## Cerebral hypomyelination associated with biallelic variants of FIG4

Guy M. Lenk ${ }^{1}$, Ian R. Berry ${ }^{2}$, Chloe A. Stutterd ${ }^{3,4,5}$, Moira Blyth ${ }^{6}$, Lydia Green ${ }^{7}$, Gayatri Vadlamani ${ }^{7}$, Daniel Warren ${ }^{8}$, Ian Craven ${ }^{8}$, Miriam Fanjul-Fernandez ${ }^{3,4}$, Victoria RodriguezCasero ${ }^{5}$, Paul J Lockhart ${ }^{3,4}$, Adeline Vanderver ${ }^{9}$, Cas Simons ${ }^{3,10}$, Susan Gibb ${ }^{4,5}$, Simon Sadedin ${ }^{3,4}$, Broad Center for Mendelian Genomics, Susan M. White ${ }^{3,4,11}$, John Christodoulou ${ }^{3,4,11}$, Olga Skibina ${ }^{12}$, Jonathan Ruddle ${ }^{5,13,14}$, Tiong Y. Tan ${ }^{3,4,11}$, Richard J. Leventer ${ }^{3,4,5}$, John H. Livingston ${ }^{7}$ and Miriam H. Meisler ${ }^{1}$

1. Department of Human Genetics, University of Michigan, Ann Arbor MI 48109-5618 USA
2. Leeds Genetics Laboratory, The Leeds Teaching Hospitals NHS Trust, St James's University Hospital, Beckett Street, Leeds, LS9 7TF, UK.
3. Murdoch Children's Research Institute, Melbourne, Australia
4. University of Melbourne Department of Paediatrics, Melbourne, Australia
5. Royal Children's Hospital, Melbourne, Australia.
6. Yorkshire Regional Genetics Service, The Leeds Teaching Hospitals NHS Trust, Chapel Allerton Hospital, Chapeltown Road, Leeds LS7 4SA, UK
7. Paediatric Neurology, The Leeds Teaching Hospitals NHS Trust, Leeds General Infirmary, Great George Street, Leeds, LS1 3EX, UK.
8. The Leeds Teaching Hospitals NHS Trust, G Floor, Jubilee Wing, Leeds General Infirmary, Great George Street, Leeds, LS1 3EX, UK.
9. Division of Neurology, Children's Hospital of Philadelphia and Perlman School of Medicine, University of Pennsylvania, Philadelphia, USA
10. Institute for Molecular Bioscience, University of Queensland
11. Victorian Clinical Genetics Services, Melbourne, Australia
12. Eastern Health Neurosciences, Box Hill Hospital, Monash University, Melbourne, Australia
13. Centre for Eye Research Australia Ltd, East Melbourne, VIC, AUS
14. Department of Ophthalmology, University of Melbourne, Melbourne, Australia

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$\dagger$ Author to whom correspondence should be addressed: Miriam H. Meisler, University of Michigan, Department of Human Genetics, 1241 East Catherine; 4909 Buhl, Ann Arbor, MI 48109-0618. Tel-734.763.5546; Fax-734.763.9691

Supplemental Figure S1. Bone defects in Patient 3. X-rays show severe scoliosis and thin shafts of the tubular bones with over tubulation in Patient 3, who also exhibits thin metacarpals, coxa valga and dolicocephaly.


## Supplemental Figure S2. Ocular defects in affected individuals from Family 4.

 (A, B) Fundus photography of the left and right eye, respectively, of Patient 7 at 6 years of age, showing bilateral mild Bull's eye maculopathy and temporal optic nerve pallor. (photographed 18/06/18). (C, D) Fundus photography of the right and left eyes, respectively, of Patient 6 at eight years of age, demonstrating depigmented macular change, generalized retinal atrophy, vessel attenuation and optic atrophy. (E, F) Spectral Domain (Spectralis - Heidelberg Optical) Optical Coherence Tomogram line scan of left macula, performed in lateral position under anaesthetic, of Patient 6 at 4 years, 9 months of age. Note macula outer retina / RPE pigmentary disturbance and loss of inner retinal nerve fibre layers. (G) Optical coherence tomogram of normal macula for comparison. (on following page)

OS, BAF $30^{\circ}$ ART + OCT $20.0^{\circ}(5.2 \mathrm{~mm})$ ART ( 17$\left.) \mathrm{Q}: 35 \mathrm{HS}\right]$


