrence of Elegant Tern in Western Europe](#). *J. Ornithol.* 158:351–361. DOI 10.1007/s10336-016-1380-0

**Collinson, J. M.**, Ferguson, E., Jones, T. & Rozen, C. 2016. Genetic analysis of a Western Reef Egret *Egretta gularis* from Israel. *Sandgrouse* 38: 2-4.

O'Mahony, B., Farrer, D. & **Collinson, M.** 2015. Genetic analysis of wintering Common Chiffchaffs *Phylloscopus collybita* in County Kerry in 2015. *Irish Birds* 10: 268-270.

Menzie, S., Gil-Velasco, M and **Collinson, J. M.** 2015. First genetically confirmed Eastern Subalpine Warbler *Sylvia cantillans* for Sweden. *Ornis Svecica* 25: 40-44.

Sangster, G., Arkhipov, VYu, **Collinson, J. M.**, Kirwan, G. M., Knox, A. G., Koblik, E. A., Parkin, D. T. & Roselaar, C. S. 2015. Comments on the work ‘The White-cheeked Geese: *Branta canadensis*, *B. maxima*, *B. lawrensis*, *B. hutchinsii*, *B. leucopareia*, and *B. minima*. Taxonomy, ecophysiological relationships, biogeography, and evolutionary considerations, Volume 1, Eastern taxa; Volume 2, Western taxa, biogeography, and evolutionary considerations’ by Harold C. Hanson: proposed suppression for nomenclatural purposes (Case 3682; see BZN 72: 209–216). *Bull. Zool. Nomencl.* 72: 311-312.

Cade, M. & **Collinson, J. M.** 2015. ‘Stejneger’s Stonechat’ in Dorset : new to Britain. *Brit. Birds* 108: 423-428.

Porter, R., Batten, L., Burton, J., **Collinson, J.M.**, Cowan, P., Kennerley, P., Kirwan, G.M., Newell, R. G., Pearson, D., Riddington, R., Salim, M., Sheldon, R. Scott, D. & Woodcock, M. 2015. Towards a better understanding of Basra Reed Warbler *Acrocephalus griseldis* (Aves: Passeriformes: Acrocephalidae) ecology? A comment on Al-Sheikhly et al. (2013). *Zoology in the Middle East* DOI: [10.1080/09397140.2015.1023424](#)

Miles, W.T.S., Parnaby, D., Rosser, B., Moss, J. & **Collinson, J.M.** 2015. ‘Eastern Grasshopper Warbler’ on Fair Isle: new to Britain. *Brit. Birds* 108: 231-236.

Garner, M., Perlman, Y., Kiat, Y. and **Collinson, J. M.** 2015. Water Pipits : three species rather than one ? *Brit. Birds* 108 : 42-48.

Miles, W.T.S., **Collinson, J.M.**, Parnaby D. & Cope, R. 2014. An analysis of biometrics, vocalisations and DNA of two Swinhoe’s Storm-petrels trapped on Fair Isle in 2013. *Brit. Birds* 107 : 654-655.

**Collinson, J.M.**, Rowlands, A., Steele, J.G., McInerney, C.J & Hudson, N. 2014. The review of the

Slender-billed Curlew at Druridge Bay, Northumberland. *Br. Birds* 107: 389-404.

Shannon T.J., McGowan R.Y., Zonfrillo B., Piertney S. & **Collinson J.M.** 2014. A genetic screen of the island races of Wren *Troglodytes troglodytes* in the North-east Atlantic. *Bird Study* 61: 135-142.

**Collinson JM**, McGowan RY & Irestedt, M. 2014. First British records of 'Eastern' and 'Western' Subalpine Warblers. *British Birds* 107, 282–297

**Collinson JM** & Dodd, I. 2014. Partial cDNA sequence of *cyt b* gene from a Weymouth Siberian Chiffchaff is identical to that from a Siberian Chiffchaff from the Yenesei River, Western Siberia. *Dorset Bird Club Annual Report 2014*, in press.

**Collinson, J. M.**, Miles, W., Parnaby, D., Moss, J. & Rosser, B. 2013. A female 'Eastern Subalpine Warbler' on Fair Isle. *Brit. Birds* 106: 287-288.

