~~WHAT IS~~ CLAIM~~ED IS~~

1. A peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, I, V, R, K, Q or L; X^2 is V, I, A, N, L or Q; X^3 is P; X^4 is Y, F or W; X^5 is D, N, Q or E; X^6 is Y, F , R, W, V, H, L, K or I; X^7 is N, S, G, D, H, E, Q or I; X^8 is W, L, F, M S, T, R, A, G, V, P, Y, I or K; X^9 is Y, N, F, K, L, R, I, V, W or Q; X^{10} is S, K, N, T, E, R, L, Q, I ,V, D, or K; X^{11} is N, E, D, Q, S, A or I; and X^{12} is W, R, V, L, I, K, F or E, wherein the peptide is not SVPYDYNWYSNW.

2. A peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, T, K, R, H, E, I, Q or D; X^2 is V, I, L, Y, G, F or W; X^3 is H, N, Q, E, D or S; X^4 is S, P, A or T; X^5 is F, W or Y; X^6 is D, N, E or Q; X^7 is Y, F or W; X^8 is D, G or E; X^9 is W, F or Y; X^{10} is Y, F or W; X^{11} is N or Q; and X^{12} is V, I or L, wherein the peptide is not SVHSFDYDWYNV.

3. The peptide of one of the preceding claims, wherein the peptide is SVPFDYNLYSNW; SAPYNFNFYSNW; NIPFNFSLNKER; SVPYQYNWYSNW; SVPWEYNFYSNW; RIPYDRGMIVNV; KVPYDWDSVINL; QLPYDVHTYNDW; LAPYDHNRYTQW; SNPYDLEAYENW; SVPYDYQGYRNI; SVPYDYNVYLNK; IQPYDKNYFQNF; VVPYDINIKDNW; SVPYDYNPYSNW; SVPYDYNKLKNW; SVPYDYNWRSSW; SVPYDYNWWSAW; SVPYDYNWQSNW; ELSSFNFDWYNV; RYSSFDYDWYNV; NVHSFDYDWYNV; RVESFNYDWYNV; RVESFDFDWYNI; RINSFDYDWYNV; TVNSFDYDWYNV; KVNSFDYDWYNV; TVHSFDYDWYNV; SVHSWDYDWYNV; SVHSYDFDWYNV; TLQAFNYEWYQL; KYETFEYGWYNI; HGDSFQYEWYNL; SVHSFDWDWYNV; SVHSFDYDYYNV; SVHSFDYDFYNV; SVHSFDYDWFNV; SVHSFDYDWWNV; IFNPFDYDWYNV; QWHSFDYDWYNV or DVHPFDYDWYNV.

4. The peptide of one of the preceding claims, wherein said peptide is cyclic peptide.

5. The peptide of one of the preceding claims, wherein said peptide is soluble.

TVNSFDYDWYNV; KVNSFDYDWYNV; TVHSFDYDWYNV; SVHSWDYDWYNV; SVHSYDFDWYNV; TLQAFNYEWYQL; KYETFEYGWYNI; HGDSFQYEWYNL; SVHSFDWDWYNV; SVHSFDYDYYNV; SVHSFDYDFYNV; SVHSFDYDWFNV; SVHSFDYDWWNV; IFNPFDYDWYNV; QWHSFDYDWYNV or DVHPFDYDWYNV.

30. The method of one of claims ~~24~~25-29, wherein said peptide is a cyclic peptide.

31. The method of one of claims ~~24~~25-30, wherein said peptide is soluble.

32. The method of one of claims ~~24~~25-31, wherein said peptide is attached to a linker.

33. The method of claim 32, wherein said linker is polyethylene glycol or palmitic acid.

34. The method of one of claims ~~24~~25-33, wherein the peptide is synthetic.

35. The method of one of claims ~~24~~25-34, wherein said surface is selected from the group comprising a fabric, a fiber, a foam, a film, a concrete, a masonry, a glass, a metal and a plastic.

