The claims defining the invention are as follows:

1. A method of producing a collagen membrane comprising the steps of:

(i) isolating a collagen-containing tissue and incubating same in an ethanol solution;

(ii) incubating the collagen-containing tissue from step (i) in a first solution comprising an inorganic salt and an anionic surfactant in order to denature non-collagenous proteins contained therein;

(iii) incubating the collagen-containing tissue produced in step (ii) in a second solution comprising an inorganic acid until the collagen in said material is denatured; and

(iv) manipulating the collagen-containing tissue produced in step (iii) using simultaneous mechanical stimulation for sufficient time to enable the collagen bundles in said collagen-containing tissue to align and incubating said tissue in a third solution comprising an inorganic acid;

wherein the mechanical stimulation comprises applying tension cyclically to the collagen-containing tissue.

2. A method for preparing a device for implantation into the body or tissue of a person or animal, said method comprising placing a collagen-containing tissue on said device, wherein said collagen scaffold is produced by a method comprising:

(i) isolating a collagen-containing tissue and incubating same in an ethanol solution;

(ii) incubating the collagen-containing tissue from step (i) in a first solution comprising an inorganic salt and an anionic surfactant in order to denature non-collagenous proteins contained therein;

(iii) incubating the collagen-containing tissue produced in step (ii) in a second solution comprising an inorganic acid until the collagen in said material is denatured; and

(iv) manipulating the collagen-containing tissue produced in step (iii) using simultaneous mechanical stimulation for sufficient time to enable the collagen bundles in said collagen-containing tissue to align and incubating said tissue in a third solution comprising an inorganic acid;

wherein the mechanical stimulation comprises applying tension cyclically to the collagen-containing tissue.

3. A device having enhanced biocompatibility for implantation into the body or tissue of a person or animal, wherein said device comprises a collagen scaffold is produced by a method comprising:

(i) isolating a collagen-containing tissue and incubating same in an ethanol solution;

(ii) incubating the collagen-containing tissue from step (i) in a first solution comprising an inorganic salt and an anionic surfactant in order to denature non-collagenous proteins contained therein;

(iii) incubating the collagen-containing tissue produced in step (ii) in a second solution comprising an inorganic acid until the collagen in said material is denatured; and

(iv) manipulating the collagen-containing tissue produced in step (iii) using simultaneous mechanical stimulation for sufficient time to enable the collagen bundles in said collagen-containing tissue to align and incubating said tissue in a third solution comprising an inorganic acid;

wherein the mechanical stimulation comprises applying tension cyclically to the collagen-containing tissue.

4. A method or device according to any one of claims 1 to 3, wherein the ethanol solution comprises greater than 70% ethanol.

5. A method or device according to any one of claims 1 to 4, wherein the inorganic salt in the first solution is capable of forming a complex with Lewis acids, preferably the inorganic salt is selected from the group consisting of trimethylammonium chloride, tetramethylammonium chloride, sodium chloride, lithium chloride, perchlorate and trifluoromethanesulfonate.

6. A method or device according to any one of claims 1 to 5, wherein the inorganic salt is lithium chloride (LiCl).

7. A method or device according to any one of claims 1 to 6, wherein the anionic surfactant in the first solution is selected from the group consisting of alkyl sulfates, alkyl ether sulfates, alkyl sulfonates, and alkyl aryl sulfonates, preferably the anionic surfactant is an alkyl sulfate.

8. A method or device according to claim 7, wherein the alkyl sulfate is sodium dodecyl sulphate (SDS).

9. A method or device according to any one of claims 1 to 8, wherein the first solution comprises about 1% (v/v) SDS and about 0.2% (v/v) LiCl.

10. A method or device according to any one of claims 1 to 9, wherein the incubation in step (ii) is at about 4°C optionally, the incubation in step (ii) is undertaken for at least 12 hours.

11. A method or device according to any one of claims 1 to 10, wherein the second solution comprises about 0.5% (v/v) HCl.

