



MRC Integrative
Epidemiology
Unit



University of
BRISTOL

The Avon Longitudinal Study of Parents and Children (ALSPAC)

Prof Abigail Fraser

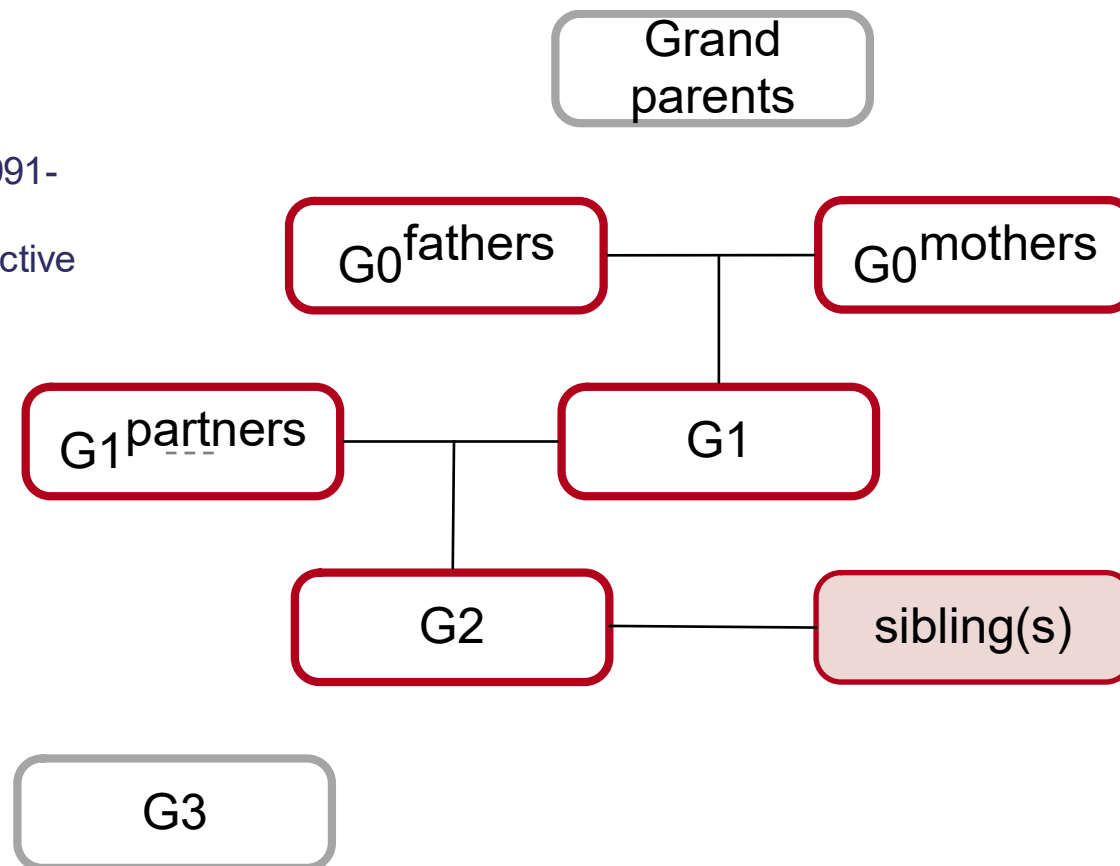
Executive Director for Data Collection

The Avon Longitudinal Study of Parents and Children (ALSPAC) “Children of the 90s”

