



The Baby Alex Foundation Annual Newsletter

Dear Friends,

Thank you for your support of The Baby Alex Foundation. In 2010, The Baby Alex Foundation raised over \$45,000 thanks to the generous contributions of our donors. These funds enabled the Foundation to award one \$30,000 and one \$15,000 grant for pediatric brain injury research.

The 2011 Grant Recipients:

1) Harvard Medical School and Children's Hospital Boston

Congratulations to Dr. Mirna Lechpammer, MD, Ph.D., who received a \$30,000 grant for her project, *PROGNOSTIC ROLE OF THE FMRP/MTOR SIGNALING PATHWAYS IN THE PATHOGENESIS OF ENCEPHALOPATHY OF PREMATURITY AND ITS NEUROCOGNITIVE SEQUELAE*. This research strives to understand encephalopathy of prematurity (EOP), a complex brain injury caused by a lack of blood/oxygen to the brain as a result of premature birth. The project will analyze the role of the fragile X mental retardation protein (FMRP) and the mammalian target of rapamycin (mTOR) and their role in the development of EOP. These signaling pathways are activated during brain injuries, including lack of blood/oxygen, and have recently been discovered to play a role in mental retardation and autism.

To understand when and how these pathways are turned on may bring about breakthroughs in the timing

of interventions, which would minimize the brain damage resulting from compromised oxygen supply in premature birth. This research will add significantly to the medical literature, has the potential for a huge impact on premies, and may even bring about greater understanding of mental retardation and autism.

2) Harvard Medical School and Children's Hospital Boston

The Foundation awarded a \$15,000 grant to continue research funded by the Foundation in 2010 to Dr. Tomo Tarui at Harvard Medical School and Children's Hospital Boston. The project, titled *EVOLUTION OF CEREBRAL DEVELOPMENT IN TWIN-TWIN TRANSFUSION SYNDROME*, aims to study the evolution of fetal brain injury resulting from Twin-Twin Transfusion Syndrome (TTTS) and its effect on normal brain development. TTTS is a disorder affecting identical twins from fetal life and has serious impacts on a baby's general health, resulting in high rates of morbidity and abnormal neurological function. The risk has not decreased despite improvements in obstetric and neonatal care. This project has the potential to make a large impact on children affected by TTTS, and to develop a powerful diagnostic technology applicable for any fetal brain pathology.

Dr. Tarui has been selected as a 2011 American Academy of Neurology and AAN Foundation

Clinical Research Training Fellow. This coveted award provides financial support for outstanding research in the field of neurology.

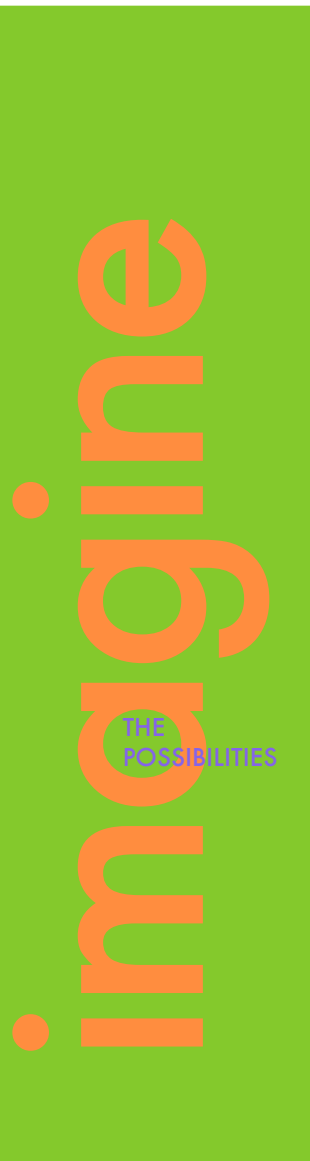
Please see the Foundation website for more information on these projects.

Team Baby Alex Foundation:

The team is composed of a dedicated group of competitors who believe in the power of sports to improve the cognitive and physical abilities of children with brain injuries. In 2011, members of our team raced in road races, triathlons and ultra distance races around the world, to include the inaugural Jerusalem Marathon and 10K.

If you have not yet allocated your gift giving for the year, please consider a tax-deductible donation to The Baby Alex Foundation. Donations may be made directly via the website at www.babyalexfoundation.com. The Foundation is run entirely on a volunteer basis, with no paid staff and minimal administrative costs. In 2010, 90% of the funds raised went directly to research.

Thank you for your support.
 Nicky, Erik and Alex



The Baby Alex Foundation is a 501(c)(3) non-profit charitable organization which supports the neurological health of children. In pursuit of that goal, the Foundation raises money to award grants to individuals and organizations engaged in pediatric brain injury research.

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www.babyalexfoundation.com