



The Book of Genesis

In the beginning...
מֵהֵימֶנְהָא אֱרֵב תִּיבְרָא



SESSION 4

- Life Begins...
 - The importance of blood
- Marine Life
- The 'winged foul'
 - Evidence of design
- God's masterpiece
 - Fearfully & wonderfully
 - In His image
 - What about Eve?



20 And God said, Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven.

21 And God created great whales, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl after his kind: and God saw that it was good.

Genesis 1:20-21

22 And God blessed them, saying, Be fruitful, and multiply, and fill the waters in the seas, and let fowl multiply in the earth.

23 And the evening and the morning were the fifth day.

Genesis 1:22-23

Life Begins...

- We now find the beginning of self replicating conscious life.
- This is the first time the word 'life' (Hebrew: 'khah'-ee) appears in the Bible,
- God makes a clear distinction between non-conscious plants and vegetation, and that which has a distinct self awareness (specifically here marine life and birds).

Life Begins...

- This distinction shows itself again in that which God originally gives for food (**see Gen 1:29-30**)
- Note: the fundamental difference is blood!
- Prior to the flood, only plants and vegetation were to be eaten – these do not have blood.
- Leviticus 17:11 states that ***“The life of the flesh is in the blood”***, thus life and blood are inextricably linked

Life Begins...

- That which does not rely on blood for its survival is not truly alive – and here there is a profound deeper truth.
- By inference we can deduce that blood was created on day five
- The number five is consistently used in the Bible to speak of grace
- God's grace is dependent on the blood of Christ.
 - Given that we might have everlasting life!



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...Clearly Seen!

For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse:

Romans 1:20

- The evidence of design is so obvious you have to be willingly ignorant* to not see it!
 - Dumb on purpose!

“Let the waters bring forth abundantly”



“Let the waters bring forth abundantly”



“Let the waters bring forth abundantly”



“Let the waters bring forth abundantly”

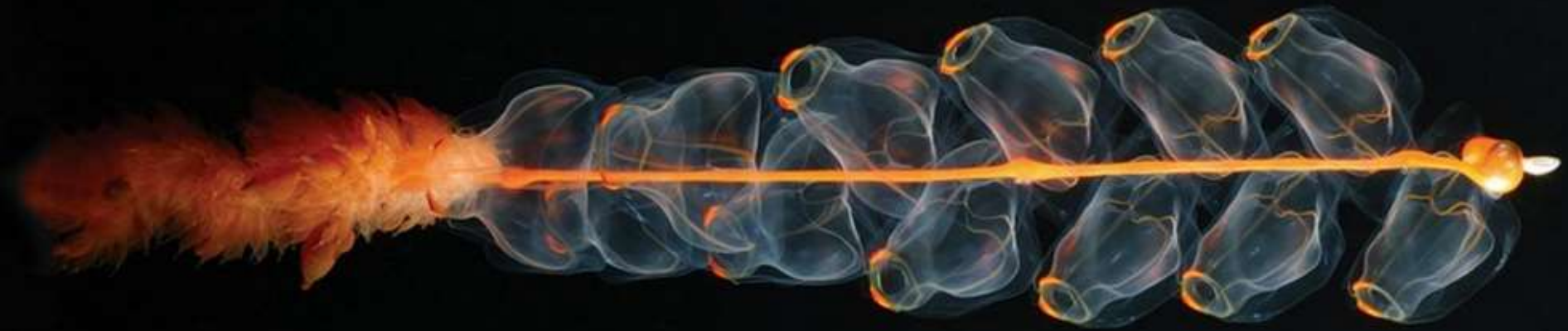
- We only have two choices:
- Either this incredible diversity is the result of random mutations over millions of years...
- ...or God’s Word is true!
- Which is the more ‘scientific’?
- Mutations do not produce anything new!
 - They simply scramble existing information
 - Evolution by natural selection just cannot account for the diversity we find
 - Nor does it offer a viable mechanism

“Let the waters bring forth abundantly”

“Deadly New Sea Creature

Lures Fish with Red Lights”

For fish, the red light district is deeper and more dangerous than anyone imagined. A newfound deep-sea relative of the jellyfish flashes glowing red lights on twitching, stinging tentacles to lure fish to their deaths more than a mile below the surface.