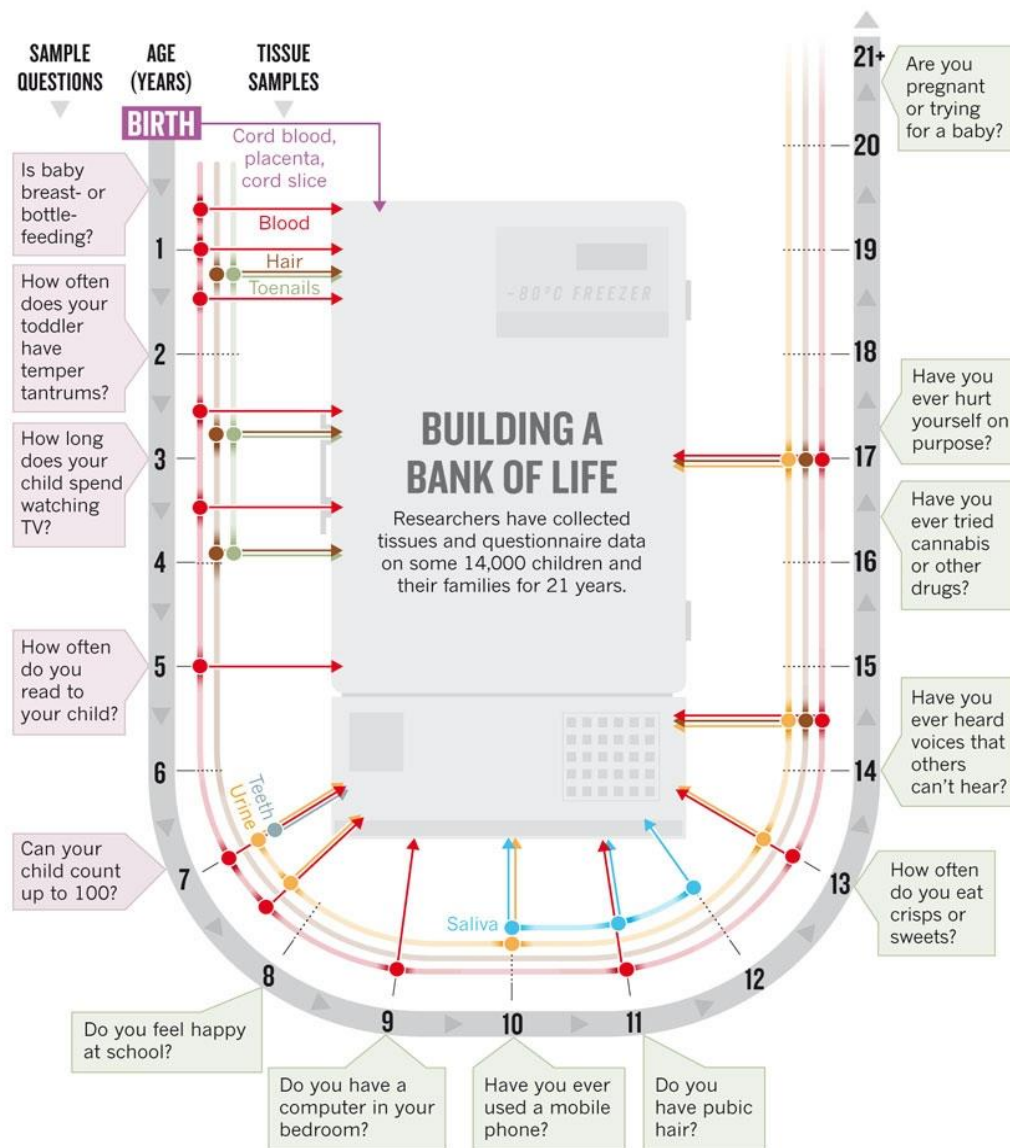
>14541 pregnancies, 75% of all pregnancies with an EDD: 04/1991-12/1992
Linkage consented and >8000 active

>9k at 8yrs, >6k at 18yr, 4.5k stable
>80% linked and >6000 active

>2000 new pregnancies
3100 pregnancies over next 5 years
Linkage consented



ALSPAC / “Children of the 90s”



Nature; April 2012.

Omics

Genome wide data

Whole exome sequencing

NMR-metabolomics (multiple ages)

Proteomics OLINK inflammation panel

DNAm on ~1,000 G0 mothers and G1 offspring pairs at different ages

G1/G2 placenta gene expression and DNAm
n=300

Cardiovascular health a main focus...

cIMT, cardiac echo, PWV, cardio-pulmonary exercise test (CPET)

