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Autore	Aizawa Shin-Ichi
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Nota di contenuto	Front Cover; The Flagellar World; Copyright Page; Contents; Preface; Introduction; 1. Basic Knowledge about Flagella; (A) Flagella Arrangement; (B) Gram Staining; (C) <i>Salmonella enterica</i> Serovar Typhimurium; 2. Flagellar Structure; (A) The Structure-Function-Gene Relationship in the Flagellum; (B) Assembly Process of the Flagellum; In the Cytoplasm; In the Periplasmic Space; Outside the Cell; 3. Flagellar Genetics; (A) Unified Gene Names for <i>E. coli</i> / <i>Salmonella</i> ; (B) Differences between <i>E. coli</i> and <i>S. typhimurium</i> ; (C) Extra Genes: Species-Specific Flagellar Genes (D) Functional units: Clusters of Functionally Related Genes 4. EM Techniques for Flagella Study; (A) PTA Staining; (B) Osmotically-Shocked Cell Method; Chapter Examples; 1. Outline; 2. Specific Indications; (A) The Genetic Map; (B) The Flagellin Gene ( <i>fliC</i> ); (C) Duplication of Genes; (D) The <i>che</i> Genes; (E) Missing Genes; (F) Extra Genes; (G) Direction of Transcription; 1 <i>Actinoplanes missouriensis</i> - Swimming Spores with Flagella; 2 <i>Aliivibrio fischeri</i> - Light-Organ Symbiont in the Bobtail Squid; 3 <i>Azospirillum brasilense</i> - A Bushy Hook of the Polar Flagellum 4 <i>Bacillus subtilis</i> - The Representative of Gram-Positive Bacteria Topic 1 Gene Regulation; 5 <i>Bdellovibrio bacteriovorus</i> - A Small but Fierce Predator; 6 <i>Borrelia burgdorferi</i> - Periplasmic Flagella in a Flat Wave

Body; 7 *Bradyrhizobium japonicum* - The Nitrogen-Fixer in the Peanut Farm; 8 *Caulobacter crescentus* - Alteration between Flagellum and Stalk; 9 *Enterococcus casseliflavus* - Edible Flagella; 10 *Escherichia coli* - The Representative of the Gram-Negative Bacteria; 11 *Geobacillus kaustophilus* - The Heat- and Acid-Stable Flagella; 12 *Gluconobacter oxydans* - The Vinegar Producing Bacteria  
13 *Helicobacter pylori* - Randomly Arranged Flagellar GenesTopic 2 Gene Arrangement; Topic3 Mot Proteins; 14 *Idiomarina loihiensis* - A Habitat of Deep-Sea Volcano; 15 *Legionella pneumophila* - Opportunistic Pathogen in Public Bath; 16 *Magnetospirillum magnetotacticum* - High-Quality Magnet in the Pond; Topic4 Flagellin size; 17 *Paenibacillus alvei* - Flagella-Dependent Social Motility; 18 *Pectobacterium carotovorum* - Subpolar Hyper-Flagellation; 19 *Pseudomonas aeruginosa* - Opportunistic Pathogen in the Hospital; Topic 5 Flagella and Pathogenicity  
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27 *Symbiobacterium thermophilum* - A Gram-Negative, High (G+C) Firmicutes

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#### Sommario/riassunto

The Flagellar World is a unique publication. The product of years of research and data collection by the author, this book is a pictorial guide to flagella in a variety of organisms. Each EM image is accompanied by a short description of the system in each organism. These never-before-seen pictures represent a wide variety of flagella, including *Legionella pneumophila*, *Escherichia coli*, *Yersinia enterocolitica*, and many others. Researchers in microbiology, immunology, and parasitology will find this a fascinating and useful resource.A unique publicat

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