36. The method of one of claims ~~24~~25-35, wherein said organism is in a biofilm.

37. The method of one of claims ~~24~~25-36, wherein said organism is an aquatic organism.

38. The method of one of claims ~~24~~25-37, wherein said organisms are attached in a cluster or aggregate.

39. The method of one of claims ~~24~~25-38, wherein said composition breaks or disperses said cluster or aggregate.

40. The method of one of claims ~~24~~25-39, wherein said composition prevents said organism from producing polysaccharide matrix.

41. The method of one of claims ~~24~~25-40, wherein said surface is a selected from the group comprising a fabric, a fiber, a foam, a film, a concrete, a masonry, a glass, a metal and a plastic.

42. A pharmaceutical composition comprising the composition of one of claims 9-24 and a pharmaceutically acceptable carrier or diluent.

43. The pharmaceutical composition according to claim 42 for use in a~~A~~ method of preventing or treating a pathogen infection in a subject in need thereof, wherein ~~the method comprising administering to the subject a therapeutically effective amount of~~ the pharmaceutical composition of claim 42 is for administering to the subject in a therapeutically effective amount.

44. The composition of one of claims 9-24 for use in a~~A~~ method of increasing the effectiveness of a pharmaceutical composition, ~~the method comprising administering the~~ wherein the composition of one of claims 9-24 is for administering to a subject in need of the pharmaceutical composition.

45. The composition for the use~~method~~ of claim 44, wherein said pharmaceutical composition is an antibiotic.

46. A method of identifying an anti-biofilm composition, the method comprising

(a) contacting said biofilm with a plurality of compositions, each composition comprising a protein or peptide;

(b) assaying the ability of said biofilm to resist anti-bioflim activity, wherein said anti-bioflim activity comprises detaching said biofilm from a surface or breaking up said biofilm; and

(c) identifying from said plurality of compositions at least one composition having said anti-biofilm activity above a predetermined threshold, thereby identifying the anti-biofilm composition.

47. The method of claim 46, wherein the peptide is SVPFDYNLYSNW; SAPYNFNFYSNW; NIPFNFSLNKER; SVPYQYNWYSNW; SVPWEYNFYSNW; RIPYDRGMIVNV; KVPYDWDSVINL; QLPYDVHTYNDW; LAPYDHNRYTQW; SNPYDLEAYENW; SVPYDYQGYRNI; SVPYDYNVYLNK; IQPYDKNYFQNF; VVPYDINIKDNW; SVPYDYNPYSNW; SVPYDYNKLKNW; SVPYDYNWRSSW; SVPYDYNWWSAW; SVPYDYNWQSNW; ELSSFNFDWYNV; RYSSFDYDWYNV; NVHSFDYDWYNV; RVESFNYDWYNV; RVESFDFDWYNI; RINSFDYDWYNV; TVNSFDYDWYNV; KVNSFDYDWYNV; TVHSFDYDWYNV; SVHSWDYDWYNV; SVHSYDFDWYNV; TLQAFNYEWYQL; KYETFEYGWYNI; HGDSFQYEWYNL; SVHSFDWDWYNV; SVHSFDYDYYNV; SVHSFDYDFYNV; SVHSFDYDWFNV; SVHSFDYDWWNV; IFNPFDYDWYNV; QWHSFDYDWYNV or DVHPFDYDWYNV.

48. A medical device comprising the composition of one of claims 9-24.

49. A method of dispersing a biofilm or detaching biofilm formation from a surface, the method comprising treating water with or coating said surface with the composition of one of claims 9-24.

50. A ~~method of treating a disease, comprising administering a~~ peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, I, V, R, K, Q or L; X^2 is V, I, A, N, L or Q; X^3 is P; X^4 is Y, F or W; X^5 is D, N, Q or E; X^6 is Y, F , R, W, V, H, L, K or I; X^7 is N, S, G, D, H, E, Q or I; X^8 is W, L, F, M S, T, R, A, G, V, P, Y, I or K; X^9 is Y, N, F, K, L, R, I, V, W or Q; X^{10} is S, K, N, T, E, R, L, Q, I ,V, D, or K; X^{11} is N, E, D, Q, S, A or I; and X^{12} is W, R, V, L, I, K, F or E, wherein the peptide is not SVPYDYNWYSNW, for use in a method of treating a disease, wherein said peptide is for administering to a subject.