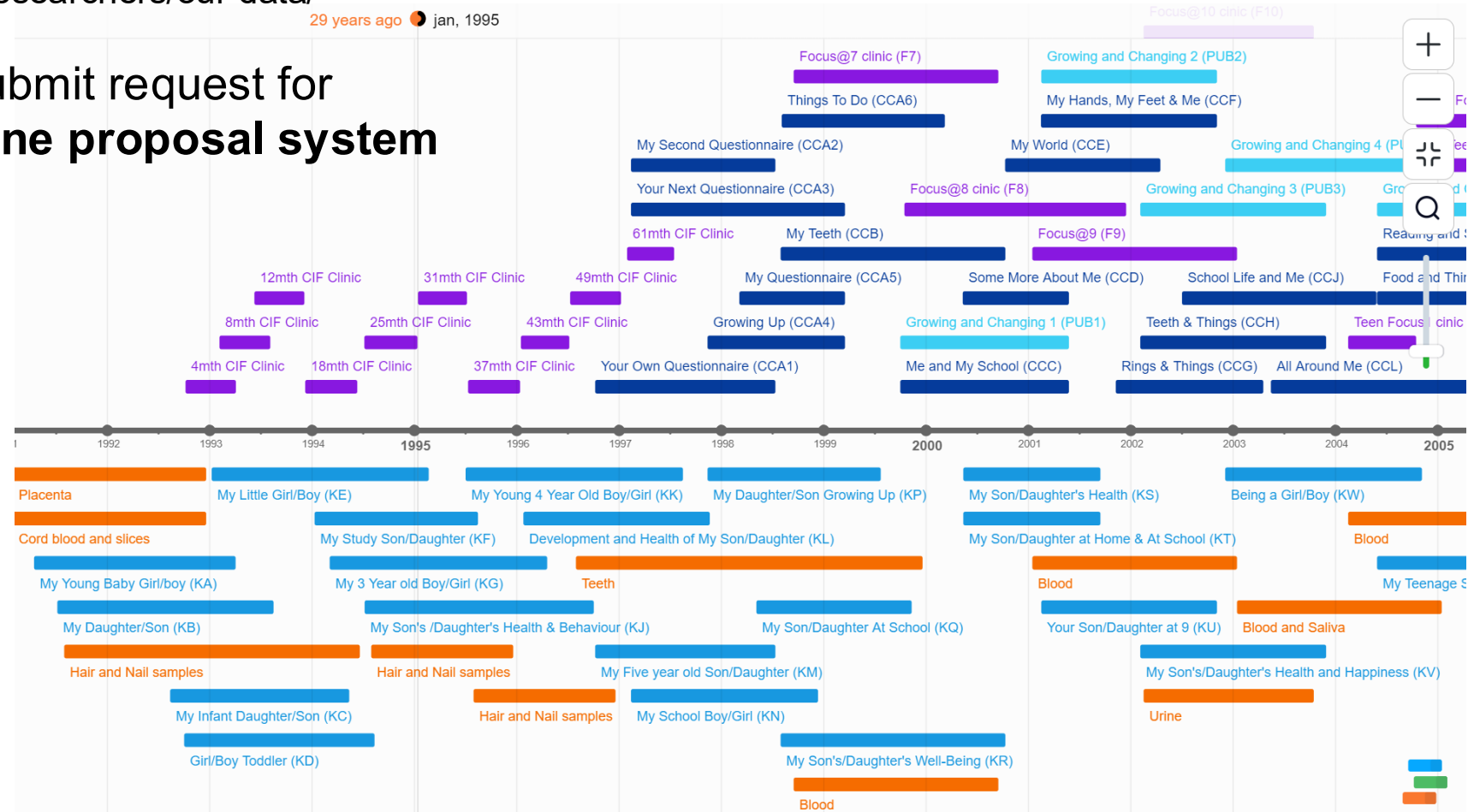
ALSPAC / “Children of the 90s”



Various ways to explore the data available.

<http://www.bristol.ac.uk/alspac/researchers/our-data/>

Managed access policy - submit request for data/samples via an **online proposal system**



ALSPAC variable search tool



ALSPAC variables search tool

About

Variables

Freely browse available ALSPAC data by variable name

Show entries

Search:

	Dataset	Variable	Details	Counts	Type	Release	Label 1	Label 2	Label 3
3838	FOM1_3c	fm1sa200	DV: Taking any blood pressure medication: FOM1	4980	numeric	Current	clinic	G0	mother
3866	FOM1_3c	fm1bp100	Consent for blood pressure: FOM1	4980	numeric	Current	clinic	G0	mother
3869	FOM1_3c	fm1bp110a	First systolic blood pressure - Right arm: FOM1	4980	numeric	Current	clinic	G0	mother
3870	FOM1_3c	fm1bp110b	Second systolic blood pressure - Right arm: FOM1	4980	numeric	Current	clinic	G0	mother
3871	FOM1_3c	fm1bp110	DV: Mean systolic blood pressure - Right arm: FOM1	4980	numeric	Current	clinic	G0	mother
3872	FOM1_3c	fm1bp111a	First diastolic blood pressure - Right arm: FOM1	4980	numeric	Current	clinic	G0	mother
3873	FOM1_3c	fm1bp111b	Second diastolic blood pressure - Right arm: FOM1	4980	numeric	Current	clinic	G0	mother
3874	FOM1_3c	fm1bp111	DV: Mean diastolic blood pressure - Right arm: FOM1	4980	numeric	Current	clinic	G0	mother
3878	FOM1_3c	fm1bp120a	First systolic blood pressure - Left arm: FOM1	4980	numeric	Current	clinic	G0	mother
3879	FOM1_3c	fm1bp120b	Second systolic blood pressure - Left arm: FOM1	4980	numeric	Current	clinic	G0	mother

