I. GOALS

The goal of outpatient clinic rotation is to learn to evaluate and treat kidney diseases on an outpatient basis. It includes history and physical examination, ordering and analyzing laboratory and radiological data, formulating treatment strategies, patient education and follow up and monitoring. During the rotations fellow should have learnt to manage wide variety of kidney disorders including primary and secondary glomerular diseases, hypertension, tubulointerstitial diseases, chronic renal failure and transition to renal replacement therapy, kidney stones, electrolyte and acid-base problems. During PGY 4 and PGY 5 years of rotation all fellows have continuity clinics on Wednesday every week. Two faculty members supervise this clinic. Social worker, dietitian and advanced nurse practitioner are also present. New referrals as well as old patients are followed up with renal problems. There are more clinics with other faculty members on the other days of the week and each fellow is assigned to one of those clinics. This clinic sees referred patients from within the university system as well as from around the state and there is a wide variety of renal problems.

II. OBJECTIVES FOR POSTGRADUATE YEAR IV FELLOW

During this year the fellows learn to manage common outpatient kidney diseases, which include hypertension, diabetic nephropathy, proteinuria and hematuria, glomerular nephritis, acid base electrolyte, and lupus and other autoimmune disorders. At the end of the rotation, fellows should be able to:

1. Evaluate the referrals from other clinic, interact with patients and take routine history and physical exam which is problem oriented, come up with differential diagnosis of the disease, supervised decision making related to treatment and investigations including needle biopsy. (Competency: IC, MK, PC, PBMI Teaching Method: LS, FS, CE, OF Evaluation Method: FEF, MCQ, GR, 360).

2. Do urine analysis, dipstick and microscopy, and be able to identify common urine abnormalities in form of cellular casts, crystals, dysmorphic red cells and proteinuria. (Competency: MK, PC, PBMI Teaching Method: LS, FS, UTD Evaluation Method: FEF, MCQ).


5. Work up proteinuria, interpret 24 hour urine collection results and spot urine protein and creatinine values, define nephrotic syndrome, differentiate from nephritic picture, know the various primary and secondary glomerular causes of proteinuria, order appropriate serological tests. (Competency: MK, PC Teaching Method: LS, FS, UTD, JC Evaluation Method: FEF, MCQ).

6. Work up hematuria, differentiate between glomerular and urological causes of hematuria, recognize active glomerulonephritis, order appropriate serological tests, and know various glomerular and urological causes of hematuria. (Competency: MK, PC Teaching Method: LS, FS, UTD Evaluation Method: FEF, MCQ).


III. METHODS OF EVALUATION AND FEEDBACK:

1. Methods of evaluation have been included in the body of the document with the individual objective and will not be repeated here.

2. Feedback will be performed semi-annually when the associate program director meets with each fellow individually to review the previous 6 months evaluations and portfolio.

3. During the two years of rotation there is active feedback to the fellows, which is continuous and ongoing throughout the clinic rotations by the faculty. At the end of three months each of the fellows have their rotations re-evaluated by the faculty and get appropriate feedback regarding their progress as far as learning is concerned.

4. Each faculty will meet with their respective fellow at the end of a rotation to discuss the performance for the month’s rotation.

5. A multiple choice exam (MCQ) will be performed at the start of the fellowship program, at the end of the first year and at the end of the second year as an assessment of the acquisition of medical knowledge over the course of the fellowship training.

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II. OBJECTIVES FOR POSTGRADUATE YEAR V FELLOW:

At the end of the program the fellow should be able to:

1. To consolidate on PGY-4 year learning and fellows are encouraged to have more independent decision making with faculty supervision. (Competency: MK, PC Teaching Method: LS, FS Evaluation Method: FEF, MCQ).


7. There is more emphasis in this year on outpatient renal biopsy procedural skills. To review the biopsy results with pathologist and present in the pathology conference. Biopsy logbooks are checked and fellows who are lagging behind in the procedural skills are encouraged to catch up. (Competency: MK, PC, PBLI Teaching Method: FS Evaluation Method: PF, PL, RBC).


