CLAIMS

What is claimed is:

1. A composition comprising:

a carrier molecule; and

a biologically active molecule, wherein the carrier is non-covalently associated with the biologically active molecule in one of a micelle and a liposome,

wherein the carrier molecule comprises one of palmitoylgly$_p$-KKRPKPG (SEQ ID NO: 5), octanoyl-gly$_p$-KKRPKPG (SEQ ID NO: 6), oleyl-gly$_p$KKRPKPG (SEQ ID NO: 7) and any combinations thereof or wherein the carrier molecule is selected from the group consisting of FFFIL VF-gly$_p$-KKRPKPG (SEQ ID NO: 1), FL VFFF-gly$_p$-KKRPKPG (SEQ ID NO: 2), KKRPKPG -gly$_p$-FL VFFF (SEQ ID NO: 3) and any combination thereof, where p is an integer from 0 to 10.

2. The composition of claim 1, wherein the biologically active molecule is selected from the group consisting of VGVAPG (SEQ ID NO: 26); palmitoyl-TTS; retinyl retinoate; retinoic acid; steroid and steroidal compounds; hydroquinone; hyalonuric acid; non-steroidal anti-inflammatory drugs (NSAIDs) including naproxen, ibuprofen, and acetaminophen; skintightening peptides; light activatable moieties and compounds; ultraviolet (UV) light absorbing, blocking, or reflecting compounds; vitamins; cholesterol; drugs which block, influence, or interfere with neurotransmitter function; and any combination thereof.

3. The composition of claim 1, wherein the biologically active molecule is selected from the group consisting of: a botulinum toxin serotype selected from the group consisting of A, B, C, D, E, F, and G; recombinant botulinum toxin; a modified botulinum toxin; a fragment of a botulinum toxin; and any combination thereof.

4. A kit for administration of a botulinum toxin to a patient, the kit comprising:

a botulinum toxin;

an effective amount for transdermal delivery thereof of a carrier molecule;

a pH buffer system adapted to maintain pH between 4.0 to 8.3; and

a device comprising the botulinum toxin, the carrier molecule, and the pH buffer system, the device adapted to administer the botulinum toxin to a patient via the patient's skin;

wherein the carrier molecule is non-covalently associated with the botulinum toxin in one of a micelle and a liposome; and

wherein one of the device, the carrier molecule, the pH buffer system, and any combination thereof are adapted to provide a controlled release of the botulinum toxin, and wherein the carrier molecule comprises one of palmitoylgly$_p$-KKRPKPG (SEQ ID NO: 5), octanoyl-gly$_p$-KKRPKPG (SEQ ID NO: 6), oleyl-gly$_p$KKRPKPG (SEQ ID NO: 7) and any combinations thereof or wherein the carrier molecule is selected from the group consisting of FFFIL VF-gly$_p$-KKRPKPG (SEQ ID NO: 1), FL VFFF-gly$_p$KKRPKPG (SEQ ID NO: 2), KKRPKPG -gly$_p$- FL VFFF (SEQ ID NO: 3) and any combination thereof, where p is an integer from 0 to 10.

5. The kit of claim 4, wherein the device is a skin patch.

6. The kit of claim 4 or claim 5, wherein the botulinum toxin, the carrier molecule, and the pH buffer system are comprised in a liquid, gel, cream, lotion, and ointment coupled with the device.