WHAT IS CLAIMED IS:

1. A method of performing a biological experiment, the method comprising:

accessing a protocol for a biological experiment that specifies a sequence of operations and prescribes a plurality of conditions for carrying out the biological experiment in a defined space, the protocol being associated with corrective protocols for particular conditions of the plurality of conditions, the corrective protocols specifying operations for remediating respective ones of the particular conditions when the particular conditions as observed during the biological experiment deviate from the particular conditions as prescribed;

performing the sequence of operations to carry out the biological experiment in the defined space according to the protocol, the sequence of operations including dispensing cells into a container with a growth medium, and transferring the container with the cells and the growth medium into an enclosure for culturing the cells; and periodically before or as the sequence of operations are performed,

obtaining observations of the particular conditions at least some of which include an incubation period in which the container with the cells and the growth medium is held in the enclosure, physical and chemical conditions in the defined space or within the enclosure, one or more physical or chemical properties of the cells or the growth medium within the container, or conditions of the cells or their concentration within the container; and

comparing the particular conditions as observed to the particular conditions as prescribed; and when a particular condition of the particular conditions as observed deviates from the particular condition as prescribed by more than a predetermined threshold for the particular condition,

interrupting the sequence of operations;

accessing a corrective protocol of the corrective protocols that specifies an operation for remediating the particular condition as observed to within the predetermined threshold of the particular condition as prescribed;

performing the operation to remediate the particular condition according to the corrective protocol; and

resuming the sequence of operations.

2. The method of claim 1, wherein when the particular condition as observed deviates from the particular condition as prescribed by less than a predetermined threshold for the particular condition, the method further comprises:

continuing the biological experiment without interrupting the sequence of operations to remediate the particular condition as observed.

3. The method of claim 1, wherein when the particular condition as observed deviates from the particular condition as prescribed by more than a critical threshold that is greater than a predetermined threshold for the particular condition, the method further comprises:

terminating the biological experiment without completing the biological experiment, and without remediating the particular condition as observed to within the predetermined threshold of the particular condition as prescribed.

4. The method of claim 1, wherein when a second particular condition of the particular conditions as observed deviates from the second particular condition as prescribed by less than a second predetermined threshold for the second particular condition, the method further comprises:

continuing the biological experiment without interrupting the sequence of operations to remediate the second particular condition as observed.

5. The method of claim 1, wherein when a second particular condition of the particular conditions as observed deviates from the second particular condition as prescribed by more than a second critical threshold that is greater than a second predetermined threshold for the second particular condition, the method further comprises:

terminating the biological experiment without completing the biological experiment, and without remediating the second particular condition as observed to within the second predetermined threshold of the second particular condition as prescribed.

6. The method of claim 1, wherein the particular conditions include the physical and chemical conditions in the defined space or within the enclosure, including temperature, humidity, and concentration of a gas in the defined space or within the enclosure.

7. The method of claim 1, wherein the particular conditions include the physical and chemical conditions in the defined space, including visible or ultraviolet light in the defined space.

8. The method of claim 1, wherein the particular conditions include the one or more physical or chemical properties of the cells or the growth medium, including temperature or pH of the growth medium.

9. The method of claim 1, wherein the particular conditions include the one or more physical or chemical properties of the cells or the growth medium, including a rate of freezing or thawing of the cells.

10. The method of claim 1, wherein the particular conditions include the conditions of the cells or their concentration within the container, including an appearance, size or shape of the cells, clusters of the cells or fragments thereof.

11. The method of claim 1, wherein the particular conditions include the conditions of the cells or their concentration within the container, including a quantified gene activity in the cells.

12. The method of claim 1, wherein the particular conditions include the conditions of the cells or their concentration within the container, including a count of adherent or floating cells, or confluence of the cells.

13. The method of claim 1, wherein the sequence of operations further includes adding a dye to the cells, and the particular conditions include the conditions of the cells or their concentration within the container, including a proportion of the cells to which the dye has attached, or an intensity with which the dye has attached to the cells or a proportion thereof.

14. The method of claim 1, wherein the method is performed in a laboratory with automated equipment including processing circuitry coupled to at least one robot and sensors, at least some of which are located in the defined space,

wherein the protocol is machine-readable and accessed by the processing circuitry from a computer-readable storage medium, and the sequence of operations is performed by the automated equipment including the at least one robot under control of the processing circuitry, and

wherein the observations are obtained by the processing circuitry from the sensors, and the processing circuitry compares the particular conditions, and when the particular condition as observed deviates from the particular condition as prescribed, the processing circuitry interrupts the sequence of operations, and accesses the corrective protocol from the computer-readable storage medium, the automated equipment performs the operation under control of the processing circuitry, and the processing circuitry resumes the sequence of operations.