11. To review ultrasound with the radiologist and at least identify and recognize obstructive uropathy, to look at kidney size and rule out kidney stones. (Competency: MK, PC Teaching Method: LS, FS Evaluation Method: FEF, MCQ).

12. Medical ethics are discussed with the fellows along with social worker including end of life care issues. (Competency: MK, PC, ICS Teaching Method: LS, FS Evaluation Method: FEF, MCQ, 360).


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II. OBJECTIVES FOR POSTGRADUATE YEAR IV FELLOW:


2. Operate as the patients advocate in the area of quality care in helping the patient to deal with system complexities (Competency: SBP Teaching Method: FS, LS Evaluation Method: 360, PS).

3. Operate as a partner with health care managers and health care providers to assess, coordinate, and improve health care (Competency: SBP Teaching Method: FS, LS Evaluation Method: 360, GR).

GLOMERULAR DISEASE

1. Identify the causes, clinical decision-making, and treatment of common and uncommon causes of hematuria and proteinuria (Competency: MK Teaching Method: LS, CE Evaluation Method: MCQ).

2. Evaluate the etiology and clinical findings of glomerular syndromes, including nephrosis, nephritis, and rapidly progressive glomerulonephritis manifesting as renal-limited processes or associated with systemic disease (Competency: MK, PC Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, FEF, MCQ).

3. Describe focal segmental glomerulosclerosis (FSGS), including its various pathological and clinical syndromes and the association with conditions or reduced renal mass, the demographics, clinical course, and outcome of the clinicopathologic syndromes of “primary” focal sclerosis, including FSGS, glomerular tip lesion, and perihilar FSGS (Competency: MK, PBLI Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, FEF, MCQ).

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PROGRAM OBJECTIVES FOR RENAL CONSULTATIVE SERVICE

4. Discuss the membranous nephropathy, including the clinical, pathological, and diagnostic features of both idiopathic membranous nephropathy and secondary membranous disease, and in-depth knowledge of the controversies regarding treatment of this disease (Competency: MK, PC, PBLI Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, FEF, MCQ).


ACUTE RENAL FAILURE AND INTENSIVE CARE UNIT NEPHROLOGY

1. Describe the differential diagnosis of acute renal failure including the pathophysiology of prerenal azotemia, the pathophysiology of intrinsic renal failure, including acute glomerular diseases, acute tubular necrosis, and acute interstitial disease, and the pathophysiology of obstructive renal failure (Competency: MK, PC, PBLI Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, FEF, MCQ).


PROGRAM OBJECTIVES FOR RENAL CONSULTATIVE SERVICE

**CHRONIC RENAL FAILURE**


2. Discuss the role of anemia in the management of patients with CRF and the management of the anemia of chronic renal failure with the use of iron, erythropoietin and other appropriate agents (Competency: MK, ICS, PBLI, PC Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, PL, FEF, MCQ, CSR).


**HYPERTENSION**


**ACID-BASE DISORDERS**


FLUID AND ELECTROLYTE DISORDERS


4. Discuss the physiology of water balance, including tonicity sensors, effector systems, the countercurrent mechanism for urine concentration, the cellular physiology of collecting duct water reabsorption, and the regulation of water excretion by the kidney (Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


TUBULOINTERSTITIAL DISEASE AND URINARY TRACT INFECTIONS


3. Evaluate the pathogenesis and treatment of bacterial urinary tract infections including major pathogenetic specific, routes, and course of infection, appropriate antibiotic choices, and appropriate work-up of the patient with multiple or resistance infections (Competency: MK, ICS, PBLI Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).