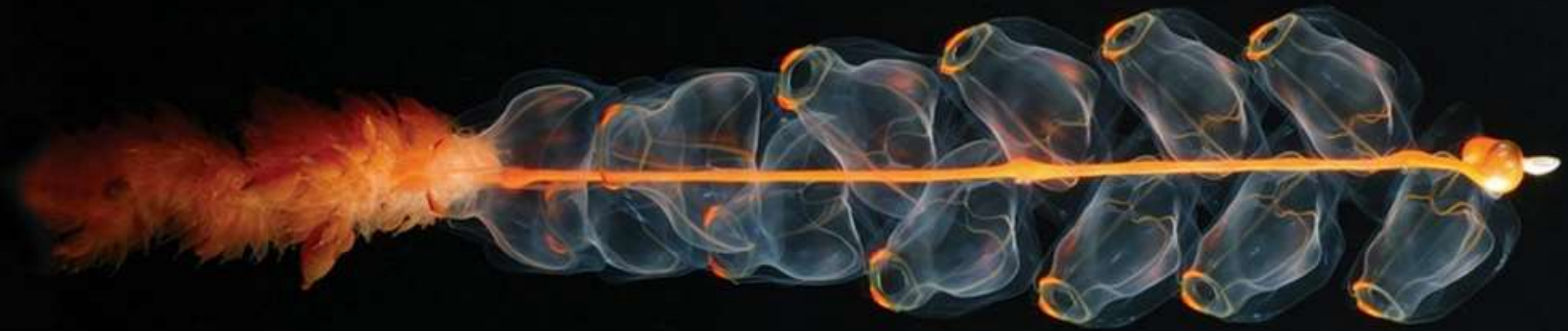


“Let the waters bring forth abundantly”

“Deadly New Sea Creature

Lures Fish with Red Lights”

The discovery is odd, because scientists had figured deep-sea animals can't see red light, since they live where sunlight doesn't reach and **therefore have no evolutionary reason to detect the colour.**



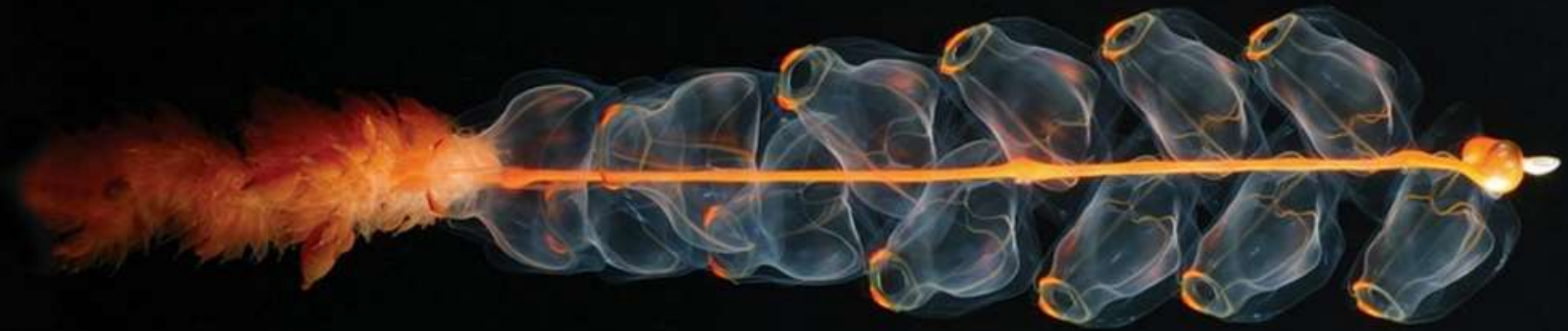
“Let the waters bring forth abundantly”

“Deadly New Sea Creature

Lures Fish with Red Lights”

The translucent, fragile creature is the first marine invertebrates ever found that produce red light. The discovery, detailed in the July 8 issue of the journal Science, was led by Steven Haddock of Monterey Bay Aquarium Research Institute.

