Cool Stuff from the Literature

- **Rethinking the Tree of Life.** As it turns out, our DNA is not entirely inherited from our ancestors. A recent study in *Genome Biology* suggests that many genes in our genome actually come from other species. Horizontal Gene Transfer (HGT) appears to occur in all organisms and appears to involve genes primarily related to metabolism.
  - “Expression of multiple horizontally acquired genes is a hallmark of both vertebrate and invertebrate genomes” (read more)
  - “Humans may harbor more than 100 genes from other organisms” (read more)

- **The Premature Brain at Age 30.** Several studies have suggested that extremely preterm infants may have reduced incidence of risk taking behaviors into adulthood. A recent paper in *Pediatrics* studying adults born weighing <1000 g finds reduced rates of alcoholism and substance abuse but also reports an increase in psychiatric disorders. Interestingly, exposure to antenatal steroids increased the psychiatric disorder incidence. So while steroids have clearly improved short-term survival and outcomes, their potential effects on brain development cannot be ignored. (read more)

- **Identifying Causes of Developmental Delay.** Many children with severe developmental delay likely have genetic causes of their disability but without clearly identified gene mutations. A recent study of over 1000 children in the UK with severe disability has uncovered a number of new gene mutations that likely explain the molecular basis for their disease. (read more)

Division of Neonatology Happenings

One of our more famous recent NICU graduates (sort of) just celebrated her first birthday. Find a great article on our favorite western lowland gorilla Joanne and a birthday video from the San Diego Zoo and Safari Park in the below links. A special thanks to Mark Greenberg, Dawn Reeves, the many NICU and Burn Unit nurses who volunteered their time and the amazing veterinary team at the Safari Park. (read more; see video)

Upcoming Seminars and Conferences

**Thursday, March 19, 2015 (4pm)**—“Better Systems for our Systems: Engineering Biotherapeutics through Systems Biology” by Nathan Lewis, PhD (Assistant Professor Pediatrics, UCSD), Location: Skaggs School of Pharm & Pharmaceutical Sci. Rm1120

**Thursday, March 19, 2015 (4pm)**—March of Dimes Lecture by Jennifer Lippincott-Schwartz, PhD (NICHD, Chief Section of Organelle Biology), Location: Conrad T. Prebys Auditorium

**Friday, March 20, 2015 (8:30am)**—Pediatric Grand Rounds “Solving Pascal’s Dilemma: Genes for Arrhythmias of Heart and Brain” by Jeffrey Noebels MD, PhD (Baylor College of Medicine, Department of Neurology), Location: RCHSD MOB Rm 113

Find out about more seminars here.

Grant Announcements & Funding Opportunities

**March of Dimes Research Grants**

- The Prematurity Research Initiative (PRI) is a special program dedicated to grant support for projects related to causes of prematurity. Awards vary. **Deadline for LOI is 4/15/2015.** (more details)

- The general March of Dimes research portfolio funds many different areas of research on topics related to our mission to prevent birth defects, premature birth and infant mortality. Awards vary. **Deadline for LOI is 4/30/2015.** (more details)

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.