What is Claimed:

1. A method of making a cytomegalovirus (CMV) vaccine comprising:

a) passaging a strain or an isolate of CMV in cultured cells of a first selected cell type;

b) amplifying the strain or isolate of CMV in a second selected cell type, thereby producing a cell type-conditioned CMV, wherein the first and second cell types are different; and

b) producing a CMV vaccine from the cell type-conditioned CMV.

2. The method of claim 1, wherein the strain or isolate of CMV is a human CMV strain or isolate.

3. The method of claim 1, wherein the first and second selected cell types are selected from the group consisting of epithelial cells, endothelial cells, fibroblasts, neuronal cells, smooth muscle cells, macrophages, dendritic cells and stromal cells.

4. The method of claim 3, wherein the first selected cell type is a fibroblast and the second selected cell type is an epithelial cell.

5. The method of claim 1, comprising producing the cell type-conditioned CMV in two or more different second selected cell types and combining the cell type-conditioned CMV to produce the CMV vaccine.

6. The method of claim 1, further comprising passaging and amplifying two or more CMV strains or isolates, and combining the cell type-conditioned CMV to produce the CMV vaccine.

7. The method of claim 1, comprising producing a live attenuated CMV vaccine.

8. The method of claim 1, comprising producing an inactivated or killed CMV vaccine.

9. A CMV vaccine produced by the method of any one of claims 1-8.

10. A vaccine composition comprising a cytomegalovirus (CMV) population or virion components thereof, admixed with a suitable pharmaceutical carrier or adjuvant, wherein the CMV population is isolated from an epithelial cell culture.

11. The vaccine composition of claim 10, wherein the CMV is human CMV.

12. The vaccine composition of claim 10, wherein the CMV population isolated from the epithelial cell culture is characterized by one or more features in subsequently infected host cells comprising:

a) entry into the host cells by fusion with host cell plasma membranes:

b) greater virion-mediated cell-cell fusion of the host cells as compared with an equivalent CMV population isolated from cultured fibroblasts:

c) accelerated virus growth in the host cells as compared with an equivalent CMV population isolated from culture fibroblasts:

d) elicitation of a cellular response involving changes in expression greater than or equal to 2.5 fold of about two thirds fewer genes than a response elicited by an equivalent CMV population isolated from culture fibroblasts at 10 hours post-infection: or

e) elicitation of a cellular response involving a change in expression of one or more genes represented by GenBank Accession Nos: AK094860, NM_145023, NM_133492, NM_001039580, NM_001004301, NM_001034, AI369525, AK123066, NM_005343, NM_020731, BC071797, NM_003414, NM_000800, NM_138467, AK090803, AL133118, NM_001165, BG001037, NM_024861, NM_001043, NM_016239, NM_001018084, NM_001037442, NM_017600, NM_022097, NM_175868, NM_032266, NM_003841, NM_005039, NM_145051,

NM_004294, AW856073, NM_024050, AF085968, NM_080927, NM_022115, AK056703, NM_000808, NM_012377, NM_006793, NM_031466, NM_005185, NM_139173, BX360933, NM_016125, NM_002104, NM_032788, NM_004185, NM_004843 or NM_173550.

13. The vaccine composition of claim 10, further comprising a CMV population or virion components thereof isolated from a cell culture of another cell type.

14. The vaccine composition of claim 13, wherein the other cell type is a fibroblast cell type.

15. The vaccine composition of claim 10, wherein the CMV population comprises two or more CMV strains or clinical isolates grown in epithelial cell cultures.

16. The vaccine composition of claim 10, comprising a live attenuated CMV vaccine.

17. The vaccine composition of claim 10, comprising an inactivated CMV vaccine.

CLAIMS

1. A method of making a cytomegalovirus (CMV) vaccine comprising:

a) passaging a strain or an isolate of CMV in a fibroblast;

b) amplifying the strain or isolate of CMV in an epithelial cell, thereby producing a cell type-conditioned CMV; and

c) producing a live attenuated, inactivated, or killed CMV vaccine from the cell type-conditioned CMV.

2. The method of claim 1, wherein the strain or isolate of CMV is a human CMV strain or isolate.

3. The method of claim 1, comprising amplifying the strain or isolate of CMV in two or more different epithelial cells to produce cell-type conditioned CMV for each of the two or more different epithelial cells and combining the cell type-conditioned CMV from the two or more different epithelial cells.

4. The method of claim 1, further comprising passaging and amplifying two or more CMV strains or isolates, and combining the two or more CMV strains or isolates to produce the cell type-conditioned.

5. A live attenuated, inactivated, or killed CMV vaccine produced by the method of any one of claims 1-4.

6. A vaccine composition comprising a live attenuated, inactivated, or killed cytomegalovirus (CMV) population or virion components thereof, admixed with a suitable pharmaceutical carrier or adjuvant, wherein the CMV population is passaged in a fibroblast and amplified in an epithelial cell.

7. The vaccine composition of claim 6, wherein the CMV is human CMV.

8. The vaccine composition of claim 6, wherein the CMV population comprises two or more CMV strains or clinical isolates.