

# FLEXCELL<sup>®</sup> STREAMER<sup>®</sup>

## Fluid Shear Stress Device

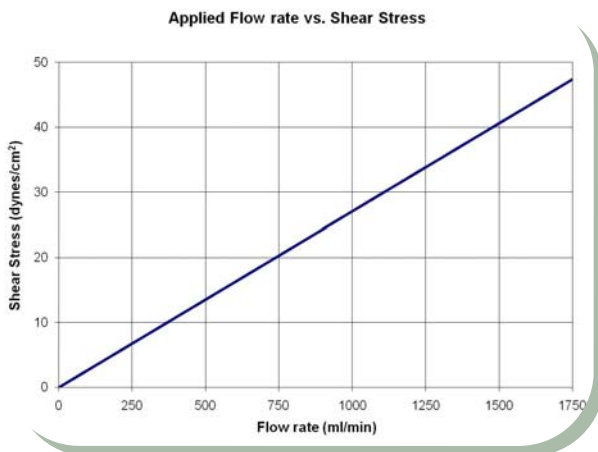
Apply fluid shear stress to cells in culture with laminar, pulsatile, or oscillating flow.



**Figure 11.** Image of Streamer<sup>®</sup> system setup with peristaltic pump, two pulse dampeners, and media bottle.



- Uses a computer-controlled peristaltic pump to regulate shear stress from 0-35 dynes/cm<sup>2</sup> (Fig. 11-12).
- Culture cells on special matrix coated, rimmed 25 mm × 75 mm × 1.0 mm Culture Slips<sup>®</sup>.
- Works with Osci-Flow<sup>®</sup> Flow Controller to regulate oscillating and pulsatile fluid flow.
- Analyze effects of fluid flow on cell alignment, mRNA and protein expression, and signaling pathways.
- Remove quick disconnect fittings for easy cleaning after use.
- Streamer device is autoclavable.
- Run up to six slides in parallel at one time.
- Comes with two pulse dampeners.



**Figure 12.** Representative graph of applied fluid shear stresses for a given pump flow rate for cells cultured on Culture Slips<sup>®</sup> and placed in the Streamer<sup>®</sup> device.

### Streamer<sup>®</sup> System includes:

- Streamer<sup>®</sup> device\*
- Dell notebook computer\*
- Tubing and quick disconnects
- Peristaltic pump
- StreamSoft<sup>™</sup> software
- Two pulse dampeners
- 12 Culture Slips<sup>®</sup>

\*Streamer<sup>®</sup> device also sold separately. Streamer<sup>®</sup> system can be purchased with or without a Dell notebook optional.

ORDERING INFORMATION (Please contact distributor for pricing)		
Catalog Number	Product/Item	Price
STR-4000	Streamer <sup>®</sup> Fluid Shear System	
STR-4000C	Streamer <sup>®</sup> Fluid Shear System w/o computer	
STR-4000D	Streamer <sup>®</sup> Fluid Shear Body Only	