

Critical Care Nephrology Observership Program Progress Report

Years Covered: 2023–2025

Institution: University of Alabama at Birmingham (UAB)

Program Overview

The Critical Care Nephrology Observership Program at UAB provides international physicians with structured exposure to advanced clinical practices in critical care nephrology, multidisciplinary ICU management, and scholarly research.

Participants engaged in rotations across specialized teams, attend educational academic sessions, and contribute to ongoing research initiatives.

Rotations

Orientation, Credentialing, and Reading Assignments

Completed initial onboarding activities, including institutional orientation, credentialing procedures, and review of key clinical guidelines and protocols.

Cardiopulmonary Critical Care Intensive Care Unit (CPCC) and Extracorporeal Membrane Oxygenation (ECMO)

Observed management of critically ill patients with severe cardiac and pulmonary conditions in CPCC and gained exposure to ECMO, a specialized life-support technique for patients with refractory respiratory or cardiac failure.

Green Nephrology Consult Service

The Green Team focuses on patients with nephrology issues on both the hospital floors and the medical ICUs. The team consists of nephrology fellows and internal medicine residents, with daily supervision by a nephrology faculty member. Clinical exposure includes acute kidney injury, complex electrolyte disturbances, and renal replacement therapy.

Yellow Nephrology Consult Service

The Yellow Team manages ESKD patients and nephrology patients on the floor who are followed primarily by the hospitalist services. This team is staffed by nephrology fellows and internal medicine residents and is led by a nephrology faculty member. Responsibilities include dialysis management, evaluation of kidney-related complications, and initiation of renal replacement therapy when needed.

Blue Nephrology Consult Service

The Blue Service focuses on patients with renal issues in the surgical ICUs, with a large proportion of the consult population in the cardiovascular ICU. This service provides significant exposure to CRRT, ECMO, and advanced surgical critical care. The team includes a nephrology

attending, nephrology fellows, and at times critical care fellows from medicine, surgery anesthesiology, all overseen by a nephrology faculty member.

Anesthesia Critical Care and ICU Primary Team

Observed perioperative and critical care management provided by anesthesia specialists and primary ICU teams, focusing on multidisciplinary approaches to complex cases.

UAB Continuous Renal Replacement Therapy (CRRT) Academy

Attended an intensive educational program focused on advanced principles and practical applications of CRRT in critically ill patients, including hands-on sessions, case-based discussions, and evidence-based updates on renal replacement therapy.

Scholarly Activities

Dedicated time to research development and academic writing, contributing to ongoing scholarly projects.

2023

Dr. Caterina Pelusio



- **Program Duration:** June 5, 2023 – August 11, 2023
- **Clinical Rotations:**
 - Orientation, credentialing, and reading assignments
 - Cardiopulmonary Critical Care ICU (CPCC) / ECMO
 - Acute Care Nephrology / Green Team
 - Scholarly activities
 - CPCC / ECMO / Blue Team
 - Anesthesia Critical Care / ICU Primary Team
 - Scholarly activities
- **Academic Contribution:**

Initiated a review on renal replacement therapy in cirrhosis, subsequently published: *Pelusio C, Endres P, Neyra JA, Allegretti AS. Renal Replacement Therapy in Cirrhosis: A Contemporary Review. Adv Kidney Dis Health. 2024;31(2):133-138.*

Dr. Francesco Galasso



- **Program Duration:** September 18, 2023 – November 29, 2023
- **Clinical Rotations:**
 - Orientation, credentialing and reading assignments
 - Blue and Green Team services
 - ECMO service
 - Scholarly activities
- **Additional Activities:**
 - Attended 2023 UAB CRRT Academy

- Collaborated on a multicenter retrospective cohort study, later published: *Cama-Olivares A, et al., Galasso F, Tolwani AJ, Neyra JA. Clinical factors associated with hospital mortality in critically ill adult COVID-19 patients with AKI requiring CRRT: A multicenter study. Clin Nephrol. 2025;103(2):96-107.*

2024

Dr. Roberta Perrucci



- **Program Duration:** July 1, 2024 – September 8, 2024
- **Clinical Rotations:**
 - Orientation and reading assignments
 - Blue Team (CICU/CPCC/SICU)
 - SICU / ECMO service
 - Scholarly activities
 - CRRT Academy Week
- **Academic Contribution:**
 - Presented an abstract at 2024 UAB CRRT Academy on concurrent ECMO and CRRT use in critically ill patients
 - Participated in drafting the LATAM AKI study protocol, an ongoing epidemiological study on RRT resource availability and mortality in low-income countries

Dr. Filippo Firenzuoli



- **Program Duration:** September 2, 2024 – November 23, 2024
- **Clinical Rotations:**
 - Orientation and CRRT Academy Week
 - ECMO / SICU service
 - Green Team, Blue Team, Yellow Team,
 - Scholarly activities
- **Academic contribution:**
 - Scholarly project: Post-hoc analysis of hypophosphatemia incidence and its association with respiratory failure in STARRT-AKI participants (manuscript in final stages).

2025

Dr. Sara Honsell



- **Program Duration:** August 8, 2025 – October 31, 2025
- **Clinical Rotations:**
 - Orientation and Blue Team
 - SICU / ECMO
 - Green Team
 - Research and CRRT Academy
- **Current Work:**
 - Attended 2025 UAB CRRT Academy
 - Developing a scholarly project on epidemiological aspects of CRRT and ECMO patients

Program Impact Summary

- **Clinical Exposure:** Participants engaged in multidisciplinary ICU care, including CPCC, SICU, ECMO, and nephrology consult services.
- **Educational Activities:** Observers attended the UAB CRRT Academy and participated in conferences and rounds. Some presented posters and abstracts.
- **Scholarly Contributions:** Multiple peer-reviewed publications and ongoing research projects have emerged from these observership, strengthening international collaboration and advancing critical care nephrology research.



