Update overview

- New staff and training
- Lab set up and method development
- Quality control & Quality assessment
- Collaborations
New Cooperative Agreement Staff

- Shirley Cao, Quality Management
- Yangzhu Long, CLS, Specimen Management
- Dr. Indranil Sen, Laboratory Scientist
- Josephine Alvaran, Laboratory Scientist
- Two more Laboratory Scientists will be hired
- One Laboratory Information Management Specialist to be hired
Training

- At Centers for Disease Control:
  - Maintaining quality management system, method specific quality control, statistical control procedures
  - Biorepository, sample & standard handling and materials screening
  - Method development

- In-house training:
  - Instrument operations
  - LIMS
  - EHL QA and sample handling procedure
Lab set up

- Currently expanding into 2 new laboratories

Established an organic lab from an empty space, 2007-08

- In the process of purchasing GC-MS/MS, LC-MS/MS, and IC-MS instrumentation
Chemicals monitored by CDC

# Methods Development

<table>
<thead>
<tr>
<th>Completed Methods</th>
<th>In Progress</th>
<th>Under Development</th>
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<tbody>
<tr>
<td>TCPy and 3-PBA</td>
<td>Blood metal panel</td>
<td>Four Phthalate Metabolites</td>
</tr>
<tr>
<td>- Validation: 20 batches</td>
<td>- Validation: 20 batches</td>
<td>- Validation: 13 batches</td>
</tr>
<tr>
<td>- Method is ready</td>
<td>- Method is ready</td>
<td>- Method ready in April 2010</td>
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QC and Quality Assessment

- Internal QC Performance Monitoring
  Three levels of QC

- External QC Performance Assessment
  G-EQUAS (The German External Quality Assessment Scheme)

- Proficiency Tests
  CDC PT program and NYS

- Inter-Laboratory Validation
  CDC and NYS
Internal QC material characterization

QCL-TCPy in Urine

PPB of TCPy

Run Batch

Run1 Run2 Run3 Run4 Run5 Run6 Run7 Run8 Run9 Run10 Run11 Run12 Run13 Run14 Run15 Run16 Run17 Run18 Run19 Run20 Run21 Run22 Run23 Run24

Mean
Mean -3SD
Mean -2SD
Mean +2SD
Mean +3SD

value

0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6
Quality assessment by method comparison

Pilot Specimens (30 samples) for Kaiser Permanente CYGNET Study
Collaborations on biomonitoring studies

- Tracking Biodrift II: 77 urine samples analyzed from Tulare county for TCPy
- CYGNET Study: 30 pilot Specimens analyzed for lead, cadmium, and mercury
- Memoranda of Understanding with CHAMACOS and CYGNET