



INTERNATIONAL SPECIALIST IN BLOOD BANKING

EDUCATOR EXPERIENCE DOCUMENTATION FORM (Routes 4 & 5)

PART I (TO BE COMPLETED BY APPLICANT)

Applicant's Name	Address
Email Address	

PART II (MUST BE COMPLETED AND SIGNED BY IMMEDIATE SUPERVISOR OR EMPLOYER IN ORDER TO BE ACCEPTABLE)

SUBJECT: VERIFICATION OF EDUCATOR EXPERIENCE FOR EXAMINATION ELIGIBILITY

This individual, identified above, has applied for the Board of Certification International Specialist in Blood Banking examination. In order to establish this applicant's eligibility for certification, the following information is necessary:

1. PLEASE COMPLETE: EMPLOYMENT

Date employment **started teaching** in Blood Banking: Month _____ Day _____ Year _____
 Date employment **ended teaching** in Blood Banking: Month _____ Day _____ Year _____
 How many hours per week **teaching**? _____ (Average, if necessary)

2. DIRECTIONS: Please review the experience of this applicant in teaching blood banking. Please place an **X** by each procedure which has been taught satisfactorily under your supervision using **The Guidelines for Evaluating Experience of a Candidate for International Specialist in Blood Banking**. (NOTE: Teaching experience is required in **ALL** of the procedures listed below.)

<p><u>SEROLOGIC AND/OR MOLECULAR TESTING</u></p> <p>_____ ABO and Rh typing</p> <p>_____ Antibody detection & identification</p> <p>_____ Crossmatching</p> <p>_____ Direct antiglobulin tests</p> <p>_____ Tests for other blood group antigens</p> <p><u>ROUTINE PROBLEM SOLVING</u></p> <p>_____ Transfusion reactions</p> <p>_____ Immune hemolytic anemias</p> <p>_____ Hemolytic disease of the fetus and newborn (HDFN)</p> <p>_____ Rh immune globulin studies</p> <p>_____ Indications for transfusion</p>	<p><u>QUALITY CONTROL/ASSURANCE</u></p> <p>_____ Reagents, equipment</p> <p>_____ Component quality control</p> <p>_____ Regulatory compliance</p> <p><u>LABORATORY OPERATIONS</u></p> <p><u>DONOR COLLECTION, PROCESSING, AND TESTING</u> (Proficiency may be demonstrated through performance, observation or simulation.)</p> <p>_____ Donor selection, preparation and collection</p> <p>_____ Processing and donor testing</p> <p>_____ Component preparation for storage and administration</p>
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3. BY SIGNING THIS FORM, I AS IMMEDIATE SUPERVISOR OR EMPLOYER VERIFY THAT THIS APPLICANT HAS TAUGHT SATISFACTORILY IN THE BLOOD BANKING AREAS CHECKED ON THIS FORM.

(Please Print) Immediate Supervisor or Employer Name	Title
Immediate Supervisor or Employer Signature	Date
Immediate Supervisor or Employer Email Address	Institution Telephone Number
Institution	
Institution Address	

BE SURE TO INCLUDE A LETTER OF AUTHENTICITY FROM YOUR IMMEDIATE SUPERVISOR OR EMPLOYER WITH THIS EDUCATOR EXPERIENCE DOCUMENTATION FORM. THE LETTER OF AUTHENTICITY MUST BE PRINTED ON ORIGINAL LETTERHEAD. IT MUST STATE THAT THE EDUCATOR EXPERIENCE DOCUMENTATION FORM WAS COMPLETED, SIGNED AND DATED BY YOUR IMMEDIATE SUPERVISOR OR EMPLOYER. EDUCATOR EXPERIENCE DOCUMENTATION FORMS RECEIVED WITHOUT LETTERS OF AUTHENTICITY ARE UNACCEPTABLE. PLEASE MAIL OR EMAIL THESE FORMS TO ASCP INTERNATIONAL: ascpinternational@ascp.org

COMPETENCY STATEMENTS

INTERNATIONAL SPECIALIST IN BLOOD BANKING

IN REGARD TO LABORATORY OPERATIONS AND THE PERFORMANCE OF LABORATORY TESTS INVOLVING BLOOD GROUP IMMUNOLOGY, BLOOD GROUP SYSTEMS, BLOOD COMPONENTS, SEROLOGY AND MOLECULAR, PHYSIOLOGY AND PATHOPHYSIOLOGY, AND TRANSFUSION PRACTICE AT CAREER ENTRY, THE SPECIALIST IN BLOOD BANKING:

APPLIES

- knowledge of possible sources of error to laboratory testing
- principles of basic laboratory procedures in order to perform tests
- knowledge of fundamental biological characteristics as they pertain to laboratory testing, in order to interpret laboratory findings
- principles of theory and practice related to laboratory operations
- principles of special laboratory procedures in order to interpret test results
- standard operating procedures, to establish laboratory protocols
- principles of management
- principles of theory and practice to clinical laboratory teaching
- principles of theory and practice related to R&D

PREPARES

- educational materials for use in teaching programs
- instruments for laboratory procedures
- controls/standards for laboratory procedures
- reagents and blood components

CALCULATES

- results from test data obtained from laboratory procedures

EVALUATES

- laboratory data to determine possible sources of error
- quality assurance data to verify laboratory results
- laboratory personnel performance
- laboratory data to verify test results
- laboratory data to assess validity/accuracy of procedures for a given test
- laboratory data to determine appropriate additional testing
- laboratory productivity
- laboratory operational policies and procedures
- laboratory data to make identifications
- various methods to establish new testing procedures

SELECTS

- appropriate methods for laboratory testing
- course of action appropriate for the type of sample and test requested
- appropriate controls/standards for tests performed
- methods/reagents/blood components/donors according to established procedures
- instruments to perform tests according to established procedures
- special or additional laboratory procedures to verify test results
- instruments for new laboratory procedures

CORRELATES LABORATORY DATA

- with clinical data to assess test methods
- with quality control data
- and clinical data with test accuracy
- and quality control data to assess test methods/procedures
- with other laboratory data to assess test accuracy
- with other laboratory data to assess test methods

ESTABLISHES

- policies and procedures to facilitate laboratory accreditation
- new laboratory test procedures

- laboratory data to refine laboratory test procedures
- laboratory data to determine alternate methods for a given test
- new technology and scientific advancements for potential information
- laboratory and clinical data to specify additional tests
- laboratory and clinical data to verify test results
- performance of clinical laboratory students
- laboratory data to establish reference range criterion for existing or new tests
- laboratory data to recognize health and disease states
- test results obtained by alternate methodologies

GUIDELINES FOR EVALUATING EXPERIENCE OF A CANDIDATE

INTERNATIONAL SPECIALIST IN BLOOD BANKING

To qualify for certification as an international specialist in blood banking, the applicant should be competent to perform the tests and procedures indicated. The international specialist in blood banking should have the equivalent knowledge and skill to those of a graduate of an accredited/approved* international specialist in blood banking program.

FOR EACH AREA OF EXPERIENCE LISTED BELOW, THE CANDIDATE SHOULD BE ABLE TO:

1. obtain necessary patient/donor history
2. recognize clerical errors in records and in the labeling of patient specimens and blood products
3. select appropriate samples, reagents, procedures, controls, and donor units
4. perform tests accurately and within a reasonable period of time
5. correctly observe, record, and interpret results
6. recognize and resolve encountered problems and discrepancies including, but not limited to, those described below
7. correlate other related data pertinent to problem resolution

SEROLOGIC AND/OR MOLECULAR TESTING	
AREA OF EXPERIENCE	SUGGESTED EXTENT OF EXPERIENCE
ABO typing	<ul style="list-style-type: none"> • Discrepancies due to subgroups, unexpected alloantibody(ies), cold reacting autoantibody(ies), lack of expected antigens/antibodies • Samples with mixed-field agglutination • Confirmation of weak subgroups by adsorption/elution techniques and saliva studies • Rouleaux • Separation of mixed ABO cell populations
Rh typing	<ul style="list-style-type: none"> • Rh phenotyping/probable genotype determination • Unusual Rh phenotypes • <i>RHD, RHCE</i> genotyping • Testing of blood samples with positive Rh controls caused by rouleaux, positive DAT • Blood samples with mixed-cell populations • Rh-positive samples with alloanti-D
Antibody detection and identification	<ul style="list-style-type: none"> • Blood samples with: <ul style="list-style-type: none"> ○ a single alloantibody; autoantibody(ies) ○ mixtures of alloantibodies ○ antibodies to low incidence and high incidence antigens ○ autoantibodies plus alloantibody(ies) ○ antibody(ies) to constituents of reagents/drugs • Samples reactive by enhancement techniques only (e.g. PEG) • Red Cell Treatments (e.g. enzymes) • Titrations • Hemagglutination inhibition • Adsorption/Elution procedures