Showing 1 to 10 of 205 entries (filtered from 94,905 total entries)

Previous 2 3 4 5 ... 21 Next



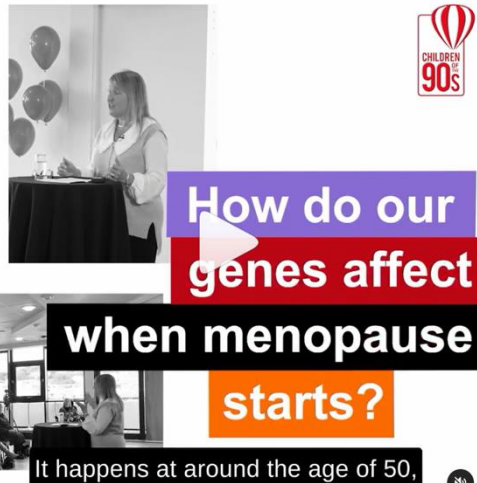
Does fertility treatment affect offspring?

International collaboration called the Assisted Reproductive Technology and Health (A.R.T-Health) Partnership.



Depression
in women
during
pregnancy

Dr. Rebecca Pearson explains that depression is at least as common during pregnancy as after birth.



Circulation

Volume 125, Issue 11, 20 March 2012; Pages 1367-1380
<https://doi.org/10.1161/CIRCULATIONAHA.111.044784>

EPIDEMIOLOGY AND PREVENTION

Associations of Pregnancy Complications With Calculated Cardiovascular Disease Risk and Cardiovascular Risk Factors in Middle Age

The Avon Longitudinal Study of Parents and Children

Editorial see p 1336

Abigail Fraser, MPH, PhD, Scott M. Nelson, MBChB, PhD, Corrie Macdonald-Wallis, MSc, Lynne Cherry, PhD, Elaine Butler, Naveed Sattar, MBChB, PhD*, and Debbie A. Lawlor, MBChB, MSc, PhD*

Circulation

Volume 121, Issue 23, 15 June 2010; Pages 2557-2564
<https://doi.org/10.1161/CIRCULATIONAHA.109.906081>

EPIDEMIOLOGY AND PREVENTION

Association of Maternal Weight Gain in Pregnancy With Offspring Obesity and Metabolic and Vascular Traits in Childhood

Abigail Fraser, PhD, Kate Tilling, PhD, Corrie Macdonald-Wallis, MSc, Naveed Sattar, PhD, FRCPPath, Marie-Jo Brion, PhD, Li Benfield, PhD, Andy Ness, PhD, FFPH, John Deanfield, BA, BCh, FRCP, Aroon Hingorani, PhD, FRCP, Scott M. Nelson, PhD, FRCOG, George Davey Smith, MD, DSc, and Debbie A. Lawlor, PhD, FFPH





Avon Longitudinal Study of Parents and Children (ALSPAC)

DATA NOTE

? ? ?

Linked Cardiology records of the children in the Avon Longitudinal Study of Parents and Children (ALSPAC) From The University Hospitals Bristol and Weston NHS Foundation Trust (UHBW) Heart-Suite (HS) dataset

[version 1; peer review: 3 approved with reservations]

AUTHORS Mark Mumme, Kurt Taylor, Andy Boyd, John Macleod

FUNDER **Wellcome Trust**

PEER REVIEWERS Demilade A Adedinsewo; Catherine B. Hayes; Shaimaa Rakha

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DATA NOTE

✓ ✓ ✓

REVISED

Ascertaining and classifying cases of congenital anomalies in the ALSPAC birth cohort

[version 2; peer review: 3 approved]

AUTHORS Kurt Taylor, Richard Thomas, Mark Mummé, Jean Golding, Andy Boyd, Kate Northstone, Massimo Caputo, Deborah A Lawlor

FUNDERS **Wellcome Trust** | British Heart Foundation



ALSPAC's new home at
L&R, Southmead