SUPPLEMENTAL MATERIAL

Figure S1. Preconception exposure model.
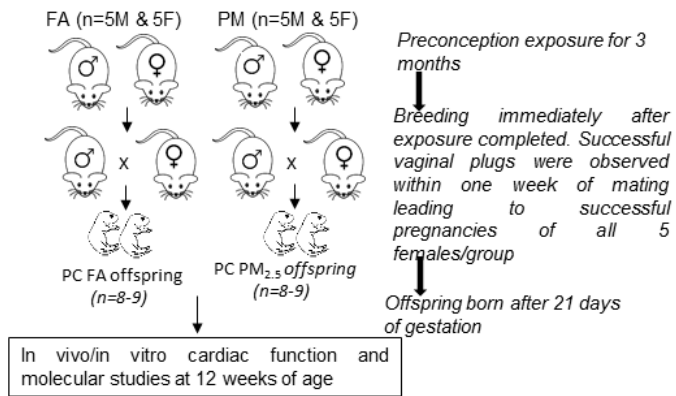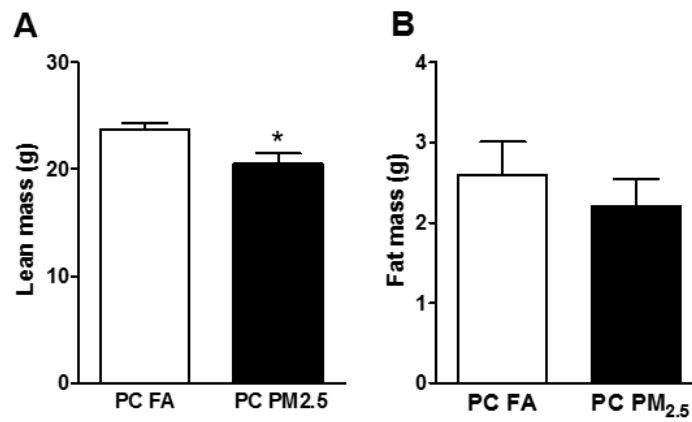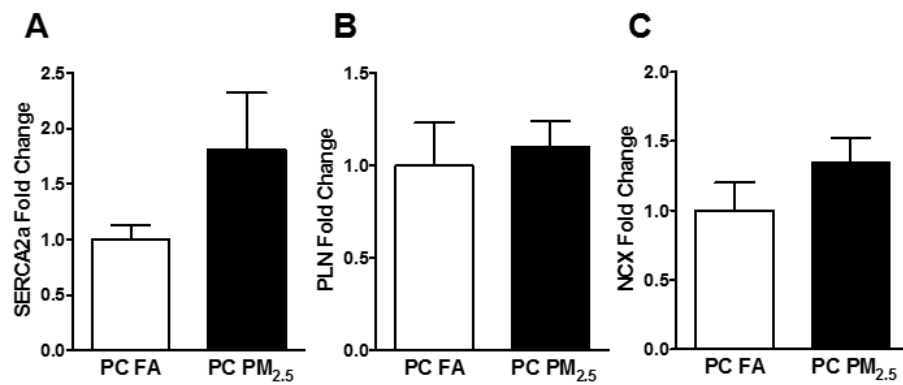

FA (n=5M & 5F)   PM (n=5M & 5F)

PC FA offspring   PC PM$_{2.5}$ offspring
(n=8-9)   (n=8-9)

In vivo/in vitro cardiac function and molecular studies at 12 weeks of age

Preconception exposure for 3 months

Breeding immediately after exposure completed. Successful vaginal plugs were observed within one week of mating leading to successful pregnancies of all 5 females/group

Offspring born after 21 days of gestation

Figure S2. Body weight parameters from mice born to preconception FA or PM$_{2.5}$ exposed parents.

(**A**) Lean mass and (**B**) Fat mass. Data were obtained from 3-month-old mice heart (n=6 mice/group) that were born to preconception FA or PM$_{2.5}$ exposed parents and expressed as mean ± S.E.M. *p<0.05 vs PC FA controls.

Figure S3. Quantitative PCR analysis showing expression of (A) Sarco/endoplasmic reticulum Ca^{2+}-ATPase (SERCA-2A), (B) Phospholamban (PLN) and (C) Na^{+}/Ca^{2+} exchanger (NCX).

Data were obtained from 3-month-old mice heart (n=6 mice/group) that were born to preconception FA or PM$_{2.5}$ exposed parents and expressed as mean ± S.E.M.

Figure S4. Quantitative PCR analysis showing expression of (A) DNA methyltransferases-1 (Dnmt1), (B) DNA methyltransferases-3a (Dnmt3a), (C) DNA methyltransferases-3b (Dnmt3b).