CLAIMS

What is claimed is:

1. A method, comprising:

securing a sample container in a sample container receptacle of a cartridge using a sample container lock;

coupling the cartridge to a cartridge receptacle of a system;

depositing a sample from the sample container within a sample well of the cartridge;

determining a presence of a target molecule within the sample using the system; and

in response to the target molecule being present within the sample, releasing the sample container lock of the cartridge to allow the sample container to be removed from the sample container receptacle.

2. The method of claim 1, wherein the target molecule is associated with severe acute respiratory syndrome coronavirus 2.

3. The method of any of the preceding claims, wherein releasing the sample container lock of the cartridge includes actuating the sample container lock using a lock release of the system.

4. The method of any of the preceding claims, wherein, in response to the target molecule not being present within the sample, uncoupling the cartridge and the cartridge receptacle to allow the cartridge and the sample container secured thereto to be removed from the system.

5. The method of any of the preceding claims, wherein the sample container lock comprises a spring-biased pawl and the sample container comprises a flange and wherein securing the sample container in the sample container receptacle comprises positioning the spring-biased pawl over top of the flange.

6. The method of any of the preceding claims, further comprising reading, using the system, a code on at least one of the cartridge or the sample container.

7. The method of claim 6, wherein reading the code comprises reading the code on the sample container through a window of the cartridge.

8. The method of any of the preceding claims, further comprising illuminating the sample container using the system in response to at least one of: 1) the target molecule being present within the sample; or 2) the target molecule not being present within the sample.

9. The method of any of the preceding claims, wherein securing the sample container in the sample container receptacle includes positioning the sample container through a collar of the cartridge.

10. The method of any of the preceding claims, further comprising exposing the sample to a reagent.

11. The method of claim 10, wherein exposing the sample to the reagent comprises flowing a reagent from a reagent reservoir of the cartridge through a fluidic line of the cartridge toward the sample well.

12. An apparatus, comprising:

a cartridge including a sample chamber and a sample container receptacle; and

a sample container disposable within the sample container receptacle,

wherein the sample container receives a sample and wherein a sample portion of the sample is receivable within the sample chamber for testing to determine a presence of a target molecule,

wherein the cartridge includes a sample container lock to move between a locked position and an unlocked position and the sample container to be secured within the sample container receptacle using the sample container lock,

wherein the sample container lock remains in the locked position in response to the target molecule not being present within the sample and is movable to the unlocked position in response to the target molecule being present within the sample to allow the sample container to be removed from the sample container receptacle.

13. The apparatus of claim 12, wherein the sample container lock includes a latch that is to pivot between the locked position and the unlocked position.

14. The apparatus of claim 13, wherein the sample container includes a flange to be engaged by the latch to secure the sample container within the sample container receptacle.

15. The apparatus of claim 13, wherein the sample container includes a groove that receives the latch to secure the sample container within the sample container receptacle.

16. The apparatus of claim 12, wherein the sample container lock comprises a cantilever biased toward the sample container receptacle and to engage the sample container to secure the sample container within the sample container receptacle.

17. The apparatus of any of claims 12 – 16, wherein the sample container receptacle comprises a boss defining a hole to receive the sample container.

18. The apparatus of any of claims 12 – 17, wherein the cartridge comprises a diagnostic indicator.

19. The apparatus of any of claims 12 – 18, wherein the sample container carries a code and the cartridge includes a hole to receive the sample container and a window to allow the code to be viewable.

20. The apparatus of any of claims 12 – 16, 18 and 19, wherein the sample container receptacle comprises an annulus.

21. An apparatus, comprising:

a system having a cartridge receptacle and a lock release;

a cartridge couplable with the cartridge receptacle and including a sample chamber, a sample container receptacle, and a sample container lock movable, using the lock release, from a locked position to an unlocked position; and

a sample container disposable within the sample container receptacle and securable therein using the sample container lock, wherein a sample is receivable within the sample container and wherein a sample portion of the sample is receivable within the sample chamber,

wherein a test is performable by the system on the sample portion to determine a presence of a target molecule, and

wherein the lock release is actuatable to actuate the sample container lock from the locked position to the unlocked position in response to the target molecule being present within the sample to allow the sample container to be removed from the sample container receptacle and wherein the lock release does not actuate the sample container lock from the locked position to the unlocked position in response to the target molecule not being present within the sample.

22. The apparatus of claim 21, wherein the system includes a light assembly displaying a first color through the sample container indicative of the target molecule being present within the sample and displaying a second color through the sample container indicative of the target molecule not being present within the sample.