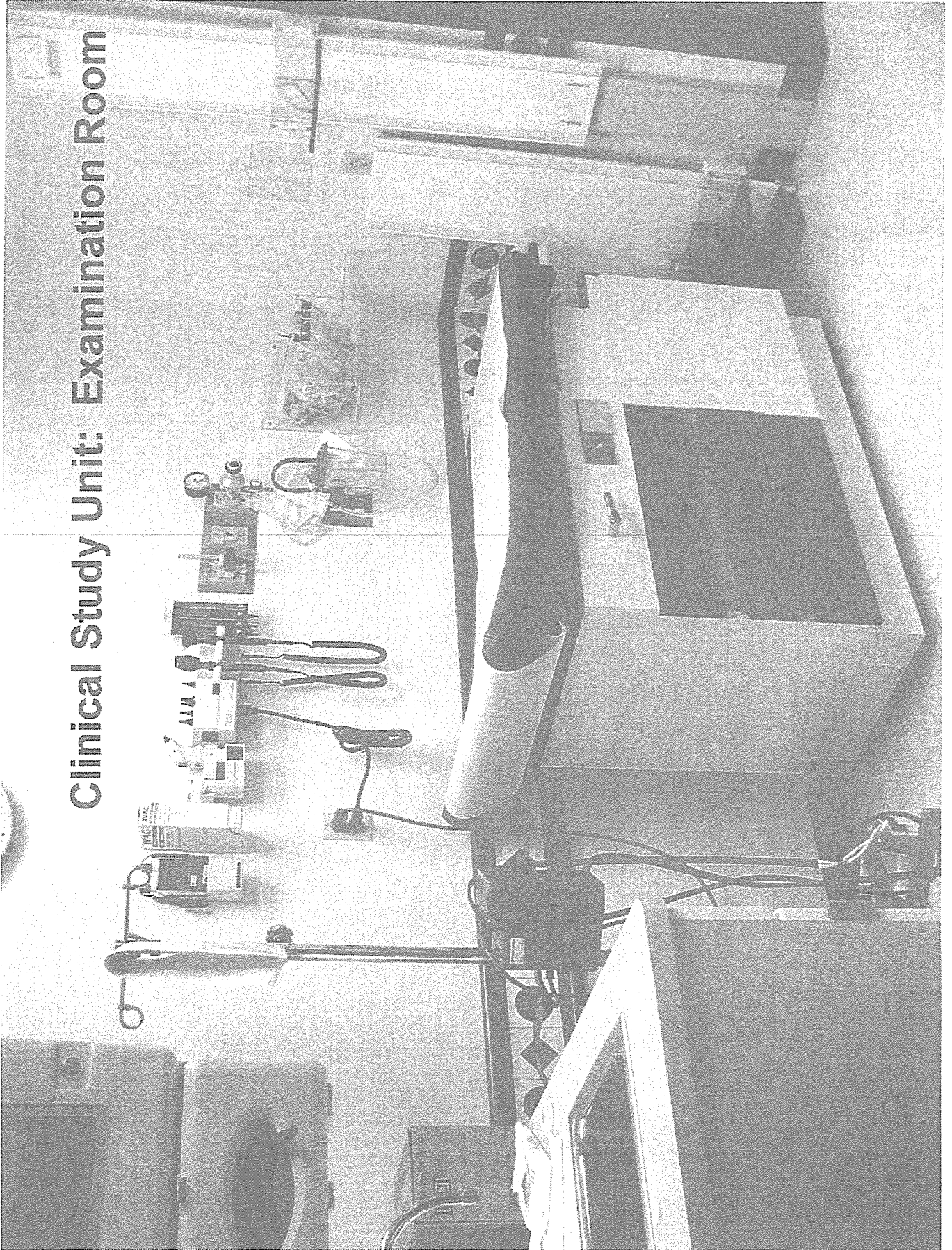
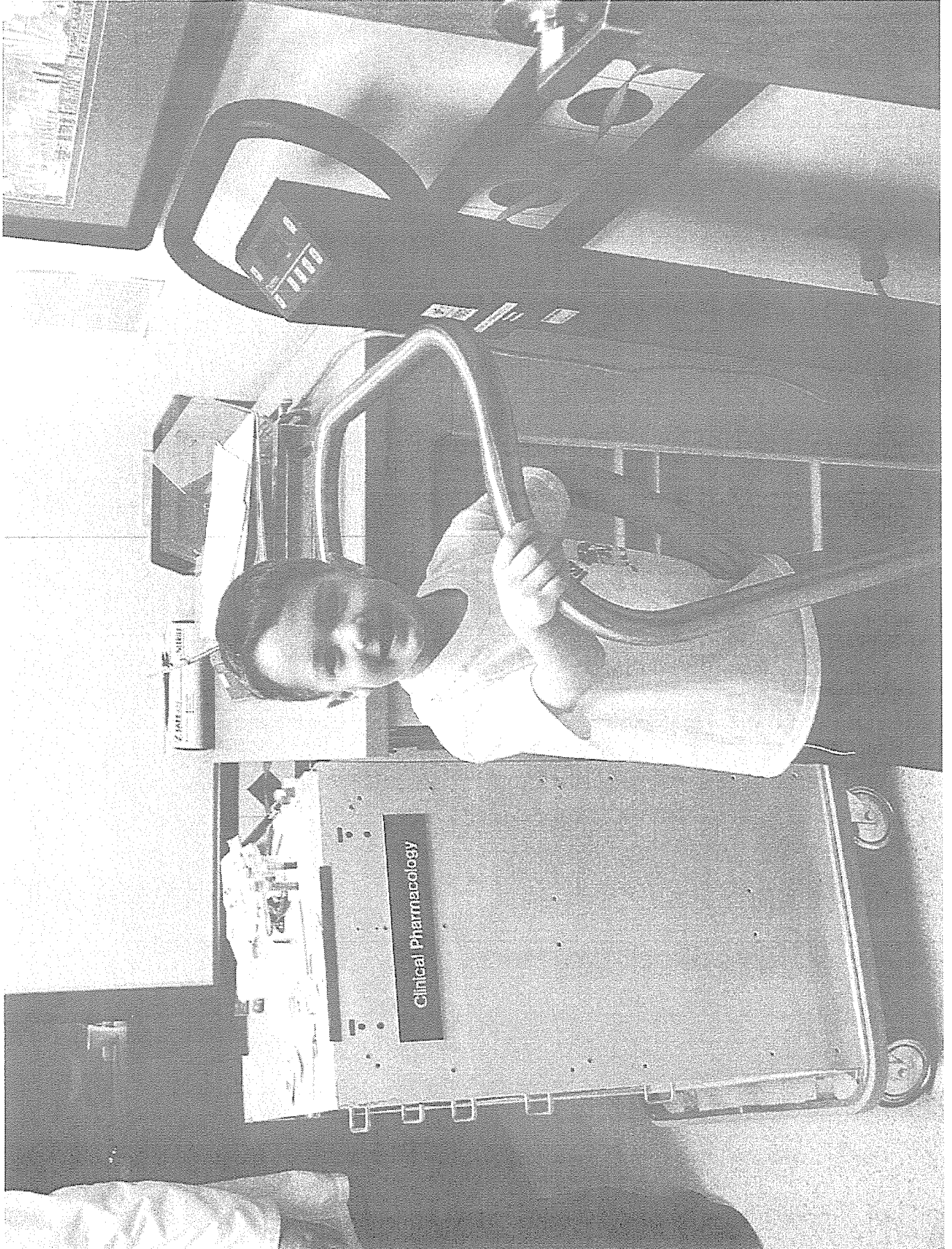


