

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

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|---|---------------|---|--------------|----------------------|
| NAME Barbara A. Fivush | | POSITION TITLE Professor of Pediatrics | | |
| eRA COMMONS USER NAME | | Division Chief Pediatric Nephrology Johns Hopkins University | | |
| EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i> | | | | |
| INSTITUTION AND LOCATION | | DEGREE <i>(if applicable)</i> | YEAR(s) | FIELD OF STUDY |
| Boston University | Boston, MA | M.D. | 1974 to 1978 | Medicine |
| Johns Hopkins Hospital | Baltimore, MD | M.D. | 1978 to 1981 | Pediatrics |
| Johns Hopkins Hospital | Baltimore, MD | M.D. | 1981 to 1983 | Pediatric Nephrology |

NOTE: The Biographical Sketch may not exceed four pages. Items A and B (together) may not exceed two of the four-page limit. Follow the formats and instructions on the attached sample.

Positions

1984 to 1991 **Assistant Professor of Pediatrics**, Johns Hopkins University School of Medicine, Baltimore, MD
 1987 to 2001 **Medical Director**, Pediatric Dialysis Unit, Johns Hopkins Hospital, Baltimore, MD
 1987 to 2001 **Medical Director**, Pediatric Renal Transplant Program, Johns Hopkins Hospital, Baltimore, MD
 1991 to present **Associate Professor**, Johns Hopkins University School of Medicine, Baltimore, MD
 1992 to 2001 **Medical Director**, Harriet Lane Kidney Center, Johns Hopkins Hospital, Baltimore, MD
 1993 to present **Division Chief**, Pediatric Nephrology, Johns Hopkins University School of Medicine, Baltimore, MD
 2001 to present **Professor**, Pediatrics, Johns Hopkins University School of Medicine, Baltimore, MD
 2003 to present **Co-Director**, Women's Leadership Council, Johns Hopkins University School of Medicine, Baltimore, MD

Honors

2000 Family Focus, National Kidney Foundation's Patient Newsletter, Pediatric Editor
 2000 Johns Hopkins School of Medicine Leadership Development Program
 2002 Listed in Top Doctors in Baltimore, Baltimore, MD 2002
 2003 Alexander Schaffer, Clinical Teaching Award, Given by Harriet Lane Housestaff, Johns Hopkins University
 2003 Johns Hopkins University, Women's Academic Leadership Course
 2003 Listed in Top Pediatricians in Maryland, Baltimore Magazine, 2003
 2004 AAMC-Women Faculty Professional Development Seminar
 2004 American Society of Pediatric Nephrology-Certificate of Appreciation
 2005 Honored at 100 Women Professors Event
 2005 American Board of Pediatric Certificate of Appreciation
 2006 Johns Hopkins University Leadership Foundation Course
 2007 Visiting Professor/ Fudan University/ Shanghai, China

Public Advisory Committee

1999 NIH Task Force, Future Direction of Pediatric Nephrology
 2000 RPA/Forum/NPSF, Renal Physicians Association/Forum of ESRD Networks/National Patient Safety Foundation
 ESRD Patient Safety Initiative
 2002 NIH Task Force, Chronic Kidney Disease in Children
 2004 Center for Medicare & Medicaid Centers-Technical Expert Panel
 2004 IOM-Advisory Panel on Post Market Surveillance of Pediatric Medical Devices
 2004-2005 NIH-National Kidney Disease Education Program
 2006 CMS-Center for Medicaid and Medicare Beneficiary Services
 Technical Expert Panel
 Medicare Part D, Medications Measures Project.

Peer Review Articles

Furth SL, Hwang W, Yang C, Neu AM, Fivush BA, Powe NR. Growth Failure, Risk of Hospitalization and Death for Children with End Stage Renal Disease. *Pediatric Nephrology* 17(5):450-455, 2002.

Furth SL, Hogg RJ, Tarver J, Moulton LH, Chang C, Fivush BA. Varicella Vaccination in Children with Chronic Renal Failure: A Report of the Southwest Pediatric Nephrology Study Group. *Pediatric Nephrology* 18:33-38, 2003.