McGowan RY, Floody Z & **Collinson JM**. 2013. Sex determination of Brünnich's Guillemots from Scotland. *Scot. Birds* 33, 229-232.

**Collinson JM**, Shannon T, Archer A, Odin N, Riddington R, Walsh R. 2013. Genetic analysis of migrant Siberian Chiffchaffs in Britain and Ireland. *Brit. Birds* 106: 109-113.

**Collinson JM**, Smith A, Waite S & McGowan RY. 2013. British records of 'Eastern Yellow Wagtail'. *Brit. Birds* 106: 36-41.

**Collinson JM** and McGowan RY. 2012. Genetic analysis of the first British record of Siberian Stonechat. *Brit Birds* 105: 318-331.

**Collinson, J.M.** & McGowan, R.Y. 2011. Hastings Rarities in the Royal Museum of Scotland, Edinburgh. *Br. Birds* 104: 542-546.

**Collinson, JM**, Parkin DT Knox AG, Sangster G, Svensson L. 2008. Species boundaries in the Herring and Lesser Black-backed Gull complex. *Brit Birds* 101, 340-363.

**Collinson JM**, Melling T. 2008. Identification of vagrant Iberian Chiffchaffs - pointers, pitfalls and problem birds. *Brit Birds* 101, 174-188.

**\*\*Collinson, JM.** 2007. Video analysis of the escape flight of Pileated Woodpecker *Dryocopus pileatus*: does the Ivory-billed Woodpecker *Campephilus principalis* persist in continental North America? *BMC Biology* 2007, 5:8.

This paper blew away the report that the Ivory-billed Woodpecker, presumed extinct for 60 years, had been rediscovered in south-eastern USA. It was featured on over 200 media websites worldwide, was the most downloaded paper in *BMC Biology* for several months (>10000 downloads to date) and was covered in the print edition of the *Washington Herald* and *USA Today*, as well as being a subject of a short film for *Discovery Channel*. It was cited and used by the US Fish and Wildlife Service (conservation body) and has been validated by the subsequent failure of researchers to locate any more Ivory-billed Woodpeckers.

Review in Science <http://news.sciencemag.org/sciencenow/2007/03/15-01.html>

Parkin, D. T., **Collinson, M.**, Helbig, A. J., Knox, A. G., & Sangster, G. 2006. Developing guidelines to assist in defining species limits. *Acta Zoologica Sinica* 52 (Suppl.) 435-438.

**Collinson, M.**, Parkin, D. T., Knox, A. G., Sangster G. & Helbig, A. J. 2006. Species limits within the genus *Melanitta*, the scoters. *Brit. Birds* 99, 183-201.

Svensson, L., **Collinson, M.**, Knox, A.G., Parkin, D.T. & Sangster, G. 2005. Species limits in the Red-breasted Flycatcher. *Brit Birds* 98, 538-541.

**Collinson, J. M.** 2005. Barrow's Goldeneye – A Hastings Rarity in Scotland. *Scot. Birds* 25, 53-54.

Parkin, D. T., **Collinson, M.**, Helbig, A. J., Knox, A. G., Sangster, G. & Svensson, L. 2004. Species

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Sangster, G., **Collinson, M.**, Helbig, A. J., Knox, A.G. & Parkin, D.T. 2004. The taxonomic status of Macqueen's Bustard. *Brit. Birds* 97, 60-67.

\*\*Helbig, A. J., Knox, A. G., Parkin, D. T., Sangster, G and **Collinson, M.** (2002) Guidelines for assigning species rank. *Ibis* 144, 518-525.

This landmark paper, cited nearly 200 times, has been adopted across Europe and worldwide as a basis for tackling key problems relating to the age-old question of 'What is a species'. Although not universally unchallenged, it has defined the basis for functional taxonomy and conservation for a decade.

193 citations (22 March 2013)

G Sangster, **JM Collinson**, AJ Helbig, AG Knox, DT Parkin, 2002. The specific status of Yelkouan and Balearic Shearwaters. *Brit Birds* 95, 636-639.

G Sangster, **JM Collinson**, AJ Helbig, AG Knox, DT Parkin 2002. The generic status of Black-browed Albatross and other albatrosses. *Brit Birds* 95, 583-6.

