

## SUPPLEMENTAL MATERIAL

to accompany

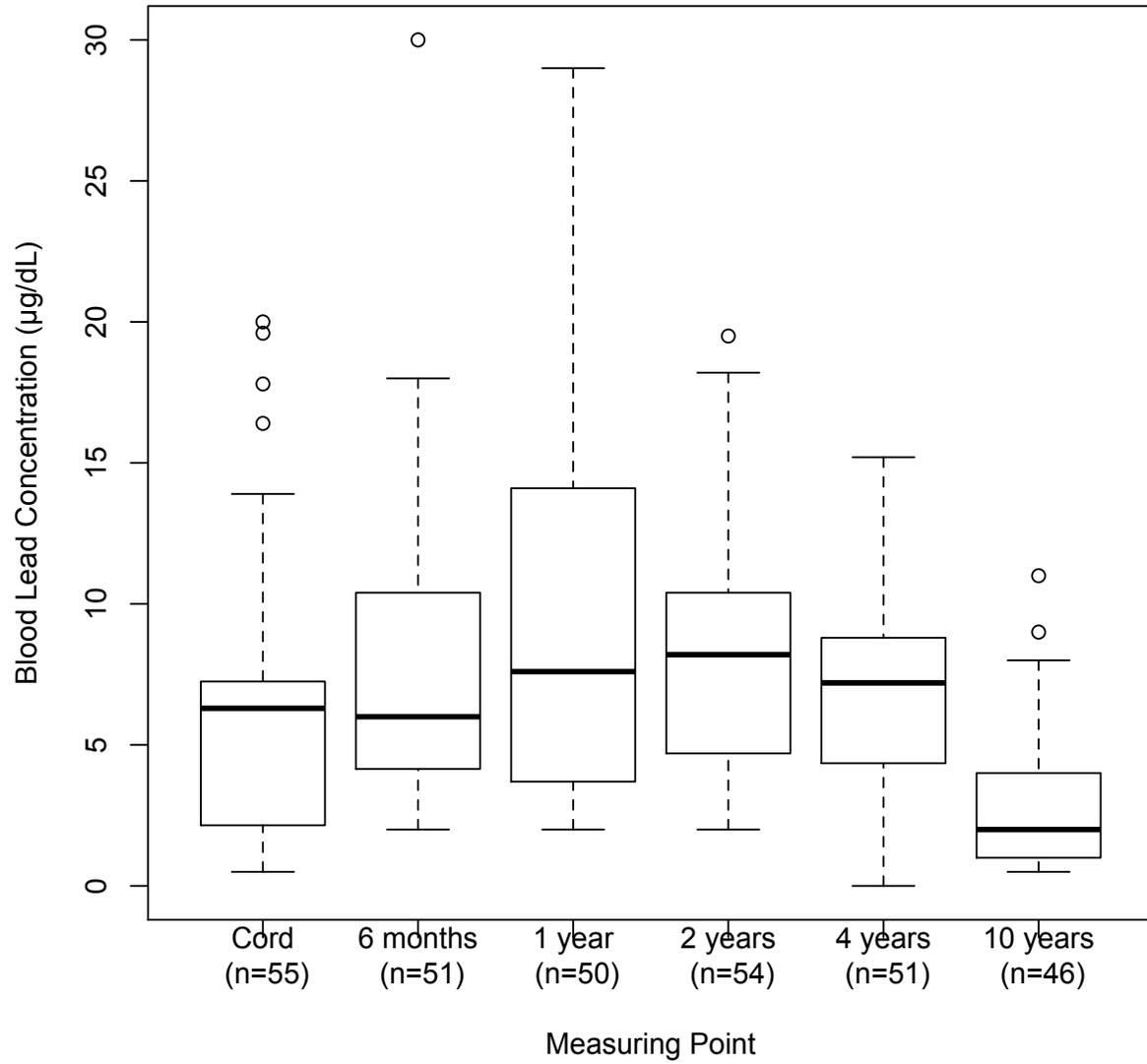
Prenatal Lead Levels, Plasma Amyloid  $\beta$  levels and Gene Expression in Young  
Adulthood

Maitreyi Mazumdar, Weiming Xia, Oliver Hofmann, Matthew Gregas, Shannan Ho Sui,  
Winston Hide, Ting Yang, Herbert L. Needleman and David C. Bellinger

