### PHACS CAB MEETING:

INTERSECTING WITH THE METABOLIC AND NUTRITION WORKING GROUP

**DECEMBER 20, 2018** 

### **Short and Long Term Concerns for HIV/ARV Exposure**

Lifetime

HIV/ARV

Exposure

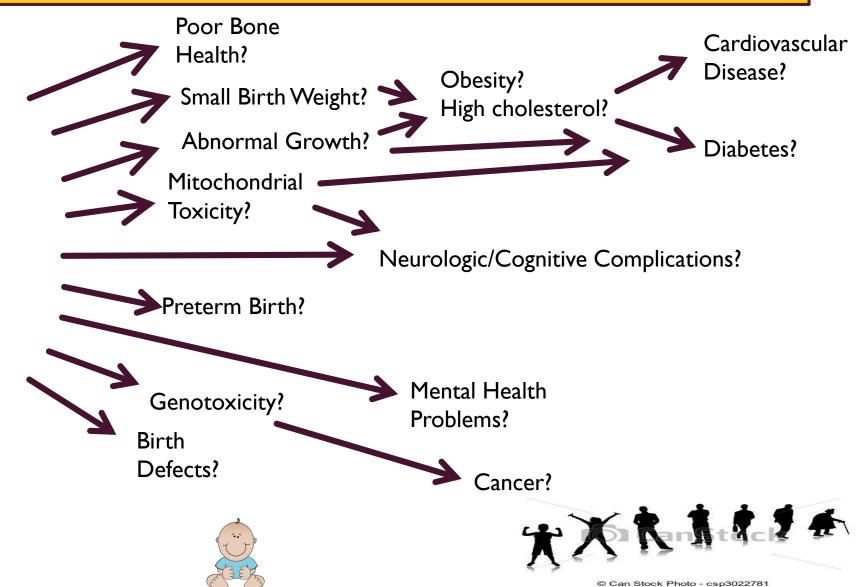
In Utero

HIV/ARV

Exposure

**AMP** 

**SMARTT** 



### **Short and Long Term Concerns for HIV/ARV Exposure**

Poor Bone
Health?

Small Birth Weight?

Abnormal Growth?

Mitochondrial
Toxicity?

Cardiovascular
Disease?

Diabetes?

AMP Lifetime
HIV/ARV
Exposure

SMARTT

In Utero HIV/ARV Exposure

## THESE ARE EXAMPLES OF "METABOLIC" OUTCOMES







# METABOLIC COMPLICATIONS WE WONDER ABOUT IN PEOPLE LIVING WITH HIV AND IN CHILDREN/ADOLESCENTS EXPOSED TO BUT NOT UNINFECTED WITH HIV

- Are there problems with birth weight and growth?
- Are there problems with bone is it more frail or easy to fracture?
- Is there more risk for obesity, diabetes, high cholesterol, high blood pressure, and heart disease later in life?
- Are there problems in breaking down sugar or fat or using food as energy?

#### WE HAVE STUDIED...

- In AMP- Perinatally HIV-infected children/adolescents compared to HIV-exposed uninfected
  - Fracture rates
  - Pre-diabetes (problems breaking down sugar)
  - Vitamin D and bone health
  - Body fat distribution
  - Risk of heart disease
  - Mitochondrial abnormalities
- In SMARTT
  - Childhood growth at 2 years of age by in-utero ART exposure
  - Childhood growth from birth to 7 years by mother's perinatal HIV status

What are the biggest concerns you have for yourself and/or your children's metabolic health long term which you would like to see PHACS address?