Sangster, G., **Collinson, M.**, Helbig, A. J., Knox, A.G., Parkin, D.T. & Prater, T. 2001. The taxonomic status of Green-winged Teal. *Brit. Birds* 94, 218-226.

**Collinson, M.** (1999) Highland darters *Sympetrum nigrescens* in south-east Scotland. *Atropos* 6, 33.

#### **Published Abstracts (does not include those published in meeting abstract books only)**

**Collinson JM**, Wallace K, Lindstrom N, Neves C, McIntosh R, Miedzybrodzka Z, Vargesson N. 2013. The genetic basis of motor neuron defects in the PMA 'clubfoot' mouse. *J. Anat.* 222, 273-304.

Z Miedzybrodzka, N Lindstrom, R McIntosh, S Duce, H Sapsford, JA Chudek, Cheryl Tickle, N Vargesson, **JM Collinson**. 2009. Insights into the etiology of congenital talipes equinovarus from the pma mouse. *Journal of Medical Genetics* 46 (Suppl 1), S63-S63.

FD Carmona, **JM Collinson**, R Jimenez. 2009. Retinal function in the closed eyes of the Iberian Mole. *Mechanisms of Development* 126, S254-S255

L Leiper, D Lavery, R Kucerova, P Walczynski, **JM Collinson** 2008. Genetic control of corneal sensory innervation. *Eye*.

Mort, R. L., **Collinson, J. M.**, Ramaesh, T., Morley, S. D., and West, J. D. (2006). Analysis of X-inactivation mosaic mice to demonstrate the maintenance of the murine corneal epithelium by limbal stem cells (abstract). *Journal of Anatomy* 209, 575-576.

Joram Piatigorsky, Robert M Grainger, Robert L Trelstad, Kunio Yasuda, Russell D Fernald, Walter J Gehring, Zbynek Kozmik, Thomas A Hooven, Yoshiyuki Yamamoto, William R Jeffery, Tokindo S Okada, Amy L Donner, Richard L Maas, Raghavendra Nagaraj, Utpal Banerjee, Travis J Bailey, Heithem El-Hodiri, Li Zhang, Rina Shah, Peter H Mathers, Milan Jamrich, Charles H Sullivan, Leslie Braunstein, Royce M Hazard-Leonards, Anna L Holen, Fouad Samaha, Laurie Stephens, Richard A Lang, **J Martin Collinson**, Robert E Hill, John D West, Hasan M Reza, Hisato Kondoh, Masanori Uchikawa, Yusuke Kamachi, Ales Cvekl, Ying Yang, Bhareesh K Chauhan, Kveta Cveklova, David Beebe, Claudia Garcia, Xiaohui Wang, Ramya Rajagopal, Mary Feldmeier, Ji-Young Kim, Anna Chytil, Harold Moses, Ruth Ashery-Padan, Michael Rauchman, Peggy S Zelenka, Yongjuan Chen, Richard JW Stump, Frank J Lovicu, John W McAvoy, Lixing W Reneker, Leike Xie, Li Xu, Venkatesh Govindarajan, Paul A Overbeek, Jer R Kuszak, Rebecca K Zoltoski, Clifford E Tiedemann, James D Zieske, Kartik S Pappu, Graeme Mardon, Motokazu Tsujikawa, Jarema Malicki, Pamela A Raymond, Linda K Barthel, Susana Cohen-Cory, Barbara Lom, Fanny Mann, William A Harris, Christine E Holt, Elena Vecino, María Hernández, Mónica García, Panagiotis A Tsonis, Mayur Madhavan, Emily E Tancous, Katia Del Rio-Tsonis, J Mario Wolosin, Murat T Budak, MA Murat Akinci, Marcos A Amato, Emilie Arnault, Muriel Perron, Ala Moshiri, Jennie Close, Thomas A Reh, Douglas B Gould, Richard S

Smith, Simon WM John, Jochen Graw, Magali Saint-Geniez, Patricia A D'Amore. 2004. Eye development. *Eye* 48, 685-1058.

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**Collinson, J. M.**, Quinn, J. C., Buchanan, M. A., Kaufman, M. H., Wedden, S. E., Hill, R. E. and West, J. D. (2001) Why do small eye (*Pax6*<sup>-/-</sup>) mice have small eyes? (abstract) *Dev. Biol* 235, 244.