Robert Roy Britt, LiveScience, July 2005

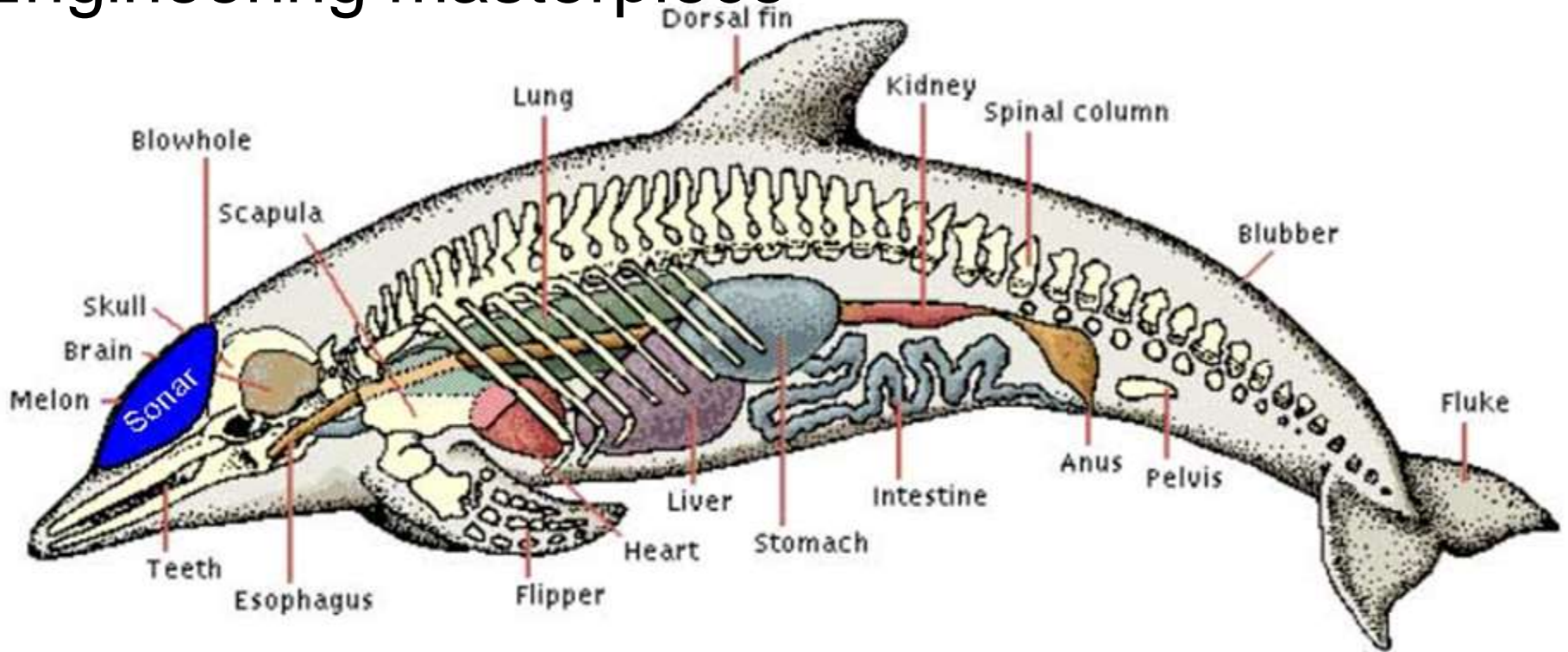


“Let the waters bring forth abundantly”



Dolphin Sonar

Engineering masterpiece



- Sonar involves sophisticated equations reconciling the velocities of sound through sea & skin – Dolphins use this to find food

Birds



Birds

- Who believes that a rubber duck could form by random processes?
- It has no moving parts
- It has no digestive system
- No nervous system
- No feathers
- Compare the real duck!



