Pediatric Grand Rounds

FRIDAY, NOVEMBER 10, 2017
8:00am:  Basic Science, Room 502
Topic:  “Burnout and Psychological Resilience in Healthcare”
Speaker:  Gautham Suresh, MD, DM, MS, FAAP
Professor of Pediatrics
Baylor College of Medicine
Section Head and Service Chief of Neonatology
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For an appointment with a physician, please call: (843) 876-0444

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What can we do to encourage Pediatric Research?

In reviewing recent articles written by MUSC child-health related faculty we discovered a short article in the Journal of Pediatrics co-authored by Phyllis Dennery, Pediatric Chair at Brown, and Rita Ryan, Professor of Pediatrics here at MUSC. The article is titled, “Pursuing Research Careers in Pediatrics:  Hope Springs Eternal”

NIH “paylines” (the percentile at which those below will have their NIH grant funded) for most of the NIH institutes remain low and so some have become discouraged about research funding in general, including those who mentor and develop future pediatric physician-scientists. Thus the “pipeline” of physician-scientists has been shrinking. However, we wish to share some new areas of excitement that are particularly relevant for pediatrics.

The big one, “Developmental Origins of Adult Disease,” has now truly come of age. With its origins in England from Dr. David Barker, and studies from the Dutch “famine” during the World War II blockade of Holland, we know that impaired nutrition during different trimesters affects the fetus in some ways that then determine later metabolic, cardiac and other outcomes in adults. The NIH has initiated a new program, “Environmental Influences on Child Health Outcomes,” or “ECHO.” The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) has already awarded $144 million in new grants for this program.

MUSC Pediatrics was able to take advantage of this new program in two ways – see boxes below for more information.

ISPCTN grant – Dr. Andy Atz, Chairman
Dr. Atz is one of three Principal Investigators on a statewide IDEa States Pediatric Clinical Trials Network (ISPCTN) grant. The ISPCTN is one arm of the ECHO project that is designed to support pediatric research infrastructure in historically under-supported and rural states such as South Carolina.

ECHO grant – Dr. Sarah Taylor, Neonatology
Dr. Taylor serves as Co-Investigator on a grant built on the previous National Fetal Growth Study led by Dr. Roger Newman in MUSC Maternal Fetal Medicine. The current study, Environmental Contributors to Child Health Originating from National Fetal Growth Study (ECCHO-NFGS) will evaluate how fetal exposures and growth are related to childhood outcomes.

The inclusion of children in clinical trials will also provide additional opportunity for those interested in clinical research of pediatric drug efficacy, side effects and/or pharmacokinetics. Many of the drugs we use every day clinically are not officially “approved” for use in children and we have sometimes erred when we have extrapolated adult dosing to children, or child dosing to neonates, or term infant dosing to premature infants.

We know that our legislators recognize that without medical research we would not have as healthy a population as we do. We have learned that “Implementation Science” is critical—even after we have shown in a clinical research study that Treatment A is better than Treatment B, what good does that do if Treatment A is not being used in one hospital or another or one part of the country but not in another? However, we cannot lose sight that there will be no new Treatments A or B if we do not support basic research as well. MUSC physicians who study child health include all of the “T1 – T4” Spectrum of Translational Research (figure above from https://catalyst.harvard.edu/pathfinder/t1detail.html.)

For those who would like to read the full article by Dennery and Ryan, it will be published soon in Journal of Pediatrics but in the meantime is available online, http://www.jpeds.com/article/S0022-3476(17)30510-3/fulltext.

For those who want to support child health-related research, please plan to visit MUSC on April 13, 2018 for the 11th Darby Children’s Research Day, when our theme will be Pediatric Brain Injury and Recovery, chaired by Dr. Ramin Eskandari, Pediatric Neurosurgery.