WHAT IS CLAIMED IS:

1. A culture medium comprising basic fibroblast growth factor (bFGF) at a concentration of at least 50 ng/ml and an IL6RIL6 chimera, wherein said culture medium is capable of expanding and maintaining human induced pluripotent stem cells in a pluripotent proliferative state for at least 5 passages in a suspension culture as single cells.

2. The culture medium of claim 1, wherein said concentration of said bFGF is selected from the range of between 50 ng/ml to 150 ng/ml.

3. The culture medium of any of claims 1-2, further comprising serum replacement.

4. The culture medium of claim 3, wherein said serum replacement is devoid of animal contaminants.

5. The culture medium of claim 1, or 2, wherein said bFGF is provided at a concentration of 100 ng/ml and said IL6RIL6 is provided at a concentration of 100 ng/ml.

6. The culture medium of claim 1, or 2, wherein said bFGF is provided at a concentration of 100 ng/ml and said IL6RIL6 is provided at a concentration of 100 pg/ml.

7. A cell culture comprising pluripotent stem cells and the culture medium of any of claims 1-6.

8. A culture system comprising a matrix and the culture medium of any of claims 1-6.

9. A method of expanding and maintaining pluripotent stem cells in an undifferentiated state, the method comprising culturing the pluripotent stem cells in the culture medium of any of claims 1-6, thereby expanding and maintaining the pluripotent stem cells in the undifferentiated state.

10. The method of claim 9, wherein said expanding and maintaining said pluripotent stem cells in said undifferentiated state is effected in a suspension culture.

11. The method of any of claims 9 and 10, wherein said culturing is effected under conditions which enable expansion of said pluripotent stem cells as single cells.

12. A method of generating lineage-specific cells from pluripotent stem cells, the method comprising:

(a) culturing the pluripotent stem cells according to the method of any of claims 9-11, to thereby obtain expanded, undifferentiated stem cells;

(b) subjecting said expanded, undifferentiated stem cells to culturing conditions suitable for differentiating and/or expanding lineage specific cells;

thereby generating the lineage-specific cells from the pluripotent stem cells.