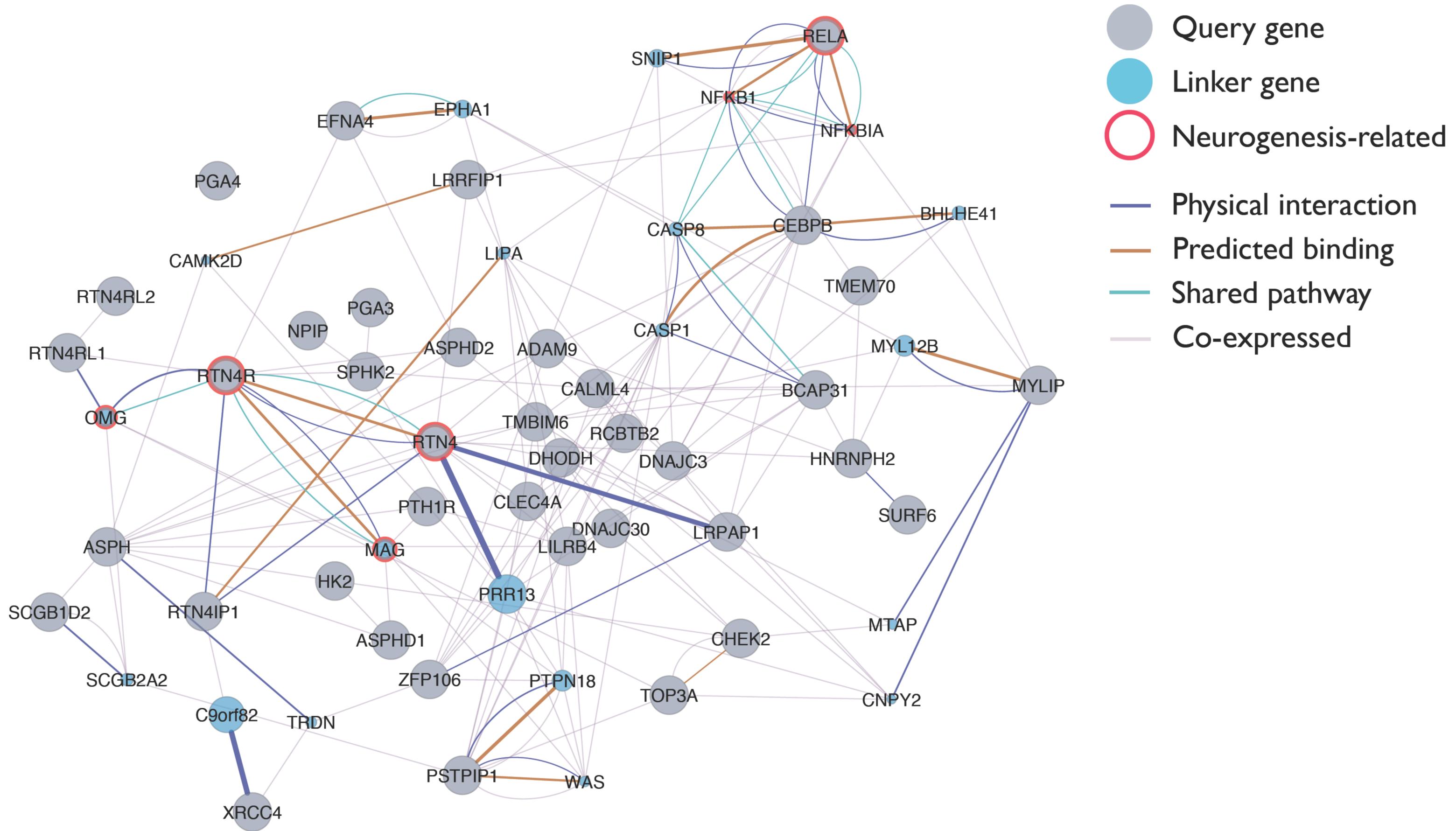
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## Blood Lead Concentration at each Measuring Point



**Supplemental Material, Figure 1. Blood lead concentration at each measuring point.** In each box plot, the median value is indicated by the center horizontal line and the 25<sup>th</sup> and 75<sup>th</sup> percentiles are indicated by the lower and upper horizontal lines, respectively. The vertical lines represent 1.5 times the interquartile range, and circles represent outliers (i.e. values that are more than 1.5 times the interquartile range). To convert values for lead to micromoles per liter, multiply by 0.0483.