Clinical Study Unit: Examination Room





Clinical Study Unit: Wet Lab

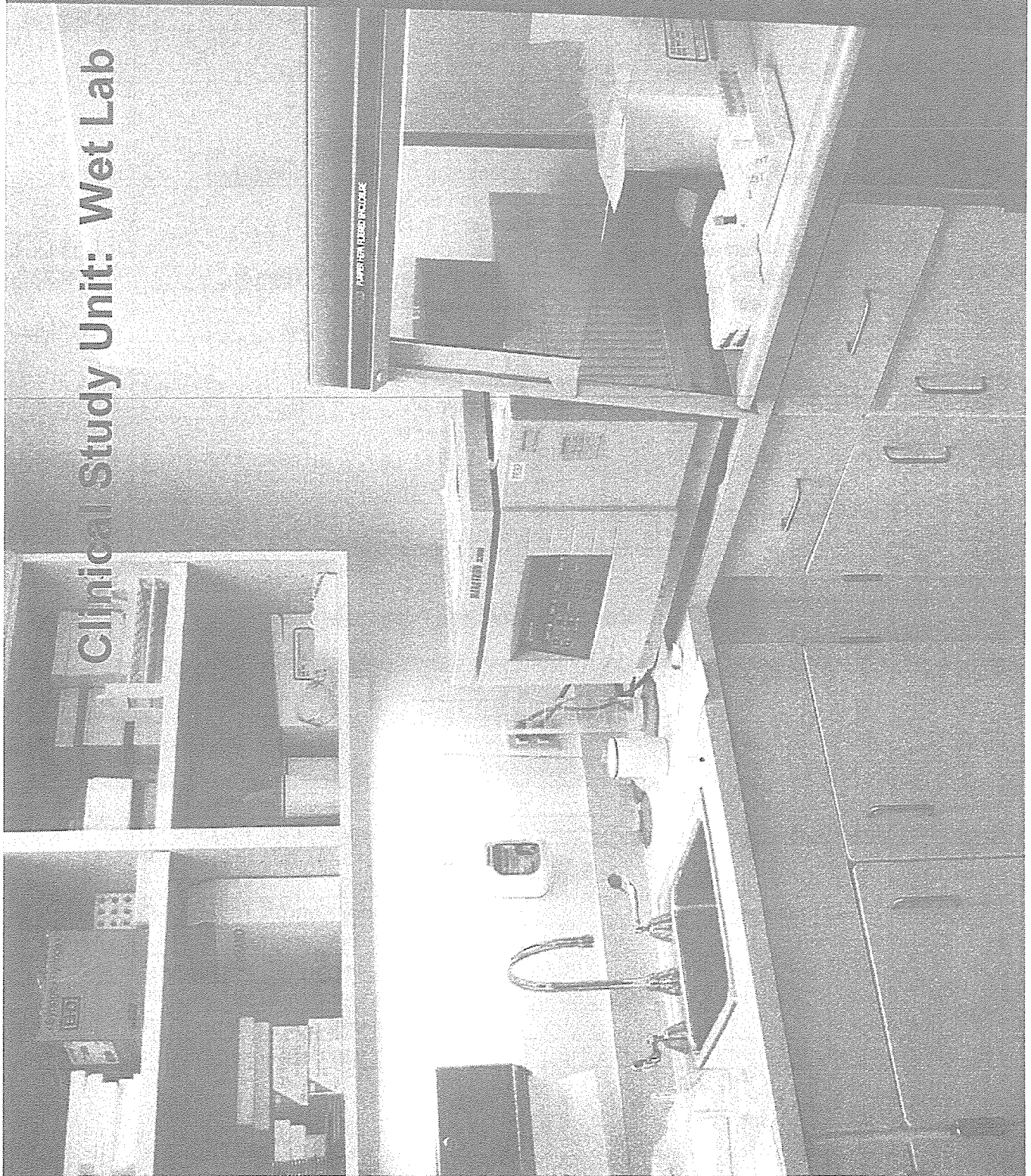


Table 3A Investigator Initiated Protocols

PID	Abbreviated Protocol Name	Study PI (if not Grant PI- indicate subspecialty)	Coordinating Center? If yes, indicate # of Non-PPRU sites	Funding
10368	Acetaminophen Overdose Pts	Laura James, M.D. (clinical toxicology)	No	Intramural
10369S	Acetaminophen Over Dose Toxicity	Laura James, M.D. (clinical toxicology)	No	NIH
10390	CYPs 1A2, 2D6, 3A4	J. Steven Leeder, Pharm.D., Ph.D. (clinical pharmacology)	Yes (2)	NIH
10606b	Pathogenesis of Adverse Drug Reactions - Phase 2	J. Steven Leeder, Pharm.D., Ph.D. (clinical pharmacology)	Yes (3)	NIH (1 U01 HD044239-4)
10688	Remicade in Acute Kawasaki Disease	Jane Burns, MD (infectious disease)	No	Pharmaceutical
10744	Histamine PG in Atopic Dermatitis	Mary Jayne Kennedy, PharmD (clinical pharmacology)	No	Intramural
10808	¹³ C Acetate Breath Test	Gregory Kearns, PharmD, PhD	Yes	NIH (PPRU)
10830	Pain treatment in pediatric sickle cell disease	Kathleen Neville, MD, MS (hematology/oncology)	Yes	NIH (K23)

