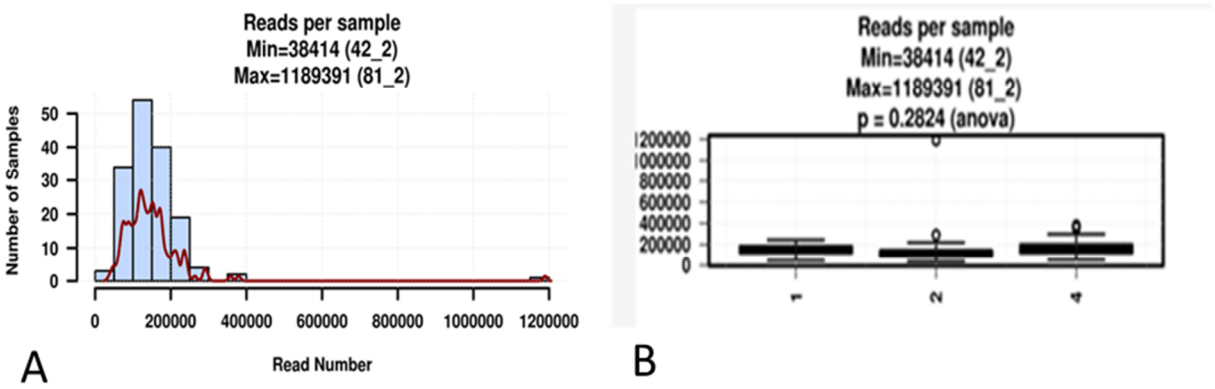
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Title	Perinatal factors affect the gut microbiota up to four years after birth
Authors	Fouhy, Fiona;Watkins, Claire;Hill, Cian J.;O'Shea, Carol Anne;Nagle, Brid;Dempsey, Eugene M.;O'Toole, Paul W.;Ross, R. Paul;Ryan, C. Anthony;Stanton, Catherine
Publication date	2019-04-03
Original Citation	Fouhy, F., Watkins, C., Hill, C.J., O'Shea, C.A., Nagle, B., Dempsey, E.M., O'Toole, P.W., Ross, R.P., Ryan, C.A. and Stanton, C., 2019. Perinatal factors affect the gut microbiota up to four years after birth. Nature communications, 10(1), (1517). DOI:10.1038/s41467-019-09252-4
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://www.nature.com/articles/s41467-019-09252-4 - 10.1038/s41467-019-09252-4
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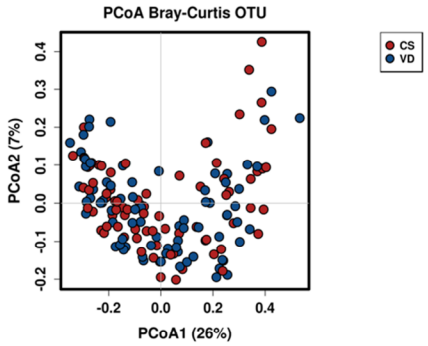
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University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Microbiome Memory of perinatal factors that affect the gut microbiota four years after birth

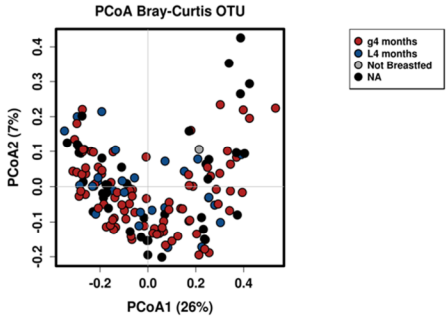
Fouhy F & Watkins C *et al.*



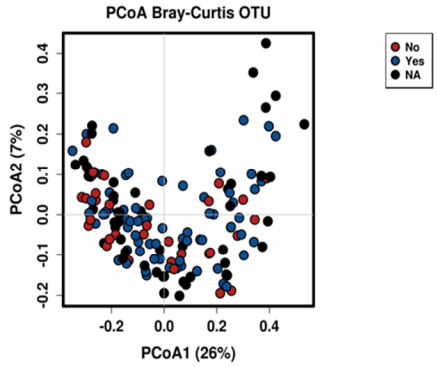
Supplementary Fig.1: A Numbers of reads per sample generated using 2x250bp Illumina MiSeq sequencing; **B** number of sequencing reads per sample by year of infant (1, 2 and 4)



