

**CIFASD Annual Meeting**  
**FASD in San Diego and Moscow**  
**Sarah Mattson, PI**  
**June, 2004**

**Introduction**

*There has not been a change in the other support of key personnel since the last reporting period nor will there be, in the next budget period, a significant change in the level of effort for key personnel from what was approved for this project. However, it is anticipated that there will be an estimated unobligated balance greater than 25 percent of the current year's total budget. This unobligated balance is mainly due to the unanticipated delay related to the neurobehavioral core. The core required considerable time and effort in the planning stages of the project. This planning was critical for the individual sites to progress. Thus, we did not expend funds until May 2004 (month 8 of an 11 month funding period). However, we have just begun data collection and anticipate budget-appropriate expenditures in the next funding year. Therefore we are requesting to carry over this unobligated balance into the next funding year. The extensive planning period was critical to the overall project and is consistent with suggestions made by Dr. T.-K. Li, as well as the steering committee at a steering/PI meeting early in the funding period.*

**Specific Aims**

The specific aim of this proposal remains to determine whether a phenotype exists in children with fetal alcohol spectrum disorders (FASD). This aim is being addressed by study of three populations of children with FASD in the United States (San Diego), Russia (Moscow), and Finland (Helsinki). The third site (Helsinki) was added as a subcontract to this award after the initial application was submitted. The project includes neuropsychological assessment (all sites), dysmorphological evaluation (all sites), 3-D facial imaging (all sites), and brain imaging (SD and Helsinki).

**Studies and Results**

Because of considerable and unanticipated planning required for the neurobehavioral core of the consortium application, progress specific to this U01 project has been delayed. During the majority of this funding year, the neurobehavioral core has revised the neuropsychological test battery to be used for this project, purchased or developed the materials necessary for the project, distributed the materials to the various consortium sites. We have recently made considerable progress towards addressing the aims of the study including:

- Identify & hire personnel: We have identified and hired personnel at both the San Diego and Moscow sites.
- IRB: We have obtained IRB approval for all sites
- Contracts: For the Finnish subcontract, the contracts are in place. For the Moscow component, we have requested that funding will be administered

- through the CRDF and are awaiting approval.
- Receive test materials/equipment: we have obtained all testing materials and computers to administer tests. Most of the computerized tests are operational; the remaining ones will be complete shortly.
  - Pilot testing (SD): Pilot testing has been conducted at the San Diego site. This served to streamline the test battery and troubleshoot the administration procedures.
  - Training-phase I (Coles): In May, Dr. Claire Coles traveled to Moscow for a separate component of the consortium project and was able to conduct some preliminary training on the materials to be used for this project.
  - Training-phase II (Mattson): During the first week in July, key personnel from the Finnish site and the Moscow site traveled to San Diego (following the RSA meeting) and participated in extensive training on the methods required for the project. Great progress was made toward uniform data collection.
  - Data collection: has begun in San Diego and Finland (see description of subcontract progress below). The Moscow site will begin data collection in September.

The Finnish component (subcontract) has made considerable progress during this funding period. Dr. Eugene Hoyme, a member of the dysmorphology core, is currently in Helsinki and has seen the majority of the alcohol-exposed children available for the project. He will return to Helsinki in the next year or so to complete the examinations. In addition, although funded separately (through a supplement to E. Riley), the Finnish group has also completed a pilot study using MRS and presented these data at the 2004 RSA meeting.

### **Significance**

Although we have not collected much data, we feel our progress has been significant. We have put in place the personnel and the measures necessary to conduct our studies in a consistent and reliable manner.

### **Plans**

The next year should be a productive one. Now that the initial planning and organization of the neurobehavioral core is near completion, data collection can begin in earnest. Our original sample size was 75-100 children in San Diego and 225-300 children in Moscow during five funding years. However, since only 3 funding years were granted, we have decreased the sample sizes accordingly. During the next funding period, we anticipate completing neuropsychological examinations on approximately 20 children in San Diego and 50 children in Moscow using the neurobehavioral core tests and beginning the planning and execution of our site-specific measures of interhemispheric interaction. We also hope to conduct dysmorphological and 3-D facial imaging studies on these same children this year as well as begin our brain imaging studies. In Finland, the plan is to continue the dysmorphology and 3-D facial imaging examinations and begin the neuropsychological examinations.