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(71) Applicant: FLAGSHIP PIONEERING, INC. [US/US];
55 Cambridge Parkway, 8th Floor 800E, Cambridge, MA
02142 (US).

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(72) Inventors: MARTINEZ, Ignacio; 36 Moon Hill Rd,
Lexington, MA 02421 (US). ARMEN, Zachary, Garo;
1200 Washington St, Unit 412, Boston, MA 02118 (US).
CEZAR, Christine; 2454 215 Ave SE, Sammamish, WA
98075 (US). MARTIN, Barry, Andrew; 150 Mount Ver-
non St, Boston, MA 02108 (US). AVENDANO AMADO,
Maier, Steve; 10 Glassworks Ave, Apt 411, Cambridge,
MA 02141 (US).

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(74) Agent: ELBING, Karen, L. et al.; Clark & Elbing LLP,
101 Federal Street, 15th Floor, Boston, MA 02110 (US).

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(54) Title: METHODS AND RELATED COMPOSITIONS FOR MANUFACTURING FOOD AND FEED

(57) Abstract: Provided herein are methods and compositions for food and feed applications, e.g., for targeting one or more microor-
ganisms resident in a host insect, the modulation resulting in an increase in the fitness of the host. The invention features a composition
that includes a modulating agent (e.g., phage, peptide, small molecule, antibiotic, or combinations thereof) that can alter the host's
microbiota in a manner that is beneficial to the host. By promoting favorable microbial levels, microbial activity, microbial metabolism,
and/or microbial diversity, the modulating agent described herein may be used to increase the fitness of a variety of insects utilized
in human food or animal feed industries.

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