SEQUENCE LISTING

<110> GENEWEAVE BIOSCIENCES, INC.

<120> NON-REPLICATIVE TRANSDUCTION PARTICLES AND TRANSDUCTION PARTICLE-BASED REPORTER SYSTEMS

<130> 28421-25938/PCT

<140> PCT/US2014/026536
<141> 2014-03-13

<150> 61/939,126
<151> 2014-02-12

<150> 61/897,040
<151> 2013-10-29

<150> 61/779,177
<151> 2013-03-13

<160> 22

<170> PatentIn version 3.5

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<211> 177
<212> DNA
<213> Enterobacteria phage P1

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aagcgccaaa ataagcgcat aaatgatcgt tcagatgatc atgacgtgat cacccgc 177

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polynucleotide

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gctgaaatag cggaaaagca gagggtgaat gccgttgtca gtgccgcagt cgagaatgcg 120

aagcgccaaa ataagcgcat aaacgaccgt tcagacgacc atgacgttat tacccgc 177

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<212> DNA
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<220>
<223> Description of Artificial Sequence: Synthetic polynucleotide

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aatatatcaa accttcatca aaatgtcgat ccttcaacca ctctgcccgt tatttgtggt 300

gttgaaatta cgaccgaccg cgctggccgt tacaacctta atgctctaca cagagcgagc 360

ggactcggtg cccataaagc gccagctcaa tggctaagaa cgctgtcagc taaacagctc 420

atcgaagagc ttgaaaaaga aactatgcag aattgcatag tttcgttcac aagcaatgga 480

agcaggattt ctttcacgac tcgtataacc ggcaaaggtc agcagtggct gatgaagcga 540

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<223> Description of Artificial Sequence: Synthetic polynucleotide

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aaaggaagag t 131

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polynucleotide

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<223> a, c, t, g, unknown or other

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<222> (4056)..(4056)
<223> a, c, t, g, unknown or other

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caaaagaatc aaaaacgaga tagaggtatg cacttataga acatgcattt atgccgagaa 180

aacttattgg ttggaatggg ctatgtgtta gctaacttgt tagcgagttg gttggacttg 240

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<211> 1194
<212> DNA
<213> Enterobacteria phage P1

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gccttcaaag aagacaccag gactacggac agccgcaagc caaataagcc agtcaggaag 180

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gaattcgaag ttggcgatta cctgatagat aacgttgaag cgcggaaggc cgcgcgcgct 480

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<211> 1194
<212> DNA
<213> Enterobacteria phage P1

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gccttcaaag aagacaccag gactacggac agccgcaagc caaataagcc agtcaggaag 180

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ggtgatgtcg atgcggaagg catatcaaac gaagcatggc ttgaacagga tctggacgaa 1140

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<211> 525
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polynucleotide

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cgtttaatga gcattacaga agctttagcg ttatctgctt ctattgctag aggagaacct 240

caagaggctt acagtaagaa atatgaccat ttaaacgatg aagtggaaaa agaggttact 300

tacacaatca caccaacttt tgaagagcgt cagagatcta ttgaccacat actaaaagtt 360

catggtgcgt atatcgacaa aaaagaaatt actcagaaga atattgagat taatattaga 420

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aagaatattg agattaatat tggtgagtac gatgacgaaa gttaa 525

<210> 9
<211> 663
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<213> Staphylococcus phage 80alpha

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<211> 1116
<212> DNA
<213> Staphylococcus aureus

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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<223> a, c, t, g, unknown or other

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gtttggtctt acgggaaatt tatttgttgc tgcggctaac ctgttaggaa gaactaaaac 240

