# The Rebecca Ava Rabinowitz Molecular Diagnostic Laboratory

Saving Babies' Lives Through Research, Diagnosis And Treatment

The Rebecca Ava Rabinowitz Molecular Diagnostic Laboratory is devoted to the development of new and improved diagnostic tests for infectious diseases afflicting babies and children in the United States and around the world. With assistance from a grant from the R Baby Foundation, the laboratory will utilize modern diagnostic research equipment and the employment of outstanding microbiologists at the University of Maryland School of Medicine in cooperation with engineers at the Ibis Division of Isis Pharmaceuticals.



in partnership with



Together, saving babies' lives

Est. August 24, 2007

## **About The Laboratory**

Physicians need a means to rapidly and comprehensively detect microorganisms causing serious infections in infants. Neonates in particular presenting non-specific symptoms risk serious illness or death, as doctors often must suspect a particular infection for a diagnosis to work. A test to be developed by the laboratory will allow clinicians to acquire a single sample of blood or spinal fluid, extract the genetic materials and inject it into a machine that identifies the genetic blueprint for diseasecausing organisms. This method will reveal the cause of the infection, greatly accelerating accurate diagnosis, intervention and treatment. The first generation test is projected to be available by the end of 2008.

### About R Baby Foundation

R Baby Foundation was established in 2006 to organize and fund efforts to improve the outcomes of medical care for infants, particularly those who contract certain viral infections within the first month of life. R Baby Foundation is dedicated to helping newborn babies with oftenmisunderstood viral infections and other infectious diseases receive the highest quality of care and service through supporting education, research, treatment, training and life-saving equipment.

## Too Many Babies Are Dying

Fact: 1 in 141 babies die each year in the U.S., and infants within the first 28 days of life are twice as likely to die than older babies.

**Fact:** There are approximately 20,000 newborn deaths within their first month of life and close to 30,000 within the first year.

**Fact:** Babies born in the U.S. are twice as likely to die than in other developed countries, with the U.S. ranking 36th among 196 nations in infant mortality rates.

Sources: Centers for Disease Control, WebMD and the World Health Organization

### Families And Babies Need Your Help Contribute - Volunteer - Educate

Learn more online: www.rbabyfoundation.org

Contact us: email: info@ rbabyfoundation.org phone: (973) 564-8611 Send donations to: PO Box 604 Short Hills, NJ 07078-0604

Make checks payable to R Baby Foundation Inc., or donate online. R Baby is a 501(c)(3) non-profit charitable organization.

## Our molecular tests focus on several viruses afflicting babies and children:

- Adenoviruses (respiratory and gastrointestinal) cause pneumonia, diarrhea, fever and disseminated severe infections. We have developed a quick method to detect adenoviruses, but this test needs to be integrated with others to be truly practical.
- **Caliciviruses** (gastrointestinal) cause severe and lethal diseases. We have already successfully developed a test that identifies many caliciviruses.
- **Enteroviruses** (gastrointestinal) induce a large number of severe illnesses. We plan to devise very efficient methods of screening for enteroviruses.
- Herpesviruses (cold sores), although highly treatable, can be devastating to infants, who often go undiagnosed for a week after symptoms appear. We plan to develop better diagnostics for herpesviruses.

