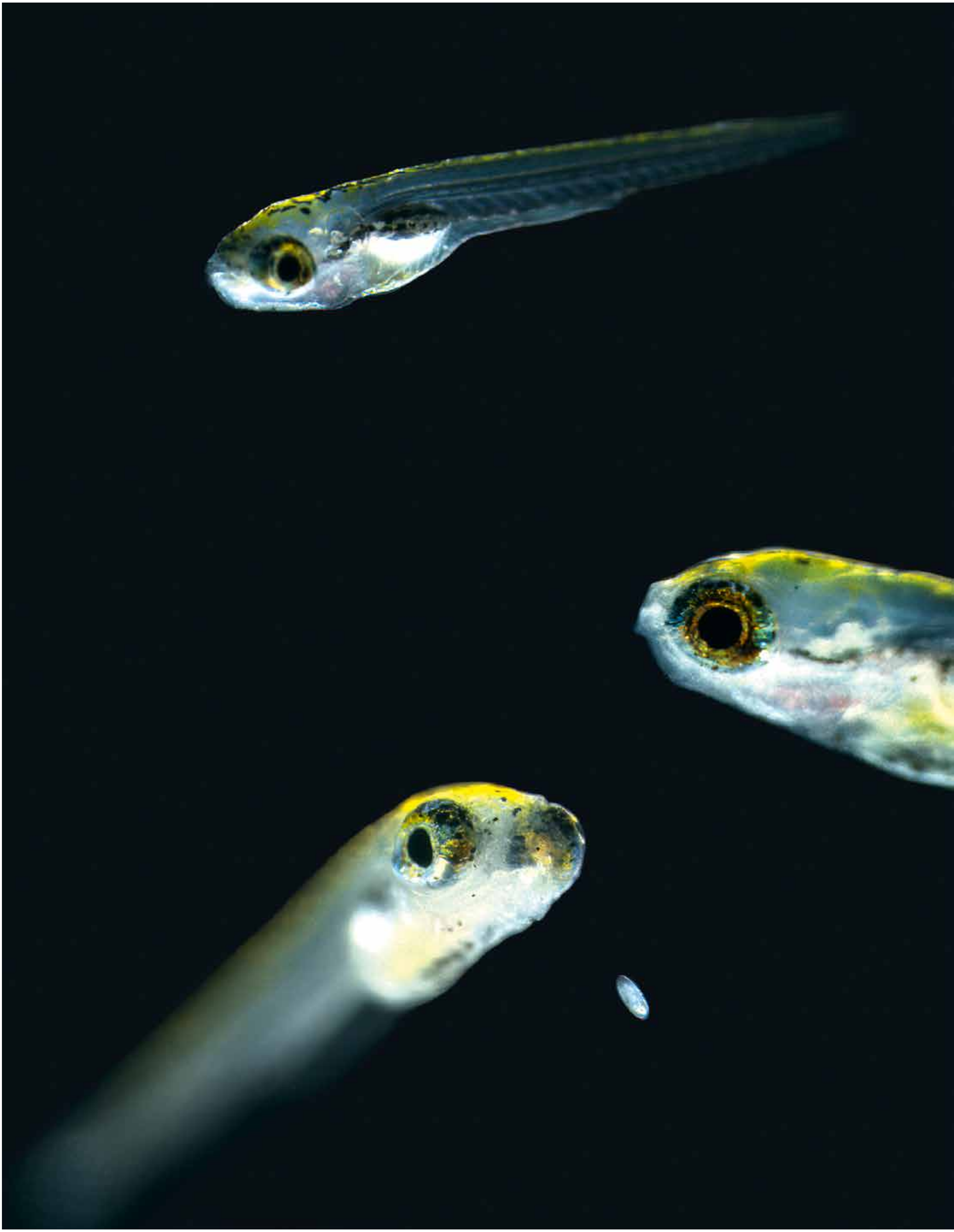

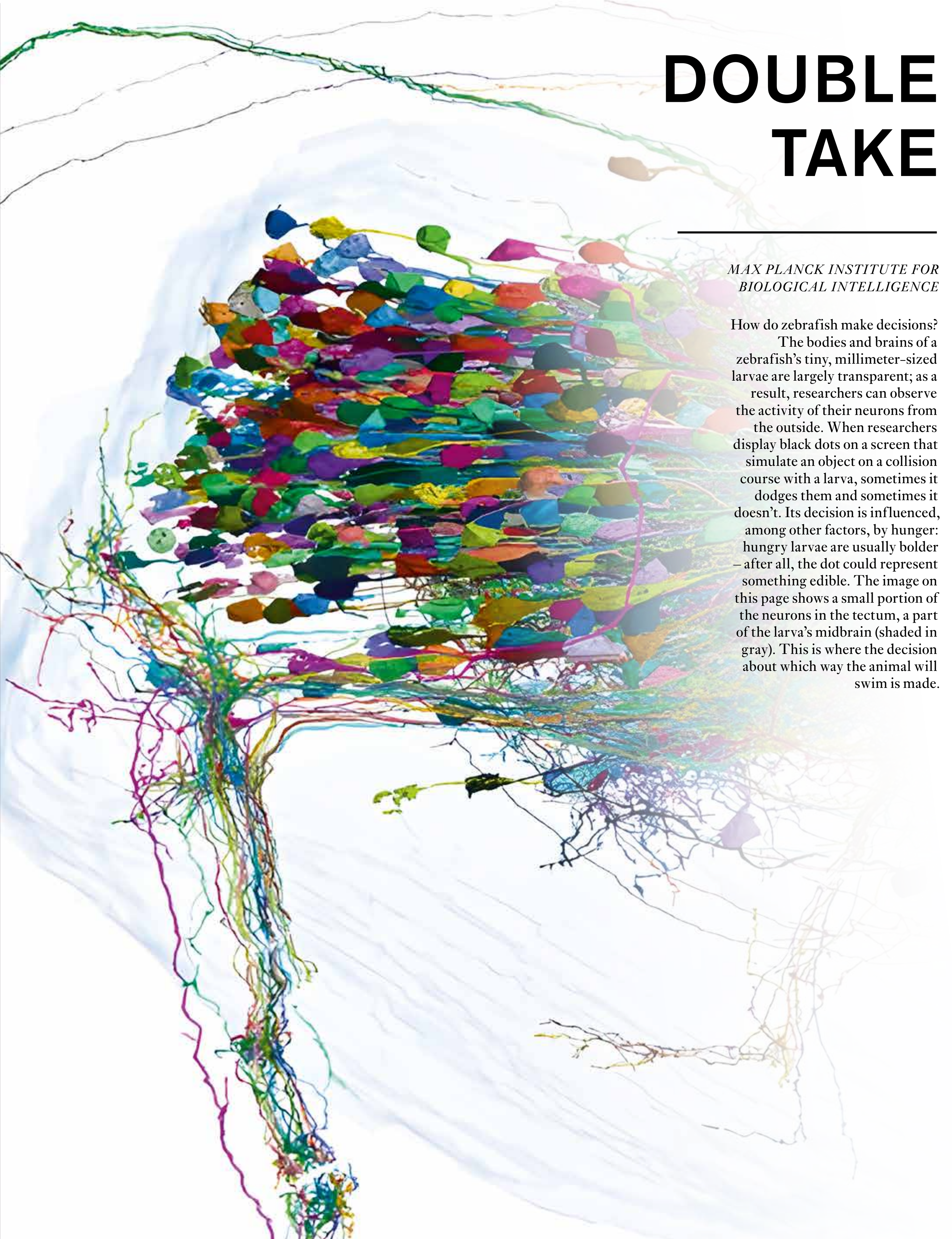

DOUBLE TAKE

MAX PLANCK INSTITUTE FOR BIOLOGICAL INTELLIGENCE

How do zebrafish make decisions? The bodies and brains of a zebrafish's tiny, millimeter-sized larvae are largely transparent; as a result, researchers can observe the activity of their neurons from the outside. When researchers display black dots on a screen that simulate an object on a collision course with a larva, sometimes it dodges them and sometimes it doesn't. Its decision is influenced, among other factors, by hunger: hungry larvae are usually bolder – after all, the dot could represent something edible. The image on this page shows a small portion of the neurons in the tectum, a part of the larva's midbrain (shaded in gray). This is where the decision about which way the animal will swim is made.

IMAGE: DOMINIQUE FÖRSTER / MPI FOR BIOLOGICAL INTELLIGENCE