MONITORING OUTPUT OF A MEGAVOLTAGE PHOTON BEAM

INSTRUCTIONS

- 1. Assemble platform as follows. Unfold the legs and place them on the treatment table with the arrow pointing upward. Place the platform top on the legs with the inscribed square visible on the top of the platform. Before irradiating the TLD, make sure the legs are NOT directly underneath the inscribed square (see photo below).
- 2. Set a 10 cm x 10 cm field size with the SSD set to the **TOP OF THE PLATFORM** (not the top of the block). The light field should align with the inscribed square for a 10 cm x 10 cm field size.
- 3. Determine the "reference point" for your machine output. The reference point is the point at which you routinely specify the exposure or dose rate in <u>your clinical dosimetry system</u>. Also specify whether your machine output is in miniphantom (without backscatter) or in phantom (with backscatter). For example, if you routinely specify dose to d_{max} for a 6 MV linac, 100 cm SSD, your reference point is at 101.5 cm and you would check the box indicating "in phantom" at 1.5 cm depth and check the "d_{max}" box. We will correct our TLD reading based on your reference point information.
- 4. Place the TLD block label side up in the center of the field and set the time to deliver 300 cGy to your reference point.
- 5. Complete the TLD data sheet on the reverse side of these instructions. Be sure to fill in all requested information (highlighted sections), as incomplete forms will delay the processing of your TLD. Please send back the TLD via regular U.S. mail using the address label provided. TLD cannot be read until 7 days after irradiation. If you wish to return TLD by an express or direct carrier, use the following address: Radiation Dosimetry Services, 8060 El Rio Street, Houston, TX 77054. If you have any questions, please call Radiation Dosimetry Services (RDS) at (713) 745-8999 or you may e-mail us at RDS@mdanderson.org.

