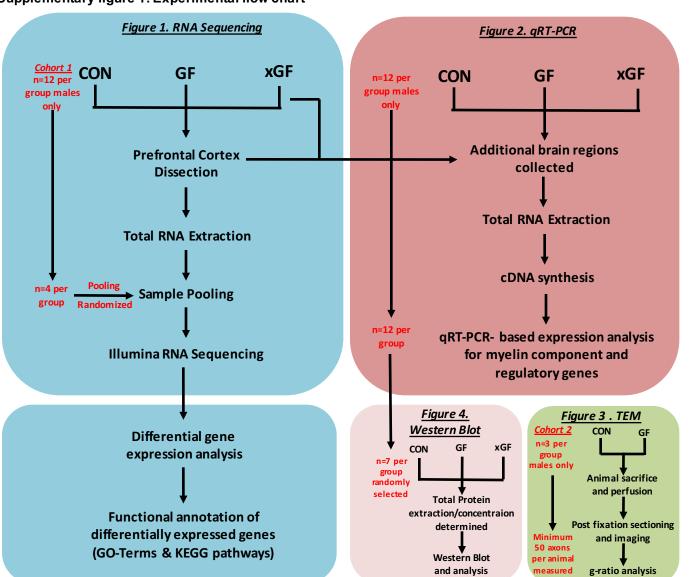


UCC Library and UCC researchers have made this item openly available. Please let us know how this has helped you. Thanks!

Title	Regulation of prefrontal cortex myelination by the microbiota
Author(s)	Hoban, Alan E.; Stilling, Roman M.; Ryan, Feargal J.; Shanahan, Fergus; Dinan, Ted G.; Claesson, Marcus J.; Clarke, Gerard; Cryan,
	John F.
Publication date	2016-04-05
Original citation	Hoban, A. E., Stilling, R. M., Ryan, F. J., Shanahan, F., Dinan, T. G., Claesson, M. J., Clarke, G. and Cryan, J. F. (2016) 'Regulation of prefrontal cortex myelination by the microbiota', Translational
	Psychiatry, 6(4), e774. (9pp.) DOI: 10.1038/tp.2016.42
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://www.nature.com/articles/tp201642 http://dx.doi.org/10.1038/tp.2016.42
	Access to the full text of the published version may require a subscription.
Rights	© The Author(s) 2016. This work is licensed under a Creative Commons Attribution 4.0 International License. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in the credit line; if the material is not included under the Creative Commons license, users will need to obtain permission from the license holder to reproduce the material. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/
Item downloaded from	http://hdl.handle.net/10468/8932

Downloaded on 2019-12-02T14:09:12Z





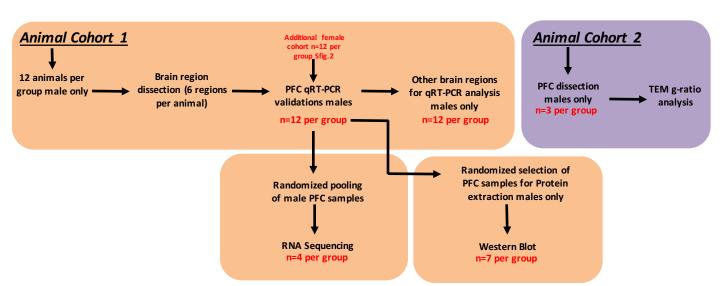


Figure S1: Experimental flowchart. Graphical depiction of the animal number and usage for each individual experiment. Each Panel represents the outcome of tissue used for each of the individual main figure.

