

MARSHALL UNIVERSITY SCHOOL OF MEDICINE

NEPHROLOGY FELLOWSHIP TRAINING PROGRAM

LETTER OF AGREEMENT FOR THE COOPERATIVE TRAINING OF RESIDENTS/FELLOWS FROM MARSHALL UNIVERSITY JOAN C. EDWARDS SCHOOL OF MEDICINE (MUSOM) AND FRESenius MEDICAL CARE/J. ROBERT PRITCHARD DIALYSIS CENTER AT CABELL HUNTINGTON HOSPITAL (PARTICIPATING SITE)

This letter of agreement is an educational statement that sets forth important points of agreement between Marshall University School of Medicine (MUSOM) and Fresenius Medical Care/J. Robert Pritchard Dialysis Center at Cabell Huntington Hospital. This statement of educational purpose does not affect current contracts and institutional affiliation agreements between the two institutions.

This Letter of Agreement is effective from January 1, 2018, and will remain in effect for five (5) years, or until updated, changed, or terminated by the Nephrology Fellowship Training Program and/or Fresenius Medical Care/J. Robert Pritchard Dialysis Center at Cabell Huntington Hospital. Such changes must be communicated with the MUSOM Office of Graduate Medical Education.

1. Persons Responsible for Education and Supervision

At MUSOM: Zeid Khitan M.D., Program Director,

At Fresenius Medical Care/J. Robert Pritchard Dialysis Center/Cabell Huntington Hospital:

Zeid Khitan, M.D. – Site Director

The above mentioned people are responsible for the education and supervision of the residents/fellows while rotating at the Participating Site.

2. Responsibilities

The faculty at the Participating Site must provide appropriate supervision of residents/fellows in patient care activities and maintain a learning environment conducive to educating the residents/fellows in the ACGME competency areas. The faculty must evaluate resident performance in a timely manner during each rotation or similar educational assignment and document this evaluation at completion of the assignment.

3. Content and Duration of the Educational Experiences

The content of the educational experiences has been developed according to ACGME Residency/Fellowship Program Requirements and are delineated in the attached goals and objectives for each rotation.

As program director, Dr. Khitan is ultimately responsible for the content and conduct of the educational activities at all sites, including Fresenius Medical Care/J. Robert Pritchard Dialysis Center at Cabell Huntington Hospital. The program director, Participating Site director and the faculty are responsible for the day-to-day activities of the residents/fellows to ensure that the outlined goals and objectives are met during the course of the educational experiences.

Rotations may be in two (2) week blocks, but generally rotations are a month in duration.

The day-to-day supervision and oversight of resident/fellow activities will be determined by the specialty service where they are assigned. Amanda Jones, is responsible for oversight of some resident/fellow activities, including coordination of evaluations, arrangements of conferences, sick leave, annual leave and benefits.

4. Assignments

MUSOM will provide to Fresenius Medical Care/J. Robert Pritchard Dialysis Center at Cabell Huntington Hospital the name of the resident(s)/fellow(s) assigned to the site, the service they will be training on and other relevant information. Residents/fellows will remain on MUSOM's payroll; remain eligible for all resident benefits, including annual leave, sick leave, and health insurance, etc. Resident's will be covered under MUSOM'S malpractice policy in the amount of one million dollars per occurrence. The policy also provides tail coverage and legal defense.

5. Responsibility for supervision and evaluation of residents

Residents will be expected to behave as peers to the faculty, but be supervised in all their activities commensurate with the complexity of care being given and the resident's own abilities and level of training. Such activities include, but are not limited to the following:

- Patient care in clinics, inpatient wards and emergencies
- Conferences and lectures
- Interactions with administrative staff and nursing personnel
- Diagnostic and therapeutic procedures
- Intensive Care unit or Ward patient care

The evaluation form will be completed and administered by the Nephrology Fellowship Program. Residents will be given the opportunity to evaluate the teaching faculty, clinical rotation and Participating Site at the conclusion of the assignment.

6. Policies and Procedures for Education

During assignments to Fresenius Medical Care/J. Robert Pritchard Dialysis Center at Cabell Huntington Hospital, residents/fellows will be under the general direction of MUSOM's Graduate Medical Education Committee's and Nephrology Fellowship Training Program's Policy and Procedure Manual as well as the policies and procedures of the Participating Site for patient confidentiality, patient safety, medical records, etc.

7. Authorized Signatures

J. Robert Pritchard Dialysis Center at Cabell Huntington Hospital



Zeid Khitan, M.D. Site Director

12/1/17
Date



Zeid Khitan, M.D. Medical Director

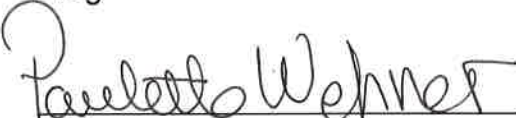
12/1/17
Date

MUSOM




Zeid Khitan, M.D.
Program Director

12/1/17
Date



Paulette Wehner, M.D.
DIO/Vice Dean for GME

12/4/17
Date



Joseph Shapiro, M.D.
Dean

12/4/17
Date

Goals and Objectives for the MUSOM Nephrology Fellowship Training Program

The goals and objectives of this rotation are broadly defined by the year of training. It is expected that those fellows beginning training will have little or no experience with nephrological issues and procedures and thus require maximum supervision. Thus, for the first six months of training, all decisions regarding significant treatment issues are made in consultation with the attending Nephrologist. Furthermore, all procedures are strictly monitored and supervised to ensure proficiency. Later in the first year, as fellows gain experience, independence in decision-making and procedures is expected. Second year fellows are expected to take responsibility for teaching first year fellows, residents and medical students and to provide leadership roles on the consult service.