Table 3B Sponsored Protocols

PID	Abbreviated Protocol Name	Study PI (if not Grant PI- indicate subspecialty)	Coordinating Center? Indicate # of Non-PPRU sites
10582	PK of Testosterone gel	Gregory Kearns, PharmD, PhD	Yes (5)
10764	Ropinirole PK in RLS	Gregory Kearns, PharmD, PhD	Yes (4)
10772	Numax in RSV	Hasan Jafri, MD (infectious disease)	No
10782	Montelukast tolerability	Gregory Kearns, PharmD, PhD	Yes (1)
10802	Olmesartan PK	Thomas Wells, MD	No
10804	Torcetrapib/Atorvastatin PK	Jim Connor, MD (Pediatrics)	No
10812	Pantoprazole sodium PK in GERD 334	John van den Anker, MD, PhD	No
10814	Daptomycin PK	Gregory Kearns, PharmD, PhD	Yes (0)
10818	Pantoprazole PK/PD in Infants 333	John van den Anker, MD, PhD	No

I) OVERALL SUMMARY OF PROTOCOLS**A) Summary of Program Productivity**

During the current report period, the PPRU at CMH remained productive in all requisite areas (see Specific Aims, previous page) of activity for the Network as outlined in RFA HD-03-001 and other guidances issued by NICHD program staff (Dr. George Giacoia). As reflected by enrollment data supplied by the CMH PPRU Data Coordinator (Ms. Azure Guidry) to the PPRU Network Operations Center (KAI), **a total of 92 subjects participated in PPRU Network studies from 01 November 2005 through 31 October 2006.** These subjects were participants in **a total of 17 PPRU Network studies, 8 of which were investigator-initiated and 9 of which were sponsored by pharmaceutical companies.** During the report period, a total of **11 studies had active enrollment, 6 of which were investigator-initiated and 6 of which were sponsored** by pharmaceutical companies. The PPRU at **CMH served as the Coordinating Center for 8 of the aforementioned investigations (47%), 4 of which were investigator initiated and 4 of which were sponsored.**

The following data tables contain information provided to the Principal Investigator by the PPRU Coordinating Center (KAI). They are included as required by guidance from the NICHD PPRU Program Officer in the fashion/format received.

All Protocols Active from November 1, 2005 – October 31, 2006

Table 1: Active Protocol Summary Information			
Protocols	# Sponsored Protocols	# Investigator-Initiated Protocols	Total Number
# of Protocols Participating	9	8	17
# of Protocols with Active Enrollment	6	6	11
# of Protocols as the Coordinating Center	4	4	8

Table 2: Protocol Enrollment Summary	
Total # of Patients Enrolled in Active Protocols from 11/1/04 to 10/31/05	Total = 92

Table 4A: Summary Enrollment of Investigator Initiated Protocols	
Total Number of Protocols:	Total = 8
Total Number of Protocols PI of grant is Lead?	Total = 1
Total # of Coordinating Center Protocols:	Total = 4
Total Screened:	Total = 63
Total Enrolled:	Total = 63

Table 4B: Summary Enrollment of Sponsored Protocols	
Total Number of Protocols:	Total = 9
Total Number of Protocols PI of grant is Lead?	Total = 4
Total # of Coordinating Center Protocols:	Total = 4
Total Screened:	Total = 29
Total Enrolled:	Total = 29

Table 5A: Number of Investigator Initiated Protocols	
# Of Protocols Solely Designed by Grant PI (provide documentation)	Total = 1
# Of Protocols Designed in Association with Other PPRU PI's	Total = 3
# Of Protocols the Grant PI Consulted the Sponsor on Protocol Design:	Total = 0
# Protocols the Grant PI Used the Protocol as Provided by the Sponsor:	Total = 0

Table 5B: Number of Sponsored Protocols	
# Of Protocols Solely Designed by Grant PI (provide documentation)	Total = 0
# Of Protocols Designed in Association with Other PPRU PI's	Total = 0
# Of Protocols the Grant PI Consulted the Sponsor on Protocol Design:	Total = 4
# Protocols the Grant PI Used the Protocol as Provided by the Sponsor:	Total = 0

Table 6A: Type of Investigator Initiated Protocols	
# of Pharmacokinetics Protocols	Total = 2
# of Pharmacokinetics-Pharmacodynamics Protocols	Total = 0
# of Pharmacokinetics-Pharmacogenetics Protocols	Total = 0
# of Pharmacokinetics and Safety and/or Efficacy Protocols	Total = 2
# of Safety and Efficacy Protocols	Total = 0
# of Bioavailability Protocols	Total = 0
# of Other Protocols (specify)	Total = 3

Table 6B: Type of Sponsored Protocols	
# of Pharmacokinetics Protocols	Total = 9
# of Pharmacokinetics-Pharmacodynamics Protocols	Total = 1
# of Pharmacokinetics-Pharmacogenetics Protocols	Total = 2
# of Pharmacokinetics and Safety and/or Efficacy Protocols	Total = 7
# of Safety and Efficacy Protocols	Total = 3
# of Bioavailability Protocols	Total = 0
# of Other Protocols (specify)	Total = 2

B) Research Activities

The PPRU at CMH participated in a wide variety of research activities during the report period of 01 November 2005 through 31 October 2006. These included investigator-initiated studies (n = 8), phase I-II clinical trials sponsored by pharmaceutical companies (n=9). The following sections of this progress report provide summary information on PPRU Network investigator-initiated protocols (section B1), a description of scientific relevance associated with those investigator-initiated protocols as they relate to specific PPRU interest areas (section B2) and a summary of particularly noteworthy scientific accomplishments associated with these protocols (section B3). **All information provided is consistent and complete in scope with the guidance document entitled "PPRU Network Non-Competing Continuation Application 2006" (dated 10/11/06)** which was supplied to PPRU principal investigators by NOC (KAI) and the PPRU Network Project Officer, Dr. George Giacoia.

B1) Network Investigator-Initiated Protocols

The eight investigator-initiated studies active in the PPRU at CMH during the report period are summarized in the following Table.