51. A ~~method of treating a disease, comprising administering a~~ peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, T, K, R, H, E, I, Q or D; X^2 is V, I, L, Y, G, F or W; X^3 is H, N, Q, E, D or S; X^4 is S, P, A or T; X^5 is F, W or Y; X^6 is D, N, E or Q; X^7 is Y, F or W; X^8 is D, G or E; X^9 is W, F or Y; X^{10} is Y, F or W; X^{11} is N

or Q; and X^{12} is V, I or L, wherein the peptide is not SVHSFDYDWYNV, for use in a method of treating a disease, wherein said peptide is for administering to a subject.

52. The ~~method~~ peptide for the use of one of claims 50-51, wherein the disease is autoimmune, inflammatory or degenerative disease.

53. The ~~method~~ peptide for the use of claim 52, wherein the disease is Alzheimer's Disease.

54. A ~~method of reducing restenosis, comprising administering a~~ peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, I, V, R, K, Q or L; X^2 is V, I, A, N, L or Q; X^3 is P; X^4 is Y, F or W; X^5 is D, N, Q or E; X^6 is Y, F , R, W, V, H, L, K or I; X^7 is N, S, G, D, H, E, Q or I; X^8 is W, L, F, M S, T, R, A, G, V, P, Y, I or K; X^9 is Y, N, F, K, L, R, I, V, W or Q; X^{10} is S, K, N, T, E, R, L, Q, I ,V, D, or K; X^{11} is N, E, D, Q, S, A or I; and X^{12} is W, R, V, L, I, K, F or E, wherein the peptide is not SVPYDYNWYSNW, for use in a method of reducing restenosis, wherein said peptide is for administering to a subject.

55. A ~~method of reducing restenosis, comprising administering a~~ peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, T, K, R, H, E, I, Q or D; X^2 is V, I, L, Y, G, F or W; X^3 is H, N, Q, E, D or S; X^4 is S, P, A or T; X^5 is F, W or Y; X^6 is D, N, E or Q; X^7 is Y, F or W; X^8 is D, G or E; X^9 is W, F or Y; X^{10} is Y, F or W; X^{11} is N or Q; and X^{12} is V, I or L, wherein the peptide is not SVHSFDYDWYNV, for use in a method of reducing restenosis, wherein said peptide is for administering to a subject.

56. A ~~method of reducing white blood cell clustering, comprising administering a~~ peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, I, V, R, K, Q or L; X^2 is V, I, A, N, L or Q; X^3 is P; X^4 is Y, F or W; X^5 is D, N, Q or E; X^6 is Y, F , R, W, V, H, L, K or I; X^7 is N, S, G, D, H, E, Q or I; X^8 is W, L, F, M S, T, R, A, G, V, P, Y, I or K; X^9 is Y, N, F, K, L, R, I, V, W or Q; X^{10} is S, K, N, T, E, R, L, Q, I ,V, D, or K; X^{11} is N, E, D, Q, S, A or I; and X^{12} is W, R, V, L, I, K, F or E, wherein the peptide is not

SVPYDYNWYSNW, for use in a method of reducing white blood cell clustering, wherein said peptide is for administering to a subject.

57. ~~A method of reducing white blood cell clustering, comprising administering a~~ peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, T, K, R, H, E, I, Q or D; X^2 is V, I, L, Y, G, F or W; X^3 is H, N, Q, E, D or S; X^4 is S, P, A or T; X^5 is F, W or Y; X^6 is D, N, E or Q; X^7 is Y, F or W; X^8 is D, G or E; X^9 is W, F or Y; X^{10} is Y, F or W; X^{11} is N or Q; and X^{12} is V, I or L, wherein the peptide is not SVHSFDYDWYNV, for use in a method of reducing white blood cell clustering, wherein said peptide is for administering to a subject.

58. Use of a therapeutically effective amount of the composition of one of claims 9-24 in the preparation of a medicament for preventing or treating a pathogen infection in a subject.