DISORDERS OF DIVALENT CATION AND MINERAL METABOLISM


2. Explain the physiology of calcitropic hormones, specifically parathyroid hormone, vitamin D, calcitonin, and parathyroid hormone-related peptide (Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


RENALE DISEASE IN PREGNANCY - PROGRAM BEHAVIORAL OBJECTIVES

1. Discuss the changes in the anatomy and function of the urinary tract during pregnancy, focusing on the relevance of these changes to clinical circumstances, stressing alterations in the calyces and ureters, renal hemodynamics, and tubular function (principally potassium and glucose) (Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


4. Discuss the altered osmoregulation in pregnancy, focusing on changes in plasma sodium and osmolality levels, as well as on certain disorders of water metabolism peculiar to gestation (Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


7. Explain the clinical spectrum and management of renal disorders in gestation including pathogenesis and treatment of urinary tract infections; acute renal failure (especially those primarily associated with gestation, i.e., septic abortion, abruption, preeclampsia, acute fatty liver, and idiopathic postpartum renal failure); and chronic glomerular and interstitial renal diseases antedating pregnancy (Competency: PBLI, MK, ICS, PC Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


11. Describe the recognition and treatment of the hypertensive disorders of pregnancy, particularly preeclampsia and its variants such as HELLP syndrome. This includes the use in gravidas of antihypertensive drugs and the prevention and treatment of eclampsia, including the administration of magnesium sulfate (Competency: PBLI, PC, ICS Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


**RENAL FUNCTION TESTING**


**Pharmacology of Drugs in Renal Disease**


PROGRAM OBJECTIVES FOR RENAL CONSULTATIVE SERVICE

PROFESSIONALISM AND ETHICAL CONDUCT

1. Elements of professionalism including altruism; accountability, dependability, responsibility, and prudence; excellence, but humility; continued education; commitment. Duty, justice, collegial collaboration; honor and integrity, honesty and fidelity, trustworthiness; respect for others, compassion, empathy; and common sense (Competency: PBLI Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, PL, FEF).

2. Threats to professionalism including abuse of power and position, sexual and other harassment; arrogance, prejudice, bias; greed and selfishness; misrepresentation, clinical and scientific misconduct; impairment, including substance abuse; lack of conscientiousness; and conflicts of interest (Competency: PBLI Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, PL, FEF).


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I. GOALS

The goal of this rotation is to provide the renal fellow with the opportunity to evaluate and follow patients with renal and related problems and to enable them to refine their knowledge, attitude and skills necessary to diagnose, manage, treat and educate patients with renal and related diseases.

II. OBJECTIVES FOR POSTGRADUATE YEAR V FELLOW

1. Discuss the role of the care team members with the care providers in the society to help define and outline a team approach that optimizes patient care while controlling cost of care (Competency: SBP Teaching Method: LS, FS Evaluation Method: 360, RR).

2. Review and understand Medicare and Medicaid rules and regulations in the area of renal related diseases to optimize the delivery of medical care while containing cost of care (Competency: SBP Teaching Method: LS, FS Evaluation Method: MCQ).

3. Operate as the patients advocate in the area of quality care in helping the patient to deal with system complexities (Competency: SBP Teaching Method: FS, LS Evaluation Method: 360, PS).

4. Operate as a partner with health care managers and health care providers to assess, coordinate, and improve health care (Competency: SBP Teaching Method: FS, LS Evaluation Method: 360, GR).

GLomerular Disease

1. Discuss the structure and function of the normal glomerulus and how alteration of these leads to the cardinal features of glomerular injury (proteinuria and reduced glomerular filtration rate) (Competency: MK Teaching Method: CE, JC, LS, MCQ Evaluation Method: MCQ).

2. Describe the principal immunologic mechanisms causing human glomerular diseases and the features that distinguish them by immunofluorescence and electron microscopy (Competency: MK Teaching Method: LS, JC, RBC Evaluation Method: MCQ).
3. Explain the fundamental features of the normal immune response and have an awareness of current concepts of autoimmunity and the factors that may be responsible for and mediate immunologic glomerular injury (Competency: MK Teaching Method: LS, JC Evaluation Method: MCQ).


