CLAIMS

WHAT IS CLAIMED IS:

1. A system for bioprocessing, comprising:

a tray having a plurality of sidewalls and a bottom surface defining an interior compartment, and a generally open top;

at least one opening formed in the bottom surface, the opening having a perimeter; and

a first tubing holder block associated with one of the sidewalls of the tray, the first tubing holder block being configured to receive at least one pump tube and hold the at least one pump at tube in position for selective engagement with a peristaltic pump;

wherein the perimeter of the opening is shaped and/or dimensioned such that a bioreactor vessel can be positioned above the opening and supported by the bottom surface of the tray within the interior compartment while a portion of the bioreactor vessel is accessible through the opening in the bottom surface.

2. The system of claim 1, wherein:

the perimeter of the opening includes at least one tab or projection for supporting the bioreactor vessel above the opening.

3. The system of claim 2, wherein:

the at least one opening is at least two openings formed in the bottom surface, each opening having a perimeter shaped and/or dimensioned for supporting a bioreactor above each opening, respectively.

4. The system of claim 1, further comprising:

a plurality of bosses extending upwardly from the bottom surface of the tray for inhibiting lateral movement of the bioreactor vessel when it is received above the opening in the bottom surface of the tray.

5. The system of claim 1, further comprising:

a second tubing holder block associated with one of the sidewalls of the tray, the second tubing holder bock being configured to receive a plurality of pinch valve tubes and hold each pinch valve tube of the plurality of pinch valve tubes in position for selective engagement with a respective actuator of a pinch valve array.

6. The system of claim 5, wherein:

the second tubing block includes a plurality of slots for receiving the plurality of tubes.

7. The system of claim 5, wherein:

the second tubing holder block includes a plurality of staggered apertures arranged in a surface behind the plurality of pinch valve tubes, wherein the apertures are each configured to allow passage of a respective actuator of the pinch valve array to selectively clamp a pinch valve tube of the plurality of pinch valve tubes.

8. The system of claim 5, further comprising:

an opening formed in a rear wall of the tray;

wherein the first tubing holder block and the second tubing holder block are connected to an engagement plate received in the opening in the rear wall.

9. The system of claim 1, wherein:

the tray is thermoformed.

10. The system of claim 1, further comprising:

a support rib integrally formed with a bottom surface of the tray.

11. The system of claim 1, further comprising:

a removable cover attached a top of the tray and enclosing the open top.

12. The system of claim 11, further comprising:

a flange defining a top edge of the tray about the opening;

wherein the removable cover is attached to the flange.