What is claimed is:

1. A method of producing virus in a bioreactor comprising the following steps:

a) providing host cells in the bioreactor;

b) growing host cells in a constant first dO2 level, pH, and temperature;

c) decreasing a dO2 to 20-90% of the first dO2 level;

d) infecting the host cells with at least one virus or virus particle 2-24 hours after step c);

e) incubating said host cells infected with said virus or virus particle to propagate said virus; and

f) harvesting the virus,

wherein the dO2 is decreased prior to infection and maintained at a second level thereafter.

2. The method of claim 1, wherein the host cells are adherent cells.

3. The method of claims 1 to 2, wherein the bioreactor is a flat-bed bioreactor.

4. The method of claims 1 to 3, wherein the height of the fixed-bed is 2 cm to 10 cm.

5. The method of claims 1 to 4, wherein the bioreactor is a single-use flat-bed bioreactor.

6. The method of claims 1 to 5, wherein said dO2 level in step c is decreased to 20-50%.

7. The method of claims 1 to 6, wherein said dO2 level in step c is decreased when the conductivity is 60 mS/cm to 80 mS/cm.

8. The method of claims 1 to 7, wherein the host cell in step d is infected with a virus when the conductivity is 90 mS/cm to 110 mS/cm.

9. The method of claims 1 to 8, wherein the infection of the host cells with the virus is at multiplicity of infection (MOI) of about 0.1 to 0.05.

10. The method of claims 1 to 9, wherein, the infection of the host cells with the virus is at MOI of 0.05.

11. The method of claims 1 to 10, wherein the dO2 in step c is decreased 12 to 24 hours prior to infecting the host cell in step d.

12. The method of claims 1 to 11 , wherein the virus is selected from a group consisting of VSV, adenovirus, Influenza virus, Ross River virus, Hepatitis A virus, Vaccinia virus and recombinant Vaccinia virus, Herpes Simplex virus, Japanese Encephalitis virus, Herpes Simplex virus, West Nile virus, Yellow Fever virus, and chimeras thereof, as well as Rhino virus and Reovirus.

13. The method of claims 1 to 12, wherein the virus is a viral vector.

14. The method of claims 1 to 13, wherein the virus is the VSV vector.

15. The method of claims 1 to 14, wherein the host cells are selected from the group consisting of Vero cells, MBCK cells, MDBK cells, MRC-5 cells, BSC-1 cells, LLC-MK cells, CV-1 cells, CHO cells, COS cells, murine cells, human cells, avian cells, insect cells, HeLa cells, 293 cells, MDOK cells, CRFK cells, RAF cells, TCMK cells, LLC-PK cells, PK 15 cells, Wl-38 cells, T-FLY cells, BHK cells, SP2/0 cells, NS0 cells, and PerC6 cells.

16. The method of claims 1 to 15, wherein the host cells are Vero cells.

17. The method of claims 1 to 16, further comprising the step of determining the virus titer by plaque assay method.

18. The method of claims 1 to 17, further comprising the step of purifying and or characterizing of the virus.

19. The method of claims 1 to 18, further comprising the step of producing a vaccine with said virus.

20. The method of claims 1 to 19, wherein the bioreactor has a capacity of 700 to 800 mL.

21. The method of claims 1 to 20, wherein the bioreactor has a capacity of 50 to 80 L.

22. The method of claims 1 to 21, wherein the bioreactor includes protein-free media.

23. A method of producing virus in a bioreactor comprising the following steps:

a) providing host cells in the bioreactor;

b) growing host cells in a constant initial dO2 level, pH, and temperature to confluence;

c) decreasing the dO2 to 20-50% of initial dO2 level;

d) infecting the host cells with at least one virus or virus particle;

e) incubating said host cells infected with said virus or virus particle to propagate said virus; and

e) harvesting the virus.

24. The method of claims 1 to 23 wherein said dO2 is decreased from about 85% dO2 to about 40% dO2.

25. The method of claim 24, wherein decreasing the dO2 level increases the propagation of said virus by about 5x as compared to the initial dO2 level.

26. The method of claims 1 to 23 wherein said dO2 is decreased from about 85% dO2 to about 20% dO2.

27. The method of claim 26, wherein decreasing the dO2 level increases the propagation of said virus by about 5x as compared to the initial dO2 level.

28. The method of claims 1 to 23 wherein said dO2 is decreased from about 85% dO2 to about 10% dO2.

29. The method of claim 28, wherein decreasing the dO2 level increases the propagation of said virus by about 10x as compared to the initial dO2 level.

30. The method of claims 1 to 29, wherein the method results in production of at least 1 x 10^7 viral titers (pfu/ml).