CLAIMS

1. A bioreactor for cell culturing, the bioreactor comprising:

a container having a base and a side wall defining an internal volume, and a lid closing the internal volume, wherein the base is moveable towards and away from the lid; and

a baffle member mounted to the lid and positioned in the internal volume of the container such that the baffle member is arranged to mix contents of the bioreactor as the base is moved relative to the lid.

2. The bioreactor of claim 1, wherein the baffle member comprises a substantially planar member extending across the internal volume of the container.

3. The bioreactor of claim 1 or claim 2, wherein the baffle member extends substantially parallel to the lid, or wherein the baffle member comprises a substantially planar surface facing the base of the container and wherein the substantially planar surface is non-parallel to the lid.

4. The bioreactor of any of claims 1 to 3, wherein the baffle member comprises a sloped surface, for example a conical surface, arranged to face the lid.

5. The bioreactor of any preceding claim, wherein the baffle member comprises one or more holes or openings for passage of fluid through the baffle member as the base is moved relative to the lid, and optionally wherein one or more holes or openings comprises a helical or angled surface.

6. The bioreactor of any preceding claim, wherein the baffle member comprises one or more ribs.

7. The bioreactor of any preceding claim, wherein an outer edge of the baffle member is substantially circular.

8. The bioreactor of any preceding claim, wherein the side wall of the container is compressible.

9. The bioreactor of any preceding claim, wherein the baffle member is movably mounted to the lid, for example, rotatably mounted to the lid.

10. The bioreactor of claim 9, wherein the baffle member is slidably mounted to the lid for reciprocal movement of the baffle member within the container.

11. The bioreactor of any preceding claim, further comprises a second baffle member mounted to the lid, and optionally wherein the second baffle member is non-parallel to the baffle member.

12. The bioreactor of any preceding claim, wherein the baffle member comprises a fluid path for conveying fluid into and/or out of the container.

13. The bioreactor of claim 12, wherein the baffle member further comprises a filter member arranged to filter fluid passing through the fluid path.

14. A bioreactor system comprising a bioreactor according to any of claims 1 to 13, and an agitator arranged to move the base of the bioreactor such that during use the baffle member mixes contents of the bioreactor.

15. The bioreactor system of claim 14, wherein the agitator is configured to:

position the base such that the baffle member is submerged in a fluid in the container, and

reciprocate the base to generate relative movement of the baffle member and the fluid.

16. The bioreactor system of claim 15, wherein the agitator is configured to reciprocate the base such that the baffle member remains submerged in the fluid.

17. The bioreactor system of any of claims 14 to 16, wherein the agitator is configured to reciprocate the base with a stroke length of up to about 50 millimetres, for example about 20 millimetres.

18. The bioreactor system of any of claims 14 to 17, wherein the agitator is configured to reciprocate the base at a frequency of up to about 80 strokes per minute, for example between about 10 and about 80 strokes per minute, for example between about 20 and 60 strokes per minute.

19. The bioreactor system of any of claims 14 to 18, wherein the agitator is configured to change an angle of the base relative to the baffle member.

20. A method of cell culturing, the method comprising providing the bioreactor system of any of claims 14 to 19, providing a cell suspension in the container of the bioreactor, and moving the base of the bioreactor such that the baffle member agitates the cell suspension.