**Supplemental Material, Figure 2.** Gene network figure based on 10 subjects with prenatal lead concentration  $\geq 10$   $\mu\text{g}/\text{dL}$ . Network representation based on GeneMania (Warde-Farley et al, default parameters) representing functional association of 39 genes ('query genes') identified by IsoGene analysis as having decreased expression with prenatal lead levels  $> 10$   $\mu\text{g}/\text{dL}$  and ten additional related genes based on functional association ('linker genes'). Association data generated from 144 public data sets include protein and genetic interactions, pathways, co-expression, co-localization and protein domain similarity. Node size reflects GeneMania scores (larger nodes are more relevant).

Warde-Farley D, Donaldson SL, Comes O, Zuberi K, Badrawi R, Chao P, Franz M, Grouios C, Kazi F, Lopes CT, Maitland A, Mostafavi S, Montojo J, Shao Q, Wright G, Bader GD, Morris Q

**Supplemental Material, Table 1. Genes altered at prenatal lead concentration < 10 µg/dL**

Symbol	Gene name
<i>ADAM9</i>	ADAM metallopeptidase domain 9
<i>ASPH</i>	aspartate beta-hydroxylase
<i>ASPHD1</i>	aspartate beta-hydroxylase domain containing 1
<i>ASPHD2</i>	aspartate beta-hydroxylase domain containing 2
<i>BCAP31</i>	B-cell receptor-associated protein 31
<i>CALML4</i>	calmodulin-like 4
<i>CEBPB</i>	CCAAT/enhancer binding protein, beta
<i>CHEK2</i>	CHK2 checkpoint homolog
<i>CLEC4A</i>	C-type lectin domain family 4, member A
<i>DHODH</i>	dihydroorotate dehydrogenase
<i>DNAJC3</i>	DNAJ (HSP40) homolog, subfamily C, member 3
<i>DNAJC30</i>	DNAJ (HSP40) homolog, subfamily C, member 30
<i>EFNA4</i>	ephrin-A4
<i>HK2</i>	hexokinase 2
<i>HNRNPH2</i>	heterogeneous nuclear ribonucleoprotein H2
<i>LILRB4</i>	leukocyte immunoglobulin-like receptor, subfamily B, member 4
<i>LRPAP1</i>	lipoprotein receptor-related protein associated protein 1
<i>LRRFIP1</i>	leucine rich repeat (in FLII) interacting protein 1
<i>MYLIP</i>	myosin regulatory light chain interacting protein
<i>NPIP</i>	nuclear pore complex interacting protein
<i>PGA3</i>	pepsinogen 3, group I (pepsinogen A)
<i>PGA4</i>	pepsinogen 4, group I (pepsinogen A)
<i>PSTPIP1</i>	proline-serine-threonine phosphatase-interacting protein 1
<i>PTH1R</i>	parathyroid hormone 1 receptor
<i>RCBTB2</i>	regulator of chromosome condensation and BTB domain containing protein 2
<i>RELA</i>	v-rel reticuloendotheliosis viral oncogene homolog a (avian)
<i>RTN4</i>	reticulon 4
<i>RTN4IP1</i>	reticulon 4 interacting protein 1
<i>RTN4R</i>	reticulon 4 receptor
<i>RTN4RL1</i>	reticulon 4 receptor-like 1
<i>RTN4RL2</i>	reticulon 4 receptor-like 2
<i>SCGB1D2</i>	secretoglobin, family 1D, member 2
<i>SPHK2</i>	sphingosine kinase 2
<i>SURF6</i>	surfeit 6
<i>TMBIM6</i>	transmembrane BAX inhibitor motif containing 6
<i>TMEM70</i>	transmembrane protein 70
<i>TOP3A</i>	topoisomerase (DNA) III alpha
<i>XRCC4</i>	X-ray repair complementing defective repair in Chinese hamster cells 4
<i>ZFP106</i>	zinc finger protein 106 homolog