Lakshmi Kannan M.D, FASN

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## **Professional Summary**

Dedicated physician with experience treating patients with acute kidney injury, chronic kidney disease, ESRD on peritoneal dialysis and hemodialysis, electrolyte disorders and glomerulonephritis. Board certified in Internal Medicine and Nephrology. Areas of interest include peritoneal dialysis, home hemodialysis and electrolyte disorders.

# Memberships

Review Editor in Frontiers in Clinical Diabetes.

Fellow of the American Society of Nephrology

SigmaXi

### **Certifications & License**

12/17/2020 Kentucky Medical License

04/15/2019 Virginia Medical License

05/01/2014 ECFMG Certified, # 0-845-498-5

### **Education:**

07/2019- 06/2021 Nephrology Fellowship

University of Virginia, Charlottesville, VA

07/2016- 06/2019 Internal Medicine Residency

Monmouth Medical Center, Long Branch, New Jersey

08/2006 - 03/2011

MBBS/ Doctor of Medicine (M.D) degree

Stanley Medical College, Tamil Nadu, India.

## **Professional Experience**

**Physician Nephrologist** 

07/2021- Present

Pikeville Medical Center, KY

- Serving as the Director for the clinical Laboratory in the Department of Nephrology.
- Conducting consultations to diagnose illnesses and evaluating kidneys to determine treatment.
- Evaluate and recommend the patients to surgeons and perform dialysis procedures.
- Form multi-disciplinary clinical plans of management to include nutritionists, counsellors, physiotherapy
- Conducting renal research and carrying out root-cause analysis
- Coordinate kidney transplant programmes.
- Manage chronic kidney disease patients in the outpatient clinic.

Fellow in training, Nephrology

07/2019- 06/2021

University of Virginia, VA

• Delivered medical services to 20-25 patients daily in the in-patient setting.

- Appropriately diagnosed and treated a variety of diseases- hypertension, acute kidney injury, chronic kidney disease, electrolyte disorders, glomerulonephritis, urolithiasis.
- Managed ESRD patients on peritoneal dialysis and hemodialysis.
- Actively participated in home dialysis programs.

### **Chief Resident- Internal Medicine**

07/2018-06/2019

## **Monmouth Medical Center, New Jersey**

- Managed, directed, and coordinated educational activities of residents and medical students.
- Provided care as a chief resident to patients admitted to the Internal Medicine inpatient and outpatient services.

### **Clinical Extern**

08/2015-09/2015

## Family Doctors of Green Valley, Las Vegas, NV

- Worked closely with physicians, physician assistants and nurses as they interacted with patients.
- Actively participated in the history taking and physical exam.
- Opportunity to do procedures like shave biopsy for skin lesions, trigger injections for chronic pain syndrome, I&D, pap smear and DEXA scan.
- Opportunity to address and understand the importance of the preventive aspects of medicine and the doctor patient relationship in the North American health care setting.

## **Clinical Research Fellow**

04/2015-03/2016

Howard University, Washington DC.

- Involved in both clinical and basic research
- Learned and conducted many different lab procedures including DNA, RNA extraction from colonoscopy biopsy samples, identifying novel biomarkers in urine for colorectal cancer.
- Actively took part in morning and afternoon reports and presented scientific papers during the lab meetings within the department and at journal clubs.

# **General Physician**

Doctors Diagnostic Center, Tamil Nadu, India

11/2013-04/2015

- Hands on experience to sharpen my clinical and diagnostic skills
- Collecting blood and spinal fluid samples for various tests.
- Placing PPD on patients with clinical suspicion of TB and performing PAP smear.
- Preparing and identifying gross specimens for pathology.
- Studying the microscopic slide fixation techniques.
- Diagnosing various blood disorders and hematologic malignancies like leukemia and lymphoma
- Cross matching and HLA typing.

**Clinical Observer (Gastroenterology)** 

09/2013-11/2013

Cleveland Clinic, Weston, Florida

- Observed physicians during history taking and physicals in the outpatient department.
- Attended floor rounds with residents and observed physicians during endoscopy and colonoscopy.

# Clinical Observer (Thoracic and Cardiovascular Surgery) MD Anderson Cancer Center, Houston, Texas

07/2013-09/2013

- Training in 6 classes of the cardiac education program
- Attended educational conferences
- Witnessed Robot Assisted surgeries like mediastinal tumor resections and pulmonary resections to remove small portions of lung tissue and its associated lymph nodes.
- Observed Robotic Assisted Coronary Artery bypass without the need for a heart-lung machine.

## Clinical Observer (pediatric ICU)

05/2013- 07/2013

# Boston Children's Hospital, Boston, MA

- Observed physicians in the acute management of certain conditions like Biliary atresia,
   Meconium Ileus and Diaphragmatic hernia in the emergency setting.
- Observed procedures like Tracheostomy and ECMO.

## Chennai Medical College Hospital and Research Center, India.

- Consult patients in the outpatient department.
- Admit patients to ward and obtain a full history and physical exam where necessary.
- Conduct rounds on the patients along with the consultant physician.
- Provide intensive medical care to children in Pediatric ICU.
- Order lab tests and other necessary studies.
- Discuss the results with the consulting physician regarding the management of the patients.
- Perform procedures like lumbar puncture, endotracheal intubation, central catheter placement, chest tube placement.