5. Evaluate the etiology and clinical findings of glomerular syndromes, including nephrosis, nephritis, and rapidly progressive glomerulonephritis manifesting as renal-limited processes or associated with systemic disease (Competency: MK, PC Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, FEF, MCQ).


8. Describe focal segmental glomerulosclerosis (FSGS), including its various pathological and clinical syndromes and the association with conditions or reduced renal mass, the demographics, clinical course, and outcome of the clinicopathologic syndromes of “primary” focal sclerosis, including FSGS, glomerular tip lesion, and perihilar FSGS (Competency: MK, PBLI Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, FEF, MCQ).

9. Discuss the membranous nephropathy, including the clinical, pathological, and diagnostic features of both idiopathic membranous nephropathy and secondary membranous disease, and in-depth knowledge of the controversies regarding treatment of this disease (Competency: MK, PC, PBLI Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, FEF, MCQ).


11. Identify the postinfectious glomerulopathies, including bacterial, viral, parasitic, rickettsial, and fungal infections, and their epidemiology, clinical course, and response to therapy, especially with respect to HIV infections.


15. Interpret the various serological markers in the presence of kidney disease (c-ANCA, p-ANCA, C3, C4, ANA, RF, Anti-GBM, and others) (Competency: MK Teaching Method: LS, CE Evaluation Method: MCQ, FEF, PF).


**ACUTE RENAL FAILURE AND INTENSIVE CARE UNIT NEPHROLOGY**


2. Describe the differential diagnosis of acute renal failure including the pathophysiology of prerenal azotemia, the pathophysiology of intrinsic renal failure, including acute glomerular diseases, acute tubular necrosis, and acute interstitial disease, and the pathophysiology of obstructive renal failure (Competency: MK, PC, PBLI Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, FEF, MCQ).


5. Evaluate and manage ARF by radiologic techniques, biochemical evaluations, the role of renal biopsy, nondialytic therapy and dialytic therapies including hemodialysis, peritoneal dialysis, and continuous therapy (Competency: MK, PC, ICS, PBLI Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, PL, FEF).


**CHRONIC RENAL FAILURE**

1. Discuss the various etiologies of chronic renal failure (CRF) including evaluation, diagnosis, and treatment of CRF resulting from glomerular, interstitial, vascular, and obstructive processes including the diagnosis of glomerular processes, interstitial processes, prerenal processes, obstructive processes, and systemic processes that led to CRF including diabetes mellitus, hypertension or ischemic renal disease (Competency: MK, PC, PBLI Teaching Method: JC, RC, LS, UTD, CE Evaluation Method: PF, PL, FEF, MCQ).


4. Discuss the role of anemia in the management of patients with CRF and the management of the anemia of chronic renal failure with the use of iron,
Program Objectives for Renal Consultative Service


Hypertension


5. Discuss Epidemiology of hypertension and hypertension in special groups (e.g. African American, Hispanics, etc.) (Competency: MK Teaching Method: LS, CE, UTD Evaluation Method: MCQ).


**ACID-BASE DISORDERS**


**FLUID AND ELECTROLYTE DISORDERS**


5. **Discuss the physiology of water balance, including tonicity sensors, effector systems, the countercurrent mechanism for urine concentration, the cellular physiology of collecting duct water reabsorption, and the regulation of water excretion by the kidney** *(Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


**Cystic and Inherited Diseases of the Kidney**

1. Discuss the genetics of inherited diseases such as Mendelian genetics, gene linkage analysis, chromosomal localization and characteristics of the gene responsible for the more common inherited renal disorders (Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, PL, FEF).


3. Explain the diagnosis of inherited and cystic disease including the use of gene link analysis and mutational analysis in the screening, the role of urinalysis, renal function testing, and radiologic testing, and the possibilities of prenatal diagnosis and pretest counseling (Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).