attaaatgtt ggcactatgg gggttgttat tccgacagca cacccagttc gacagttaga 300

agacgtttta ttattagatc aaatgtcgaa aggtcgtttt aattttggaa ccgttcgagg 360

gctataccat aaagattttc gagtatttgg tgttgatatg gaagagtctc gagcaattac 420

tcaaaatttc taccagatga taatggaaag cttacagaca ggaaccatta gctctgatag 480

tgattacatt caatttccta aggttgatgt atatcccaaa gtgtactcaa aaaatgtacc 540

aacctgtatg actgctgagt ccgcaagtac gacagaatgg ctagcaatac aagggctacc 600

aatggttctt agttggatta ttggtactaa tgaaaaaaaa gcacagatgg aactctataa 660

tgaaattgcg acagaatatg gtcatgatat atctaaaata gatcattgta tgacttatat 720

ttgttctgtt gatgatgatg cacaaaaggc gcaagatgtt tgtcgggagt ttctgaaaaa 780

ttggtatgac tcatatgtaa atgcgaccaa tatctttaat gatagcaatc aaactcgtgg 840

ttatgattat cataaaggtc aatggcgtga ttttgtttta caaggacata caaacaccaa 900

tcgacgtgtt gattatagca atggtattaa ccctgtaggc actcctgagc agtgtattga 960

aatcattcaa cgtgatattg atgcaacggg tattacaaac attacatgcg gatttgaagc 1020

taatggaact gaagatgaaa taattgcttc catgcgacgc tttatgacac aagtcgctcc 1080

tttcttaaaa gaacctaaat aaattactta tttgatacta gagataataa ggaacaagtt 1140

atgaaatttg gattattttt tctaaacttt cagaaagatg gaataacatc tgangaaacg 1200

ttggataata tggtaaagac tgtcacgtta attgattcaa ctaaatatca ttttaatact 1260

gcctttgtta atgaacatca cttttcaaaa aatggtattg ttggagcacc tattaccgca 1320

gctggttttt tattagggtt aacaaataaa ttacatattg gttcattaaa tcaagtaatt 1380

accacccatc accctgtacg tgtagcagaa gaagccagtt tattagatca aatgtcagag 1440

ggacgcttca ttcttggttt tagtgactgc gaaagtgatt tcgaaatgga atttttaga 1500

cgtcatatct catcaaggca acaacaattt gaagcatgct atgaaataat taatgacgca 1560

ttaactacag gttattgtca tccccaaaac gacttttatg attttccaaa ggtttcaatt 1620

aatccacact gttacagtga gaatggacct aagcaatatg tatccgctac atcaaaagaa 1680

gtcgtcatgt gggcagcgaa aaaggcactg cctttaacat ttaagtggga ggataattta 1740

gaaaccaaag aacgctatgc aattctatat aataaaacag cacaacaata tggtattgat 1800

atttcggatg ttgatcatca attaactgta attgcgaact taaatgctga tagaagtacg 1860

gctcaagaag aagtgagaga atacttaaaa gactatatca ctgaaactta ccctcaaatg 1920

gacagagatg aaaaaattaa ctgcattatt gaagagaatg cagttgggtc tcatgatgac 1980

tattatgaat cgacaaaatt agcagtggaa aaaacagggt ctaaaaatat tttattatcc 2040

tttgaatcaa tgtccgatat taaagatgta aaagatatta ttgatatgtt gaaccaaaaa 2100

atcgaaatga atttaccata ataaaattaa aggcaatttc tatattagat tgccttttta 2160

aatttc 2166

<210> 18
<211> 2143
<212> RNA
<213> Vibrio fischeri

<400> 18
aaucaccaaa aaggaauaga guaugaaguu uggaaauauu uguuuuucgu aucaaccacc 60

aggugaaacu cauaagcuaa guaauggauc gcuuuguucg gcuuugguauc gccucagaag 120

aguaggguuu gauacauauu ggaccuuaga acaucauuuu acagaguuug gucuuacggg 180

