CLAIMS

1. A packaged hemostatic textile comprising a textile material comprising glass fibers co-woven or knitted with secondary fibers, wherein said textile material is within a sterilized package, said glass fibers have a diameter from 5 nanometers to 15 microns, and said secondary fibers comprise raw or regenerated bamboo fibers.

2. The packaged hemostatic textile of claim **1**, wherein the glass fibers are in the warp and the secondary fibers are in the fill.

3. The packaged hemostatic textile of claim **1**, wherein the textile material is capable of activating hemostatic systems in an animal when the textile material is applied to a wound.

4. The packaged hemostatic textile of claim **1**, wherein the relative amounts of the glass fibers and the secondary fibers range from about 0.1% to about 99.9% by weight glass fibers and from about 99.9% to about 0.1% by weight secondary fibers, based on the total weight of the textile.

5. The packaged hemostatic textile of claim **1**, wherein the relative amounts of the glass fibers and the secondary fibers range from about 50% to about 80% by weight glass fibers and from about 20% to about 50% by weight secondary fibers, based on the total weight of the textile.

6. The packaged hemostatic textile of claim **1**, wherein the glass fibers comprise an alumino-borosilicate glass.

7. The packaged hemostatic textile of claim **1**, wherein the raw or regenerated bamboo fibers comprise bamboo rayon fibers.

8. The packaged hemostatic textile of claim **1**, wherein the package contains a wound dressing bandage comprising the textile material.

9. A packaged hemostatic textile comprising a textile material comprising glass fibers co-woven or knitted with secondary fibers, wherein said textile material is within a sterilized package, said glass fibers are continuous filaments, and said secondary fibers comprise raw or regenerated bamboo fibers.

10. The packaged hemostatic textile of claim **9**, wherein the glass fibers have a diameter from 5 nanometers to 15 microns.

11. The packaged hemostatic textile of claim **9** or **6**, wherein said raw or regenerated bamboo fibers comprise bamboo rayon fibers.

12. A packaged hemostatic textile comprising a textile material comprising glass fibers co-woven or knitted with secondary fibers, wherein said textile material is within a sterilized package and said secondary fibers comprise raw or regenerated bamboo fibers.

13. A hemostatic textile, comprising a textile material comprising glass fibers co-woven or knitted with raw or regenerated bamboo fibers, further comprising platelets bound to the glass fibers, the raw or regenerated bamboo fibers, or a combination thereof.

14. The hemostatic textile of claim **13**, wherein the raw or regenerated bamboo fibers comprise bamboo rayon fibers.

15. The hemostatic textile of claim **13**, wherein the relative amounts of the glass fibers and the raw or regenerated bamboo fibers range from about 65% by weight glass fibers and from about 35% by weight raw or regenerated bamboo fibers, based on the total weight of the textile.

16. A hemostatic textile comprising a textile material comprising glass fibers co-woven or knitted with raw or regenerated bamboo fibers, wherein the glass fibers have a diameter from 5 nanometers to 15 microns.

17. The hemostatic textile of claim **16**, wherein the glass fibers comprise alumino-borosilicate glasses.

18. The hemostatic textile of claim **16**, further comprising platelets bound to the glass fibers, the raw or regenerated bamboo fibers, or a combination thereof.

19. A hemostatic textile, comprising a textile material comprising glass fiber co-woven or knitted with raw or regenerated bamboo fibers, wherein when said textile material is in contact with a wound on an animal or human and blood from the wound, hemostatic systems are activated in the animal or human, and wherein the glass fibers have a diameter from 5 nanometers to 15 microns.

20. The hemostatic textile of claim **19**, wherein the textile material is a nonwoven textile.

21. The hemostatic textile of claim **19**, wherein the relative amounts of the glass fibers and the raw or regenerated bamboo fibers range from about 50% to about 80% by weight glass fibers and from about 20% to about 50% by weight raw or regenerated bamboo fibers, based on the total weight of the textile.