12. A method or device according to any one of claims 1 to 12, wherein the incubation in step (iii) is undertaken for about 30 minutes optionally, the incubation in step (iii) is undertaken with shaking.

13. A method or device according to any one of claims 1 to 12, wherein the third solution comprises about 1% (v/v) HCl solution.

14. A method or device according to any one of claims 1 to 13, wherein the incubation in step (iv) is undertaken for about 12 to 36 hours preferably the incubation in step (iv) is undertaken for about 24 hours optionally, the incubation in step (iv) is undertaken with shaking.

15. A method or device according to any one of claims 1 to 14, further comprising a neutralization step between step (iii) and step (iv) which comprises incubation of said collagen-containing tissue with about 0.5% (v/v) NaOH.

16. A method or device according to any one of claims 1 to 15, further comprising step (v) which comprises incubating the collagen-containing tissue from step (iv) with acetone and then drying the collagen-containing tissue.

17. A method or device according to any one of claims 1 to 16, wherein between steps (ii) and (iii) and/or between steps (iii) and (iv) the collagen-containing tissue is contacted with glycerol in order to visualise and facilitate the removal of fat and/or blood vessels, preferably the glycerol is contacted with the collagen-containing tissue for at least 10 minutes.

18. A method or device according to any one of claims 1 to 17, wherein between steps (ii) and (iii) and/or between steps (iii) and (iv) the collagen-containing tissue is washed preferably, the wash used between steps (ii) and (iii) is acetone to remove the denatured proteins.

19. A method or device according to claim 18, wherein the collagen-containing tissue is further washed after the acetone with sterile water optionally, the collagen-containing tissue is further washed in a NaOH:NaCl solution.

20. A method or device according to any one of claims 1 to 19, wherein after steps (iv) the collagen-containing tissue is washed with sterile water optionally, the collagen-containing tissue is further washed after the sterile water with the first solution.

21. A method or device according to any one of claims 1 to 20, wherein the collagen-containing tissue comprises dense connective tissue preferably, the collagen-containing tissue is isolated from a sheep, a cow, a pig or a human.

22. A method according to any one of claims 1 to 21, wherein the collagen-containing tissue is isolated from a human and is optionally, autologous tissue.

23. A collagen-containing tissue produced by a method according to any one of claims 1 to 22, wherein said tissue comprises greater than 80% (w/w) type I collagen fibres or bundles having a knitted structure and a modulus of greater than 300 MPa.

24. A collagen-containing tissue according to claim 23, wherein the tissue has a modulus of greater than 400 MPa, preferably the tissue has a modulus of greater than 500 MPa.

25. A collagen-containing tissue according to claim 23 or 24, wherein the tissue has an extension at maximum load of less than 85%, preferably the tissue has an extension at maximum load of less than 80%.

26. A collagen-containing tissue according to any one of claims 23 to 25, comprising greater than 85% (w/w) type I collagen, preferably greater than 90% (w/w) type I collagen.

27. A collagen-containing tissue according to any one of claims 23 to 26, comprising greater than 80% (w/w) type I collagen fibres or bundles having a knitted structure and has an extension at maximum load of less than 85%, preferably less than 80%.

~~28. Use of a device according to any one of claims 3 to 22 or a collagen-containing tissue according to any one of claims 23 to 27 for the repair of a tissue defect in a mammalian animal.~~

~~29. Use according to claim 28, wherein the mammalian animal is a human.~~

~~30. A method of treating a tissue defect in a mammalian animal subject comprising the step of inserting a device according to any one of claims 3 to 22 or a collagen-containing tissue according to any one of claims 23 to 27 into said tissue defect.~~

~~31. A use or method according to any one of claims 28 to 30, wherein the collagen-containing tissue is about 40µm thick.~~

~~32. A use or method according to any one of claims 28 to 31, wherein the tissue defect is a tympanic membrane perforation.~~