Birds



Birds

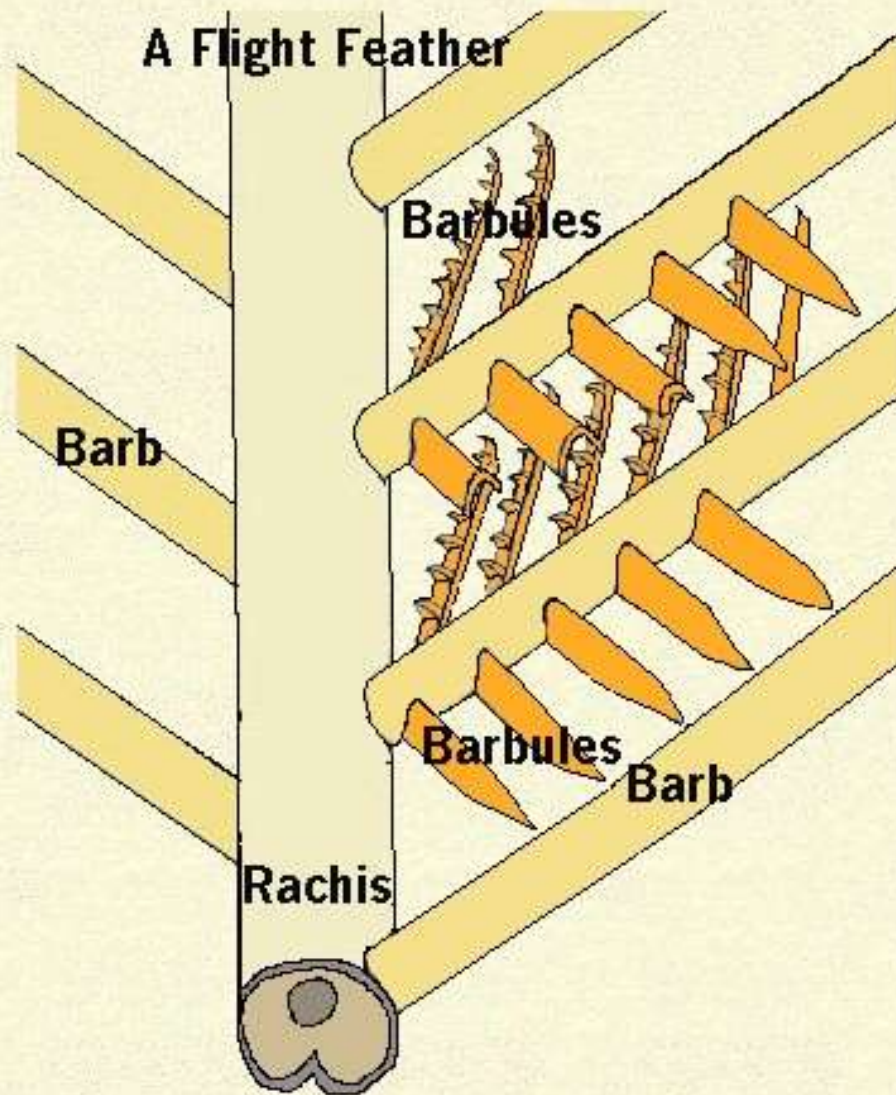


Birds



Feathers

Feathers have a basic form of a central hollow supporting shaft called a 'rachis' and a number of fine side branches. These side branches have even finer sub-branches in contour feathers. The side branches in these are called barbs and are linked



together by a set of barbules and their hooklets sometimes called 'Hamuli'. Barbs have side branches of their own called barbules. The upper ones containing a series of hooklets and the lower ones without hooks but slightly convex in form to catch the hooklets of the barbules from the next barb along the shaft. This is perhaps best understood by seeing the diagram. The base of the feather - where there are no side branches - is called the calamus or quill and at the base of this is the hollow entrance that was used by blood veins to carry nutrients to the growing feather when it was alive, this is called the Inferior umbilicus.

The gripping effect of any one set of barbule hooklets is not great, but like the threads that hold your clothes together the combined effect is sufficient to keep the feathers together. Playing with any wing feather can demonstrate the affect of these tiny attachments. The overall presence of all these barbs and barbules together is called the vane of the wing. The rachis and the vane are the two parts of the feather you see with the naked eye.

A bird has many different sorts of feathers which perform different jobs.

Feathers

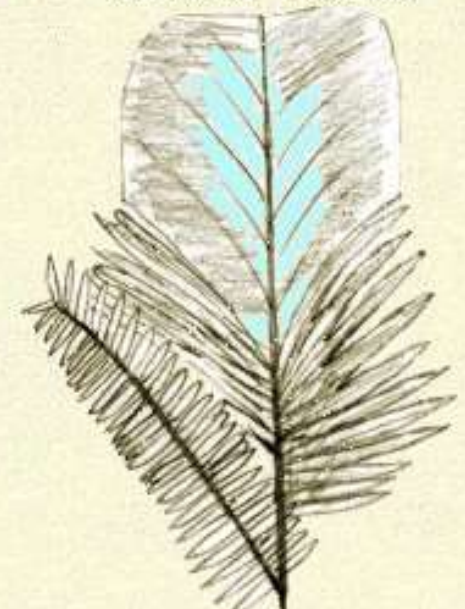


Remiges and retrices are the long strong feathers you most commonly find. These two here came from a British Magpie and as you can see they have different shapes. One is a wing flight feather a remige and it is asymmetrical i.e. the vane is much smaller on one side than the other. This is because the pressures on the 'leading edge' of the feather (the part that faces forward) are far greater than those on the trailing edge. If the leading edge vane was as large as the trailing edge it would soon become very ragged and not work properly.