Principal Investigator/Program Director (Last, First, Middle): **PI Name: Fivush, Barbara A**

- Furth SL, Hwang W, Yang C, Neu AM, Fivush BA, Powe NR. The Effects of Patient Compliance, Parental Education and Race on Nephrologists' Recommendations for Kidney Transplantation in children. *American Journal of Transplantation* 3:28-34, 2003.
- Furth SL, Arbus G, Tarver J, Hogg Ro, Chang C, Fivush BA. Varicella Vaccination in Children with Nephrotic Syndrome: A Report of the Southwest Pediatric Nephrology Study Group. *Journal of Pediatrics* 142:145-148, 2003.
- Neu AM, Ho PL, Fine RN, Furth SL, Fivush BA. Tacrolimus versus Cyclosporine A as Primary Immunosuppression in Pediatric Renal Transplantation: A NAPRTCS Study. *Pediatric Transplantation* 7:2147-222, 2003.
- Frankenfield DL, Neu AM, Warady BA, Fivush BA, Johnson CA, Brem AS. Anemia in Pediatric Hemodialysis Patients: Results from the 2001 ESRD CPM Project. *Kidney International*, 64, 1120-1124,2003.
- Neu AM, Fivush BA, Warady BA, Watkins SL, Friedman AL, Brem AS, Goldstein S and Frankenfield DL. Longitudinal Analysis of Adolescent Hemodialysis Patients: Results from the 2001 ESRD Clinical Performance Measures (CPM) Project. *Pediatric Nephrology* 18(11):1172-1176, 2003.
- Warady BA, Ellis EN, Fivush BA, Lum GM, Alexander SR, Brewer ED, Kohaut EC, Watkins SL. "Flush Before Fill" in Children Receiving Automated Peritoneal Dialysis. *Peritoneal Dialysis International* 23, 493-498, 2003.
- Fadowski JJ, Furth SL, Fivush BA. Association Between Age, Dialysis Modality and Anemia in Pediatric Dialysis Patients in ESRD Network 5. *Pediatric Nephrology* 19 (9), 1029-1034, 2004.
- Gerson AC, Futh SL, Neu AM, Fivush BA. Assessing Associations Between Medication Adherence and Psychosocial Variables in Pediatric Kidney Transplant Recipients and Their Families. *Pediatric Transplantation* 8, 543-550, 2004.
- Gerson AC, Hwang W, Fiorenza J, Barth K, Kaskel F, Weiss L, Zelikovsky N, Fivush B, Furth S. Anemia and Health-Related Quality of Life in Adolescents with Chronic Kidney Disease. *American Journal Kidney Disease* 44(6):1017-1023, 2004.
- Neu AM, Bedinger M, Fivush BA, Warady BA, Watkins SL, Friedman AL, Brem AS, Goldstein SL, Frankenfield DL. Growth in Adolescent Hemodialysis Patients- Data from the Centers for Medicare & Medicaid Services ESRD Clinical Performance Measures Project. *Pediatric Nephrology* 20(7):1156-1160, 2005.
- Gerson AC, Pham N, Fiorenza J, Robertson J, Weiss R, Chandra M. Trachtman H, Riley A, Fivush B, Furth S. Assessing Health Status and Health Care Utilization in Adolescents with Chronic Kidney Disease. *Journal of the American society of Nephrology* 16(5):1427-1432, 2005.
- Parekh R, Zhang L, Fivush B, Klag MJ. Incidence of Atherosclerosis by Race in the Dialysis Morbidity and Mortality Study (DMMS): A Sample of the US ESRD Population. *Journal of the American Society of Nephrology* 16:1420-1426, 2005.
- Andreoli SP, Brewer ED, Watkins S, Fivush B, Powe N, Shevchek J, Foreman J. American Society of Pediatric Nephrology Position Paper on Linking Reimbursement to Quality of Care. *Journal of the American Society of Nephrology* 16:2265-2269, 2005.
- Gorman G, Fivush B, Frankenfield D, Warady B, Watkins S, Brem A, Neu A. Short Stature and Growth Hormone Use in Pediatric Hemodialysis Patients. *Pediatric Nephrology* 20(12): 1794-1800,2005.
- Fadowski JJ, Frankenfield DL, Friedman AL, Warady BA, Neu AM, Fivush BA. Impact of Specialization of Primary Nephrologist on the Care of Pediatric Hemodialysis Patients. *American Journal of Kidney Disease* 47(1):115-121, 2006.
- Gorman G, Furth S, Hwang W, Parekh R, Astor B, Fivush B, Frankenfield D, Neu A. Clinical Outcomes and Dialysis Adequacy in Adolescent Hemodialysis Patients. *American Journal of Kidney Disease* 47(2) 285-93,2006.
- Frankenfield DL, Atkinson MA, Fivush BA, Neu AM. Outcomes for Adolescent Hispanic Hemodialysis Patients: Findings from the ESRD Clinical Performance Measures (CPM) Project. *American Journal of Kidney Disease* 47(5): 820-878, 2006.
- Goldstein SL, Brem A, Warady B, Fivush B, Frankenfield D. Comparison of Single-Pool (sp) and Equilibrated (e) Kt/V in Pediatric Patients Receiving Maintenance Hemodialysis (HD): A Report From CMS's CPM Project. *Pediatric Nephrology*, 21(8):1161-1166, 2006.
- Amaral S, Hwang W, Fivush B, Neu A, Frankenfield D, Furth S. Association of Mortality and Hospitalization with Achievement of Adult Hemoglobin Targets in Adolescents on Hemodialysis. *Journal of the American Society of Nephrology* 17(10):2878-2885, 2006.
- Fadowski JJ, Hwang W, Frankenfield DL, Fivush BA, Neu AM, Furth SL. Clinical Course Associated with Vascular Access Type in a national cohort of adolescents receiving hemodialysis: Findings from the CPM and USRDS projects. *CJASN*, 1(5):987-992, 2006.
- Sule SD, Fadowski J, Fivush B, Gorman G, Furth S. Reduced Albumin Levels and Utilization of Arteriovenous Vascular Access in Pediatric Patients with SLE on Hemodialysis. In Press, *Pediatric Nephrology*.
- Atkinson MA, Neu AM, Fivush BA, Frankenfield DL. Ethnic Disparity in Outcomes for Pediatric Peritoneal Dialysis Patients in the ESRD (CPM) Project. In Press, *Pediatric Nephrology*.

