I/we claim:

1. A method for preparing an implant for repairing a chondral defect, comprising:
providing mesenchymal stem cells (MSCs); and
cultivating the MSCs in a collagen containing medium supplemented with transforming growth factor beta one (TGF-β1) under conditions allowing differentiation of the MSCs to the chondrocyte-like cells and formation of the implant.

2. The method of claim 1, wherein the cultivating step is performed by culturing the MSCs in a collagen containing medium supplemented with TGF-β1 for 7 to 21 days under conditions allowing formation of a collagen matrix and differentiation of the MSCs into chondrocyte-like cells, which are embedded in the collagen matrix.

3. The method of claim1, wherein the MSCs are isolated from bone marrow, adipose tissue, muscle tissue, dental pulp of deciduous baby teeth, umbilical cord blood, Wharton's jelly, placenta, or cord lining membrane.

4. The method of claim 1, wherein the collagen is contained in the medium at a concentration of about 1% to about 10% w/v.

5. The method of claim 4, wherein the collagen is contained in the medium at a concentration of about 3% w/v.

6. The method of claim 1, wherein the medium contains type-I or type-II collagen.

7. The method of claim 1, further comprising, after the cultivating step, confirming that the chondrocyte-like cells secret glycosaminoglycan and the implant is free of lacunae.

8. The method of claim 1, wherein the cultivating step is performed in a capsule.

9. An implant for repairing a chondral defect, which is prepared by any of claims 1-8.

10. The implant of claim 9, wherein the chondrocyte-like cells secret glycosaminoglycan and the implant is free of lacunae.

We claim:

1. An implant for repairing a chondral defect, comprising a collagen matrix embedded with chondrocyte-like cells, wherein the implant, free of lacunae, is prepared by cultivating mesenchymal stem cells (MSCs) for 7 to 20 days in a collagen-containing medium supplemented with transforming growth factor beta one (TGF-. β1) under conditions allowing differentiation of the MSCs to the chondrocyte-like cells and formation of the implant, the chondrocyte-like cells being glycosaminoglycan-secreting.

2. The implant of claim 1, wherein the MSCs are isolated from bone marrow, adipose tissue, muscle tissue, dental pulp of deciduous baby teeth, umbilical cord blood, Wharton's jelly, placenta, or cord lining membrane.

3. The implant of claim 1, wherein the collagen matrix contains type-I or type-II collagen.

4. A method for preparing the implant of claim 1, comprising: providing mesenchymal stem cells (MSCs); and cultivating the MSCs for 7 to 20 days in a collagen-containing medium supplemented with transforming growth factor beta one (TGF-. β1) under conditions allowing differentiation of the MSCs to the chondrocyte-like cells and formation of the implant.

5. The method of claim 4, wherein the MSCs are isolated from bone marrow, adipose tissue, muscle tissue, dental pulp of deciduous baby teeth, umbilical cord blood, Wharton's jelly, placenta, or cord lining membrane.

6. The method of claim 4, wherein the collagen is contained in the medium at a concentration of about 1% to about 10% w/v.

7. The method of claim 6, wherein the collagen is contained in the medium at a concentration of about 3% w/v.

8. The method of claim 4, wherein the matrix contains type-I or type-II collagen.

9. The method of claim 4, further comprising, after the cultivating step, confirming that the chondrocyte-like cells secret glycosaminoglycan and the implant is free of lacunae.

10. The method of claim 4, wherein the cultivating step is performed in a capsule.