4. Discuss the approach to the symptomatic patient including familiarity with the natural history of inherited cystic and non-cystic disease, knowledge of clinical presentations, and familiarity with extrarenal manifestations (Competency: MK, ICS, PBLI Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).

5. Formulate a treatment plan including knowledge of strategies to manage progression of renal failure, proteinuria, and hypertension in non-cystic inherited disease; knowledge of management of pain, hypertension, renal stone, hematuria, infection, and progressive renal failure in patients with cystic disease; and familiarity with management of extrarenal manifestation of ADPKD, including mitral valve prolapse diverticular disease, intracranial aneurysm, and hepatic cystic disease (Competency: PC, MK, ICS, PBLI Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, PL, FEF).

**Tubulo-interstitial Disease and Urinary Tract Infections**


3. Explain the pathophysiology of interstitial disease including immunopathogenetic and non-immune mechanisms, relationship to glomerular function, the association with major tubular defects including


DISORDERS OF DIVALENT CATION AND MINERAL METABOLISM


2. Explain the physiology of calcitropic hormones, specifically parathyroid hormone, vitamin D, calcitonin, and parathyroid hormone-related peptide (Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


RENAL DISEASE IN PREGNANCY - PROGRAM BEHAVIORAL OBJECTIVES

1. Discuss the changes in the anatomy and function of the urinary tract during pregnancy, focusing on the relevance of these changes to clinical circumstances, stressing alterations in the calyces and ureters, renal hemodynamics, and tubular function (principally potassium and glucose) (Competency: MK Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, FEF).


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RENAI FUNCTION TESTING

1. At the end of the program, the fellow should be able to explain the indications, contraindications, complications, interpretation of results, cost effectiveness, and application to patient care of: (Competency: MK, PC PBLI Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, PL, FEF).


**Pharmacology of Drugs in Renal Disease**


**Professionalism and Ethical Conduct**

1. Elements of professionalism including altruism; accountability, dependability, responsibility, and prudence; excellence, but humility; continued education; commitment. Duty, justice, collegial collaboration; honor and integrity, honesty and fidelity, trustworthiness; respect for others, compassion, empathy; and common sense (Competency: PBLI Teaching Method: JC, RC, LS, UTD Evaluation Method: PF, PL, FEF).

2. Threats to professionalism including abuse of power and position, sexual and other harassment; arrogance, prejudice, bias; greed and selfishness; misrepresentation, clinical and scientific misconduct; impairment, including
substance abuse; lack of conscientiousness; and conflicts of interest

3. Methods of evaluation of professionalism and ethical conduct in trainees
including utilizing ABIM peer evaluation professional associate rating
forms from multiple evaluators. Maintaining a critical events file
documenting positive and constructive comments. Expanding traditional
performance evaluation forms to incorporate components of professional
and ethical evaluation. Providing for professionalism and ethics evaluation
in research performance. When necessary, providing a mechanism for
remediation of professional and ethical deficiencies (Competency: PBLI, MK, PC

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DEPARTMENT OF INTERNAL MEDICINE
DIVISION OF NEPHROLOGY

PROGRAM OBJECTIVES FOR DIALYSIS ROTATION

I. GOALS

The goals of this rotation are to provide the Nephrology fellow with:

1. An opportunity for longitudinal follow up of both peritoneal and hemodialysis patients to enable them to refine the knowledge, attitudes and skills necessary to diagnose, manage and treat renal failure patients and develop health promotion behaviors in this population.

2. An understanding of the business aspects of managing a dialysis facility and the role and responsibilities of a medical director.

II. OBJECTIVES FOR POSTGRADUATE YEAR IV FELLOW:

At the end of the program the fellow should be able to:

1. Describe the types, advantages, and disadvantages of acute and chronic hemodialysis access (Competency: MK, PC Teaching Method: LS, FS Evaluation Method: FEF, MCQ).


3. Discuss the most common complications of hemodialysis and their management including hypotension, cramps, arrhythmias, hemolysis and air embolism with patients, their families and other health care providers (Competency: MK, PC, ICS Teaching Method: LS, FS Evaluation Method: FEF, MCQ, RR, 360).


