enhancer, which alter the functioning of said nanocrystals;

ii.) have a mode particle size of less than 50nm; and

iii.) are present in said nanosuspension at a concentration of 2-3,000 ppm; and

c.) said nanosuspension having a pH of between 5 to 9.5 and a zeta potential of at least -40mv.

7.) Use of a composition in the manufacture of a medicament for the therapeutic treatment of a dysmyelination disease, wherein an effective amount of a nanosuspension is to be used, the nanosuspension comprising:

a.) pharmaceutical grade water;

b.) gold nanocrystals suspended in said water forming the nanosuspension, wherein said gold nanocrystals:

i.) have surfaces that include at least one characteristic selected from the group of characteristics consisting of: (1) no organic chemical constituents adhered or attached to said surfaces and/or (2) are substantially clean and do not have chemical constituents adhered or attached to surfaces, other than water or said processing enhancer, which alter the functioning of said nanocrystals;

ii.) have a mode particle size of less than 50nm; and

iii.) are present in said nanosuspension at a concentration of 2-3,000 ppm; and

c.) said nanosuspension having a pH of between 5 to 9.5 and a zeta potential of at least -40mv; and

wherein said dysmyelination disease comprises a disturbance of cellular respiration.

8.) Use of a therapeutically effective amount of a composition comprising an elemental gold nanosuspension in the manufacture of a medicament for the therapeutic treatment of dysmyelination, wherein the composition is to be administered to a mammal in need thereof, said elemental gold nanosuspension comprising:

a.) pharmaceutical grade water;

b.) gold nanocrystals suspended in said water forming a suspension, wherein said gold nanocrystals:

i.) have surfaces that include at least one characteristic selected from the

group of characteristics consisting of: (1) no organic chemical constituents adhered or attached to said surfaces and/or (2) are substantially clean and do not have chemical constituents adhered or attached to surfaces, other than water or said processing enhancer, which alter the functioning of said nanocrystals;

ii.) have a mode particle size of less than 50nm;

iii.) are present in said suspension at a concentration of 2-5,000 ppm; and

c.) said suspension having a pH of between 5 to 9.5 and a zeta potential of at least -30mv.

9.) Use of a therapeutically effective amount of a composition comprising an elemental gold nanosuspension in the manufacture of a medicament for the therapeutic treatment of dysmyelination resulting from degeneration of supporting oligodendrocytes in a mammal, wherein the composition is to be administered to a mammal in need thereof, said elemental gold nanosuspension comprising:

a.) pharmaceutical grade water;

b.) gold nanocrystals suspended in said water forming a suspension, wherein said gold nanocrystals:

i.) have surfaces that include at least one characteristic selected from the group of characteristics consisting of: (1) no organic chemical constituents adhered or attached to said surfaces and/or (2) are substantially clean and do not have chemical constituents adhered or attached to surfaces, other than water or said processing enhancer, which alter the functioning of said nanocrystals;

ii.) have a mode particle size of less than 50nm;

iii.) are present in said suspension at a concentration of 2-5,000 ppm; and

c.) said suspension having a pH of between 5 to 9.5 and a zeta potential of at least -30mv.

10.) Use of a therapeutically effective amount of a composition comprising an elemental gold nanosuspension in the manufacture of a medicament for the therapeutic treatment of dysmyelination of central nervous system neurons in a mammal, wherein the composition is to be administered to a mammal in need thereof, said elemental gold nanosuspension comprising:

a.) pharmaceutical grade water;

b.) gold nanocrystals suspended in said water forming a suspension, wherein said gold nanocrystals:

i.) have surfaces that include at least one characteristic selected from the

group of characteristics consisting of: (1) no organic chemical constituents adhered or attached to said surfaces and/or (2) are substantially clean and do not have chemical constituents adhered or attached to surfaces, other than water or said processing enhancer, which alter the functioning of said nanocrystals;

ii.) have a mode particle size of less than 50nm;

iii.) are present in said suspension at a concentration of 2-5,000 ppm; and

c.) said suspension having a pH of between 5 to 9.5 and a zeta potential of at least -30mv.

11.) The use of any of claims 1, 4-6 and 8-10 wherein said dysmyelination comprises a disturbance of cellular respiration.

12.) The use of any of claims 1, 4-6 and 8-10 wherein said dysmyelination comprises a disturbance in mitochondrial morphology.