

## **KUH Interagency Coordinating Committee (KUHICC) Meeting May 19, 2003**

*Chaired by the Director, Division of Kidney, Urologic, and Hematologic Diseases of the National Institute of Diabetes and Digestive and Kidney Diseases, the KUHICC encourages cooperation, communication, and collaboration among all Federal agencies involved in kidney, urology, and hematology research and other activities. Members of the committee share information and advice about ongoing, new, and planned activities and identify potential areas of collaboration.*

**Members Present:** Dr. Josephine Briggs, NIDDK, chair; Dr. Winnie Barouch, NHLBI; Dr. Tracie Rankin, NICHD; Dr. Cheryl Marks, NCI; Dr. Jukka Korpela, NIAID; Dr. Steven Fox, AHRQ; Dr. Chris Lee, NIEHS; Dr. Emmeline Edwards, NINDS; Dr. Marva Moxey-Mims, NIDDK; Dr. Hector Herrera, FDA.

**Guests:** Dr. Gail Pearson, NHLBI; Dr. Lynn Haverkos, NICHD; Dr. Roslyn Mannon, NIDDK; Dr. Christopher Mullins, NIDDK; Dr. Catherine Myers, NIDDK; Dr. Robert Star, NIDDK; Dr. Stuart Howards, NIDDK.

**Guest Speakers:** William Harmon, M.D., Director, Pediatric Nephrology, Children's Hospital, Boston; Anthony Atala, M.D., Professor of Surgery, Director, Laboratory for Tissue Engineering and Cellular Therapeutics, Children's Hospital of Boston, Harvard Medical School

### **Introduction**

Dr. Josephine Briggs, chair of the Kidney, Urologic, and Hematologic Interagency Coordinating Committee and director of NIDDK's Division of Kidney, Urologic, and Hematologic Diseases welcomed members and guests and noted that today's meeting would emphasize pediatric issues of the kidney and lower urinary tract. Dr. Briggs introduced the first guest speaker, Dr. William Harmon, who is Director of Pediatric Nephrology at Children's Hospital, Boston, and also current president of the American Society for Transplantation. Dr. Briggs noted that transplantation of solid organs is of joint interest for NIDDK and NIAID. Although there is some overlap in areas of interest, NIDDK is interested in the issues surrounding chronic rejection, particularly the non-immunologic mechanisms. NIAID has a somewhat larger kidney transplant program, she said, which has a focus on the immunologic mechanisms of rejection and tolerance induction. Following Dr. Harmon's presentation, Dr. Briggs introduced Dr. Anthony Atala, who is a pediatric urologist at Children's Hospital of Boston and director of the Laboratory of Tissue Engineering and Cell Therapeutics at Harvard Medical School.

### **Presentations**

Dr. Harmon's presentation addressed the current and future challenges for improvement of kidney transplantation in children and adolescents. Dr. Atala, spoke about his lab's

research in tissue engineering, stem cells, and cloning and their current and future applications for regenerative medicine. Dr. Harmon's and Dr. Atala's presentations are attached.

### **Around the Table**

Dr. Josephine Briggs, asked members of the committee and guests to share information about areas of kidney and urologic disease research that are active in their institute's programs, especially those areas that relate to children.

*Dr. Rankin, NICHD:* The Institute of Child Health and Human Development has some RO1s for research on molecular mechanisms of cryptorchidism and K23s for pediatric urology centers. She noted that NICHD does not have a large pediatric urology program. Their general urology program focuses on male fertility and infertility.

*Dr. Moxey-Mims, NIDDK:* KUH pediatric initiatives include a clinical trial of therapies for steroid-resistant focal glomerulosclerosis (FSGS) and a Prospective Study of chronic kidney disease (CKD) in children. The FSGS trial will compare treatment with cyclosporine A versus combined therapy of mycophenolate mofetil and oral dexamethasone pulses. Next week the FSGS trial protocol will be presented to the External Advisory Committee and enrollment is expected to start November 1. Applications for the CKD in Children trial will be reviewed in early July. Although other NIDDK initiatives are not specific to pediatrics, Dr. Moxey-Mims said that there will most likely be pediatric applications for the program announcements for Ancillary Studies for Kidney Disease and Research Grants for Clinical Studies in Kidney Disease. There is an O'Brien Kidney Center that includes a pediatric program and there are separate Centers of Excellence in Pediatric Nephrology programs. Dr. Moxey-Mims also mentioned that a task force meeting was held May 18 to discuss the potential for a clinical trial on vesicoureteral reflux in children.