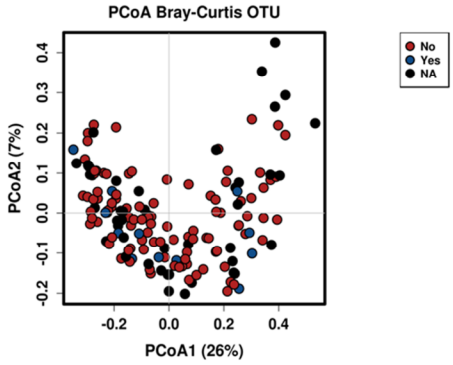
A) Mode of Delivery



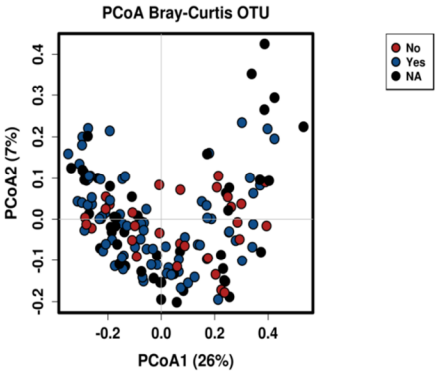
B) Breastfeeding duration



C) Antibiotics taken during first year of life

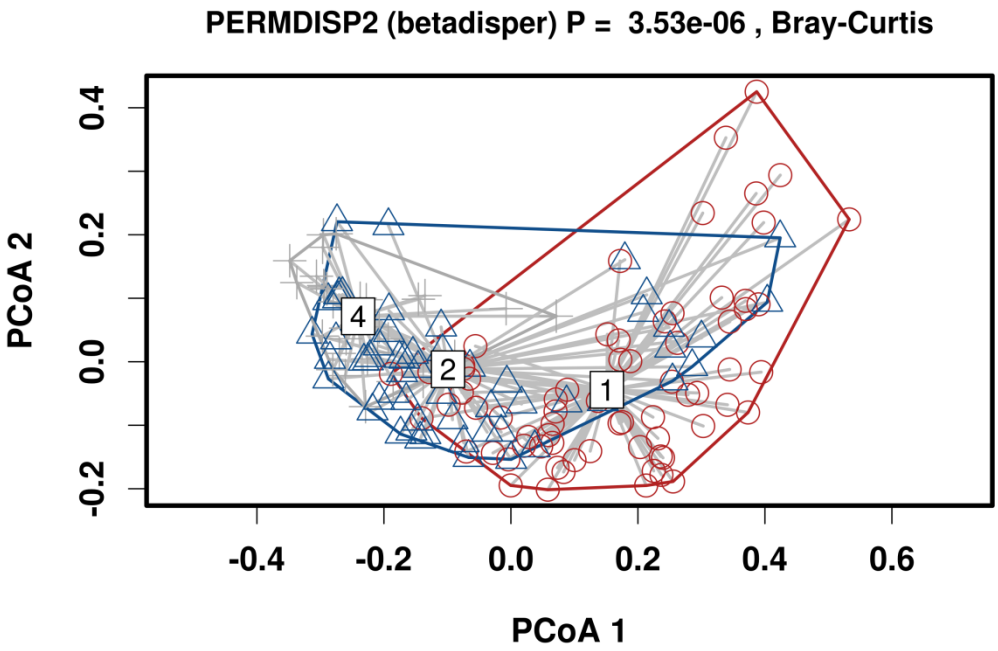


D) Probiotic exposure in first year of life



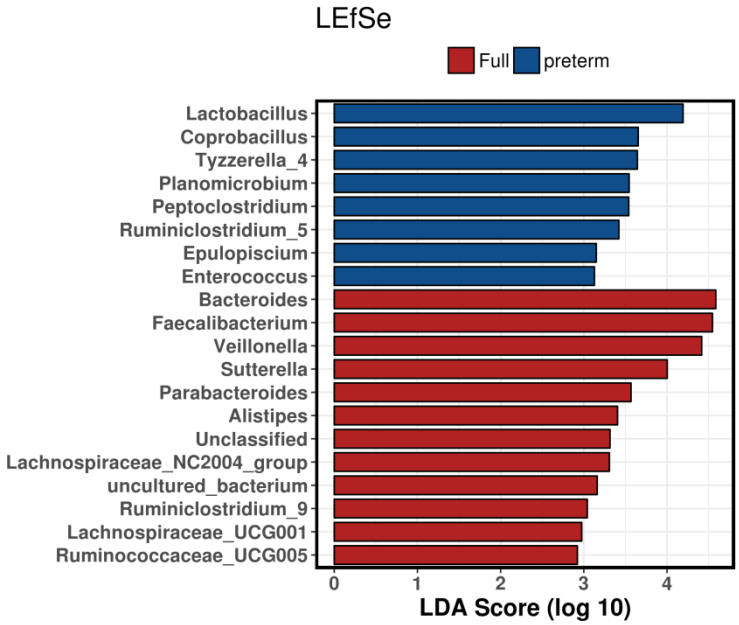
E) Other Siblings

Supplementary Fig.2: PCoA analysis using Bray-Curtis distance matrices based on; **A** Mode of delivery, **B** breastfeeding duration (g > 4, L < 4 months); **C** antibiotics