22. The hemostatic textile of claim **19**, wherein the glass fibers comprise an alumino-borosilicate glass.

23. A hemostatic textile, comprising a textile material comprising glass fibers co-woven or knitted with raw or regenerated bamboo fibers, wherein when said textile material is in contact with a wound on an animal or human and blood from the wound, hemostatic systems are activated in the animal or human, and wherein the glass fibers are continuous filaments.

24. The hemostatic textile of claim **23**, wherein the glass fibers have a diameter from 5 nanometers to 15 microns.

25. The hemostatic textile of claim **13**, **16**, **19**, or **23**, wherein said raw or regenerated bamboo fibers comprise bamboo rayon fibers.

26. A hemostatic textile, comprising a textile material comprising glass fibers co-woven or knitted with rayon fibers, wherein when said textile material is in contact with a wound on an animal or human and blood from the wound, hemostatic systems are activated in the animal or human, and wherein the textile material further comprises platelets bound to the glass fibers, rayon fibers, or a combination thereof.

27. A hemostatic textile comprising a textile material comprising glass fibers co-woven or knitted with secondary fibers, wherein the relative amounts of the glass fibers and the secondary fibers are 65% by weight glass fibers and 35% by weight secondary fibers, based on the total weight of the textile material.

28. The hemostatic textile of claim **27**, wherein the secondary fibers comprise rayon fibers.

~~WHAT IS CLAIMED IS:~~

1. A hemostatic textile, comprising:

a material comprising a combination of glass fibers and one or more secondary fibers selected from the group consisting of silk fibers; ceramic fibers; raw or regenerated bamboo fibers; cotton fibers; rayon fibers; linen fibers; ramie fibers; jute fibers; sisal fibers; flax fibers; soybean fibers; corn fibers; hemp fibers; lyocel fibers; wool; lactide and/or glycolide polymers; lactide/glycolide copolymers; silicate fibers; polyamide fibers; feldspar fibers; zeolite fibers, zeolite-containing fibers, acetate fibers; and combinations thereof;

said hemostatic textile capable of activating hemostatic systems in the body when applied to a wound.

2. The hemostatic textile of claim 1, wherein said material comprises a combination of glass fibers and raw or regenerated bamboo fibers.

3. The hemostatic textile of claim 1 in a woven or nonwoven form.

4. The hemostatic textile of claim 1, wherein the relative amounts of said glass fibers and said secondary fibers range from about 0.1% to about 99.9% by weight glass fibers and from about 99.9% to about 0.1% by weight secondary fibers, based on the total weight of said textile.

5. The hemostatic textile of claim 1, wherein the relative amounts of said glass fibers and said secondary fibers range from about 30% to about 80% by weight glass fibers and from about 70% to about 20% by weight secondary fibers, based on the total weight of said textile.

6. The hemostatic textile of claim 1, wherein the relative amounts of said glass fibers and said secondary fibers range from about 50% to about 80% by weight glass fibers and from about 50% to about 20% by weight secondary fibers, based on the total weight of said textile.

7. ~~The hemostatic textile of claim 1, wherein said hemostatic textile is an article of~~ clothing or a liner for an article of clothing.

8. A hemostatic textile, comprising:

a material comprising a combination of about 65% by weight glass fibers and about 35% by weight raw or regenerated bamboo fibers; said hemostatic textile capable of activating hemostatic systems in the body when applied to a wound.

9. A hemostatic textile, comprising:

a material comprising glass fibers and one or more secondary fibers selected from the group consisting of silk fibers; polyester fibers; nylon fibers; ceramic fibers; raw or regenerated bamboo fibers; cotton fibers; rayon fibers; linen fibers; ramie fibers; jute fibers; sisal fibers; flax fibers; soybean fibers; corn fibers; hemp fibers; lyocel fibers; wool; lactide and/or glycolide polymers; lactide/glycolide copolymers; silicate fibers; polyamide fibers; feldspar fibers; zeolite fibers, zeolite-containing fibers; acetate fibers; and combinations thereof; and

thrombin or a fraction comprising thrombin;

said hemostatic textile capable of activating hemostatic systems in the body when applied to a wound.