Tait, S., **Collinson, M.** and Brophy, P. J. (1998) Differential expression of neurofascin isoforms in the CNS. (abstract). *Mol. Biol. Cell* 9, S1319.

**Collinson, M.**, Marshall, D., Gillespie C.S. and Brophy, P. J. (1997) An adhesion molecule implicated in axon-glia signalling. (abstract). *Mol. Biol. Cell* 8, 1164-1164.

**Collinson, M.**, Marshall, D. and Brophy, P. J. (1997) Identification of novel oligodendrocyte-specific genes. (abstract). *J. Neurochem.* 69, S131-S131.

## Reviews

**Collinson, J. M.** 2012. Leadenhall market as a historical source of rare bird specimens (review). *Br. Birds* 105: 318-331.

Harrop, A. H. J., **Collinson, J. M.** & Melling, T. 2012. What the eye doesn't see: the prevalence of fraud in ornithology (review). *Br. Birds* 105: 236-257.

**Collinson, M.** 2006. Splitting headaches? Recent taxonomic changes affecting the British and Western Palearctic lists. *Brit. Birds* 99, 306-323.

Maclean, N., **Collinson, M.** & Newell R. G. 2005. Taxonomy for birders: a beginner's guide to DNA and species problems. *Brit. Birds* 98, 512-537.

**Collinson, J. M.**, Hill, R. E. and West, J. D. (2004). Analysis of eye development with mouse chimeras and mosaics. *Int. J. Dev. Biol.* 48, 793-804.

\*\*Mackenzie, A., Miller, K. A and **Collinson, J. M.** (2004). Is there a functional link between gene interdigitation and multi-species conservation of synteny blocks? *BioEssays* 26, 1217-1224. This paper has subsequently been validated by multiple research papers showing that its central hypothesis, for maintenance of genetic architecture by conservation of long-range regulatory elements, is true.

**Collinson M.** (2001). Greenish Warbler, 'Two-barred' Greenish Warbler, and the speciation process. *Brit Birds* 94: 278-283.

**Collinson, M.** (2001) Evolution of Atlantic Island Chaffinches *Brit. Birds* 94, 121-124.

**Collinson, M.** (2001) Shifting Sands: taxonomic changes in the world of the field ornithologist. *Brit Birds* 94, 1-24.

## Public engagement papers/articles.

West, J. & **Collinson, J. M.** (2014) Understanding Corneal Stem Cells Through Stripes. *The*

*Ophthalmologist* 12: 17-23 (October 2014).

**\*\*Collinson, M.** 2012. Letting the genie out. (The Flamborough *Ficedula*). *Birdwatch* July 2012: 70. *Birdwatch* magazine is distributed to over 30000 readers and we used this article (genetic identification of a migrant bird in April 2012) to highlight our forensic genetic capability at University of Aberdeen.  
[http://www.rarebirdalert.co.uk/v2/Content/weeklyreview2012no10.aspx?s\\_id=246710436](http://www.rarebirdalert.co.uk/v2/Content/weeklyreview2012no10.aspx?s_id=246710436)

Votier SC, Bearhop, S & **Collinson M.** 2008. Forensic birding: Using molecular and stable isotope techniques to establish identification and origin of vagrants. In *Frontiers of Birding*, ed. Garner M. Birdguides: Sheffield.

**Collinson, M.** 2004. The great south coast swindle. *Birdwatch* 145, 18-22.  
A description of the biggest ornithological fraud of all time and its debunking – the Hastings Rarities.

**Collinson, M.** (2000). Lump Sums. *Birdwatch* 101, 26-30.

**Collinson, M.** (2000) Twitching and Taxonomy. *Brit. Birds* 93, 414.

**Collinson, M.** (2000) The Songbird Survival Action Group. *Scot. Bird News* 58, 2.

**Collinson, M.** (1999) Subspecies - more than meets the eye. *Brit. Birds* 92, 118-119.

**Collinson, M.** (1999) Those ruddy ducks again!. *Brit. Birds* 92, 222-224.

**Collinson, M.** (1998) Bumblebees for beginners. *West Lothian Wildlife* 2, 84-93.

**Collinson, M.** (1997) The tree sparrow in West Lothian. *West Lothian Wildlife* 1, 37-45.

**Collinson, M.** (1997) Bird Recording at Addiewell Bing SWT Reserve. *West Lothian Wildlife* 1, 12-18. {reprinted in *Patchwork*, 1 (4), 27-32 (1998)}.