taken during first year of life; **D** probiotic exposure in first year of life; **E** other siblings

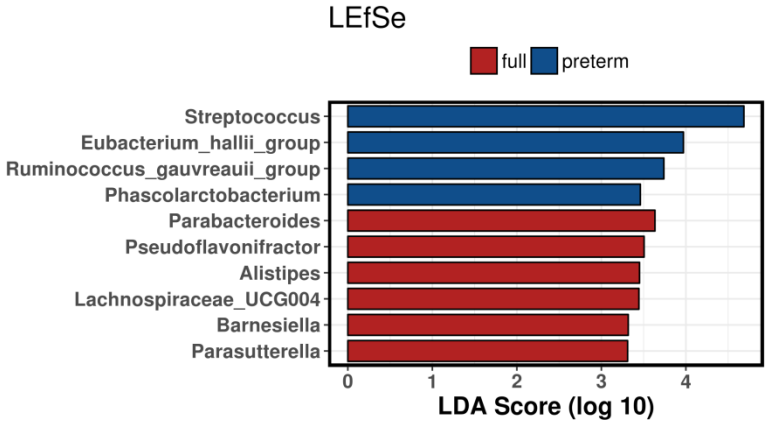


Supplementary Fig. 3: Microbiota composition was significantly different between groups based on year using PERMDISP2 permutational analysis. P-value is calculated based on distances of each sample to the group centroid in the PCoA and describes significance of the grouping

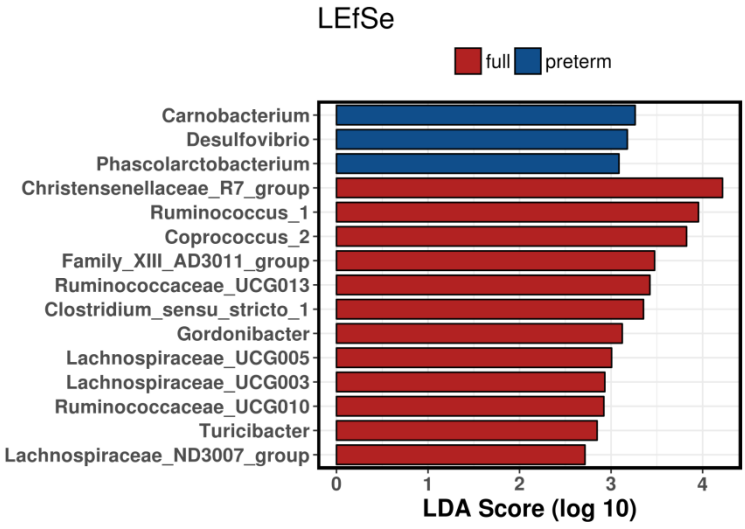
A) Year one – Gestational age at birth.