10. The hemostatic textile of claim 9, wherein said fraction comprising thrombin further comprises one or more coagulation factors selected from the group consisting of factor XII, factor XIIa, factor XI, factor XIa, factor XIII, factor XIIIa, factor IX, factor IXa, factor VIII, factor VIIIa, factor vWF, factor V, factor Va, factor X, factor Xa, and combinations thereof.

11. The hemostatic textile of claim 9, wherein said fraction further comprises a vasoactive active agent.

12. The hemostatic textile of claim 9, wherein said vasoactive agent is selected from the group consisting of endothelins, thromoboxanes, NO scavengers, and combinations thereof.

13. The hemostatic textile of claim 9, further comprising a preservative selected from the group consisting of glycerol, propanediol, polyoxyethylene glycol (PEG), trehalose, and combinations thereof.

14. The hemostatic textile of claim 9, wherein said fraction comprising thrombin is a partially purified plasma fraction containing thrombin IIa.

15. The hemostatic textile of claim 9, wherein the relative amounts of said glass fibers and said secondary fibers range from about 0.1% to about 99.9% by weight glass fibers and from about 99.9% to about 0.1% by weight secondary fibers, based on the total weight of said textile.

16. The hemostatic textile of claim 9, wherein the relative amounts of said glass fibers and said secondary fibers range from about 30% to about 80% by weight glass fibers and from about 70% to about 20% by weight secondary fibers, based on the total weight of said textile.

17. The hemostatic textile of claim 9, wherein the relative amounts of said glass fibers and said secondary fibers range from about 50% to about 80% by weight glass fibers and from about 50% to about 20% by weight secondary fibers, based on the total weight of said textile.

18. The hemostatic textile of claim 9, wherein said thrombin or a fraction comprising thrombin comprises from about 0.01 to about 10% by weight, based on the total weight of said textile.

19. The hemostatic textile of claim 9, wherein said thrombin or a fraction comprising thrombin comprises from about 0.05 to about 7% by weight, based on the total weight of said textile.

20. The hemostatic textile of claim 9, wherein said thrombin or a fraction comprising thrombin comprises from about 0.1 to about 5% by weight, based on the total weight of said textile.

21. The hemostatic textile of claim 9, further comprising one or more additional agents selected from the group consisting of skin conditioners, anti-inflammatory agents; analgesics; antimicrobial or antifungal agents; vasoconstrictors; growth factors; anti-scar agents; cauterizing agents, dehydrating agents, prothrombotic agents, and combinations thereof.

22. The hemostatic textile of claim 9 in a woven or nonwoven form.

23. The hemostatic textile of claim 9, wherein said hemostatic textile is an article of clothing or a liner for an article of clothing.

24. A hemostatic textile, comprising:

a material comprising a combination of about 65% by weight glass fibers and about 35% by weight raw or regenerated bamboo fibers; and

from about 0.1 to about 5% by weight of thrombin or a fraction comprising thrombin based on the total weight of said textile;

said hemostatic textile capable of activating hemostatic systems in the body when applied to a wound.

25. A hemostatic textile, comprising:

a material comprising glass fibers and one or more secondary fibers selected from the group consisting of silk fibers; polyester fibers; nylon fibers; ceramic fibers; raw or regenerated bamboo fibers; cotton fibers; rayon fibers; linen fibers; ramie fibers; jute fibers; sisal fibers; flax fibers; soybean fibers; corn fibers; hemp fibers; lyocel fibers; wool; lactide and/or glycolide polymers; lactide/glycolide copolymers; silicate fibers; polyamide fibers; feldspar fibers; zeolite fibers, zeolite-containing fibers; acetate fibers; and combinations thereof; and

one or more hemostatic agents selected from the group consisting of RL platelets, RL blood cells; fibrin, and fibrinogen;

said hemostatic textile capable of activating hemostatic systems in the body when applied to a wound.