Protocol Number	Abbreviated Protocol Name	Study PI, if not grant PI, (subspecialty)	Coord. Center, if yes # non-PPRU sites	Designed by	Protocol Type	Funding Source(s)
10368	APAP Overdose	G. Wasserman, DO (Toxicology)	No	L. James, MD & other PPRU investigators	Translational	Intramural (PPRU)
10369s	APAP Overdose amendment	G. Wasserman, DO (Toxicology)	No	L. James, MD with PPRU input	Translational	Arkansas and Intramural
10390	Ontogeny of CYPs 1A2, 2D6, 3A4	J.S. Leeder, PharmD, PhD, (Clinical Pharmacology)	Yes, 0 non-PPRU sites	J.S. Leeder, PharmD, PhD	Translational	Intramural (PPRU)
10606b	Pathogenesis of Adverse Drug Reaction	S. Leeder, PharmD, PhD, (Clinical Pharmacology)	Yes, 0 non-PPRU sites	J.S. Leeder, PharmD, PhD	Translational	NIH (NICHD U01 cooperative agreement)
10688	Kawasaki Disease	M.A. Jackson, MD (Infectious Disease)	No	J. Burns, MD & PPRU investigators	PK, Safety	Company and intramural (PPRU)
10744	PG of Atopic Dermatitis	G. Kearns, PharmD, PhD	No	M. Kennedy, PharmD and G. Kearns, PharmD, PhD	Translational	Intramural (PPRU)
10808	13C Acetate Breath test	G. Kearns, PharmD, PhD	Yes, 0 non-PPRU sites	G. Kearns, PharmD, PhD	PK, safety, surrogate markers	Intramural (PPRU)
10830	Pain treatment in pediatric sickle cell disease	Kathleen Neville, MD, MS (Hematology / Oncology)	Yes, 0 non-PPRU sites	K.A. Neville, MD & G.L. Kearns, PhD	Translational	NHLBI (K23)

Complete summary information for each of the aforementioned investigator-initiated PPRU Network protocols is provided for each study in the following tables. ***Associated protocol number(s), titles, and***

Principal Investigator/Program Director (Last, First, Middle): Gregory L. Kearns, PharmD, PhD

- Continued a collaboration with PPRU (and associated) investigators at Baylor/Texas Children's Hospital (Drs. Lisa Bomgaars, Kenneth McClain), UT Southwestern (Drs. George Buchanan and Zora Rogers) and CMH (Drs. G. Kearns and Kathleen Neville) to create an ad hoc working group to study aspects of pain in Sickle Cell disease in response to the current PPRU initiative to develop a program project that will focus on the study of pain treatment in selected pediatric populations. To date, two conference calls of the Sickle Cell group have been held and two protocols are in development (one of them submitted by Dr. Neville on 01 October 2005 as an R21 grant application to NHLBI and simultaneously, to the PPRU Executive Committee for consideration).
- Served as a member of the NICHD BPCA Prioritization Committee and made a presentation concerning development of pralidoxime as an antidote in children at the July 2006 meeting.

III. PRESENTATIONS AT NATIONAL AND INTERNATIONAL MEETINGS

During the report period, key personnel of the PPRU at CMH delivered a total of eight invited scientific presentations relevant to the aims contained in RFA HD-003-01 at international, national, regional or local meetings of learned societies and investigative groups:

Abdel-Rahman SM. "Longitudinal scalp sampling and multi-locus genotyping reveal a persistent carrier state for *T. tonsurans*." Poster presentation at American Society for Microbiology 106th General Meeting in Orlando, FL. (May 2006)

Blake MJ, Abdel-Rahman SM, Pearce RE, Leeder SJ, Kearns GL. Effect of diet on the ontogeny of caffeine and dextromethorphan metabolism. Presented at the annual ASCPT meeting in Baltimore, March 10, 2006

Gaedigk A. Co-chair (co-organizer) of ASCPT workshop entitled: "Should we incorporate measures of individual genetic ancestry and population structure in the modern Pharmacogenomics-enabled clinical trial?" Presented at the annual ASCPT meeting in Baltimore, March 10, 2006

Gaedigk A. Selected, oral presentation: Novel CYP2D6 Gene Duplication Arrangements In African Americans. 14th North American ISSX meeting, Puerto Rico, Oct 2006.

Leeder JS. "Pediatric Pharmacogenetics and Developmental Pharmacogenomics" Resolutions 3 Advisory Panel Meeting, United States Pharmacopeia Annual Meeting, Denver, CO, Sept. 26-27, 2006.

Leeder JS. "Problem-Based Lecture: Importance of Pharmacogenetics in Neonates, Young Infants and Other Pediatric Populations" American College of Clinical Pharmacology 35th Annual Meeting, Boston, MA, Sept. 19, 2006.

Leeder JS. "Developmental Pharmacogenetics and -genomics: Why is this relevant to Drug Development?" 2006 Annual Meeting of the Pacific Rim Association for Clinical Pharmacogenetics and International Conference on Pharmacogenetics, Changsha, China, June 28-30, 2006.

Leeder JS. "Ontogeny of Drug Biotransformation and Pathogenesis of Pediatric ADRs". American Society of Pharmacology and Experimental Therapeutics Annual Meeting, San Francisco, CA, April 3, 2006.

Additionally, key personnel in the PPRU at CMH delivered a significant number of invited scientific lectures (n=16) to organizations and institutions in the U.S. and abroad during the report period. While many of these presentations may not be associated with specific PPRU Network protocols, they do reflect scientific objectives for the Network (contained in the aims of RFA HD-003-01) and most importantly, research activity by the PPRU (and Division of Pediatric Pharmacology and Medical Toxicology) at CMH. Given the central importance of the PPRU to the research program in Developmental and Pediatric Clinical Pharmacology at CMH, these invited lectures do, either directly or indirectly, represent the accomplishments of the PPRU Network and are considered as such. A summary of these presentations is as follows:

Kearns GL. Invited Speaker, presented at symposium on Pediatric Clinical Trials, 103rd annual meeting of the American Society for Clinical Pharmacology and Therapeutics entitled "What Have We Learned from Pediatric Clinical Trials - the Academic Perspective", Baltimore, MD 08 March 2006

Principal Investigator/Program Director (Last, First, Middle): Gregory L. Kearns, PharmD, PhD