### Commissioned Reports

**\*\*Taxonomic subcommittee reports (below).** These reports, which are official publications of the British Ornithologists' Union, form the basis of taxonomic changes to the British list that are subsequently adopted across Europe and in the major world bird lists. They are consistently the highest accessed papers in the top ornithological journal, *Ibis*.

Sangster, G., **Collinson, JM.**, Crochet, P.-A., Kirwan, G., Knox, A.G., Parkin, D.T. & Votier, S.C. 2016. Taxonomic recommendations for Western Palearctic birds: Eleventh Report. *Ibis* 158: 206-212.

Sangster, G., **Collinson, JM.**, Crochet, P.-A., Kirwan, G., Knox, A.G., Parkin, D.T. & Votier, S.C. 2015. Taxonomic recommendations for Western Palearctic birds: Tenth Report. *Ibis* 157: 193-200.

Sangster, G., **Collinson, JM.**, Crochet, P.-A., Knox, A.G., Parkin, D.T. & Votier, S.C. 2013. Taxonomic recommendations for Western Palearctic birds: Ninth Report. *Ibis* 155: 898-907.

Sangster, G., **Collinson, JM.**, Crochet, P.-A., Knox, A.G., Parkin, D.T. & Votier, S.C. 2012. Taxonomic recommendations for British birds: Eighth Report. *Ibis* 154: 874-883.

Sangster G, **Collinson JM.**, Crochet P.A., Knox AG, Parkin DT, Svensson L & Votier SC. 2011. Taxonomic recommendations for British Birds: Seventh report. *Ibis* 153: 883-892.

Sangster G, **Collinson JM**, Knox AG, Parkin DT & Svensson L. 2010. Taxonomic recommendations for British birds: Sixth report. *Ibis* 152, 180–186.

Knox, A. G., **Collinson, J. M.**, Parkin, D. T., Sangster, G. & Svensson, L. 2008. Taxonomic recommendations for British birds: Fifth report. *Ibis* 150: 833-835.

Sangster, G., **Collinson, J. M.**, Knox, A. G., Parkin, D. T. & Svensson, L. 2007. Taxonomic recommendations for British birds: Fourth report. *Ibis* 149: 853-857.

Sangster, G., **Collinson, M.**, Helbig, A. J., Knox, A.G. & Parkin, D.T. 2005. Taxonomic recommendations for British Birds: third report. *Ibis* 147, 821-826.

Sangster, G., **Collinson, J. M.**, Helbig, A. J., Knox, A.G. & Parkin, D.T. 2004. Taxonomic recommendations for British birds: second report. *Ibis* 146, 153-157.

Knox, A.G., **Collinson, M.**, Helbig, A.J., Parkin, D.P. & Sangster, G. 2002. Taxonomic recommendations for British birds. *Ibis* 144: 707-710.

**\*\*British List (below).** The 8<sup>th</sup> edition in press was published as a notebook by RSPB and distributed to 15000 people at the British Birdwatching Fair.

**The British Ornithologists' Union Records Committee.** 2006. The British List: A checklist of British Birds (7<sup>th</sup> edition). *Ibis* 148, 526-563.

Harrop AHJ, **Collinson JM**, Dudley SP, Kehoe C & The British Ornithologists' Union Records Committee. 2013. The British List: A checklist of birds of Britain (8<sup>th</sup> edition). *Ibis* 155:635-676. Recommended citation; British Ornithologists' Union (BOU). 2013. The British List: a checklist of birds of Britain (8th ed.) *Ibis* 155: 635–676.

**European Taxonomic Advisory Committee (below):** these reports underlie the only independent pan European bird list, and are used by scientists across the continent as a basis for research and conservation.