~~26. The hemostatic textile of claim 25, further comprising one or more coagulation~~ factors selected from the group consisting of factor XII, factor XIIa, factor XI, factor XIa, factor XIII, factor XIIIa, factor IX, factor IXa, factor VIII, factor VIIIa, factor vWF, factor V, factor Va, factor X, factor Xa, and combinations thereof.

27. The hemostatic textile of claim 25, further comprising a vasoactive active agent.

28. The hemostatic textile of claim 27, wherein said vasoactive agent is selected from the group consisting of endothelins, thromoboxanes, NO scavengers, and combinations thereof.

29. The hemostatic textile of claim 25, further comprising a preservative selected from the group consisting of glycerol, propanediol, polyoxyethylene glycol (PEG), trehalose, and combinations thereof.

30. The hemostatic textile of claim 25, wherein the relative amounts of said glass fibers and said secondary fibers range from about 0.1% to about 99.9% by weight glass fibers and from about 99.9% to about 0.1% by weight secondary fibers, based on the total weight of said textile.

31. The hemostatic textile of claim 25, wherein the relative amounts of said glass fibers and said secondary fibers range from about 30% to about 80% by weight glass fibers and from about 70% to about 20% by weight secondary fibers, based on the total weight of said textile.

32. The hemostatic textile of claim 25, wherein the relative amounts of said glass fibers and said secondary fibers range from about 50% to about 80% by weight glass fibers and from about 50% to about 20% by weight secondary fibers, based on the total weight of said textile.

33. The hemostatic textile of claim 25, wherein said RL platelets or said RL blood cells comprise from about 0.1 to about 20 wt%, based on the total weight of said textile.

34. The hemostatic textile of claim 25, wherein said fibrin or fibrinogen comprises from about 0.1 to about 5 wt%, based on the total weight of said textile.

35. The hemostatic textile of claim 25, further comprising one or more additional agents selected from the group consisting of skin conditioners, anti-inflammatory agents; analgesics; antimicrobial or antifungal agents; vasoconstrictors; growth factors; anti-scar agents; cauterizing agents, dehydrating agents, prothrombotic agents, and combinations thereof.

36. The hemostatic textile of claim 25 in a woven or nonwoven form.

37. The hemostatic textile of claim 25, wherein said hemostatic textile is an article of clothing or a liner for an article of clothing.

38. A hemostatic textile, comprising:

a material comprising a combination of about 65% by weight glass fibers and about 35% by weight raw or regenerated bamboo fibers; and

one or more hemostatic agents selected from the group consisting of RL platelets, RL blood cells, fibrin, and fibrinogen, wherein said RL platelets and said RL blood cells comprise from about 0.1 to about 20 wt% and said fibrin and said fibrinogen comprise from about 0.1 to about 5 wt%, based on the total weight of said textile;

said hemostatic textile capable of activating hemostatic systems in the body when applied to a wound.

39. A hemostatic textile, comprising:

a material comprising glass fibers and one or more secondary fibers selected from the group consisting of silk fibers; polyester fibers; nylon fibers; ceramic fibers; raw or regenerated bamboo fibers; cotton fibers; rayon fibers; linen fibers; ramie fibers; jute fibers; sisal fibers; flax fibers; soybean fibers; corn fibers; hemp fibers; lyocel fibers; wool; lactide and/or glycolide polymers; lactide/glycolide copolymers; silicate fibers; polyamide fibers; feldspar fibers; zeolite fibers, zeolite-containing fibers; acetate fibers; and combinations thereof; and

thrombin or a fraction containing thrombin; and

one or more hemostatic agents selected from the group consisting of RL platelets, RL blood cells; fibrin, and fibrinogen;

said hemostatic textile capable of activating hemostatic systems in the body when applied to a wound.