aaauuuauuu guugcugcgg cuaaccuguu aggaagaacu aaaacauuaa auguuggcac 240

uauggggguu guuauuccga cagcacaccc aguucgacag uuagaagacg uuuuauuauu 300

agaucaaaug ucgaaagguc guuuuaauuu uggaaccguu cgagggcuau accauaaaga 360

uuuucgagua uuugguguug auauggaaga gucucgagca auuacucaaa auuucuacca 420

gaugauaaug gaaagcuuac agacaggaac cauuagcucu gauagugauu acauucaauu 480

uccuaagguu gauguauauc ccaaagugua cucaaaaaau guaccaaccu guaugacugc 540

ugaguccgca aguacgacag aauggcuagc aauacaaggg cuaccaaugg uucuuaguug 600

gauuauuggu acuaaugaaa aaaaagcaca gauggaacuc uauaaugaaa uugcgacaga 660

auauggucau gauauaucua aaauagauca uuguaugacu uauauuuguu cuguugauga 720

ugaugcacaa aaggcgcaag auguuugucg ggaguuucug aaaaauuggu augacucaua 780

uguaaaugcg accaauaucu uuaaugauag caaucaaacu cugguuaaug auuaucauaa 840

aggucaaugg cgugauuuug uuuuacaagg acauacaaac accaaucgac guguugauua 900

uagcaauggu auuaacccug uaggcacucc ugagcagugu auugaaauca uucaacguga 960

uauugaugca acggguauua caaacauuac augcggauuu gaagcuaaug gaacugaaga 1020

ugaaauaauu gcuuccaugc gacgcuuuau gacacaaguc gcuccuuucu uaaaagaacc 1080

uaaauaaauu acuuauuuga uacuagagau aauaaggaac aaguuaugaa auuuggauua 1140

uuuuuucuaa acuuucagaa agauggaaua acaucugaag aaacguugga uaauauggua 1200

aagacuguca cguuaauuga uucaacuaaa uaucauuuua auacugccuu uguuaaugaa 1260

caucacuuuu caaaaaaugg uauuguugga gcaccuauua ccgcagcugg uuuuuuauua 1320

ggguuaacaa auaaauuaca uauugguuca uuaaaucaag uaauuaccac ccaucacccu 1380

guacguguag cagaagaagc caguuuauua gaucaaaugu cagagggacg cuucauucuu 1440

gguuuuagug acugcgaaag ugauuucgaa auggaauuuu uuagacguca uaucucauca 1500

aggcaacaac aauuugaagc augcuaugaa auaauuaaug acgcauuaac uacagguuau 1560

ugucaucccc aaaacgacuu uuaugauuuu ccaaagguuu caauuaaucc acacuguuac 1620

agugagaaug gaccuaagca auauguaucc gcuacaucaa aagaagucgu cauguggGca 1680

gcgaaaaagg cacugccuuu aacauuuaag ugggaggaua auuuagaaac caaagaacgc 1740

uaugcaauuc uauauaauaa aacagcacaa caauauggua uugauauuuc ggauguugau 1800

caucaauuaa cuguaauugc gaacuuaaau gcugauagaa guacggcuca agaagaagug 1860

agagaauacu uaaaagacua uaucacugaa acuuacccuc aaauggacag agaugaaaaa 1920

auuaacugca uuauugaaga gaaugcaguu gggucucaug augacuauua ugaaucgaca 1980

aaauuagcag uggaaaaaac agggucuaaa aauauuuuau uauccuuuga aucaaugucc 2040

gauauuaaag auguaaaaga uauuauugau auguugaacc aaaaaaucga aaugaauuua 2100

ccauaauaaa auuaaaggca auuucuauau uagauugccu uuu 2143

<210> 19
<211> 2294
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polynucleotide

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gaaguuugga aauauugguu guucguauca accaccaggu gaaacucaua agcuaaaggc 120