*Dr. Howards, NIDDK:* Dr. Howards, who is a member of the Vesicoureteral Reflux Task Force, gave a summary of the task force's first meeting. Members discussed the standard practice of giving prophylactic antibiotics to children with reflux and whether or not a placebo-controlled trial would yield some valuable information. They also discussed possible protocols and parameters for such a trial and concluded that it is possible to conduct one. The members agreed that newborns or very young children should not go without antibiotic prophylaxis until it is well documented that this is not a problem. Some task force members felt that some of the higher grade refluxes should not be enrolled. They also discussed when more aggressive intervention such as open surgical repair should be used and whether or not the FDA-approved injection therapy agent, Deflux should be used preemptively. Deflux is less effective than surgery, but is less invasive and can be done in 30 minutes as a cystoscopic procedure. Patients are able to return to normal activities the next day.

*Dr. Meyers, NIDDK:* Dr. Meyers discussed the division's expanding inventory of clinical studies in kidney disease. Data in the USRDS reveal a dearth of clinical trials that study adults and children with ESRD, acute renal failure, and chronic allograft nephropathy. Consequently, the NIDDK has issued a program announcement soliciting applications from independent investigators for R21 and combined R21 and R33 funding mechanisms that will support the exploratory and developmental phases of clinical trials.

*Dr. Briggs, NIDDK:* The NIDDK is also in the process of funding its own data and specimen repositories and is working with its U01 consortia to get a buy-in for making specimens and data more widely available.

*Dr. Mullins, NIDDK:* The NIDDK has issued a program announcement (PA) for Basic and Clinical Studies in Congenital Urinary Tract Obstruction. NIDDK urology programs have had a busy year initiating and continuing translational studies and basic science studies that address a wide variety of diseases and processes, including benign prostatic hyperplasia (BPH) and interstitial cystitis. The NIDDK anticipates that these studies will elucidate important clinical and basic science findings that will be applied to people of all ages. Clinical studies include Minimally Invasive Treatment of BPH (MIST), Complementary and Alternative Medicine of Urological Symptoms (CAMUS), Urinary Incontinence Trial Network (UITN), Interstitial Cystitis Treatment Group (ICTG), Chronic Prostatitis Treatment Network (CPTN), Medical Therapy of Prostate Symptoms (MTOPS), and the Boston Area Community Health Survey (BACH). Basic science studies include the MTOPS Prostate Samples Analysis Consortium (MPSA), IC and Basic Biology of the Bladder, and a PAR for Development of Cell Selective Tools for the Prostate and GU Tract. In addition, the urology program is currently writing PAs for Basic Research on the Bladder and Lower Urinary Tract and HIV in Semen. The NIDDK also funds Genome Anatomy Projects (GAPS) on Stem Cells of the Bladder and Prostate. NIDDK has also had a number of meetings, including one for a Murine Atlas of the Developing Genitourinary Tract. So far, two workshops are scheduled for Fall 2003: Urologic Complications of Diabetes and Research Insights into Interstitial Cystitis.

*Dr. Pearson, NHLBI:* The institute has one K23 on cardiovascular complications in adolescents with ESRD who are undergoing dialysis. The institute is beginning internal plans to reconsider the pediatric hypertension guidelines.

*Dr. Barouch, NHLBI:* Her division in the has a second-year RFA on the Susceptibility of Target Organs to Damage from High Blood Pressure and a soon-to-be-released PA on the Development of a Diagnostic Screening Test for Salt Sensitivity, which is co-sponsored by the NIDDK. The PA invites grant applications for SBIRs and STTRs to develop a noninvasive or minimally invasive rapid and practical diagnostic test for salt sensitivity. Ideally, this test would be low-cost and administered on an out-patient basis and would correlate with long-term changes in blood pressure.

*Dr. Fox, AHRQ:* Has published a paper on a study of prostate cancer and PSA screening. The study looked at men diagnosed with prostate cancer in two regions: Seattle,

Washington and Connecticut. Seattle adopted PSA screening earlier than Connecticut. Seattle had an upsurge in diagnosis and surgery at the time, but there was no difference in survival rates between the two regions over 10 years.

*Dr. Marks, NCI:* NCI has increased the number of SPORE programs for prostate cancer. The institute convened a bladder and kidney cancer progress review group (PRG), which strongly recommended that NCI augment the SPORE programs with kidney and bladder SPOREs. NCI is also encouraging its community of researchers to increase applications for basic science studies of the bladder and kidney. NCI has established a pediatric consortium and an RFP will be issued soon on pediatric testing. Various pharmaceutical companies have agreed to supply drugs and universities have agreed to participate in testing. Dr. Marks' program, which develops mouse models of cancers, will be using engineered strains they have developed for pediatric malignancies. Dr. Marks said that NCI has collaborated successfully with other institutes and would be pleased to work with NIDDK on kidney and bladder studies as well.

*Dr. Korpela, NIAID:* NIAID is conducting a study of uropathogenic *E. coli* and the regulatory mechanisms of pili and a study of the cytomegalovirus associated with transplants.

*Dr. Herrera, FDA:* The FDA is reviewing new bulking agents for grades II to III vesicoureteral reflux, more intraurethral devices for the treatment of BPH, electrostimulation device for menigomyelocele and urinary incontinence, and intravesical therapy for interstitial cystitis.