B) Year two – Gestational age at birth.

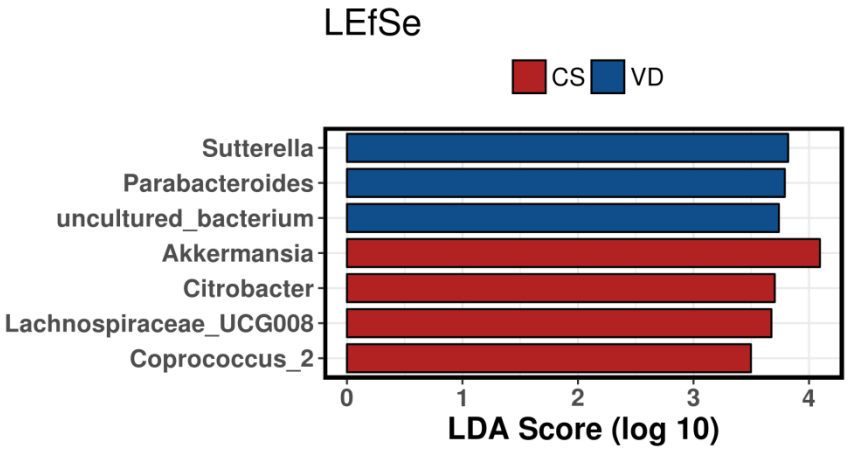


C) Year four – Gestational age at birth.

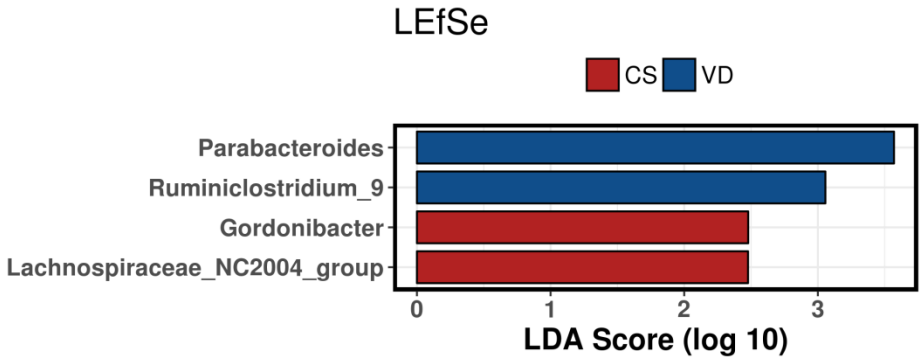


Supplementary Fig. 4: LDA Effect Size (LEfSe) analysis on gut microbiota composition based on gestational age at birth at A) year one, B) year two and C) year four

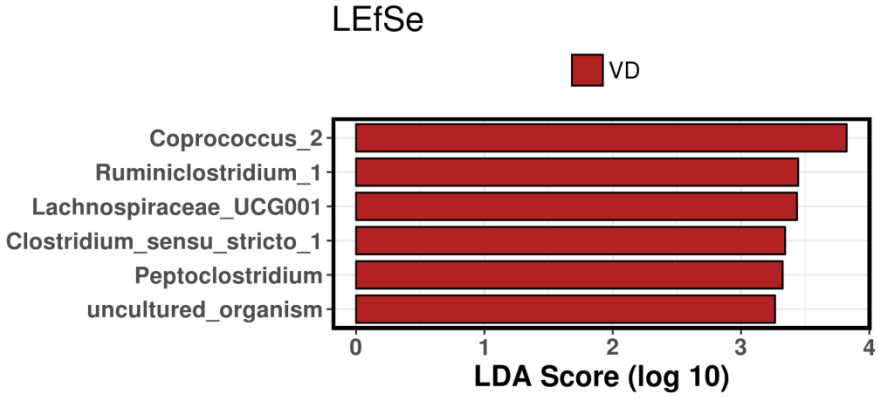
A) Year one – Delivery mode.



B) Year two – Delivery mode.



C) Year four – Delivery mode.



Supplementary Fig. 5: LDA Effect Size (LEfSe) analysis on gut microbiota composition based on mode of delivery at A) year one, B) year two and C) year four