

ASPHO Career Path Spotlight

Jennifer Andrews, MD, MSc

Career Description

- Current position: Associate Professor of Pathology, Microbiology and Immunology (Division of Transfusion Medicine) and Pediatrics (Division of Hematology/Oncology), Medical Director of the Blood Bank
- 2. Institution: Vanderbilt University Medical Center
- 3. Years at institution: Two
- 4. Did you complete additional post-fellowship training? Was it an important factor in your current position? I completed a Blood Banking/Transfusion Medicine fellowship at Stanford after my Pediatric Heme/Onc fellowship. This one-year fellowship program was instrumental to my career path. One specialty informs the other and I 'translate' blood banking to my clinical colleagues and clinical medicine and hematology to my laboratory colleagues every day. I have been fortunate to practice both Pediatric Heme/Onc and Transfusion Medicine throughout my career and credit this blend with my academic success.
- 5. Years out of Fellowship: 8
- **6. Type of institution:** Academic center
- 7. Approximate number of attendings in your PHO department/division: 21
- 8. How do you allocate your effort?
 Clinical-40%, Scholarship-30%, Education-5%, Administration-25%
- 9. Position Specifics (Please give a brief description of your current responsibilities in these areas)
 - a. Clinical activity: I am the Medical Director of the Blood Bank where I oversee a busy transfusion service that performs approximately 80,000 tests and dispenses approximately 65,000 blood products annually (and climbing) to complex patients including those receiving ABO-incompatible stem cell and pediatric heart transplants, and supports the only level I trauma center in Nashville and a sizable sickle cell patient population with significant alloantibodies. My colleagues and I also perform apheresis procedures including erythrocytophereis for sickle cell patients on chronic transfusions, and stem cell and CAR-T collections. I also see classical pediatric hematology patients both in an outpatient clinic once weekly and on an inpatient consultation service for 8-12 weeks a year.
 - **b.** Scholarship/Research: I've attended all the NIH/NHLBI Scientific Priorities in Pediatric Transfusion Medicine Workshops which helps set the research agenda in my field. I'm





ASPHO Career Path Spotlight

also an active member of the AABB Subsection on Pediatric Transfusion Medicine, which allows me to participate in international collaborative research on new blood products or blood product alternatives (like pathogen-reduced platelets and fibrinogen concentrate), blood utilization in children, use of technology to optimize best practices for blood transfusion and medical education. I recently completed an investigator-initiated multi-institutional randomized clinical control trial comparing human fibrinogen concentrate to a traditional blood product, cryoprecipitate, in children undergoing cardiopulmonary bypass surgery during congenital heart repair surgery. I'm excited to start an international multi-site trial soon to standardize laboratory testing for minor red blood cell antibodies in hemolytic disease of the fetus/newborn.

- c. Education/Teaching: I am the Chair of the Clinical Competency Committee (CCC) for Pathology residents, where we assess progress of our residents through the residency curriculum. I mentor multiple medical students, residents and fellows (in Pathology, Pediatrics, Anesthesia and Surgery residencies and in Pediatric Heme/Onc and Transfusion Medicine/Blood Bank fellowships) and teach both didactic lectures and small group learning sessions at the Vanderbilt School of Medicine. And I find myself educating a lot of my colleagues around the hospital in my daily interactions with shared patients, or even during meetings setting the safety goals of the hospital.
- d. Administration: As the Medical Director of the Blood Bank, my team and I ensure our policies and procedures lead to the safest and most efficient transfusions of all the patients at Vanderbilt from newborns to patients over 100 years old. We interact with health care providers in all specialties at our hospital, and I have especially good relationships with colleagues in the ER, anesthesia, surgery, trauma and hematology. We have many obligations per all kinds of regulatory bodies, including the Joint Commission, AABB, CAP, and others, so I find these responsibilities taking up more and more of my time. I am happy to have a fantastic Transfusion Committee here ensuring that all our patients are safely and appropriately transfused.

Career Perspectives

- 1. What were important factors in your taking on this role (e.g., professional interest, family, geography, spousal profession)? What made this career path appealing?

 I took my current position after being on faculty at Stanford since 2012, and though I miss my friends and colleagues in California, it was the right time for my family to move. My husband graduated from Vanderbilt over 20 years ago and has always wanted to come back to Nashville, and he's running his own successful tech recruiting company here (IQ Talent Partners). Our daughter started kindergarten in the fall after I started my position, so again, the timing just worked out perfectly and she's settling in nicely at her new school.
- 2. Is there specific training or experience that helped you obtain this position?



ASPHO Career Path Spotlight

Yes, doing a Transfusion Medicine/Blood Banking fellowship and then staying on at Stanford and gaining experience practicing both specialties made my current position possible. I have benefited from having so many mentors (too many to name!) over the years too who have really been key in my crafting my career path.

3. Is this career path what you expected? Please explain.

Not at all! In fact, I interviewed here at Vanderbilt for Pediatric Hematology/Oncology fellowship and I just re-read my personal statement that I sent in with the application (with the attached black and white photo from ERAS, where I look so young!). I was very set on becoming an Oncologist. I am so lucky that I ended up working very closely with Drs. Jeannie Hendrickson and Cassandra Josephson at Emory who peaked my interest in this field, and we still work together today.

4. What do you find most rewarding about your current professional role?

I love being in the thick of so many things – running to see a patient in my clinic after a busy morning in the blood bank writing policies or interpreting test results and taking calls from colleagues and friends about a difficult case or preparing a lecture on massive transfusion to the surgery residents. I really enjoy the variety in my specialty – I can literally see a 'once in a lifetime' antibody in the blood bank (where my laboratory friends nerd out and share with everyone) and then go see the baby with resulting hemolytic disease of the newborn/fetus. And I love sharing all this knowledge with learners of every kind. Education & mentoring are the truly most rewarding parts of my day.

5. What do you find most challenging about your current professional role?

Some of my administrative responsibilities are the 'thorn' of my day, but I try my best to turn even the most difficult moments, like investigating an error that resulted in sub-optimal patient care, into opportunities to ensure mistakes don't happen again to other patients. Sometimes the pace of a change I'd like to see put in place to optimize practice can seem agonizingly slow, and sometimes changes can seem incomplete. But I'm learning not to let the good be the enemy of the perfect, and even small iterative change adds up over time.

6. What do you see yourself doing in 5 years and 10 years?

7. If 2020 has taught the world anything, it's that life is unpredictable. So, I'm planning on filling my days with the things I love the most — seeing a cadre of interesting patients and teaching (best when combined). Serendipity has served me well thus far in my career, and I'm keeping an open mind about more administrative opportunities to serve the patients in our hospital during Vanderbilt's year-long Mid-Career Leadership Development Program starting in January 2021. And of course, I'll continue to do research in my growing community of friends in Pediatric Transfusion Medicine.