Crochet, P. A., Barthel, P. H., Bauer, H. G., van den Berg, A. B., Bezzel, E., **Collinson, J. M.**, Dubois, P. J., Fromholtz, J., Helbig, A. J., †, Jiguet, F., Jirle, E., Knox, A. J., Kirwan, G. M., Lagerqvist, Le Maréchal, P., van Loon, A. J., Päckert, M., Parkin, D. T., Pons, J. M., Raty, L., Roselaar, C. S., Sangster, G., Steinheimer, F. D., Svensson, L., Tyrberg, S. C., Votier S. C., & Yésou, P. 2015. *AERC TAC's taxonomic recommendations: 2015 report*. [[pdf](#)]

PA Crochet, PH Barthel, HG Bauer, AB van den Berg, E Bezzel, **JM Collinson**, C Dietzen, PJ Dubois, J Fromholtz, AJ Helbig, F Jiguet, E Jirle, AG Knox, T Krüger, P Le Maréchal, AJ van Loon, M Päckert, DT Parkin, JM Pons, L Raty, CS Roselaar, G Sangster, FD Steinheimer, L Svensson, T Tyrberg, SC Votier, P Yésou. (2012) *AERC TAC's Taxonomic Recommendations. 2012 Report*. Available online at <http://www.aerc.eu/tac.html>.

PA Crochet, PH Barthel, HG Bauer, AB van den Berg, E Bezzel, **JM Collinson**, C Dietzen, PJ Dubois, J Fromholtz, AJ Helbig, F Jiguet, E Jirle, AG Knox, T Krüger, P Le Maréchal, AJ van Loon, M Päckert, DT Parkin, JM Pons, L Raty, CS Roselaar, G Sangster, FD Steinheimer, L Svensson, T Tyrberg, SC Votier, P Yésou. (2011) *AERC TAC's Taxonomic Recommendations. 2011 Report*. Available online at <http://www.aerc.eu/tac.html>.

Crochet P.-A., Raty L., De Smet G., Anderson B., Barthel P.H., **Collinson J.M.**, Dubois P.J., Helbig A.J., Jiguet F., Jirle E., Knox A.G., Le Maréchal P., Parkin D.T., Pons, J.-M., Roselaar C.S., Svensson L., van Loon A.J., Yésou P. (2010) *AERC TAC's Taxonomic Recommendations. July 2010*. Available online at <http://www.aerc.eu/tac.html>.

## Books

**Écosse - Guides Gallimard, Éditions Nouveaux-Loisirs, Paris**  
Contributed material for the section on Scottish Natural History - *Biogeography, Cliffs, Moorland and*

**INVITED TALKS AND PRESENTATIONS**

**Collinson, JM.** Fraud in Ornithology. Scottish Ornithologists' Club annual meeting, Oct 2013.

**Collinson JM.** PCP mutation in the vertebrate cornea. Limbal Stem Cell Forum September 2012, KCL.

**Collinson JM.** The Developmental Basis of Clubfoot. 5<sup>th</sup> International Clubfoot meeting, Manchester, October 2012.

**Collinson JM.** The Developmental Basis of Clubfoot. Anatomical Society 125<sup>th</sup> Anniversary Meeting Meeting, July 2012, Edinburgh.

**Collinson JM.** The mechanistic basis of Pax6-related eye disease. Limbal Stem Cell Forum, Univ Reading, 2010

**Collinson JM.** Iberian Moles as a new evo-devo model system. Soc. Experimental Biology Annual meeting, April 2009, New Orleans.

**Collinson JM.** The role of Pax6 in corneal epithelial maintenance. International Society for Eye research, Beijing, 2008.

**Collinson, JM.** Maintenance of the Ocular Surface. Departmental Seminar, University of Granada, February 2008.

**Collinson JM** and Ou, J. Oxidative stress in the cornea. International Society for Eye Research, Beijing, 2008.

**Collinson JM,** The biology of stripy eyes. Limbal Stem Cell Forum, Univ Newcastle , 2008

**Collinson, J. M** Pax6 expression in the eyes of moles. *Edinburgh Pax6 group*, April 2007.

**Collinson, J. M** Cell surface defects in the eyes of small eye *Pax6*<sup>+/−</sup> mice. SHERT Grant holders Open Day, June 2 2004.