Physician Intern 03/2011- 03/2012

### Stanley Medical College, Chennai, India.

- Gained the experience of applying theoretical knowledge into proven clinical practice.
- Actively performed basic medical, obstetric, gynecological, pediatric and surgical procedures.
- Improved my decision-making process as regards to the healthcare needs of my patients.
- Gained extensive experience in phlebotomy, intravenous cannulation and sample collection.
- First officer on call at the emergency room, handled medical, surgical and pediatric referrals.
- Assisted major surgeries and medical procedures.

### **Abstracts/ Posters**

Ewing Sarcoma/PNET in the uterus: A rare sighting. Poster presented at Combined Annual meeting of CSCTR and MWAFMR in March 2017.

Triphasic response following resection of Craniopharyngioma- A classical case. Poster presented at American Society of Clinical Endocrinology in Boston in May 2018.

Atrial Fibrillation Gut syndrome- Severe gastroparesis with pyloric spasm following radiofrequency catheter ablation of drug resistant symptomatic atrial fibrillation treated with botulinum injection. Poster presented in ACC in March 2018.

Chronic dialysis access management in the COVID-19 era: The need for raising awareness, JASN, 2020.

Diabetes in the Appalachian Region- Poster presentation at American Diabetes Association, 2022.

Purple Urine in an Elderly female with UTI and constipation- ASN 2022.

SIADH escape to tolvaptan- A case of persistent hyponatremia in a patient with SIADH from small cell lung cancer- ASN 2022.

### **Publications**

A meta-analysis of MSI frequency and race in colorectal cancer. Oncotarget, v7(7(23):34546-34557): PMID- 27120810

Adiponectin, Leptin, IGF1 and TNFα serum biomarker as noninvasive diagnosis of colon adenoma, Cancer Research 76 (14 Supplement), 3130-3130

Apolipoprotein D Is a Potential Urine Biomarker for Colorectal Neoplasia, Gastroenterology 150 (4), S617

CD8+ T-Cell Infiltration in Epithelial and Stromal Tissues of MSI Colorectal Cancer Patients, Gastroenterology 150 (4), S617

The prognostic influence of CD 8+ T cell infiltration in MSI-H colorectal cancer in African-American population. Poster presented at American Association of Cancer Research in November 2017.

Rituximab for steroid-dependent minimal change disease: Is it time for a change? Cureus, 2022, doi:10.7759/cureus.22313

Polypharmacy in a Patient with Intellectual and Developmental Disabilities, Cureus, 2022. doi:10.7759/cureus.22019

Less Known Early Complication of Baricitinib Use: Acute Kidney Injury Clinical and Experimental Nephrology, 2022.

Oxalate Nephropathy in a patient with COVID-19 infection: Causation or Association, preprint server- https://doi.org/10.21203/rs.3.rs-1375836/v1, 2022.

Hyperplastic polyps discovered due to unprovoked acute upper gastrointestinal bleeding as an unusual presentation of malignancy- Annals of Internal Medicine Clinical Cases, 2022.

Malnutrition inflammation complex syndrome and atherosclerosis in CKD- accepted for publication in Cureus.

StatPearls: Metformin associated lactic acidosis, 2022.

Immobilization related hypercalcemia in COVID-19- Cureus, 03/2022.

Vancomycin associated interstitial nephritis- Frontiers in Medicine.

A case of membranous lupus nephritis identified after pronase digestion- Cureus, 2022.

Chronic constrictive pericarditis after hemodialysis- Medicine 2022.

Coexisting Portal Vein Thrombosis and Aortic Thrombosis in a Patient with COVID-19: A Case Report and Literature Review- Infectious Disease, 2022.

Thromboelastography for uremic thrombocytopathy in a patient with COVID-19- Frontiers in Hematology.

Case report: SARS-CoV-2 infection as a trigger for diabetic ketoacidosis and newly detected pancreatic autoantibodies- Frontiers in Endocrinology.

Acute Spinal Cord Ischemia Associated With Cocaine Use: A Case Report- Cureus, 2022.

Uridine Triacetate in the Management of Delayed Onset 5-Fluorouracil Toxicity: A Case Report and Review of Literature- Frontiers in Pharmacology, 2022.

Sodium-Glucose Co-transporter-2 Inhibitor Associated Severe Epididymo-orchitis- BMJ, 2022.

Treatment of drug-resistant Wolff-Parkinson White Syndrome in pregnancy with Caesarean section. – Frontiers in Medicine.

### **Book Chapter**

Handbook of Home Hemodialysis- Wrote a book chapter- Complications of home hemodialysis-Published- McGraw- Hill, 2021.

Rituximab in glomerular diseases and resistance to anti-CD20 antibodies- In the process of writing for Elsevier.

Nutrition in Kidney Disease-Community Outreach book for Eastern Kentucky region.

Center for Medicare and Medicaid- Developed Interactive E-learning series for CKD management- <a href="https://www.ediscolearn.com/learn/course/external/view/elearning/116/managing-ckd-timely-and-appropriate-referral-to-nephrology">https://www.ediscolearn.com/learn/course/external/view/elearning/116/managing-ckd-timely-and-appropriate-referral-to-nephrology</a>

## **Community Outreach**

As a Kidney Health Coach of the National Kidney Foundation, I have done outreach programs for the Eastern Kentucky Region.

# **National Competition Judge**

Society of Hospital Medicine, 04/2022- Poster competition judge American College of Physicians, 04/2022- Poster competition judge.