Cool Stuff from the Literature

• Remember the nightmare of having to learn the Kreb’s Cycle? Used for making ATP and energy, right? Well vascular endothelial cells instead use glycolysis for >85% of their energy. However, fatty acid oxidation is required to generate the carbon nucleotides backbone in proliferating endothelial cells. This requirement for fatty acids appears unique to endothelial cells, and blocking fatty acid oxidation can slow pathological angiogenesis in a retinopathy of prematurity model. (Nature|Article)

• Investigators have long debated the potential benefits of using fresh v. old blood for transfusions. A trial of >2400 critically ill adults requiring transfusion compared fresh blood (avg. 6 days old) to standard blood (avg. 22 days old). The study showed no differences in 90-day mortality or other outcomes. These negative findings are among the most important outcomes in recent critical care research. (NEJM|Article)

• Increased maternal age is linked to a higher incidence of congenital heart defects in offspring. But why? And can this risk be modified? In a provocative study that transplanted young ovaries into older mice (and vice versa), investigators showed that maternal age was more important than ovarian age. Genetics clearly play a role, as the incidence varied among different mouse strains. While diet did not affect risk, older females that exercised had lower rates of heart defects in their offspring. (Nature|Article)

Division of Neonatology Happenings

Congratulations to our colleague Shira L. Robbins, MD, Associate Clinical Professor in the Department of Ophthalmology at UCSD Hillcrest. Dr. Robbins has received a Hartwell Foundation Individual Biomedical Research award to study omega-3 fatty acids as a therapy for the prevention of retinopathy of prematurity. The award provides $100,000 in funding per year for three years. We look forward to working with Dr. Robbins on this great project!

Upcoming Seminars and Conferences

• Wednesday, April 15th Town Hall Meeting with the UCSD Human Research Protections Program (HRPP). An HRPP representative will address services, policies and procedures, specific guidance, and new innovations 12:00-1:30 Leichtag Building, Room 107 (Advanced Registration Requested, please contact Mallory or Kim for more info)
• Friday, April 17th Pediatric Grand Rounds “From Gene to Mechanisms and Treatment in Down Syndrome” Presented by William Mobley, MD, PhD (UCSD) 8:30-9:30 RCHSD MOB 113
• Find out about more seminars here

Grant Announcements & Funding Opportunities

E.W. “Al” Thrasher Awards - The purpose of these awards is to improve children’s health through medical research, with an emphasis on projects that have the potential to translate into clinically meaningful results within a few years. There is also a special category for new investigators: fellows or those who have completed their fellowship within one year prior to submission of the concept proposal. Submissions are due in September so now is the perfect time to start thinking about ideas. Mallory and Kim are both available to assist in proposal preparation!

For more on division research, seminars, workshops, and funding opportunities, Please visit here.

Info to share? Feedback or comments? Contact us here and let us know.