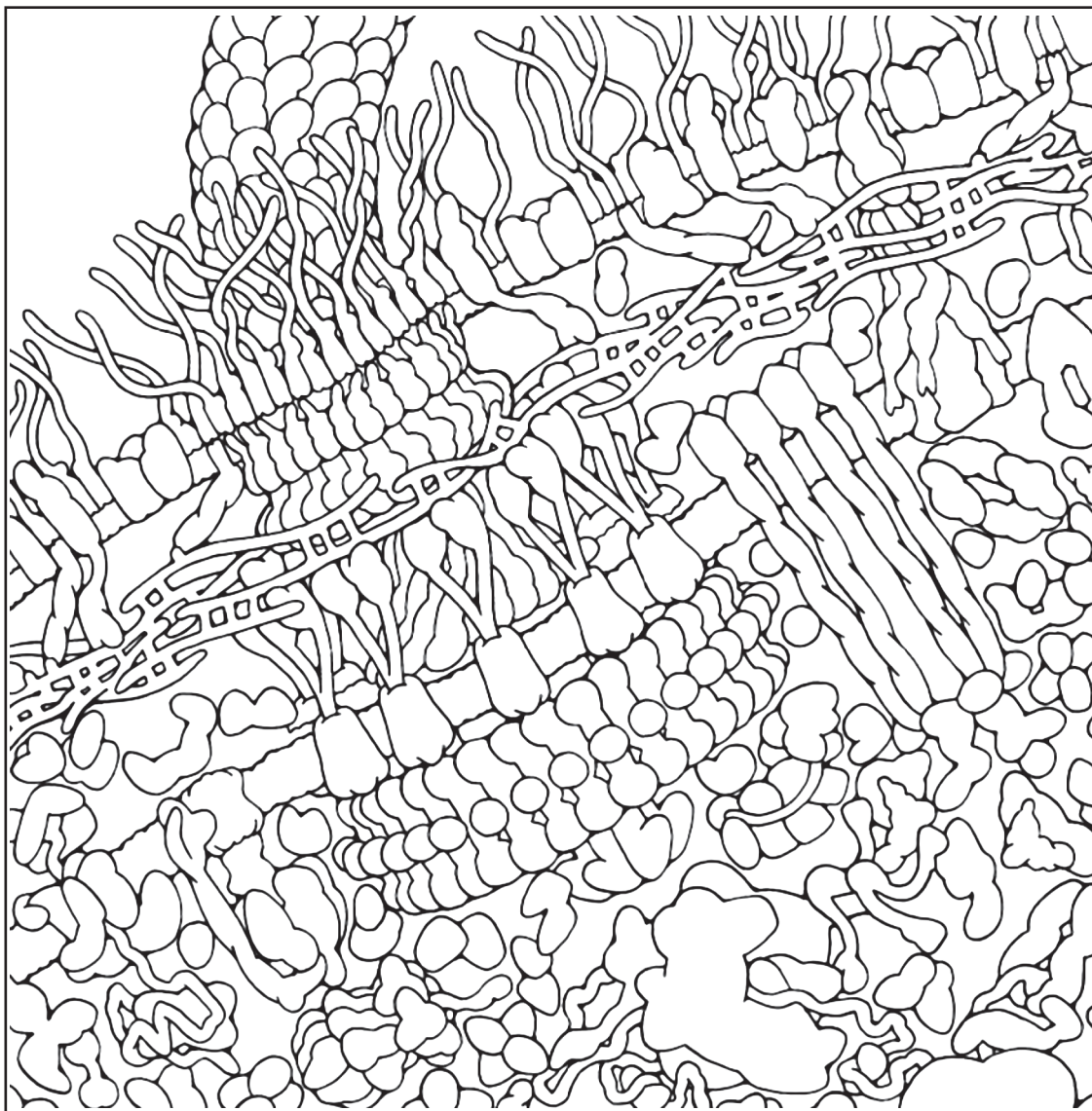


A flagellar motor

A new feature in *The Biologist* for 2022 invites readers to get artistic while learning about some of the life sciences' most important and interesting macromolecules. **By David S Goodsell**



◆ **This image shows a cross section** of an *Escherichia coli* cell magnified to show individual proteins and RNA molecules. A layered cell wall runs diagonally through the middle. The outer membrane, near the top, is filled with protein channels and long lipopolysaccharides extending from the surface. The inner membrane contains several protein complexes, including a secretory channel and ATP synthase on the left, and a chemoreceptor signalling complex,

a multidrug efflux pump and lipid flippase on the right.

A network of cross-linked peptidoglycan molecules supports the cell wall between the two membranes and a huge flagellar motor spans the entire cell wall, providing the power to propel the cell through the environment. Inside the cell, look for a ribosome, a Cascade/CRISPR complex, and many soluble proteins.

For David's coloured-in painting of this cell, and more information, visit PDB-101 at the RCSB Protein Data Bank

(PDB) using the QR code (below) or at bit.ly/Ecolipainting

PDB-101 hosts educational resources supporting molecular explorations through biology and medicine centred around the biological macromolecules archived in the Protein Data Bank.