**Collinson, J. M** Wacky Races: On the trail of Pax6 in the cornea. Scottish Developmental Biology Group, March 2003.

**Collinson, J. M** Why do *Smalleye* mice have small eyes? - Scottish Developmental Biology Group, September 2000. Genetics Society, January 2002.

**Collinson, J. M** Different roles for *Pax6* in the optic vesicle and facial epithelia mediate early morphogenesis of the murine eye - Scottish Developmental Biology Group, April 2000 \*Prize talk\*

**Collinson, J. M** The roles of *Pax6* in eye development - Genetical Society, November 1999

**Collinson, J. M** Using chimaeras to investigate the role of *Pax6* in the murine eye - Society for Developmental Biology, Charlottesville, VA, June 1999

**Collinson, J. M** Neurofascin: an adhesion molecule implicated in axon-glia signalling - Scottish Developmental Biology Group, April 1998.

## GRANT FUNDING

### Current Funding

#### **BBSRC**

##### **Joint Principal Applicant.**

A combined experimental and mathematical approach to corneal epithelial maintenance.

£505K from October 2012 - September 2015 (195K to Aberdeen/JMC).

##### **Kingdom of Saudi Arabia Ministry of Higher Education.**

PhD Studentship.

£15K bench fees from April 2013 - March 2016.

### Previous Funding

#### **The Anatomical Society**

##### **Principal Applicant**

Planar cell polarity in a classical anatomical system, the cornea.

£57K from October 2011 – September 2014

#### **WELLCOME TRUST**

##### **Co-applicant (Principal Investigator John D. West, University of Edinburgh).**

Genetic analysis of the roles of Pax6 in maintaining corneal homeostasis

£339K From January 2010 – June 2013.

#### **MEDICAL RESEARCH COUNCIL**

##### **Principal Applicant.**

The pma mouse and the developmental basis of clubfoot.

550K from October 2008 – April 2012.

##### **Newlife (Birth Defects Foundation).**

Coapplicant with Dr Deirdre Cilliers, Dr Z Miedzybrodzka.

Roles of RNF135 in embryonic development.

£15K from April 2011 – September 2012.

#### **CHIEF SCIENTIST'S OFFICE**

##### **Co-applicant (Principal Investigator Paul Fowler, University of Aberdeen)**

Bioincubator system to model toxic effects on the human fetal testis.

£62K from January 2010 – December 2011

#### **DR JAMES ALEXANDER MEARN'S TRUST**

##### **Principal Applicant**

Molecular basis of gene dosage effects of Pax6 mutants

£52K from October 2007 to September 2010.

#### **BBSRC**

##### **Principal Applicant – coholders Dr Ann Rajnicek (Univ of Aberdeen), Prof Min Zhao (UC Irvine), Prof Colin McCaig (Univ of Aberdeen)**

The genetic control of epithelial cell migration and wound healing physiology

£643K from February 2007 – January 2010

#### **WELLCOME TRUST**

##### **Principal Applicant**

Corneal dysgenesis in the Pax6-mutant mouse – shoddy workmanship or sabotage?

£245K from September 2004 – April 2009

**NHS GRAMPIAN ENDOWMENT FUND**

Vascularisation of the cornea  
£2688 from April 2007 – March 2008

**NEWLIFE (Birth Defects Foundation)**

**Principal Applicant**

Aetiology and therapy of congenital corneal opacity  
£80K from July 2005 – June 2007

**TENOVUS Scotland**

**Principal Applicant**

The role of Neurofascin in the eye  
£10K from January 2005 – December 2006  
[Awarded the prize for best final grant report.](#)

**SCOTTISH HOSPITALS ENDOWMENTS RESEARCH TRUST**

**Principal Applicant**

Investigation of the molecular basis of cell surface abnormalities in eye disease resulting from mutations in the transcription factor Pax6.  
£56K from September 2003 – August 2004

**ROYAL SOCIETY**

**Principal Applicant**

Brain defects in Pax6 mutants.  
£10K from August 2002 – July 2003.

## TEACHING

### **D BSc Biomedical Science (Developmental Biology) and BSc Human Embryology and Developmental Biology.**

Course Organiser for DB3804 Development of Organ Systems, BM4004 Advanced Molecules Membranes and Cells.

