

## Late News

The E.coli Model is now on display to the public in the Main Reception of the University of Aston in Birmingham. For personal viewers the following Tour is suggested.

The Tour, roughly from left to right, shows the features presented on the plastic Panels on which they are mounted. Panels are set out in four rows, A – D, and ten columns, 1 – 10. They are distinguished on the model by observing the join lines, for labelling them would spoil the model's appearance. A1 is bottom left and D10 is top right. Row A is 16cm deep, rows B & C are 20cm deep and row D is 30cm deep. All are 30cm wide.

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
A1	A2	A3	A4	A5	A6	A7	A8	A9	A10

The order is as follows:

Panel(s)	Features
A1	Cell wall with porins. Aerated nutrient environment
B1	Glucose assimilation. Glycolysis, pentose phosphate pathways. Precursor metabolites
B2	Krebs Cycle. Energy collection. Precursor metabolites
C1-C3	Amino acid syntheses (20). Polyamine syntheses (2).
D1-D4	Protein synthesis. Early stages of a simple protein. Bead model
B4-C4	Ribonucleotide syntheses. ATP regeneration
A2-A4	Electron transport chain. Proton motive force. Nutrient uptakes.
B3	Lactose assimilation. Glycogen formation and breakdown. Second glycolysis pathway
D5-D7, C5-C7	DNA: nucleoid and plasmid. Bead and string models
D8-D10, C9-C10	Protein syntheses: ribosomal proteins. String models
C8	Ribosome self-assembly
B5-B7, A5-A7	Wall components and syntheses:
B5-A5	Protein synthesis: AB5 toxin. Bactoprenol, murein monomer and polymer syntheses. Multidrug resistance transporter. O-157 antigens. Cell septation proteins, wall invagination
B6-A6	Phospholipid syntheses, PE and PG (phosphatidyl ethanolamine and phosphatidyl glycerol). Bayer's Junction. Enterobacterial common antigens (ECA)

- B7-A7 KDO-LipidA synthesis, ABC transporter. KDO-LipidA and core sugar passage to external wall. ECA assembly and passage through inner wall on bactoprenol. Protein synthesis: Braun's lipoprotein with leader peptide. Sec (secretory) system
- B8-A8 Flagellar motor. Protein synthesis: flagellin. Flagellum being built
- B9-A9 Flagellar motor. Running on proton motive force. Flagellum cut off. Start of anaerobic nutrient environment. Glucose assimilation. Third glycolysis pathway.
- B10-A10 Mixed acid fermentation pathways. Secretion of succinate, lactate, formate, hydrogen, carbon dioxide, ethanol, acetate.

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