40. The hemostatic textile of claim 39, wherein said fraction further comprises one or more coagulation factors selected from the group consisting of factor XII, factor XIIa, factor XI, factor XIa, factor XIII, factor XIIIa, factor IX, factor IXa, factor VIII, factor VIIIa, factor vWF, factor V, factor Va, factor X, factor Xa, and combinations thereof.

41. The hemostatic textile of claim 39, wherein said fraction further comprises a vasoactive active agent.

42. The hemostatic textile of claim 41, wherein said vasoactive agent is selected from the group consisting of endothelins, thromoboxanes, NO scavengers, and combinations thereof.

43. The hemostatic textile of claim 39, further comprising a preservative selected from the group consisting of glycerol, propanediol, polyoxyethylene glycol (PEG), trehalose, and combinations thereof.

44. The hemostatic textile of claim 39, wherein said fraction comprising thrombin is a partially purified plasma fraction containing thrombin IIa.

45. The hemostatic textile of claim 39, wherein the relative amounts of said glass fibers and said secondary fibers range from about 0.1% to about 99.9% by weight glass fibers and from about 99.9% to about 0.1% by weight secondary fibers, based on the total weight of said textile.

46. The hemostatic textile of claim 39, wherein the relative amounts of said glass fibers and said secondary fibers range from about 30% to about 80% by weight glass fibers and from about 70% to about 20% by weight secondary fibers, based on the total weight of said textile.

47. The hemostatic textile of claim 39, wherein the relative amounts of said glass fibers and said secondary fibers range from about 50% to about 80% by weight glass fibers and from about 50% to about 20% by weight secondary fibers, based on the total weight of said textile.

48. The hemostatic textile of claim 39, wherein said thrombin or a fraction comprising thrombin comprises from about 0.01 to about 10% by weight, based on the total weight of said textile.

49. The hemostatic textile of claim 39, wherein said thrombin or a fraction comprising thrombin comprises from about 0.05 to about 7% by weight, based on the total weight of said textile.

50. The hemostatic textile of claim 39, wherein said thrombin or a fraction comprising thrombin comprises from about 0.1 to about 5% by weight, based on the total weight of said textile.

51. The hemostatic textile of claim 39, wherein said RL platelets or said RL blood cells comprise from about 0.1 to about 20 wt%, based on the total weight of said textile.

52. The hemostatic textile of claim 39, wherein said fibrin or fibrinogen comprises from about 0.1 to about 5 wt%, based on the total weight of said textile.

53. The hemostatic textile of claim 39, further comprising one or more additional agents selected from the group consisting of skin conditioners, anti-inflammatory agents; analgesics; antimicrobial or antifungal agents; vasoconstrictors; growth factors; anti-scar agents; cauterizing agents, dehydrating agents, prothrombotic agents, and combinations thereof.

54. The hemostatic textile of claim 39 in a woven or nonwoven form.

~~55. The hemostatic textile of claim 39, wherein said hemostatic textile is an article of~~ clothing or a liner for an article of clothing.

56. A hemostatic textile, comprising:

a material comprising a combination of about 65% by weight glass fibers and about 35% by weight raw or regenerated bamboo fibers;

from about 0.1 to about 5% by weight of thrombin or a fraction comprising thrombin based on the total weight of said textile; and

one or more hemostatic agents selected from the group consisting of RL platelets, RL blood cells, fibrin, and fibrinogen, wherein said RL platelets and said RL blood cells comprise from about 0.1 to about 20 wt% and said fibrin and said fibrinogen comprise from about 0.1 to about 5 wt%, based on the total weight of said textile;

said hemostatic textile capable of activating hemostatic systems in the body when applied to a wound.