Crossmatching	<ul style="list-style-type: none"> • Selection of appropriate blood products and ABO/Rh types for a variety of patients • Incompatible crossmatches: <ul style="list-style-type: none"> ○ Recipient samples with unexpected alloantibodies, rouleaux, cold reacting autoantibody(ies) ○ Recipient samples with unidentified alloantibody ○ Recipient samples with warm-reactive autoantibodies and underlying alloantibody(ies) ○ Donor blood samples with positive DAT
Tests for other blood group antigens	<ul style="list-style-type: none"> • Red cell phenotyping • Phenotyping of red cells with positive DAT • Red cell genotyping
Direct antiglobulin test	<ul style="list-style-type: none"> • Samples coated with IgG, Complement components and/or both • Elution techniques • Recognize mixed-field reactions
QUALITY CONTROL/ASSURANCE	
AREA OF EXPERIENCE	SUGGESTED EXTENT OF EXPERIENCE
Quality control	<ul style="list-style-type: none"> • Equipment troubleshooting and maintenance, including: incubators, water baths, refrigerators, freezers, centrifuges, automated cell washers, alarm systems, platelet rotators • Performance of routine and required procedures on reagents • Blood and component products to include preparation and labeling of Whole Blood, Red Blood Cells, Plasma Components, Platelets, Cryoprecipitated AHF, Leukocyte-Reduced Cellular Components, Irradiated Cellular Components, Red Blood Cells Frozen/Deglycerolized, apheresis products
Quality Assurance	<ul style="list-style-type: none"> • Application of <u>AABB Standards</u> and <u>Code of Federal Regulations</u> as appropriate to all areas in quality management • Competency assessment program(s) • Proficiency testing
Laboratory Operations	<ul style="list-style-type: none"> • Procedure/policy selection and evaluation • Reagent and supply inventory • Instructional responsibilities • Safety
ROUTINE PROBLEM SOLVING	
AREA OF EXPERIENCE	SUGGESTED EXTENT OF EXPERIENCE
Transfusion reactions	<ul style="list-style-type: none"> • Investigation of reactions due to ABO incompatibility, unexpected alloantibodies, and non-immunologic causes • Recognition of cases with clinical evidence of transfusion reactions in absence of supportive serologic data
Immune hemolytic anemias	<ul style="list-style-type: none"> • Blood samples that present with ABO and Rh typing discrepancies • Utilization and interpretation of polyspecific and monospecific antiglobulin sera testing • Blood samples that contain autoantibodies plus alloantibodies in serum and/or eluate • Cold autoadsorption and prewarming procedures

	<ul style="list-style-type: none"> • Warm autoadsorption procedures • Differential adsorptions with selected RBC • Selection of blood for transfusion • Correlation of laboratory data to determine immune mediated hemolysis
Hemolytic disease of the fetus and newborn (HDFN)	<ul style="list-style-type: none"> • Serologic testing of prenatal and neonatal blood samples • Elution techniques • Serologic evaluation of ABO & Rh hemolytic disease of the fetus and newborn (HDFN) • HDFN caused by other blood group system antibody(ies) • Selection of donor blood for exchange, replacement, and intrauterine transfusions • Use of thiol/sulphydryl reagents • Comparative titration studies • Amniocentesis and evaluation of fetal blood • Preparation of blood products for neonatal transfusion
Rh immune globulin studies	<ul style="list-style-type: none"> • Determination of eligibility for RhIG cases involving: <ul style="list-style-type: none"> ○ weak D positive mothers ○ maternal serum containing anti-D ○ maternal serum containing other alloantibodies ○ Rh negative infants • Samples with mixed-field weak D reactions • Detection of fetomaternal hemorrhage by multiple techniques • Kleihauer-Betke stain and/or other quantitative method • Microdose RhIG • Cases of excessive fetal bleed • RhIG usage post-delivery, post-amniocentesis, post-abortion, and antepartum prophylaxis
Indications for transfusion	<ul style="list-style-type: none"> • Criteria for transfusion of blood components (e.g., red cells, platelets, plasma) • Application of patient blood management and blood utilization review
<p>DONOR COLLECTION, PROCESSING, AND TESTING (Proficiency may be demonstrated through performance, observation or simulation)</p>	
AREA OF EXPERIENCE	SUGGESTED EXTENT OF EXPERIENCE
Donor selection, preparation & collection	<ul style="list-style-type: none"> • Donor interview and deferral as appropriate • Phlebotomies • Donor reactions
Processing and donor testing	<ul style="list-style-type: none"> • Donor Unit Processing • Tests for transmittable diseases • Samples with ABO/Rh confirmation not in agreement with unit label • Quarantine of blood and blood products
Component preparation for storage and administration	<ul style="list-style-type: none"> • Preparation of components for administration and storage: Red Blood Cells, Plasma Components, Platelets, Cryoprecipitated AHF, Leukocyte-Reduced Cellular Components, Washed Red Blood Cells, Irradiated Cellular Components, and Red Blood Cells Frozen/Deglycerolized • Storage and transportation of blood and blood components • Donor unit labeling