59. Use of the composition of one of claims 9-24 in the preparation of a medicament for administering to a subject in need of a pharmaceutical composition to enhance the effectiveness of said pharmaceutical composition.

60. Use according to claim 59, wherein the pharmaceutical composition is an antibiotic.

61. Use of a peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, I, V, R, K, Q or L; X^2 is V, I, A, N, L or Q; X^3 is P; X^4 is Y, F or W; X^5 is D, N, Q or E; X^6 is Y, F , R, W, V, H, L, K or I; X^7 is N, S, G, D, H, E, Q or I; X^8 is W, L, F, M S, T, R, A, G, V, P, Y, I or K; X^9 is Y, N, F, K, L, R, I, V, W or Q; X^{10} is S, K, N, T, E, R, L, Q, I ,V, D, or K; X^{11} is N, E, D, Q, S, A or I; and X^{12} is W, R, V, L, I, K, F or E, wherein the peptide is not SVPYDYNWYSNW, for the preparation of a medicament for for treating a disease.

62. Use of a peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, T, K, R, H, E, I, Q or D; X^2 is V, I, L, Y, G, F or W; X^3 is H, N, Q, E, D or S; X^4 is S, P, A or T; X^5 is F, W or Y; X^6 is D, N, E or Q; X^7 is Y, F or W; X^8 is D, G or E; X^9 is W, F or Y; X^{10} is Y, F or W; X^{11} is N or Q; and X^{12} is V, I or L, wherein the peptide is not SVHSFDYDWYNV, for the preparation of a medicament for treating a disease.

63. Use according to one of claims 61-62, wherein the disease is autoimmune, inflammatory or degenerative disease.

64. Use according to claim 63, wherein the disease is Alzheimer's Disease.

65. Use of a peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, I, V, R, K, Q or L; X^2 is V, I, A, N, L or Q; X^3 is P; X^4 is Y, F or W; X^5 is D, N, Q or E; X^6 is Y, F , R, W, V, H, L, K or I; X^7 is N, S, G, D, H, E, Q or I; X^8 is W, L, F, M S, T, R, A, G, V, P, Y, I or K; X^9 is Y, N, F, K, L, R, I, V, W or Q; X^{10} is S, K, N, T, E, R, L, Q, I ,V, D, or K; X^{11} is N, E, D, Q, S, A or I; and X^{12} is W, R, V, L, I, K, F or E, wherein the peptide is not SVPYDYNWYSNW, for the preparation of a medicament for reducing restenosis.

66. Use of a peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, I, V, R, K, Q or L; X^2 is V, I, A, N, L or Q; X^3 is P; X^4 is Y, F or W; X^5 is D, N, Q or E; X^6 is Y, F , R, W, V, H, L, K or I; X^7 is N, S, G, D, H, E, Q or I; X^8 is W, L, F, M S, T, R, A, G, V, P, Y, I or K; X^9 is Y, N, F, K, L, R, I, V, W or Q; X^{10} is S, K, N, T, E, R, L, Q, I ,V, D, or K; X^{11} is N, E, D, Q, S, A or I; and X^{12} is W, R, V, L, I, K, F or E, wherein the peptide is not SVPYDYNWYSNW, for the preparation of a medicament for reducing white blood cell clustering.

67. Use of a peptide consisting of amino acids X^1-X^2-X^3-X^4-X^5-X^6-X^7-X^8-X^9-X^{10}-X^{11}-X^{12}, wherein X^1 is S, N, T, K, R, H, E, I, Q or D; X^2 is V, I, L, Y, G, F or W; X^3 is H, N, Q, E, D or S; X^4 is S, P, A or T; X^5 is F, W or Y; X^6 is D, N, E or Q; X^7 is Y, F or W; X^8 is D, G or E; X^9 is W, F or Y; X^{10} is Y, F or W; X^{11} is N or Q; and X^{12} is V, I or L, wherein the peptide is

not SVHSFDYDWYNV, for preparation of a medicament for reducing white blood cell clustering.