

S100: Science: a foundation course
S100/17: Genetic code

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Clip transcript: Cell division stages and characteristics.

Stephen Hurry:

Now let's review the whole thing again as a continuous process. We'll see the film through, and remember that this film is speeded up a great deal so that condensed into a few moments is a process which will last a whole day.

Here's the Interphase cell with little structure visible. And we'll jump, yes, into Prophase. Chromosomes are distinct, and now they're free in the cell substance. Remember that they're duplicated already. They become untangled, untwisted, and gradually line up across the equator of the cell. The centromere divides, freeing the chromosomes from each other. And now separation's beginning. Chromosomes retreat to opposite ends of this dividing cell. The arrow simply shows the direction of movement. A new cell wall begins to be formed. There it is, growing in from the edges. Chromosomes clump together, lose their structure, as a new nuclear membrane forms around them.