2003-2008 **NIH-NIDDK**
“Chronic Kidney Disease in Children Study”
Co- Investigator

The Prospective Study of Chronic Kidney Disease in Children (C-Kid) is a longitudinal, observational study of 600 children, aged <19 yrs with mildly to moderately impaired kidney function (estimated glomerular filtration rate (GFR) 30-75 ml/min/1.73 m²). The follow-up period will be 2.5 to 4.5 years. At enrollment, and at annual visits thereafter, selected exposures will be obtained on participants, including sociodemographic characteristics, family history, health care utilization, environmental exposures and medication use using standardized questionnaires. Standardized blood pressure, growth and nutritional assessments, metabolic status, measures of anemia, dyslipidemia, measures of microinflammation, insulin resistance and proteinuria will also be measured. Level of kidney function (GFR) will be measured annually by plasma disappearance of iohexol. The primary outcomes of interest will be the temporal evolution of sub clinical measures and clinical events associated with CKD progression as measured by decline in GFR, growth failure and its treatment, neurocognitive and behavioral deficits and cardiovascular disease.

2004-2006 **NIDDK**
“Clinical Performance Measures and Health Outcomes in Adolescents with ESRD”
Co-Investigator

Although adult standards are frequently applied in assessing the clinical care of children and adolescents maintained on dialysis, little evidence exists to justify the direct application of these standards to children. No longitudinal study has assessed the health outcomes for children and adolescents on dialysis according to whether or not CPM target hemoglobin, adequacy or serum albumin levels were reached. To address this gap in current knowledge, we are performing a longitudinal analysis of prevalent pediatric ESRD in-center hemodialysis patients identified in the 2000 and 2001 CPM project. Linkage of the 2000 (n=433) and 2001 (n=257) CPM data, in which 690 pediatric in-center hemodialysis patients were studied, with outpatient, hospitalization, transplant and survival data from the US Renal Data Systems has allowed an initial assessment of the clinical relevance of adult CPM standards in adolescents and teens with ESRD.

2005-2010 **NIH-NIDDK**
U01-DK004019
“Randomized Intervention of Vesico-Ureteral Reflux in Children”
Co-Investigator

Urinary tract infections in children account for over a million doctor visits per year, and 30,000-40,000 hospitalizations per year. Many of these children have vesico-ureteral reflux (a condition where urine improperly flows backwards out of the bladder toward the kidney), and this may predispose these children to urinary infections. While vesico-ureteral reflux can be corrected surgically, it is unclear whether this is beneficial; this research study will compare several management approaches to vesico-ureteral reflux to determine which is best.