- Kearns GL. Invited Lecturer, presented at the Clinical Research (K30 program) lecture series, University of Texas-Southwestern School of Medicine, entitled "Developmental Pharmacology: Why and How Children are Different", Dallas, TX; 08 February 2006
- Kearns GL. Invited Lecturer, presented at the Division of Pediatric Infectious Disease, University of Texas-Southwestern School of Medicine, entitled "Individualized Medicine: Promise, Purpose and Potential", Dallas, TX 08 February 2006
- Kearns GL. Invited Lecturer, presented at the Department of Family and Community Medicine Grand Rounds, St. Vincent's Regional Health Center entitled "Personalized Medicine: Hype or Hope", Erie, PA; 03 February 2006
- Kearns GL. Invited Lecturer, presented at the American Association of Clinical Chemistry, symposium on Individualized Medicine entitled "Individualized medicine in neurological disease: Purpose, potential and promise", Washington, D.C., 30 September 2005
- Kearns GL. Invited Lecturer, presented at the 3rd International Workshop on Pediatric Clinical Trials entitled "The American PPRU: what has been achieved?", Derby, England; 12 July 2005
- Kearns GL. Invited Lecturer, presented at Department of Pediatrics, University of Liverpool, entitled "Pharmacogenetics and Ontogeny: Determinants of Drug Disposition During Development", Liverpool, England; 14-15 July 2005
- Leeder JS. "Ontogeny of Drug Biotransformation and Adverse Drug Reactions in Children." University of Kansas Medical Center Liver Club, Department of Pharmacology, Toxicology and Therapeutics, Kansas City, KS, April 28, 2006.
- Leeder JS: "Prenatal Pharmacogenetics and the Promise of Developmental Pharmacogenomics". College of Pharmacy, Ohio State University, Columbus, OH, Jan. 18, 2006
- Abdel-Rahman SM. "Considerations in the Design and Conduct of Pediatric Clinical Trials". Presented at the Pharmaceutical Education and Research Institute (PERI) Pediatric Clinical Trials Meeting. Baltimore, MD (December 2005)
- Abdel-Rahman SM. "Problems and Pitfalls in Pediatric Clinical Pharmacology Research". Presented at the Children's Hospital of Pennsylvania (CHOP) Pharmacologic Basis of Pediatric Therapeutics Research Affinity Group Summer Symposium. Philadelphia, PA, July 18, 2006
- Gaedigk A. "Pharmacogenetics of CYP2D6, a major drug metabolizing enzyme". McGill University, Quebec Genome Project, Montreal, Canada. February 21, 2006
- Blake MJ. "Developmental and Dietary Determinants of Drug Metabolism in Infants". Department of Pharmacology and Toxicology, University of Louisville, Louisville, KY. July 27, 2006
- Kearns GL. "Child-friendly Clinical Trial Designs", 4th International Workshop on Paediatric Clinical Trials, Toronto, Ontario, Canada, September 28, 2006
- Kearns GL. "Ontogeny of Drug Metabolizing Enzymes, Transporters and Receptors in the Neonate", EMEA Workshop on Neonatal Clinical Pharmacology, London, England, October, 11, 2006
- Kearns GL. "Personalized Medicine in Pediatrics: Purpose, Promise and Potential". Pediatric Grand Rounds presentation, Department of Pediatrics, Erasmus University School of Medicine and Sophia Children's Hospital, Rotterdam, the Netherlands, October, 13 2006

IV. PUBLICATIONS

During the report period, a total of 15 peer-reviewed manuscripts representing original research associated with PPRU Network protocols and/or scientific objectives of the PPRU Network were published (or accepted for publication) by investigators directly associated with the PPRU Network at CMH. Ten of the total publications (67%) were directly associated with PPRU Network protocols and thus, were (in some measure) significantly supported by the PPRU cooperative agreement awarded to CMH.

Principal Investigator/Program Director (Last, First, Middle): Gregory L. Kearns, PharmD, PhD

Peer-Reviewed Original Research Associated with PPRU Network Protocols

- Gaedigk A, Gaedigk R, Leeder JS. CYP2D7 splice variants in human liver and brain: does CYP2D7 encode functional protein? *Biochem Biophys Res Commun* 2005;336:1241-50. PMID: 16169517 PMID: 16169517
- Findling RL, Nucci G, Danoff TM, Piergies AA, Gomeni R, Bartolic EI, Fong R, Carpenter DJ, Gaedigk A, Leeder JS. Multiple dose pharmacokinetics of paroxetine in children and adolescents with major depressive disorder or obsessive compulsive disorder. *Neuropsychopharmacology* 2006;31: 1274-1285 PMID: 16319918
- Gaedigk A, Baker DW, Totah RA, Gaedigk R, Pearce RE, Vyhldal CA, Zeldin DC, Leeder, JS. Variability of CYP2J2 expression in human fetal tissues. *J Pharmacol Exp Ther* 2006;(Jul 25) [epub ahead of print]. PMID: 16868033
- Vyhldal CA, Gaedigk R, Leeder JS. Nuclear Receptor expression in fetal and pediatric liver: correlation with CYP3A expression. *Drug Metab Dispos* 2006;34: 131-137 PMID: 16243958
- Knorr B, Maganti L, Ramakrishnan R, Tozzi CA, Migoya E, Kearns GL. Pharmacokinetics and safety of montelukast in children aged 3 to 6 months. *J Clin Pharmacol* 2006 Jun;46(6):620-7 PMID: 16707408
- Pearce R, Leeder JS, Kearns GL. In vitro biotransformation of fluticasone: a CYP3A substrate. *Drug Metab Dispos* 2006;34: 1035-40 PMID: 16565171
- Blake MJ, Abdel-Rahman SM, Pearce RE, Leeder SJ, Kearns GL. Effect of diet on the development of drug metabolism in healthy infants. *Pediatr Res* 2006; (in press).
- Blake MJ, Abdel-Rahman SM, Jacobs RF, Lowery NK, Sterling TR, Kearns GL. Pharmacokinetics of rifapentine in children. *Pediatric Infect Dis* 2006;25: 405-09 PMID: 16645503
- Berul CI, Ward RM, Kearns GL, Kerstens R, Robinson PK, van den Ouweland FA. Electrocardiographic observations in premature and term infants on cisapride therapy. *Paediatric and Perinatal Drug Therapy* 2006;7:77-88 (not indexed by PubMed)
- Abdel-Rahman SM, Simon S, Wright KJ, Ndjountche L, Gaedigk A. Tracking *Trichophyton tonsurans* through a large urban childcare center: defining infection prevalence and transmission patterns by molecular stain typing. (*Pediatrics* In Press)

Other Peer-Reviewed Original Research Publications Related to PPRU Program Objectives

- Bhathena A, Gaedigk R, Abdel-Rahman SM. Characterization of the *ALP1* gene locus of *Trichophyton tonsurans*. *Mycopathologia* 2005;160:265-72. PMID: 16244893
- Koren G, Cairns J, Chitayat D, Gaedigk A, Leeder JS. Pharmacogenetics of morphine poisoning in a breastfed neonate of a codeine-prescribed mother. *Lancet*. 2006 Aug 19;368(9536):704. No abstract available. PMID: 16920476
- Yeh RF, Gaver VE, Patterson KB, Rezk NL, Baxter-Meheux F, Blake MJ, Eron JJ, Klein CE, Rublein J, Kashuba ADM. Lopinavir/Ritonavir Induces the Hepatic Activity of Cytochrome P450 Enzymes (CYP) 2C9, CYP2C19, and CYP1A2, but Inhibits the Hepatic and Intestinal Activity of CYP3A as Measured by a Phenotyping Drug Cocktail in Healthy Volunteers. *J Acquir Immune Defic Syndr* 2006; Apr 24; [Epub ahead of print]. PMID: 16639344
- Friesen CA, Sandridge L, Andre L, Roberts CC, Abdel-Rahman SM. Mucosal eosinophilia and response to H1/H2 antagonist and cromolyn therapy in pediatric dyspepsia. *Clin Pediatr* 2006;45:143-7. PMID: 16528434
- Blowey DL, Warady BA, Abdel-Rahman SM, Frye RF, Manley H. Vancomycin disposition following intraperitoneal administration in children receiving peritoneal dialysis. *Perit Dial Int* (in press)