11. Discuss the most common complications of peritoneal dialysis and their management including peritonitis, hypotension, hernias, dialysate leaks, and inadequate dialysis (Competency: MK, PC Teaching Method: LS, FS Evaluation Method: FEF, MCQ, RR).


16. Discuss medical reimbursement for end stage renal disease care including listing services bundled under the monthly capitated payment system (Competency: PBLI, SBP Teaching Method: LS, FS Evaluation Method: MCQ).

17. Integrate care with other renal health care providers to maximize care provided including renal social worker, renal dietician, dialysis nursing and technical staff (Competency: PC, SBP, ICS, PBLI Teaching Method: FS Evaluation Method: FEF, 360).

PROGRAM OBJECTIVES FOR RENAL DIALYSIS ROTATION


III. SHIFT COVERAGE

Each fellow will be assigned a group of peritoneal dialysis patients and a shift of hemodialysis patients to follow for up to two years. The peritoneal dialysis clinic meets one half day a month for each fellow. Hemodialysis shifts meet three days a week with the fellows being required to round once a week on their hemodialysis shift. The faculty will attend each peritoneal dialysis clinic and will round once a month with the fellow on their assigned hemodialysis session. In addition, each fellow will have a month long rotation annually in the dialysis facility.

IV. METHODS OF EVALUATION AND FEEDBACK:

1. Methods of evaluation have been included in the body of the document with the individual objective and will not be repeated here.

2. Feedback will be performed semi-annually when the associate program director meets with each fellow individually to review the previous 6 months evaluations and portfolio.

3. Each faculty will meet with their respective fellow at the end of a rotation to discuss the performance for the month’s rotation.

4. A multiple choice exam (MCQ) will be performed at the start of the fellowship program, at the end of the first year and at the end of the second year as an assessment of the acquisition of medical knowledge over the course of the fellowship training.

5. At the end of the dialysis rotation the fellow will be evaluated by:

   a. Meeting with the nephrology APN.

   b. Taking a multiple choice question examination.

   c. Completion of 360 degree global rating.

6. Ongoing as dictated by patient care and job performance.
## PROGRAM OBJECTIVES FOR RENAL DIALYSIS ROTATION

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DEPARTMENT OF INTERNAL MEDICINE  
DIVISION OF NEPHROLOGY  
PROGRAM OBJECTIVES FOR DIALYSIS ROTATION

I. GOALS

The goals of this rotation are to provide the Nephrology fellow with:

1. An opportunity for longitudinal follow up of both peritoneal and hemodialysis patients to enable them to refine the knowledge, attitudes and skills necessary to diagnose, manage and treat renal failure patients and develop health promotion behaviors in this population.

2. An understanding of the business aspects of managing a dialysis facility and the role and responsibilities of a medical director.

II. OBJECTIVES FOR POSTGRADUATE YEAR V FELLOW:

At the end of the program the fellow should be able to:


2. Describe the different continuous dialytic therapies, including continuous arteriovenous hemodiafiltration and venovenous hemodiafiltration (Competency: MK, PC Teaching Method: LS, FS Evaluation Method: FEF, MCQ).

3. Utilize the appropriate drugs, including dose modifications for dialysis patients (Competency: MK, PC Teaching Method: LS, FS Evaluation Method: FEF, MCQ).

4. Describe the role of Medicare, the Health Care Finance Administration, renal networks, U.S. Renal Data System, and voluntary organizations/societies, such as the National Kidney Foundation, the American Society of Nephrology, the Renal Physicians’ Association, and the American Nephrology Nurses’ Association in the delivery and financing of care for end stage renal disease patients (Competency: PBL, P, SBP Teaching Method: LS, FS Evaluation Method: FEF, MCQ).
PROGRAM OBJECTIVES FOR RENAL DIALYSIS ROTATION

5. Compare and contrast pros and cons of cost containment measures such as dialyzer selection and patient modality selection (Competency: MK, PC, ICS, PBLI, P Teaching Method: LS, FS Evaluation Method: FEF, MCQ).


