CLAIMS

1. A method of producing a composition comprising *Shigella* bioconjugates in a bioreactor comprising the steps:

(i) growing bacteria that comprises (a) modified exotoxin of *Pseudomonas aeruginosa* (EPA) containing at least one consensus sequence, D/E – X – N – Z – S/T, wherein X and Z may be any natural amino acid except proline; (b) an oligosaccharyl transferase; and (c) one or more *Shigella* polysaccharides for a period of time to produce an amount of *Shigella* bioconjugates comprising the modified EPA linked to the one more *Shigella* polysaccharides;

(ii) extracting periplasmic proteins; and

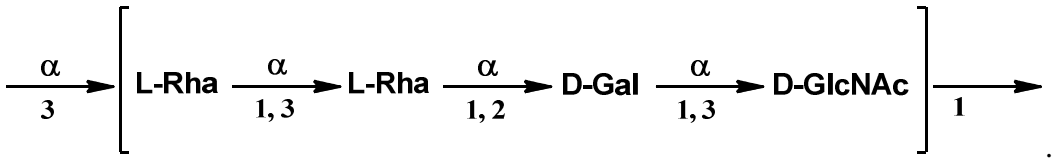
(iii) separating the *Shigella* bioconjugates from the extracted periplasmic proteins by anionic exchange.

2. The method of claim 1, wherein said modified EPA has an amino acid sequence comprising SEQ. ID NO.: 6.

3. The method of claim 1, wherein said modified EPA has an amino acid sequence comprising SEQ. ID NO.: 7.

4. The method of any one of the preceding claims, wherein said *Shigella* polysaccharide is from *Shigella dysenteriae* **O1**.

5. The method of any one of the preceding claims, wherein said *Shigella* polysaccharide comprises the following structure:



6. The method of any one of the preceding claims, wherein said bacteria comprises a nucleotide sequence comprising SEQ ID NO: 5.

7. The method of any one of the preceding claims, wherein the oligosaccharyl transferase is from *Campylobacter* spp.

8. The method of any one of the preceding claims, wherein the oligosaccharyl transferase is from *Campylobacter jejuni*.

9. Use of the method of any one of the preceding claims for the production of a bioconjugate vaccine.

10. The method of any one of the preceding claims, wherein said bacteria is *E. coli*.