Principal Investigator/Program Director (Last, First, Middle): Gregory L. Kearns, PharmD, PhD

In addition to manuscripts published/accepted (ie., in press), faculty members associated with the PPRU at CMH have submitted an additional three manuscripts for consideration of publication in high impact scientific journals, two of which directly emanate from investigator-initiated, PPRU-sponsored original research:

Scientific Manuscripts Currently Submitted or in Revision

Blake MJ, Gaedigk A, Pearce RE, Bomgaars LR, Christensen ML, James LP, Kearns GL, Leeder JS. Ontogeny of dextromethorphan O- and N-demethylation in the first year of life. *Clin Pharmacol Ther* (submitted, October 2006)

Gaedigk R, Gaedigk A, Pearce RE, Schindel BP, Leeder JS. Characterization of alternative splicing and haplotype structure of CYP2A7-CYP3A1 in human fetal liver. *Pharmacogenet Genomics* (under revision, October 2006).

Lowe LH, Kearns GL, Wible JH Jr. The safety and efficacy of neuroimaging with gadoversetamide injection in pediatric patients. *Curr Med Res Opin* (revised manuscript submitted, October 2006)

V. INVOLVEMENT OF PEDIATRIC SUBSPECIALISTS

As illustrated by the protocol-specific information previously provided in this progress report for both investigator-initiated (see Sections B1 and B2) and pharmaceutical company sponsored (see Section C) PPRU Network protocols, a diverse group of pediatric generalists and sub-specialists served as key collaborators. A summary of the investigator-initiated, translational science protocols (protocol # and abbreviated title) conducted at CMH having a key sub-specialist co-investigator follows with the roles for a specific individual denoted:

Protocol #10368 and 10369s (Acetaminophen Overdose)

Sub-specialist Investigator and Discipline: Gary S. Wasserman, D.O. (Medical Toxicology)

Roles in Study: Service as site principal investigator, protocol review/revision, patient evaluation, review of data analysis and publication

Protocol #10688 (Kawasaki Disease)

Sub-specialist Investigator and Discipline: Mary Anne Jackson, M.D. (Infectious Disease)

Roles in Study: Service as the site principal investigator, protocol review/revision, patient evaluation, review of data analysis and publication

Protocol #10744 (Pharmacogenetics of Atopic Dermatitis)

Sub-specialist Investigators and Discipline: Amy J. Nopper, M.D. and Kim Hori, M.D. (Dermatology)

Roles in Study: Service as co-investigators, protocol review/revision, patient evaluation, review of data analysis and publication

Protocol #10808 (¹³C Acetate Breath Test)

Sub-specialist Investigator and Discipline: Craig Friesen, M.D. (Gastroenterology)

Roles in Study: Service as co-investigator, protocol design, patient evaluation and recruitment, review of data analysis and publication

Protocol #10830 (Pharmacogenetics of Codeine in Sickle Cell Disease)

Sub-specialist Investigator and Discipline: Kathleen A. Neville, M.D., M.S. (Hematology / Oncology)

Roles in Study: Service as principal investigator, protocol design, patient evaluation and recruitment, review of data analysis and publication

As with investigator-initiated studies, physician co-investigators from a variety of sub-specialty areas continue to play pivotal roles, enabling success of the phase I-II trial program in the PPRU at CMH. The roles played by these individuals are vital not simply from the perspective of patient identification but most importantly, by adding unique knowledge about the pathophysiology of the disease/condition for which the drug under study is ultimately intended. As well, their role related to medical oversight for a given study insures that only subjects who are truly suitable for enrollment are approached for study participation and also, that adverse event monitoring during the period of study occurs in an exemplary fashion with suitable expertise for the evaluation and treatment of any adverse event if necessary. A summary of the pharmaceutical company

Division of Clinical Pharmacology and Medical Toxicology
Subject/Parent/Guardian Satisfaction Questionnaire

Date _____ Subject Parent/guardian
 Study _____

If you would like someone to respond to your comments- please put your name on the survey.

Now that you have/your child has finished the study, please take a few minutes to complete the following questionnaire. We appreciate your/your child's participation in the study and your comments help us improve the research process.

I feel the study team (doctors and nurses) answered questions to my satisfaction?
 Yes No NA

Comments _____

I was comfortable asking the study team questions? Yes No

Comments _____

I feel the study team treated me with respect? Yes No

Comments _____

I feel the study team was concerned about my health and welfare? Yes No

Comments _____

If necessary, I was able to contact a member of the study team after hours if I had a question about the study? Yes No NA

Comments _____

The information I received about the study from discussions with the study team and the informed consent document was clear? Yes No

The information I received about the study from discussions with the study team and the informed consent was accurate? Yes No

Comments _____

The part of the study I liked best was? _____

The part of the study I liked least was? _____

What can we do to make the process better? _____

Would you/your child like to be in another study? Yes No

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

IRB # _____
 (Abbrev. Title) – Child

*THIS FORM IS TO BE USED FOR SUBJECTS 17 YRS OLD AND YOUNGER
 AN ADULT CONSENT FORM IS TO BE USED FOR SUBJECTS AGE 18 AND UP*

INFORMATION IN ITALICS IS INSTRUCTIONAL OR OPTIONAL AND MAY NOT NEED TO BE INCLUDED IN THE FINAL DOCUMENT. IF INCLUDED, REMOVE ITALICS.

Use wording consistent with a 5th to 8th grade reading level; simple words, short sentences, small paragraphs, etc.

**PARENTAL PERMISSION AND CHILD ASSENT TO PARTICIPATE IN A
 RESEARCH STUDY AT THE CHILDREN'S MERCY HOSPITAL AND AT TRUMAN MEDICAL CENTER**

(STUDY TITLE)

WHO IS DOING THIS STUDY?

List PI first, then others involved. Include the study coordinator. Other health care professionals may help them.

(Sponsor name) has contracted with The Children's Mercy Hospital to do this study. Data collected for this study will be shared with them. The study personnel will not receive any direct personal financial benefits as a result of your decision.

We are asking your child to be in this research study. Please read the information below and ask questions about anything that you do not understand before you make a decision.

WHY IS THIS STUDY BEING DONE?

