

## STAFF IN CHARGE

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## **TECHNICAL SPECIFICATIONS**

## **OPTICS**

- ★ Laser beams independent alignement by adjustable mirrors: 200-mW 488-nm, 50-mW 640-nm, 100-mW 405-nm and 75-mW 561-nm
- $\star$  Elliptical beam spots (3:1 ratio with a typical beam height of 15–20 µm).
- ★ 17 PMTs

## Fluorescence Resolution/ Sensitivity

- ★ CV PI-Area of <3%, full G0/G1 peak for propidium iodide (PI)-stained chicken erythrocyte nuclei (CEN)
- ★ Doublet/singlet ratio of 1.95-2.05 for CENs stained with PI detected off the 488-nm

# **Forward and Side Scatter Sensitivity**

- ★ Polarization: two FSC detectors are mounted under Brewster angles to measure changes in paralllel and perpendicular light. Change in polarization can help differentiate between different population of granulocytes.
- ★ Small particule option improves FSC detection. Optimized sheath fluid (0.1-micron filtered) lowers the intrinsic noise level, which enables measurement of particles as small as 200 nm.

# **FLUIDICS AND SORTING**

## **Sort performance**

- ★ Sheath pressure is highly adjustable in relation to nozzle sizes. It allows to sort from very fragile cells at very low pressure to more sturdy cells at high pressure and high speed. Even at high flow rates the yield remains very efficient (at 25000 events / second, purity is > 98% and yield is > 80%)
- \* Four nozzle sizes: 70, 86, 100 and 140 μm

Sample input: only BD Falcon 5 ml Polypropylene Round-Bottom Tube (REF 352063)

## **Sort collection devices**

Sample and collection device temperature can be controlled (from 4°C to 42°C)

- ★ Two-way sorting: 1.5-mL, 5-mL, 15-mL, and 50-mL tubes, and 25-mm round filter paper
- ★ Three-way sorting: one 50-mL tube and two 5-mL tubes
- ★ Four-way sorting: 1.5-mL and 5-mL tubes
- ★ Six-way sorting: 5-mL tubes
- ★ Plates and slides: 6, 24, 48, 96, and 384-well plates; slides; and user-defined collection devices

# **MAINTENANCE/ QUALITY CONTROL**

BD Service twice a year

Daily alignment

Daily accudrop setting for optimal performance