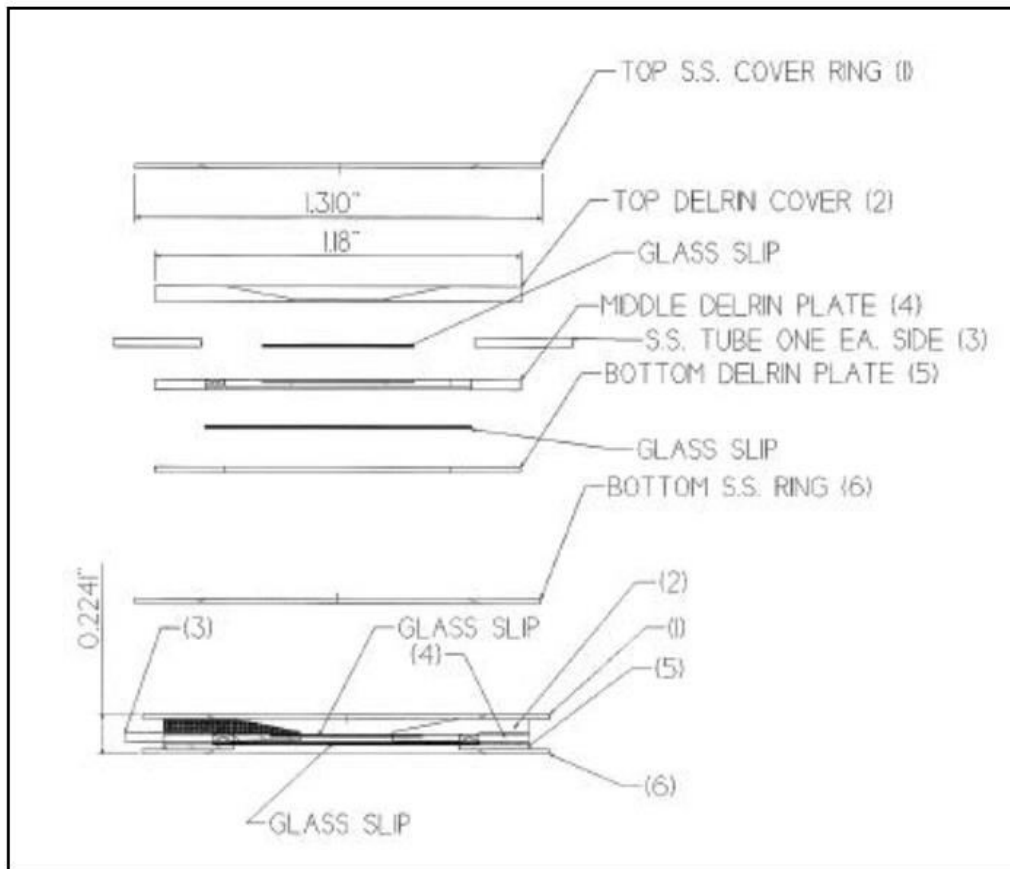


## FLOWCELL FOR IMAGING CELLULAR RESPONSES TO DRUG PULSES



Description: The flow cell was a unique design (before the era of microfluidics) with a small working volume ( $50 \mu\text{l}$ ) that allowed rapid displacement of media viewed under a high power and short working distance microscope objective. The device enabled the stimulation of cells (loaded with a dye) on the coverslip with a drug lasting for fractions of a minute. This was the chemical equivalent of electrical stimulation, common in electrophysiological recording from nerve cells. The top is the assemble drawing and the bottom is a picture of the cell. Several investigators requested detailed engineering drawings and made their own cells for use in their research.

Reference: Agnihotri, N.; Kisaalita, W.S.; Keith, C.H. A micro-perfusion flow cell for imaging cultured cells. *BioTechniques* 27:722-728 (1999). PMID: 10524313; DOI: 10.2144/99274st01.

