

Bench Rotation Checklist

- **Acceptance of specimens**
 - Verification of labeling
 - Check for previous records
 - Sample requirements
- **Reading and recording of reactions**
 - Grading of reactions
 - Reporting of reactions
- **Blood types, Type and Screen**
 - Forward and reverse grouping**
 - Understand methodology
 - Understand differences between adult and pediatric specimen processing
 - Perform own type (if desired), including extended phenotype
 - Rh (D) typing**
 - Understand difference between donor testing and patient/recipient testing
 - Understand weak D testing
 - Perform own type (if desired)
 - Read "The Rh Antigen D: A review for clinicians" by Marion Reed
 - Antibody screen**
 - Understand principle of screen
 - Perform own antibody screen (if desired)
- **Maternal and Infant specimens**
 - Maternal**
 - Prenatal
 - Blood type, prenatal screen
 - Issuing Rhlg
 - Delivery room
 - Type and screen only
 - Fetal screen
 - When to perform
 - Procedure
 - Infant**
 - Cord bloods
 - ABO, Rh, DAT
 - Pediatric transfusion
 - Read procedure manual for guidelines and special procedures
 - Specimen requirements
 - Testing of specimens
 - Exchange transfusion
 - Donor limitation policy
- **Antibody identification**
 - Panels**
 - When to perform panel
 - Newly positive antibody screen
 - Increase in antibody strength
 - Change in reactivity
 - Auto control

- Ruling out and setting up selected cell panels
 - Special techniques
 - Prewarming
 - Neutralizations
 - Cold panel
 - **Direct Antihuman Globulin Test (DAT)**
 - Procedure
 - Read procedure manual
 - Understand when to order
 - How to interpret results
 - **Elutions**
 - Principle
 - When to perform eluate
 - How to interpret results
 - Methodologies
 - **Antigen typing**
 - When to perform
 - When antibody is found in serum and autocontrol is negative
 - Compatible units must be antigen typed for clinically significant antibodies
 - How antigen-matched/specially type units are obtained from blood centers
 - Antigen type own blood (if desired)
- **Crossmatching**
 - Type and crossmatch versus type and screen
 - Selection of specialty products
 - Leukoreduction
 - Irradiation
 - CMV negative
 - Crossmatch methods
 - Incompatibilities
 - Least incompatible blood
 - Auto and directed units
 - Must be given first
 - Policies regarding irradiation of directed donations
- **Donor processing**
 - Collection of whole blood versus component apheresis
 - Confirmation of ABO and Rh types
 - Auto and directed donors
- **Components**
 - Packed RBCs
 - When to use
 - Additive solutions
 - Storage times
 - Biochemistry
 - Potency
 - Administration
 - Platelets
 - When to use
 - Storage time/requirements

Blood Bank/Transfusion Medicine Rotation

- Pooling
 - Apheresis
 - HLA matched
 - Administration
 - FFP
 - When to use
 - Storage time
 - Thawing units
 - What it actually contains
 - Administration
 - Cryoprecipitate
 - When to use
 - Storage time
 - Thawing
 - What it actually contains
 - Administration
- **Issuing blood and components**
 - Review procedure manual
 - Emergency release
 - Management of blood returned to blood bank
- **Coagulation factors**
 - Inventory
 - Costs
 - How to order/calculate doses
 - Hemophilia/acquired deficiencies/off-label use
- **HLA**
 - Read “HLA platelets: filling requests” in procedure manual
 - Spend time in HLA lab
 - Observe Luminex testing
 - Discuss significance of HLA antibodies
 - Read related articles on platelet refractoriness
- **Stem Cell Lab**
 - Processing
 - Storage
 - Thawing/Preparation for transplant
- **Regulations**
 - Gain an appreciation of the regulatory environment in blood banking
 - Inspections
 - Skim an inspection checklist
 - FDA
 - AABB
 - CAP
 - FACT
- **Transfusion reactions**
 - Understand what to do in case of a suspected reaction
 - Understand how the laboratory investigation and follow-up works