57. A method of preparing a hemostatic textile, comprising the steps of:

(1) contacting a material comprising glass fibers and one or more secondary fibers selected from the group consisting of silk fibers; polyester fibers; nylon fibers; ceramic fibers; raw or regenerated bamboo fibers; cotton fibers; rayon fibers; linen fibers; ramie fibers; jute fibers; sisal fibers; flax fibers; soybean fibers; corn fibers; hemp fibers; lyocel fibers; wool; lactide and/or glycolide polymers; lactide/glycolide copolymers; silicate fibers; polyamide fibers; feldspar fibers; zeolite fibers, zeolite-containing fibers; acetate fibers; and combinations thereof with thrombin or a fraction comprising thrombin and optionally a hemostatic agent selected from the group consisting of RL platelets, RL blood cells; fibrin, fibrinogen, and combinations thereof; to form a wet matrix; and

(2) drying said wet matrix to produce said hemostatic textile.

58. The method of claim 57, wherein said fraction further comprises one or more coagulation factors selected from the group consisting of factor XII, factor XIIa, factor XI, factor XIa, factor XIII, factor XIIIa, factor IX, factor IXa, factor VIII, factor VIIIa, factor vWF, factor V, factor Va, factor X, factor Xa, and combinations thereof.

59. The method of claim 57, wherein said fraction further comprises a vasoactive active agent.

60. The method of claim 59, wherein said vasoactive agent is selected from the group consisting of endothelins, thromoboxanes, NO scavengers, and combinations thereof.

61. The method of claim 57, wherein said textile further comprises a preservative selected from the group consisting of glycerol, propanediol, polyoxyethylene glycol (PEG), trehalose, and combinations thereof.

62. The method of claim 57, wherein said fraction comprising thrombin is a partially purified plasma fraction containing thrombin IIa.

63. The method of claim 57, wherein said textile further comprises one or more additional agents selected from the group consisting of skin conditioners, anti-inflammatory agents; analgesics; antimicrobial or antifungal agents; vasoconstrictors; growth factors; anti-scar agents; cauterizing agents, dehydrating agents, prothrombotic agents, and combinations thereof.

64. The method of claim 57, wherein said material is in a woven or nonwoven form.

65. A method of preparing a hemostatic textile, comprising the steps of:

(1) contacting a material comprising glass fibers and one or more secondary fibers selected from the group consisting of silk fibers; polyester fibers; nylon fibers; ceramic fibers; raw or regenerated bamboo fibers; cotton fibers; rayon fibers; linen fibers; ramie fibers; jute fibers; sisal fibers; flax fibers; soybean fibers; corn fibers; hemp fibers; lyocel fibers; wool; lactide and/or glycolide polymers; lactide/glycolide copolymers; silicate fibers; polyamide fibers; feldspar fibers; zeolite fibers, zeolite-containing fibers; acetate fibers; and combinations thereof with platelet rich plasma containing platelets

(2) crosslinking said platelets; and

(3) optionally contacting said textile with thrombin or a fraction comprising thrombin to produce said hemostatic textile.

66. The method of claim 65, further comprising the step of drying said hemostatic textile.

67. The method of claim 65, wherein said fraction further comprises one or more coagulation factors selected from the group consisting of factor XII, factor XIIa, factor XI, factor XIa, factor XIII, factor XIIIa, factor IX, factor IXa, factor VIII, factor VIIIa, factor vWF, factor V, factor Va, factor X, factor Xa, and combinations thereof.

68. The method of claim 65, wherein said fraction further comprises a vasoactive active agent.

69. The method of claim 68, wherein said vasoactive agent is selected from the group consisting of endothelins, thromoboxanes, NO scavengers, and combinations thereof.

70. The method of claim 65, wherein said textile further comprises a preservative selected from the group consisting of glycerol, propanediol, polyoxyethylene glycol (PEG), trehalose, and combinations thereof.

71. The method of claim 65, wherein said fraction comprising thrombin is a partially purified plasma fraction containing thrombin IIa.

72. The method of claim 65, wherein said textile further comprises one or more additional agents selected from the group consisting of skin conditioners, anti-inflammatory agents; analgesics; antimicrobial or antifungal agents; vasoconstrictors; growth factors; anti-scar agents; cauterizing agents, dehydrating agents, prothrombotic agents, and combinations thereof.

73. The method of claim 65, wherein said material is in a woven or nonwoven form.