What is claimed is:

CLAIMS

1. A system for processing samples by a robotic platform, the system comprising:

a tray defining:

a well defining a drain, wherein the well comprises a bottom surface; and

an access port in fluid communication with the drain; and

an insert adapted to be received in the well, wherein the insert comprises a bottom wall and a side wall, wherein both the bottom wall and the side wall separately define a plurality of openings, such that an interior of the insert is in fluid communication with the well when the insert is inserted into the well, and wherein at least some of the openings define an angle relative to the side wall or the bottom wall so as to induce a current or swirl in the fluid.

2. The system of claim 1, wherein the well defines a channel connecting the drain and the access port, wherein the channel is pitched downward from the drain to the access port.

3. The system of claim 2, wherein the bottom surface defines a top surface of the channel.

4. The system of claim 2, wherein the bottom surface at least partially defines an edge of the channel.

5. The system of claim 1, wherein the bottom surface defines the drain.

6. The system of claim 1, wherein the bottom surface comprises a high point and a low point, and wherein the drain is located proximate the low point.

7. The system of claim 6, wherein the low point is located proximate a center of the bottom surface.

8. The system of claim 6, wherein the low point is located proximate an outer edge of the bottom surface.

9. The system of claim 6, wherein the well comprises an outer wall, and wherein the outer wall at least partially defines the drain.

10. The system of claim 1, wherein the tray defines a slot, wherein the slot provides fluid communication between the well and the access port.

11. The system of claim 10, wherein the slot is configured to receive a gate.

12. The system of claim 1, wherein the well comprises an outer wall, and wherein when inserted into the well, the basket forms an interference fit with the outer wall.

13. The system of claim 12, wherein at least one of the outer wall and the basket comprises a gasket, wherein the gasket forms the interference fit.

14. The system of claim 1, wherein the tray further comprises at least one of a clamp or a latch for securing the basket within the well.

15. The system of claim 1, wherein the well comprises an outer wall, wherein the outer wall defines at least one of a circular shape, a quadrilateral shape, an oval shape, and a triangular shape.

16. The system of claim 15, wherein the side wall of the basket defines a shape complementary to the outer wall shape.

17. The system of claim 1, wherein the tray defines a plurality of wells and wherein the access port is in fluid communication with at least two of the plurality of wells.

18. The system of claim 1, wherein at least one of the plurality of openings comprises a sharp corner.

19. A tray for processing samples by a robotic platform, the tray comprising:

a well defining a geometric shape having at least one outer wall and a bottom surface;

an access port discrete from and in fluid communication with the well; and

a basket configured to fit within the well, wherein the basket defines at least one side wall and a bottom wall, and wherein both the side wall and bottom wall separately define a plurality of openings, and wherein at least some of the openings define an angle relative to the side wall or the bottom wall so as to induce a current or swirl in the fluid.

20. The tray of claim 19, wherein the well defines a drain defined by at least one of the outer wall and the bottom surface.

21. The tray of claim 19, wherein the bottom surface is at least one of substantially convex and substantially concave.

22. The tray of claim 19, wherein the bottom surface is sloped toward the outer wall.

23. The tray of claim 19, wherein the tray further comprises a channel connecting the well to the access port, wherein the channel is located below the bottom surface.

24. The tray of claim 23, wherein the bottom surface at least partially defines the channel.

25. The tray of claim 19, wherein the tray comprises a plurality of wells and the access port is in fluid communication with at least two of the plurality of wells.