104 hours p.a. formal contact teaching on 2<sup>nd</sup>/3<sup>rd</sup>/4<sup>th</sup> year Biomedical Sciences, 4<sup>th</sup> Year SBS Courses, 2<sup>nd</sup> Year Molecular and Cellular Biology and 1st year Medical and Dental Programmes. Supervise 2-4 Honours students annually for research projects.

External Examiner for PhD students in UK and international universities. In 2012-13 (to end March), I have acted as PhD External Examiner for University of Cardiff, Sastra University (India), University of Edinburgh (three times) and University College London.

Internal Examiner for PhD and MSci students in Univ. Aberdeen (4-6 per year).

### **Current PhD students and source of funding**

Ahlam Alamri Oct 2017 – Sep 2020 (Government of Saudi Arabia).  
Kaja Kostanjevec October 2015-Sep 2019 (EASTBIO/BBSRC)  
Thom Shannon October 2017-Sep 2020 (The Sound Approach)  
Miriam Onochie February 2018-January 2021 (Self-funded)  
Rebecca McIntosh (Feb 2011-Sep 2019) (part-time)

### **Previous PhD Students (date of successful completion).**

**Dr Nada Sagga.** Stem cell activity in the cornea. (2017)  
**Dr Alessio Panzica.** PCP genes in corneal development and cell migration (2015).  
**Dr Amy Findlay.** The role of PCP genes in corneal wound healing (2016).  
**Dr Carlos Neves.** The etiology of the human limb abnormality, clubfoot (2014).  
**Dr Zhe Pei.** Roles of Nde1 and NdeL1 in the adult mammalian CNS. (2012). Now postdoc in US.  
**Dr Ida Parisi.** Roles of Pax6 in the development of the sensory system of the vertebrate head (2011). Now postdoc at the Karolinska.  
**Dr Miguel Arocena.** Control of Neural Stem cell migration in Electric Fields. (2010). Now faculty position in Uruguay.  
**Dr Natalie Dora.** The role of Pax6 in corneal development and maintenance. (2009). Now postdoc in Edinburgh.  
**Dr Jingxing Ou.** Chronic wound state and oxidative stress in the corneas of Pax6 mice. (2008). Now postdoc in NIH Bethesda.  
**Dr Romana Kucerova.** Genetic control of corneal epithelial cell migration by Pax6. (2008). Went to postdoc in Cambridge, then faculty position in Charles University, Prague.  
**Dr Patrick Stoney** (co-supervision with Dr A Rajnicek, Dr D Shewan). Role of Pax6 in growth cone guidance. (2009). Now postdoc in IMS, Aberdeen.

Undergraduate research projects – 3-4 SMS/SBS Honours students p.a. Level 2/3 summer students annually.

## MENTORING

Mentor to early career researchers and fellowship applicants.

## EDITORIAL BOARD MEMBERSHIP

<i>Ibis</i>	2009-present (Associate Editor)
<i>BMC Research Notes</i>	2008-present (Associate Editor)
<i>British Birds</i>	1998-present (Vice-chair, Editorial board)

*Ibis* is the JCR top-ranked ornithology journal (January 2018)

## CONSULTANCIES AND OTHER ACTIVITIES

**BBSRC Pool of Experts** October 2009-present

**Member of DEFRA-registered directory of experts.**

**European Framework 7 Expert Reviewer.**

**Convenor of the taxonomic committee of the British Ornithologists' Union Records Committee, October 1999 – present**

**Member of the Association of European Records Committees Taxonomic Advisory Committee, 2002-present**

**Chair of the British Ornithologists' Union Records Committee (British List Committee).**  
May 2010-present. Member 2002-present

**Editor of the newsletter of the Scottish Ornithologists' Club, *Scottish Bird News*, June 2000 - 2002**

**Member of Conservation Science Committee, Scottish Wildlife Trust, May 1998 - 2000**

**Chairman of West Lothian Scottish Wildlife Trust Group, April 1998 - 2002**

**Chairman of the West Lothian Bird Club, October 1997 - 2002**

**Editor of *West Lothian Wildlife* 1996 - 2001**

**Editor of *West Lothian Wildlife News* 1995 - 2001**

**Reserve Committee for Addiewell Bing SWT, 1995 - 2002**