augaaaaaac uaggugaucu ucaccaacac cuaguuuuuu caaggaauug aguaugaagu 180

uuggaaauau uuguuuuucg uaucaaccac caggugaaac ucauaagcua aguaauggau 240

cgcuuuguuc ggcuugguau cgccucagaa gaguaggguu ugauacauau uggaccuuag 300

aacaucauuu uacagaguuu ggucuuacgg gaaauuuauu uguugcugcg gcuaaccugu 360

uaggaagaac uaaaacauua aauguuggca cuaugggggu uguuauuccg acagcacacc 420

caguucgaca guuagaagac guuuuauuau uagaucaaau gucgaaaggu cguuuuaauu 480

uuggaaccgu ucgagggcua uaccauaaag auuuucgagu auuugguguu gauauggaag 540

agucucgagc aauuacucaa aauuucuacc agaugauaau ggaaagcuua cagacaggaa 600

ccauuagcuc ugauagugau uacauucaau uuccuaaggu ugauguauau cccaaagugu 660

acucaaaaaa uguaccaacc uguaugacug cugaguccgc aaguacgaca gaauggcuag 720

caauacaagg gcuaccaaug guucuuaguu ggauuauugg uacuaaugaa aaaaaagcac 780

agauggaacu cuauaaugaa auugcgacag aauaugguca ugauauaucu aaaauagauc 840

auuguaugac uuauauuugu ucuguugaug augaugcaca aaaggcgcaa gauguuuguc 900

gggaguuucu gaaaaauugg uaugacucau auguaaaugc gaccaauauc uuuaaugaua 960

gcaaucaaac ucgugguuau gauuaucaua aaggucaaug gcgugauuuu guuuuacaag 1020

gacauacaaa caccaaucga cguguugauu auagcaaugg uauuaacccu guaggcacuc 1080

cugagcagug uauugaaauc auucaacgug auauugaugc aacggguauu acaaacauua 1140

caugcggauu ugaagcuaau ggaacugaag augaaauaau ugcuuccaug cgacgcuuua 1200

ugacacaagu cgcuccuuuc uuaaaagaac cuaaauaaau uacuuauuug auacuagaga 1260

uaauaaggaa caaguuauga aauuuggauu auuuuuucua aacuuucaga aagauggaau 1320

aacaucugaa gaaacguugg auaauauggu aaagacuguc acguuaauug auucaacuaa 1380

auaucauuuu aauacugccu uuguuaauga acaucacuuu ucaaaaaaug guauuguugg 1440

agcaccuauu accgcagcug guuuuuuauu aggguuaaca aauaaauuac auauugguuc 1500

auuaaaucaa guaauuacca cccaucaccc uguacgugua gcagaagaag ccaguuuauu 1560

agaucaaaug ucagagggac gcuucauucu ugguuuuagu gacugcgaaa gugauuucga 1620

aauggaauuu uuuagacguc auaucucauc aaggcaacaa caauuugaag caugcuauga 1680

aauaauuaau gacgcauuaa cuacagguua uugucauccc caaaacgacu uuuaugauuu 1740

uccaaagguu ucaauuaauc cacacuguua cagugagaau ggaccuaagc aauauguauc 1800

cgcuacauca aaagaagucg ucaugugggc agcgaaaaag gcacugccuu uaacauuuaa 1860

gugggaggau aauuuagaaa ccaaagaacg cuaugcaauu cuauauaaua aaacagcaca 1920

acaauauggu auugauauuu cggauguuga ucaucaauua acuguaauug cgaacuuaaa 1980

ugcugauaga aguacggcuc aagaagaagu gagagaauac uuaaaagacu auaucacuga 2040

aacuuacccu caaauggaca gagaugaaaa aauuaacugc auuauugaag agaaugcagu 2100

ugggucucau gaugacuauu augaaucgac aaaauuagca guggaaaaaa cagggucuaa 2160

aaauauuuua uuauccuuug aaucaauguc cgauauuaaa gauguaaaag auauuauuga 2220

uauguugaac caaaaaaucg aaaugaauuu accauaauaa aauuaaaggc aauuucuaua 2280

uuagauugcc uuuu 2294

<210> 20
<211> 12
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<220>
<221> modified_base
<222> (1)..(2)
<223> a, c, u, g, unknown or other

<220>
<221> modified_base

<222> (7)..(9)
<223> a, c, u, g, unknown or other

<220>
<221> modified_base
<222> (12)..(12)
<223> a, c, u, g, unknown or other

<220>
<223> See specification as filed for detailed description of
substitutions and preferred embodiments

<400> 20
nnwawgnnnu un 12

<210> 21
<211> 13
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<220>
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<222> (1)..(1)
<223> a, c, u, g, unknown or other

<220>
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<222> (4)..(7)
<223> a, c, u, g, unknown or other

<220>
<221> modified_base
<222> (12)..(13)
<223> a, c, u, g, unknown or other

<220>
<223> See specification as filed for detailed description of
substitutions and preferred embodiments

<400> 21
nagnnnncwu wnn 13

<210> 22
<211> 13
<212> RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 22
cagauaacau uuu 13