III. SHIFT COVERAGE

Each fellow will be assigned a group of peritoneal dialysis patients and a shift of hemodialysis patients to follow for up to two years. The peritoneal dialysis clinic meets one half day a month for each fellow. Hemodialysis shifts meets three days a week with the fellows being required to round once a week on their hemodialysis shift. The faculty will attend each peritoneal dialysis clinic and will round once a month with the fellow on their assigned hemodialysis session. In addition, each fellow will have a month long rotation annually in the dialysis facility.

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3. Each faculty will meet with their respective fellow at the end of a rotation to discuss the performance for the month’s rotation.

4. A multiple choice exam (MCQ) will be performed at the start of the fellowship program, at the end of the first year and at the end of the second year as an assessment of the acquisition of medical knowledge over the course of the fellowship training.

5. At the end of the dialysis rotation the fellow will be evaluated by:
   a. Meeting with the nephrology APN.
   b. Taking a multiple choice question examination.
   c. Completion of 360 degree global rating.

6. Ongoing as dictated by patient care and job performance
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I. GOALS

To provide clinical Nephrology Fellows in our training program the highest level of training in clinical kidney and pancreas transplantation: including historical perspective, the pretransplant evaluation of the recipient, the pretransplant evaluation of the living donor, the pretransplant evaluation of the cadaver donor/organ procurement, the surgical technique and surgical management, the physiology of the transplanted kidney, the pathogenesis and pathology of allograft dysfunction, the post transplant care/in hospital care, the post transplant care/outpatient care – short and long term; expected clinical outcome/analysis of risk factors, special considerations in pediatric renal transplantation and special consideration for pancreas and kidney/pancreas transplantation.

II. OBJECTIVES FOR POSTGRADUATE YEAR IV FELLOW

At the end of the program the fellow should be able to:


5. Recognize the histological classifications of allograft rejection and be able to device a short and long-term management plan for treating different types of allograft rejection (Competency: MK, PC, PBLI Teaching Method: LS, JC, CE Method of Evaluation: CL, GR, MCQ, PS).


III. METHODS OF EVALUATION AND FEEDBACK:

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I. OBJECTIVES FOR POSTGRADUATE YEAR V FELLOW:

At the end of the program the fellow should be able to:


4. Discuss the cellular and humoral mechanisms of acute rejection and how immunosuppressant drugs work and interact in light of these mechanisms (Competency: MK, PC, ICS Teaching Method: LS, JC, CE Method of Evaluation: CL, GR, MCQ, PS).


7. Recognize the histological classifications of allograft rejection and be able to devise a short and long-term management plan for treating different types of allograft rejection (Competency: MK, PC, PBLI Teaching Method: LS, JC, CE Method of Evaluation: CL, GR, MCQ, PS).


III. METHODS OF EVALUATION AND FEEDBACK:

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DEPARTMENT OF INTERNAL MEDICINE
DIVISION OF NEPHROLOGY

PROGRAM OBJECTIVES FOR RESEARCH ROTATION

I. GOALS

The trainees are expected to acquire research experience in various areas including, but not limited to renal physiology, molecular biology, biochemistry, pharmacology, pathology or clinical research. This can be accomplished through weekly journal clubs and monthly research seminars that critically review clinical and basic science articles. Trainees should become familiar with the methods and problems inherent in performing and interpreting clinical and basic research. This would be best accomplished by their participation in the design, performance and interpretation of a particular research project. The training program should provide a teaching environment that focuses on these components of research. At the end of the fellowship the trainees must acquire knowledge and understanding of the following areas.