The first paragraph should contain 3-4 sentences giving simple background information that would help a participant understand more about the study topic such as:

- *Description of current adult and/or pediatric use*
- *Results of previous studies*
- *State clearly if the study involves an investigational/experimental procedure, drug or device or therapy being used in a way for which it is not currently labeled.*
- *Do not copy scientific language directly from the protocol.*

Do not use "you/your child" in this section.

The purpose of this research study is *(information here should reflect objectives listed in the protocol)*

WHO CAN BE IN THIS STUDY?

We are asking your child to be in this study because he or she has *[include diagnosis or inclusion criteria in lay terms to explain why individual children are asked to be in study.]*

About (#) children will be in this study at (#) different places. About (#) children, ____ to ____ years old, will be asked to be in this study at The Children's Mercy Hospital.

WHAT WILL HAPPEN TO MY CHILD IN THIS STUDY?

Being in this study involves *(give brief study overview – taking an investigational medicine for (#, time), # clinic visits, # hour hospital stay, # follow-up visits over # months, etc.)* Each participant will be in this study for about # *(hrs, days, weeks, months, years)*

If you decide to let your child be in this study the following things will happen:

- *Describe all procedures and invasive techniques (Include duration of each visit. A chart of study visits/procedures is preferred.)*

**THIS FORM IS TO BE USED FOR SUBJECTS 17 YRS OLD AND YOUNGER
AN ADULT CONSENT FORM IS TO BE USED FOR SUBJECTS AGE 18 AND UP**

- *Specify how blood will be drawn, include amounts (in teaspoons) of blood drawn each time and the total for the study.*
- *Describe restrictions on normal activity/diet*
- *If relevant, the possibility of receiving placebo or other control interventions. Clearly describe randomization process.*
- *Be clear about what is routine vs. study only procedures.*

If applicable - As part of your child being in the study, you will be asked to (complete daily diaries, logs, give treatments/ medicines, and how much time is required) Tell the parent/guardian what they will have to do as part of the study)

If biologic samples are to be retained as part of the study, explain what they will be used for, where and how they will be stored, what identifiers will be maintained, and if the participant will be contacted prior to future use. For example: "Part of your child's blood sample will be frozen and saved by (the investigator/study sponsor) for (period of time). Your child's (name/study number/other identifiers) will be removed from the sample. DNA from the sample may be used in future studies of (name disease/drug metabolism, etc). Some new products might be developed and commercially sold because of results from research done on your child's samples. You and your child will not receive money or other compensation for use of these samples. You will not be informed about future use or results."

WHAT ARE THE RISKS OF THE STUDY?

There are certain risks in this study. These risks may include *(indicate severity and likelihood of all risks)*

If your child has any of these problems or changes in the way he or she feels, you should tell the investigator or other study personnel as soon as possible.

There may be risks we don't know about right now. We will tell you about any new information that might change your decision to keep your child in the study.

Optional information for pregnancy/breastfeeding risks – We don't know what effect (this drug/procedure) might have on a pregnant woman, an unborn baby, or a breastfeeding baby. Participants who could get pregnant or father a child should use birth control such as birth control pills or condoms, or not have sex. Girls who are breastfeeding a baby should not be in this study. If you think your child may have become pregnant or fathered a child while being in this study, please tell the study investigator or other study personnel.

WHAT ARE THE BENEFITS OF BEING IN THIS STUDY?

Individualize as appropriate –

There may be *no* direct benefit to your child from being in this study. Possible benefits may include ----- . By being in this study, your child may help children with ----- in the future.

WHAT ABOUT EXTRA COSTS?

Individualize as appropriate –

You will not have to pay anything extra if your child is in this study. (Study sponsor) will pay for ----- . You will still have to pay for all treatment that is not part of the study. These charges may include -----

*THIS FORM IS TO BE USED FOR SUBJECTS 17 YRS OLD AND YOUNGER
AN ADULT CONSENT FORM IS TO BE USED FOR SUBJECTS AGE 18 AND UP*

WHAT ABOUT CONFIDENTIALITY?

Your child has rights regarding the privacy and confidentiality of his or her health information. When health information includes identifiers (like names, addresses, phone numbers and social security numbers) that link it directly to an individual, it is called protected health information (PHI). Federal laws require that PHI be kept secure and private. In certain situations, federal law also requires that you approve of how your child's PHI is used or disclosed. A research study is one of those situations.

By signing this permission/assent form, you are permitting the following people to have access to your child's **medical record** and use your child's PHI for the research purposes described in this form:

- The research team, which includes the study personnel listed on this form and other persons involved in this study at The Children's Mercy Hospital
- The [insert name of cooperative study group or sponsor/CRO] and its designees;
- The Institutional Review Board at The Children's Mercy Hospital;
- Federal agencies such as the Office for Human Research Protections [add as appropriate other agencies such as the Food and Drug Administration, the National Cancer Institute and/or other National Institutes of Health offices]; and
- [insert name of any other person or agency as required; i.e., Other regulatory agencies involved with drug review and approval located in Europe or other countries]

Information about your child that is obtained during this study will be recorded in a research record. Information in the research record will be sent to the sponsor. This record will

[insert as appropriate

- include your child's name, home street address, telephone number, medical record number, hospital account number, insurance number, social security number, date of birth, dates of service, medical device number, fax number, email address, certificate/license numbers, vehicle identifier/license numbers, web or internet address, finger or voice prints, full face photographs, *or list other unique personal identifier*).
- include your child's study number without any unique personal identifiers.
- not identify your child.]

The research record is separate from your child's medical record. Information from your child's medical record may also be recorded in the research record. By signing this permission/assent form, you are allowing your child's information to be recorded in the research record. You are also permitting your child's research record to be shared with everyone listed above.

We will also keep a research file that stays in the [department] research office. That file may include documents that have your child's [insert as appropriate - name, home street address, telephone number, medical record number, hospital account number, insurance number, social security number, date of birth, dates of service, medical device number, fax number, email address, certificate/license numbers, vehicle identifier/license numbers, web or internet address, finger or voice prints, full face photographs, *or list other unique personal identifier*].

The persons and groups listed above are required by federal law or by contract to keep any PHI in your child's research record secure and private. While confidentiality cannot be guaranteed, it will be protected to the greatest extent possible. There also may be some situations where laws require the release of your child's PHI. If your child's PHI is shared with an organization that is not required to comply with federal privacy laws, your child's health information is no longer considered protected and may be used and shared freely by that organization.

