

Blood Bank Technology (BBT) Program Description

The OneBlood Blood Bank Technology Program (BBT) is licensed by the Florida Department of Health. Upon successful completion of the program, the student applies to the American Association of Bioanalysts (AAB) to take the national examination to be certified as a medical technologist in the discipline of Immunohematology and Blood Banking. The student will apply to the Florida Department of Health to obtain a medical technologist trainee, temporary medical technologist, and medical technologist licenses in the areas of Immunohematology and Blood Banking. This will allow a graduate to work in a blood center or hospital compatibility testing laboratory.

Entrance Requirements

Candidates for admission must have:

1. BS degree in biological sciences, with 24 hours in the following:
 - a. 6 hours biology
 - b. 6 hours chemistry, and
 - c. 12 hours biology and/or chemistry
2. GPA 3.0 or higher preferred
3. Official transcripts from each college or university attended, mailed directly to the Program Director by the designated deadline. Transcripts from universities/colleges outside of the United States must be evaluated by an acceptable evaluation agency.
4. 3 references using our form by designated deadline
5. Completed application by designated deadline
6. Resume by designated deadline

Curriculum

Classes are part-time (approximately 20 hours/week), beginning mid-late August and ending early-mid February. The primary teaching center is located in St. Petersburg, but students may be accepted from remote OneBlood sites in Florida, including but not limited to Ft. Lauderdale, Orlando, Jacksonville, and Tallahassee, or Charlotte, North Carolina.

Preparation of competent entry-level graduates in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains is accomplished by several means. Didactic lectures/review sessions/competitive team games/case studies/presentations are administered online with narration, delivered by live videoconference, and/or delivered face-to-face. In addition to the Program Director, faculty also provide didactic lectures and the OneBlood Medical Director, OneBlood department directors/managers/supervisors and invited guests. Students are also encouraged to attend AABB Webinars and local technical meetings outside of OneBlood.

Education on all major aspects of immunohematology and transfusion medicine, including blood collection, product manufacturing, specialized serology, molecular testing, transfusion medicine practice, quality systems, process control, education and management is included. Didactic training is complimented with supervised student wet laboratory exercises and clinical practicum experiences designed to enhance applied knowledge through observation, discussions, and/or hand-on experiences during rotations. Students read and sign a copy of the program's Essential Functions. Finally, students are mentored on communication skills, ethics, attitudes, self-awareness, respect, teamwork, motivation, and ability to change using 1) intrinsic factors, such as their attitudes, curiosity, and desire to learn, as well as extrinsic factors such as grades, regular feedback, and the goal of becoming a certified and license technologist; 2) clinical practicum experiences and their study guides; 3) delivering class presentations and case studies; and 4) student feedback on didactic and practicum evaluation surveys.

The primary teaching center has a designated student laboratory. Students accepted locally are provided instruction for wet laboratory experiences (approximately 100 hours) by the Program Director or designee. Students accepted from remote OneBlood locations are paired with a designated mentor who executes scheduled student wet laboratory experiences in a clinical laboratory. The Program Director establishes the testing schedule and number of unknown test challenges for all students. Students maintain a Student Laboratory Manual to document/establish satisfactory psychomotor ability via a variety of successful test challenges and expected results (such as ABO/Rh typing, antibody screen, antibody identification, direct antiglobulin testing, compatibility testing, fetal screen testing, sickle cell screening, donor and self-phenotyping), as well as satisfactory cognitive ability to interpret serologically and apply the testing results clinically. Affective ability is assessed by evidence of teamwork, such as working with the instructor, sharing reagents, cleaning the work area and put away reagents at the end of student lab, asking questions, or supporting peers in their understanding of procedures performed; and emotional control while performing timed procedures, unknowns, and practical exams, or when receiving constructive feedback on important skills, such as proper resuspension and interpretation of red cell buttons, pipetting or dropping reagents, reading and following procedures, calculating math problems.

Clinical practicum experiences (approximately 40 hours) are generally scheduled during the months of November, December, and January, based on matching students, travel requirements, and clinical practicum site availability. Clinical practicum experiences available include: Transfusion Services and/or Immunohematology Reference Laboratory; Molecular Laboratory; HLA Antigen/Antibody Laboratory; Platelet Testing Laboratory; Donor Collection (fixed-site or mobile); Component Distribution; Component Manufacturing; Donor Infectious Disease Testing; and Product Quality Control Laboratory.

Lectures include (approximately 160 hours) and include:

- Quality Assurance and Regulatory Affairs
- Laboratory Finance and Budgeting
- Human Resources Knowledge
- Introductions to the Clinical Laboratory, including Math
- Basic Immunology (9-part series)
- Principles of Blood Group Genetics
- An Introduction to Human Leukocyte Antigens (HLA) and Their Role in Immunohematology
- Biochemistry and Immunology in Immunohematology
- Introduction to Molecular Testing
- Blood Group Systems, including ABO and Secretor, Rh, Kell, Kidd, Duffy, MNS, Lewis, I/I, PP1Pk/Globoside, Lutheran, and Other Miscellaneous Blood Groups
- Serological Testing, including Specimen Integrity in Blood Bank, Introduction to Hemagglutination, Introduction to Blood Bank Reagents, Antiglobulin Testing, Pretransfusion Testing, Antibody Identification, and Resolving ABO/Rh Discrepancies
- Transfusion Reactions and Laboratory Work-up
- Hemolytic Disease of the Fetus and Newborn
- Immune Hemolytic Anemias
- Coagulation and Hematology
- Blood Administration
- Blood Donor Collection
- Component Manufacturing
- Donor Testing
- Proper Use of Components

Deadline for Application Materials

- Unofficial transcripts **MUST** be reviewed in advance by the Program Director to ensure prerequisites and minimum GPA requirements are met. Email to MTEducation@oneblood.org.
- Completed application, resume, three references, and official transcript must be submitted by the middle of May. Refer to the OneBlood website or the Program Director for specifics.
- Qualified candidates are scheduled interviews with the BBT Admissions Committee after the designated application deadline.
- Candidates are will receive notifications of their acceptance or denial by mid-late June.



Maximum Student Capacity (exceptions made by Executive Management based on need)

- 6 students in St. Petersburg
- 2 students at each remote location (based on mentor and staffing availability)

Fees

- The application fee to the BBT Program is \$50 and nonrefundable. Tuition is \$750.00 for OneBlood employees; \$1,000.00 for non-employees. Fees are subject to change each year.
 - In any given class cycle, there may be students who are employed by OneBlood, and students who are not currently employed by OneBlood.
 - All funds are submitted to OneBlood Accounts Payable by the designated deadline:
 - Check or money order made payable to “OneBlood, Inc.”
 - In the “For:” section of the check (bottom left corner), please note “BBT App Fee” or “BBT tuition”, as applicable.
 - Mail payment to:
OneBlood, Inc.
Attn. Accounts Receivable
8669 Commodity Circle
Orlando, FL 32819
- **There is no allowance for late payment unless approved by OneBlood executive management.**
- Fees are subject to change, periodically. Please contact the Program Director to confirm.

For more information, please email MTEducation@oneblood.org or contact:

Wyenona “Nonie” Hicks, MS, MT(ASCP)SBB
Program Manager of Medical Technology Education
10100 Dr. Martin Luther King St. N
St. Petersburg, FL 33716
Office: 727-568-1224
Cell: 863-206-4004
Fax: 727-568-1177
Email: wyenona.hicks@oneblood.org