15. A system for performing a biological experiment, the system comprising:

a computer-readable storage medium configured to store a protocol for a biological experiment that specifies a sequence of operations and prescribes a plurality of conditions for carrying out the biological experiment in a defined space, the protocol being associated with corrective protocols for particular conditions of the plurality of conditions, the corrective protocols specifying operations for remediating respective ones of the particular conditions when the particular conditions as observed during the biological experiment deviate from the particular conditions as prescribed; and

automated equipment comprising processing circuitry, at least one robot and sensors, the processing circuitry coupled to the at least one robot and the sensors, at least some of which are located in the defined space,

wherein the processing circuitry configured to access the protocol from the computer-readable storage medium,

wherein the automated equipment is configured to perform the sequence of operations under control of the processing circuitry to carry out the biological experiment according to the protocol, the sequence of operations including the at least one robot configured to dispense cells into a container with a growth medium, and transfer the container with the cells and the growth

medium into an enclosure for culturing the cells; and periodically and automatically before or as the sequence of operations are performed,

wherein the sensors are configured to measure and thereby produce measurements of the particular conditions at least some of which include an incubation period in which the container with the cells and the growth medium is held in the enclosure, physical and chemical conditions in the defined space or within the enclosure, one or more physical or chemical properties of the cells or the growth medium within the container, or conditions of the cells or their concentration within the container, and

wherein the processing circuitry is configured to:

obtain the measurements and thereby observations of the particular conditions from the sensors;

compare the particular conditions as observed to the particular conditions as prescribed;

when a particular condition of the particular conditions as observed deviates from the particular condition as prescribed by more than a predetermined threshold for the particular condition: interrupt the sequence of operations, and access, from the computer-readable storage medium, a corrective protocol of the corrective protocols that specifies an operation for remediating the particular condition as observed to within the predetermined threshold of the particular condition as prescribed;

cause the automated equipment to perform the operation to remediate the particular condition according to the corrective protocol; and

resume the sequence of operations.

16. The system of claim 15, wherein when the particular condition as observed deviates from the particular condition as prescribed by less than a predetermined threshold for the particular condition, the processing circuitry is further configured to continue the biological experiment without the sequence of operations being interrupted to remediate the particular condition as observed.

17. The system of claim 15, wherein when the particular condition as observed deviates from the particular condition as prescribed by more than a critical threshold that is

greater than a predetermined threshold for the particular condition, the processing circuitry is further configured to terminate the biological experiment without the biological experiment being completed, and without the particular condition as observed being remediated to within the predetermined threshold of the particular condition as prescribed.

18. The system of claim 15, wherein when a second particular condition of the particular conditions as observed deviates from the second particular condition as prescribed by less than a second predetermined threshold for the second particular condition, the processing circuitry is further configured to continue the biological experiment without the sequence of operations being interrupted to remediate the second particular condition as observed.

19. The system of claim 15, wherein when a second particular condition of the particular conditions as observed deviates from the second particular condition as prescribed by more than a second critical threshold that is greater than a second predetermined threshold for the second particular condition, the processing circuitry is further configured to terminate the biological experiment without the biological experiment being completed, and without the second particular condition as observed being remediated to within the second predetermined threshold of the second particular condition as prescribed.

20. The system of claim 15, wherein the particular conditions include the physical and chemical conditions in the defined space or within the enclosure, including temperature, humidity, and concentration of a gas in the defined space or within the enclosure.

21. The system of claim 15, wherein the particular conditions include the physical and chemical conditions in the defined space, including visible or ultraviolet light in the defined space.

22. The system of claim 15, wherein the particular conditions include the one or more physical or chemical properties of the cells or the growth medium, including temperature or pH of the growth medium.

23. The system of claim 15, wherein the particular conditions include the one or more physical or chemical properties of the cells or the growth medium, including a rate of freezing or thawing of the cells.

24. The system of claim 15, wherein the particular conditions include the conditions of the cells or their concentration within the container, including an appearance, size or shape of the cells, clusters of the cells or fragments thereof.

25. The system of claim 15, wherein the particular conditions include the conditions of the cells or their concentration within the container, including a quantified gene activity in the cells.

26. The system of claim 15, wherein the particular conditions include the conditions of the cells or their concentration within the container, including a count of adherent or floating cells, or confluence of the cells.

27. The system of claim 15, wherein the sequence of operations further includes the at least one robot being configured to add a dye to the cells, and the particular conditions include the conditions of the cells or their concentration within the container, including a proportion of the cells to which the dye has attached, or an intensity with which the dye has attached to the cells or a proportion thereof.