Specialist in Blood Bank Technology

Goals and Outcomes

Program Mission

In support of the mission of Carolinas College, the mission of the School of Clinical Laboratory Sciences Specialist in Blood Bank Technology/Transfusion Medicine program is to provide quality education to prepare individuals to function as competent entry-level specialists and serve in leadership, educational, and technical roles within the profession.

Program Goals

1. To prepare competent entry-level Specialists in Blood Bank Technology/Transfusion Medicine (SBBT/TM) in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains
2. To develop and maintain a master curriculum that meets the Standards of the American Association of Blood Banks (AABB) Committee on Accreditation of Specialist in Blood Bank Technology Schools (CoA-SBBT).
3. To prepare graduates who possess the cognitive knowledge necessary to successfully pass the American Society of Clinical Pathology (ASCP) Specialist in Blood Banking (SBB) Board of Certification (BOC) exam

Objectives (Student Expected Outcomes)

The Specialist in Blood Bank Technology/Transfusion Medicine program prepares professionals who are competent to perform and interpret laboratory tests in all aspects of blood banking and transfusion medicine and to explain the appropriate use of blood products and laboratory results to other health-care professionals and to the public. The curriculum is designed to develop critical thinking skills by integrating theoretical concepts with clinical laboratory training. At completion of the Specialist in Blood Bank Technology/Transfusion Medicine program, students will:

1. Evaluate pre-analytical, analytical, and post analytical procedures to ensure quality
laboratory results.
2. Develop instructional materials and present information using educational principles.
3. Explain the principles of managing resources and the essential principles of clinical laboratory operations including financial management, human resources management, laboratory accreditation, and total quality management.
4. Evaluate and lead laboratory compliance with quality system practices instituting proper procedures to maintain the accuracy, precision, and reliability of laboratory results.
5. Appraise and implement appropriate recruitment, collection, and testing of blood donors as well as component preparation, labeling, storage, and transportation of blood products.
6. Integrate concepts of genetic inheritance, molecular methodologies, and the sciences of immunology, hematology, and hemostasis as they relate to transfusion medicine.
7. Assess the role of blood groups in transfusion with respect to antigen biochemistry and population frequency, as well as antibody characteristics and immunogenicity.
8. Perform and evaluate routine and special serologic testing to ensure donor/recipient compatibility.
9. Ensure safe effective transfusions for all populations utilizing appropriate hemotherapy decisions, blood management protocols, component therapy, and the appropriate use blood derivatives.
10. Discuss the collection and processing procedures and indications for therapeutic apheresis, stem cells and bone marrow transplantation.
11. Evaluate, classify, and suggest treatment for and prevention of complications due to transfusion.
12. Demonstrate ethical standards and confidentiality with patient medical information and demonstrate professional behavior and interpersonal communication skills with laboratory personnel, other health care professionals, and the public.

**Program Outcomes**

<table>
<thead>
<tr>
<th>Year of Graduation</th>
<th>CCHS Board Certification Pass Rate</th>
<th>ASCP National Board Certification Pass Rate</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>100%</td>
<td>68%</td>
</tr>
<tr>
<td>2018</td>
<td>100%</td>
<td>62%</td>
</tr>
<tr>
<td>2019</td>
<td>100%</td>
<td>68%</td>
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