

QUALIFICATION IN CYTOMETRY (QCYM) Topic Outline

I. Laboratory Techniques (40 - 50%)

- A. Cell Surface Markers
 - 1. Neoplastic
 - 2. Non-neoplastic
 - 3. Non-leukocytes
- B. Intracellular Markers
- C. Functional Assays
- D. CD Nomenclature
- E. Crossmatches
- F. Histogram Interpretation
- G. Data Calculation and Analysis
- H. Other (DNA ploidy)

II. Disease States (25 - 35%)

- A. Immunodeficiency Diseases
 - 1. HIV
 - 2. Wiskott-Aldrich
 - 3. Bruton's
 - 4. DiGeorge
 - 5. Other (CGD)
- B. Acute Leukemias
 - 1. Lymphoid
 - 2. Myeloid
- C. Chronic Leukemias
 - 1. Lymphoid
 - 2. Myeloid
- D. Lymphomas
- E. Stem Cell Transplantation
- F. Solid Organ Transplantation
- G. Lymphoproliferative
 - 1. Waldenström's
 - 2. Multiple myeloma
 - 3. Hairy cell
- H. Other
 - 1. Sézary syndrome
 - 2. PNH

III. Instrumentation (10 - 20%)

- A. Principles of Operations
- B. Maintenance
- C. Troubleshooting
- D. Calibration
- E. Fluorochromes, Dyes

IV. Laboratory Operations (5 - 15%)

- A. Performance Improvement
 - 1. Specimen collection, processing, storage
 - 2. Reagent selection, preparation, storage, disposal
 - 3. Assay selection, validation, documentation, calculation
 - 4. Quality control and proficiency testing
- B. Safety