CLAIMS

What is claimed is:

1. An apparatus, comprising:

a reagent cartridge receptacle;

a pressure source; and

a reagent cartridge interface, comprising:

a reagent coupling; and

a pressure coupling fluidly coupled to the pressure source;

a reagent cartridge, comprising

a first flexible container comprising an end and defining a first interior containing reagent;

a second flexible container having an end and defining a second interior, the first flexible container positioned within the second interior; and

a coupling having a first portion coupled to the end of the first flexible container and a second portion coupled to the end of the second flexible container, the coupling comprising a reagent port fluidly coupled to the first interior of the first flexible container and a pressure port fluidly coupled to the second interior of the second flexible container, and

wherein the reagent coupling is to couple with the reagent port to enable reagent to flow out of the first flexible container to the reagent coupling of the reagent cartridge interface and the pressure coupling is to couple with the pressure port to enable the pressure source to change a pressure within the second flexible container to urge the reagent to flow out of the first flexible container.

2. The apparatus of claim 1, wherein the pressure source provides positive pressure.

3. The apparatus of claim 1, further comprising a seal carried by the reagent port and a seal carried by the pressure port, wherein the reagent coupling sealingly engages the seal carried by the reagent port and the pressure coupling sealingly engages the seal carried by the pressure port.

4. The apparatus of claim 1, further comprising a cover covering the pressure port and the reagent port.

5. The apparatus of claim 4, wherein the cover comprises an impermeable barrier.

6. The apparatus of claim 4, wherein the reagent coupling pierces the cover covering the reagent port and the pressure coupling pierces the cover covering the pressure port.

7. The apparatus of claim 1, wherein the coupling further comprises an extension coupled to the reagent port and extends into the first interior of the first flexible container.

8. The apparatus of claim 1, further comprising an insert positioned within the second interior of the second flexible container and between the second flexible container and the first flexible container.

9. An apparatus, comprising:

a first flexible container comprising an end and defining a first interior containing reagent;

a second flexible container having an end and defines a second interior, the first flexible container positioned within the second interior; and

a coupling having a first portion coupled to the end of the first flexible container and a second portion coupled to the end of the second flexible container, the coupling comprising a reagent port fluidly coupled to the first interior of the first flexible container and a pressure port fluidly coupled to the second interior of the second flexible container.

10. The apparatus of claim 9, wherein the first flexible container comprises a first pouch bag and the second flexible container comprises a second pouch bag.

11. The apparatus of claim 9, wherein the first flexible container has a neck and the first portion of the coupling is coupled to the neck of the first flexible container and the second flexible container has a neck and the second portion of the coupling is coupled to the neck of the second flexible container.

12. The apparatus of claim 9, wherein the first flexible container comprises a first material and the second flexible container comprises a second material.

13. The apparatus of claim 12, wherein the first material is resistant to air permeability.

14. The apparatus of claim 9, wherein the coupling comprises a pressure fluidic line and a reagent fluidic line, the pressure fluidic line extending between the pressure port and the second portion of the coupling and the reagent fluidic line extending between the reagent port and the first portion of the coupling, and wherein the pressure fluidic line extends through the second portion of the coupling to enable a pressure within the second flexible container to change and the reagent fluidic line extends through the first portion and the second portion of the coupling to enable the reagent to flow out of the first flexible container.

15. The apparatus of claim 9, wherein the first portion of the coupling has opposing first side walls that form a first canoe shape and the second portion of the coupling has opposing second side walls that form a second canoe shape.

16. An apparatus, comprising:

a system, comprising:

a reservoir receptacle to receive a reservoir;

a fluidic interface to be fluidly coupled to the reagent reservoir;

a pump fluidly coupled to the fluidic interface, the pump comprising:

a housing comprising a pressure port;

a flexible container disposed in the housing and including an inlet and an outlet, each of the inlet and the outlet being externally accessible outside of the housing, the inlet being fluidly coupled to the fluidic interface; and

a pressure source coupled with the pressure port and in fluid communication with the housing,

a flow cell receptacle to receive a flow cell and comprising a flow cell interface fluidly coupled to the outlet of the flexible container,

wherein fluid is to flow from the reservoir to the inlet of the flexible container, and

wherein the pressure source is to pressurize the housing and urge the fluid out of the outlet of the flexible container toward the flow cell receptacle.

17. The apparatus of claim 16, wherein the pressure source positively pressurizes the housing.

18. The apparatus of claim 16, wherein the pump comprises a coupling comprising the inlet and the outlet and wherein the housing comprises an aperture through which the coupling extends to enable the inlet and the outlet to be externally accessible outside of the housing.

19. The apparatus of claim 18, wherein the pump comprises a seal disposed between the coupling and the housing, and wherein the housing comprises a pressure chamber in which the flexible container is disposed and wherein the seal hermetically seals the pressure chamber.

20. The apparatus of claim 18, wherein the coupling comprises an extension and the flexible container has an interior that the extension extends into.