*THIS FORM IS TO BE USED FOR SUBJECTS 17 YRS OLD AND YOUNGER
AN ADULT CONSENT FORM IS TO BE USED FOR SUBJECTS AGE 18 AND UP*

You may choose not to sign this permission/assent form and not have your child be in the study. You may cancel your permission to use and share your child's PHI at any time by contacting the study personnel listed on this form or The Children's Mercy Hospital Medical Records Correspondence Department in writing. If you cancel your permission, your child may no longer participate in this study. If you cancel your permission, no more information will be recorded in your child's research record for study purposes. Your child's PHI that has already been collected for the study may still be used, however. Unless you cancel your permission, your child's PHI may continue to be recorded and used until the study is finished. Some information about the study may be included in your child's medical record. Any study information recorded in your child's medical record will be kept there indefinitely. In the case of a side effect or bad event, your child's entire medical record may need to be reviewed. Unless stated elsewhere in this form, you may not have access to your child's research record or test results.

Results of this study may be made public. Your child will not be identified in any publications or presentations.

[All studies that include testing for pregnancy or recreational drug use must include the following statement: Under Missouri law, a minor (less than 18 years old) may have pregnancy and drug testing without parental permission. If the test results are negative, the fact that the test has been done and that the result is negative may not be released without the minor's permission. Because pregnancy and drug testing is being done as part of this study, this privacy protection is not possible. If participants do not want these test results shared, they should not enroll in the study.]

WHAT ARE THE ALTERNATIVES TO BEING IN THIS STUDY?

Instead of being in this study, your child may *have/be given/* -----
[note – if study does not involve treatment, the alternative is not to participate.]

WHAT WILL MY CHILD RECEIVE FOR BEING IN THIS STUDY?

(If no compensation or reimbursement is given, delete this section. When compensation is included the second paragraph is required. Make clear to whom (parent or child, or something to each) the payments will be made)

We will give your child --- for (each study visit, --- will be given for study visit #, which is longer, etc)

If the total value of compensation to your child from The Children's Mercy Hospital totals more than \$600 in any calendar year, the hospital must report this to the IRS on a Form 1099 with the recipient's social security number. You will receive a copy of this tax form. If you are a Children's Mercy Hospital employee, the amount you receive will be added to your W-2.

To reimburse you for (travel costs, meals, babysitting.....) you will receive \$\$ for each study visit.

WHAT ARE MY CHILD'S RIGHTS AS A STUDY PARTICIPANT?

Being in a research study is voluntary. Your child does not have to be in a study to receive care for *(his/her condition)*. If you choose not to have your child participate, there will be no penalty or loss of benefits to which your child is otherwise entitled.

You may withdraw your child from the study at any time without penalty or loss of benefits to which your child is otherwise entitled. *We will inform you of any new information that develops during this study. This information may affect your decision to keep your child in the study. If your child withdraws from the study, information and samples collected during the study before your child withdraws (will/will not) be (destroyed/kept/retain what*

*THIS FORM IS TO BE USED FOR SUBJECTS 17 YRS OLD AND YOUNGER
AN ADULT CONSENT FORM IS TO BE USED FOR SUBJECTS AGE 18 AND UP*

identifiers). (If samples are anonymized, state at what point in the study participants may still request they be destroyed.)

Withdrawal of your child may have consequences. Consequences might be -----.

The investigator(s), your child's doctor, or the sponsor may remove your child from the study at any time without your permission. Reasons this might happen are ----.

If you want to withdraw your child from this study or if your child is being removed from the study, your child will be asked to (come back for a final visit, which will include a blood draw, etc.; return all remaining study drug / devices, etc.)

WHO SHOULD I CALL IF I HAVE QUESTIONS OR PROBLEMS?

_____ is in charge of this study. You may call *him/her* at (816) 234-____ with questions at any time during the study. You may also call _____, the study coordinator, at (816) ###-#### with any questions you may have.

You should call Dr. _____ if you believe that your child has suffered injury of any kind or is sicker as a result of being in this research study.

You may also call the Chair of the Pediatric Institutional Review Board (IRB) at (816) 234-3879 with questions about injury or your child's rights as a research subject. The IRB is a group of people who review studies to protect the rights of research subjects.

SPONSOR AND INSTITUTIONAL RESPONSIBILITIES

Insert Sponsor Liability statement here

If your child is a patient at Children's Mercy Hospitals & Clinics:

It is not the policy of The Children's Mercy Hospital to compensate research participants if the research results in injury. The hospital will provide facilities and medical attention to participants if needed.

The following section in italics is only to be used when children are being enrolled at Truman Medical Center and at Children's Mercy Hospitals & Clinics:

If your child is a patient at Truman Medical Center:

Truman Medical Center (TMC) will provide medical attention to your child if he/she suffers any injury or harm as a direct result of participating in this research project. TMC, the study doctor, and the sponsor of this study will decide, in their discretion, who should pay for the medical care. TMC will provide treatment for your child in the event of any medical emergency while present at TMC, whatever the cause. Moreover, your child will have the benefit of the coverage of any existing health insurance you own. Participation in this research study does not take the place of routine physical examinations or clinic visits to your child's personal physician.

*THIS FORM IS TO BE USED FOR SUBJECTS 17 YRS OLD AND YOUNGER
AN ADULT CONSENT FORM IS TO BE USED FOR SUBJECTS AGE 18 AND UP*

PERMISSION OF PARENT OR LEGALLY AUTHORIZED REPRESENTATIVE

The purposes, procedures, and risks of this research study have been explained to me. I have had a chance to read this form and ask questions about the study. Any questions I had have been answered to my satisfaction. I give permission for _____ to participate in this research study. A copy of this signed form will be given to me.

Add if a category 3 (45 CFR 46.406) study: The Children's Mercy Hospital Pediatric Institutional Review Board is requesting that both parents' signatures be obtained on the permission/assent form. If two parents' signatures cannot reasonably be obtained, an explanation must be documented below

Signature of Parent/Legally Authorized Representative	Date	Relationship to Participant
---	------	-----------------------------

(Second signature required if more than minimal risk with no direct benefit)

Signature of Parent/ Legally Authorized Representative	Date	Relationship to Participant
--	------	-----------------------------

ASSENT OF MINOR

I have been told what I will be asked to do if I am in this study. I have been told that I don't have to be in this study. I may quit the study at any time, and no one will be mad at me. I have had a chance to discuss the study and ask questions. My questions have been answered. I agree to be in the study and do what I am asked to do so long as I continue in the study.

Signature of Minor

_____ Date

STUDY PERSONNEL

I have explained the purposes, procedures, and risks involved in this research study in detail to:

Print name(s) of Parents/ Legally Authorized Representative, and

_____, who in my opinion ___ IS / ___ IS NOT capable of assenting to participate in this study.

Print child's name

Signature of Person Obtaining Permission/Assent

_____ Date

(Add revision dates as they occur)

(form template revised 3/27/03; 11/11/03; 06/07/05, 11/17/05; 11/23/05, 10/31/06)