

Work Plan for the Study of 700 Children from Mirpur, Dhaka, Bangladesh														
Clinic Visit # (child also home visited 2x/weekly)	1	2	3	4	5	6	7	8	9	10	11	12	13-15	16
Target visit schedule (age in weeks)	0	6 wks	10 wks	12 wks	14 wks	17 wks	18 wks	24 wks	39 wks	40 wks	52 wks	53 wks	65, 78, 91 wks	104 wks
EPI Vaccinations + Rotarix (-) Rotarix +/- IPV	BCG	Penta OPV	Penta OPV Rota	Penta OPV	Rota			OPV	Measles Rubella	OPV		Wk 65 Measles		
			IPV											
			OPV											
			IPV											
Infant blood draws		2cc					2cc	HS		2cc		3cc		5cc
Infant baseline stool sample	X													
Breast milk IgA: polio & rotavirus		X												
Maternal serum neutralizing antibody: polio		5cc												
Poliovirus Vaccine Measures														
Antibody in lymphocyte supernatant (ALS)		X								X				
Faecal IgA (all 3 virus types)		X				X				X		X		
Faecal excretion vaccine virus		XX			XXX						XXX			
Faecal cytokines		XX												
Serum neutralizing antibody		X					X			X		X		
Saliva swab for polio IgA												X		X
Rotavirus Vaccine Measures														
Rotavirus diarrhea	Continuous Diarrhea Surveillance and Testing for Rotavirus Diarrhea													
Antibody in lymphocyte supernatant (ALS)		X					X							
Faecal IgA		X					X							
Faecal excretion vaccine virus			XX			XXX								
Faecal cytokines			XX											
Serum IgA		X					X	X						
T Cell-mediated immunity:												X		
Phosphoflow		X					X			X				X
Tetramer-Flow Cytometry							X			X				X
ICS/CytoF*		X*					X*			X*				X
csSAM												X		
Systemic Vaccine Measure														
Serum tetanus IgG; saliva tetanus and measles IgA							X					X		X
Nutritional Measures														
Gestational Age Assessment	X													
Anthropometry (HAZ,WAZ)	X	X-c X-m	X	X	X	X	X	X	X	X	X	X	XXX	X
RBP, Vitamin D, zinc, ferritin		X					X							
Hematocrit								X						
Tropical Enteropathy Measures														
Lactulose-mannitol ratio urine				X				X		X				X
Serum □-LPS,CRP		X					X			X		X		X
Small intestine bacterial overgrowth													week 78	X
Other Measures														
Diarrhea Surveillance (etiologic agents & severity) & Breast Feeding Duration	Household and Clinic Continuous Monitoring for Entire Study Duration													
Gut Microbiome (subset of responders/non-responders)	Specimens taken from scheduled stool samples and episodic diarrheal samples													
Child's HLA (and store mother/ child DNA for future study of genome polymorphisms)		X- c X- m												
Cognitive Function Assessment (infants)													Week 78	X
Maternal depression and intelligence (mothers)														X

*If sufficient peripheral blood mononuclear cells available for freezing.