CLAIMS

1. A modulator of the function of a toxic disease-inducing RNA, wherein the RNA comprises expanded repeat sequences $r(CUG)^{exp}$ or $r(CCUG)^{exp}$, the modulator comprising an RNA-binding oligomer that is formed *in situ* within a living cell from a condensation reaction of a cell-permeable RNA expanded repeat sequence binding module, wherein the cell-permeable module comprises both an alkyne and an azide moiety, or from a condensation of a pair of cell-permeable RNA expanded repeat sequence binding modules, wherein a first module comprises an alkyne moiety and a second module comprises an azide moiety, the condensation reaction taking place between the RNA expanded repeat bound modules via an a 1,3 Huisgen dipolar cyclo-addition reaction between the alkyne and azide moieties.

2. The modulator of claim 1, wherein the toxic RNA comprises adjacent internal loops formed by RNA expanded repeat sequences $r(CCUG)^{exp}$.

3. The modulator of claim 2, wherein each cell-permeable module comprises a modified kanamycin moiety.

4. The modulator of claim 3, wherein the cell-permeable module is **N_3-K-Ak**, or **N_3-K-AaK**, or a pair of cell-permeable modules used together are **N_3-K** and **K-Ak,** wherein N_3 is azide, K is kanamycin, Ak is alkyne, and AaK is activated, electron deficient alkyne.

5. The modulator of any one of claims 2 to 4 for use in the treatment of myotonic dystrophy type 2 (DM2).

6. The modulator of claim 1, wherein the toxic RNA comprises adjacent internal loops formed by RNA expanded repeat r(CUG)^{exp}.

7. The modulator of claim 6, wherein each cell-permeable module comprises a bisheteroaryl moiety, preferably a bis-benzimidazole moiety

8. The modulator of claim 7, wherein the cell permeable module is **N_3-2H-K4NMeS-Aak** which is N-((4S,7S,10S)-12-(2-((2-amino-2-oxoethyl)(3-azidopropyl)amino)-2-oxoethyl)-3,4,6,7,9,10,17-heptamethyl-21-(3-(5-(4-methylpiperazin-1-yl)-1H,3'H-[2,5'-bibenzo[d]imidazol]-2'-yl)phenoxy)-2,5,8,11,18-pentaoxo-3,6,9,12,17-pentaazahenicosyl)-N-(2-(N-methyl-4-(3-(5-(4-methylpiperazin-1-yl)-1H,3'H-[2,5'-bibenzo[d]imidazol]-2'-yl)phenoxy)butanamido)ethyl)-6-propiolamidohexanamide

9. The modulator of any one of claims 6-8, for use in the treatment of myotonic dystrophy type 1

(DM1).

10. The modulator comprising a modulator of any one of claims 1 to 4 or 6-8 further comprising a nucleic acid cleaving moiety for use in cleaving a toxic disease-inducing RNA, wherein the RNA comprises expanded repeat sequences.

11. The modulator of claim 10, wherein the nucleic acid cleaving moiety comprises a bleomycin.

12. Use of a modulator of claim 1 in the manufacture of a medicament for the treatment of a disease in a patient wherein the disease is induced by the presence of a toxic RNA having expanded repeat sequences, wherein the disease is myotonic dystrophy type 2 (DM2), the toxic RNA comprises r(CCUG)^{exp} expanded repeat sequences, and the modulator is formed *in situ* from one cell-permeable module comprising a kanamycin bearing an alkyne and an azide group, or a pair of cell-permeable modules, each comprising a kanamycin, a first module bearing an alkyne group and a second module bearing an azide group.

13. Use of a modulator of claim 1 in the manufacture of a medicament for the treatment of a disease in a patient wherein the disease is induced by the presence of a toxic RNA having expanded repeat sequences, wherein the disease is myotonic dystrophy type 1 (DM1), the toxic RNA comprises r(CUG)^{exp} expanded repeat sequences, and the modulator is formed *in situ* from one cell-permeable module bearing an alkyne and an azide group, or a pair of cell-permeable modules each comprising a bis-benzimidazole, a first module bearing an alkyne group and a second module bearing an azide group.

14. The use of claim 12 or claim 13, wherein the modulator further comprises a nucleic acid cleaving moiety.