II. OBJECTIVES FOR POSTGRADUATE YEAR IV FELLOW:


2. Discuss experimental design of human, animal or other research projects (Competency: MK, PBLI, ICS, P Teaching Method: FS, JC, LS, RC Evaluation Method: FEF, PF, GR).


6. Demonstrates scientific integrity and responsible conduct in the area of clinical and basic research i.e. (Competency: PC, MK, PBLI, ICS, P Teaching Method: FS, JC, LS, RC Evaluation Method: FEF, PF, GR, MCQ)

   a. Protection of animal and human subjects

May 26, 2002
PROGRAM OBJECTIVES FOR RENAL RESEARCH ROTATION

- Integrity in the collection and recording of data.
- Integrity in the interpretation of data.
- Integrity in the authorship and publication.
- Discuss the Nuremberg code, Helsinki declaration and Belmont report.

7. Describe scientific misconduct and fraud i.e. (Competency: MK, PBLI Teaching Method: FS, JC, LS, RC Evaluation Method: FEF, PF, MCQ)
   - Self-deception.
   - Fabrication, falsification and plagiarism.
   - Conflicts of interest
   - Scientist-scientist relationship
   - Scientist-industry relationship.

8. Develop familiarity with and a working knowledge of techniques and assays relevant to their project (Competency: MK, PBLI, ICS Teaching Method: FS, JC, LS, RC Evaluation Method: FEF, PF, GR).


11. Prepare abstracts, manuscripts, or reports that originate as a result of the studies (Competency: MK, PBLI, ICS, P Teaching Method: FS, JC, LS, RC Evaluation Method: FEF, PF, GR).

III. METHODS OF EVALUATION AND FEEDBACK:

1. Methods of evaluation have been included in the body of the document with the individual objective and will not be repeated here.

2. Feedback will be performed semi-annually when the associate program director meets with each fellow individually to review the previous 6 months evaluations and portfolio.

3. Each faculty will meet with their respective fellow at the end of a rotation to discuss the performance for the month’s rotation.
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Structure for the Month:

Timing is variable but the fellow is expected to:

1. Participate in monthly Dialysis CQI meeting.
2. Participate in monthly Care Plan meeting.
3. Participate in CKD anemia management CQI (usually 2nd week of month).
4. Participate in Hemodialysis Adequacy CQI (usually 3rd week of month).
5. Participate in Hemodialysis anemia management (usually Thursday & Friday 2nd & 4th weeks of month).
6. Assess and treat acute patient problems in both the peritoneal and hemodialysis clinics.
7. Round for any fellow who is on vacation.
8. Complete chart audits for documentation of MCP covered services.
9. Complete readings in syllabus.
10. Tour water system and assist with cultures and testing.
11. Complete test on water system.
12. Precept with RN (acute or chronic) for hands on experience with hemodialysis.
13. Precept with Peritoneal Dialysis nurse for hands on experience with CAPD and CCPD.
14. Participate in CKD Education classes
15. Arrange with Dr Barone (688-6377) to scrub on vascular access cases.
16. Arrange with Interventional radiology scheduler (395-9100) to scrub for thrombolysis or venography studies.
17. Attend Peritoneal Dialysis clinic with Dr. Bienvenue (Tues, 10-12 am) twice during month (optional).
18. Study reuse module and tour Midtown Dialysis unit for hands on experience with reuse.
19. Complete observational surveys at both Freeway and Midtown Hemodialysis units.
20. Review records and write orders for transient patients.
21. Review records and write orders for new dialysis patients.
22. Be graded on Medical Director Duties Report Card by unit director and review results with her.
23. Review, with renal dietitian, her role in the unit, assessment requirements, subjective global assessment and parameters of a renal diet for both hemo and peritoneal dialysis patients.
24. Review, with the renal social worker, her role in the unit and paperwork required by CMS and Network 13.
25. Participate in any patient or family conferences that occur (intermittent, usually for problems in the unit or withdrawal from dialysis)
26. Participate in CKD screenings (last Friday morning of each month)

2/06 AE