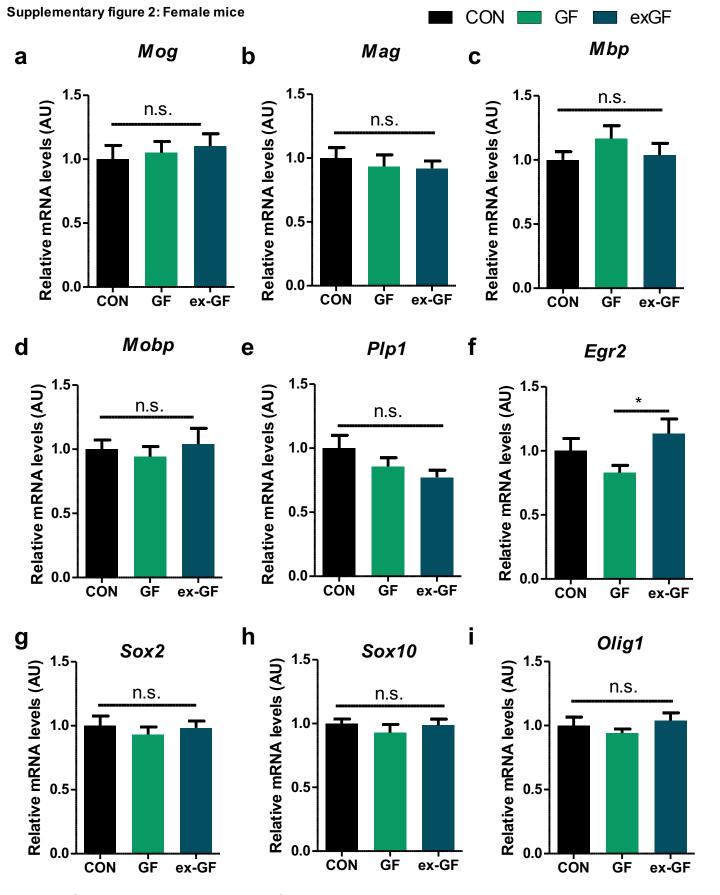


Figure S2: mRNA expression levels of myelin component and upstream myelin regulatory genes in the PFC of <u>female</u> CON, GF and exGF mice. No male-equivalent changes in myelin component mRNA levels were found in the PFC of female GF and exGF mice. (a-i) qRT-PCR of myelin component gene transcript and myelin regulating transcription factors in the PFC. Bar graphs indicate average values of 12 animals after β -actin normalization relative to average control levels (p<0.05 *). Data graphed as +/- SEM.

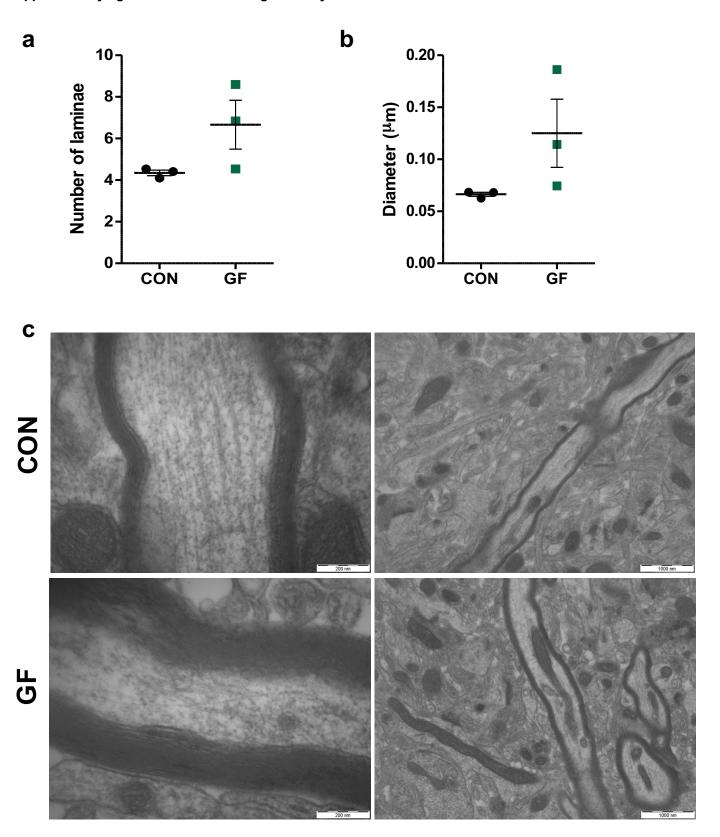


Figure S3: Increased g-ratio coincides with stronger trend to higher lamina number and myelin diameter. (a) Average lamina number per animal in the PFC of GF and CON mice. (b) Average myelinated diameter per animal (c) Electron micrograph of longitudinally sliced axons in the PFC of CON and GF mice. Scale bar 200nm and 1µm. Bar graph data is shown as mean +/- SEM. **n.s.** indicated p>0.05; n=3 animals per group; n=>50 axons per animal (CON n=187 axons; GF n=390 axons).