1. Become familiar with renal anatomy and physiology in normal and aging humans.
2. Understand the pathogenesis, complications, and management of:
 - Disorders of fluid and electrolytes: water, sodium, potassium, calcium, magnesium, and phosphorus balance
 - Acid-base balance and disorders
 - Acute renal failure
 - Chronic renal failure
 - Nutritional aspects of renal failure
 - Urinary tract infection
 - Metabolic bone disease (osteitis fibrosa cystica, aluminum bone disease, osteomalacia, and beta-2 microglobulin)
 - Nephrolithiasis
 - Isolated hematuria
 - Isolated non-nephrotic proteinuria
 - Nephrotic and nephritic syndrome and the renal vascular diseases listed in the histopathology rotation goals and objectives
 - Tubulointerstitial diseases (pyelonephritis, reflux nephropathy, acute and chronic interstitial nephritis, gouty nephropathy, polycystic kidney disease)
 - Pregnancy-induced renal disease (preeclampsia, post-partum renal failure and those renal diseases exacerbated by pregnancy)
 - Drug metabolism and dosing in renal failure
 - Essential, malignant, and secondary forms of hypertension
3. Become familiar with the indications for, management, and complications of various modes of dialysis to include hemodialysis, peritoneal dialysis (CAPD, CCPD, Tidal PD), and continuous dialytic therapies. Become familiar with the indications for, management, and complications of therapeutic apheresis.
4. Understand the indications for and interpretation of radiologic tests of the kidney and urinary tract to include IVP, renal US, CT scan and radio nucleotide scans, angiography and vascular access studies.
5. Procedures
 - Become familiar with the indications, technique, potential complications and/or interpretation of the following: urinalysis, acute hemodialysis catheters, percutaneous biopsy of the native kidney and transplant kidney, bone biopsy, renal ultrasound, duplex ultrasonography, Tenckhoff catheter placement, apheresis

- Each fellow is responsible for keeping an updated log of procedures performed, countersigned by the appropriate attending. A log of all kidney biopsies will be kept. Log of other procedures should be kept until proficiency is obtained, and then signed by an attending certifying the fellow to perform the procedure without supervision. These logs are kept electronically and periodically reviewed by the program director to ensure that fellows are meeting requirements.

Recommended Reading

1. Brenner and Rector: The Kidney
2. Schrier: Disease of the Kidney and Urinary Tract
3. Burton David Rose: Clinical Physiology of Acid-Base and Electrolyte Disorders
4. Burton David Rose: Pathophysiology of Renal Disease
5. Daugirdas and Ing: Handbook of Dialysis
6. Journals: Kidney International, American Journal of Kidney Disease, NEJM, Annals of Internal Medicine, Journal of the American Society of Nephrology
7. Others as suggested by Nephrology Faculty

Measurement of Competencies

Throughout the rotation, attending physicians are responsible for evaluating and review competencies of all fellows. These evaluations are reviewed by the program director.

Specific competencies that are assessed include:

<p>Patient Care</p>	<p>Provision of compassionate, effective care that promotes patient well-being. Some specific issues monitored include: Performance of accurate and appropriate history and physical examinations, ability to determine appropriate diagnostic and therapeutic plans, performance of procedures specific to Nephrological practice in a proficient manner, Ability to effectively and appropriately counsel patients, and respect of patient privacy and autonomy</p>
<p>Medical Knowledge</p>	<p>Demonstration of effective application of biomedical, clinical and social skills and knowledge to the care of patients; also assessed through formal didactic teaching and examination throughout the program. Expectation of a broad-based knowledge encompassing the basic and clinical science concepts that is required to provide expert Nephrological care. Expectation to read extensively throughout this rotation and to present evidence-based recommendations for diagnostic and therapeutic decision making</p>
<p>Practice Based Learning & Improvement</p>	<p>Use of evidence and sound methodology to investigate, evaluate and improve patient care practices. Skills include: ability to self-evaluate and improve one's performance, and the incorporation of feedback into improvement Expectation to review outcomes of dialysis therapies and monitor their proficiency with procedural skills to improve their practice.</p>

Interpersonal & Communication Skills	Demonstration of these skills and effective functioning in maintaining professional and therapeutic relationships with patients and the healthcare team. Demonstration of skill in listening to patients and families and the ability to effectively educate and counsel patients on complex treatment decisions including initiation of dialysis therapies, and end-of-life issues.
Professionalism	Demonstration of behaviors that reflect ongoing commitment to continuous professional development, ethical practice, sensitivity to diversity and responsible attitudes.
Systems Based Practice	Demonstration of understanding of contexts and systems in which health care is provided and application of this knowledge in improving health care. Familiarity with the payment structures involved in the care of patients with ESRD and acute renal failure.