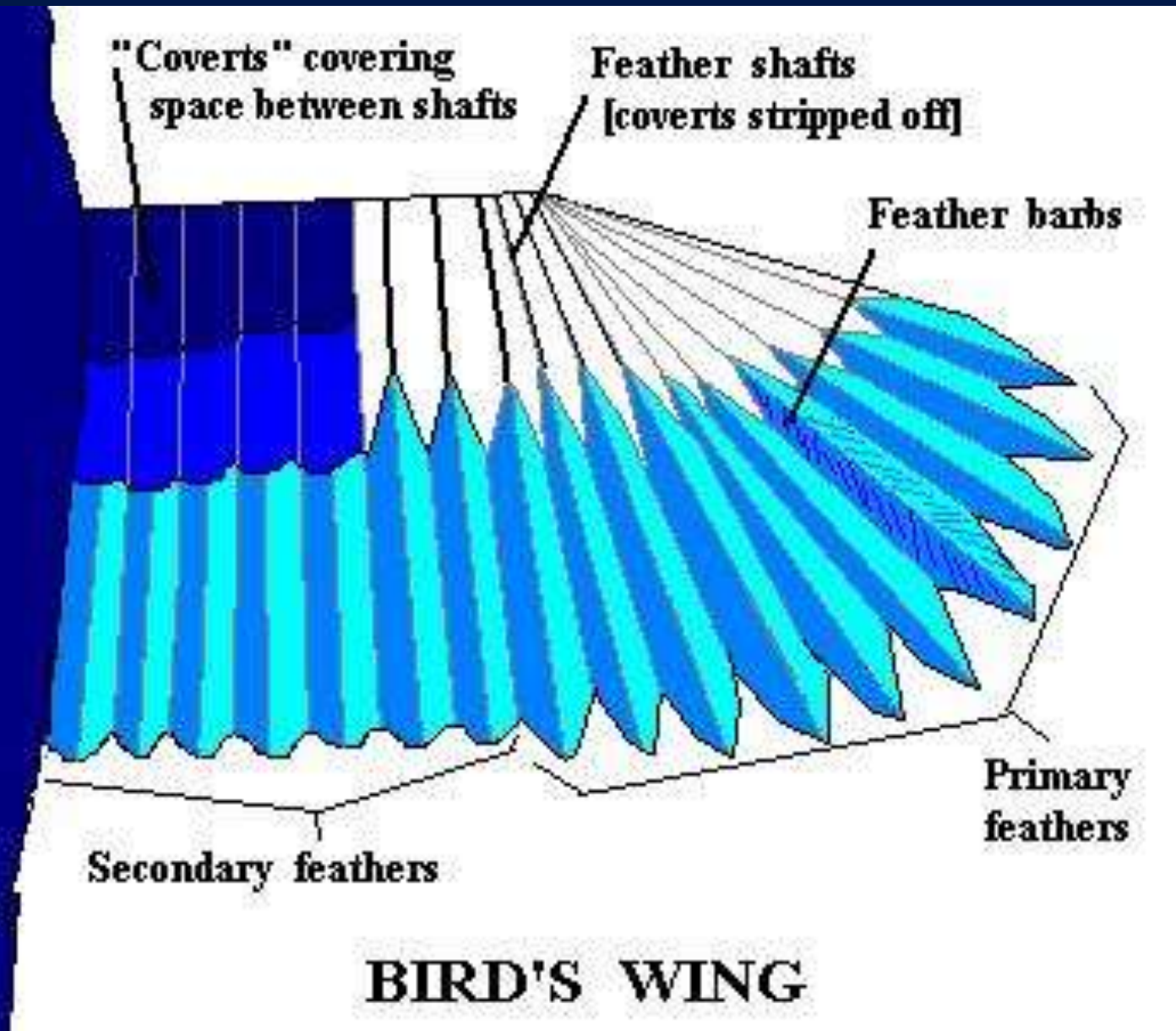
Contour Feather



The rest of the feathers you see when looking at a bird are the ordinary body 'contour feathers'. These give the bird its characteristic smooth round shape. They also give the bird its visual colouring and provide a first level of defence against physical objects, sunlight, wind and rain. They are very important.

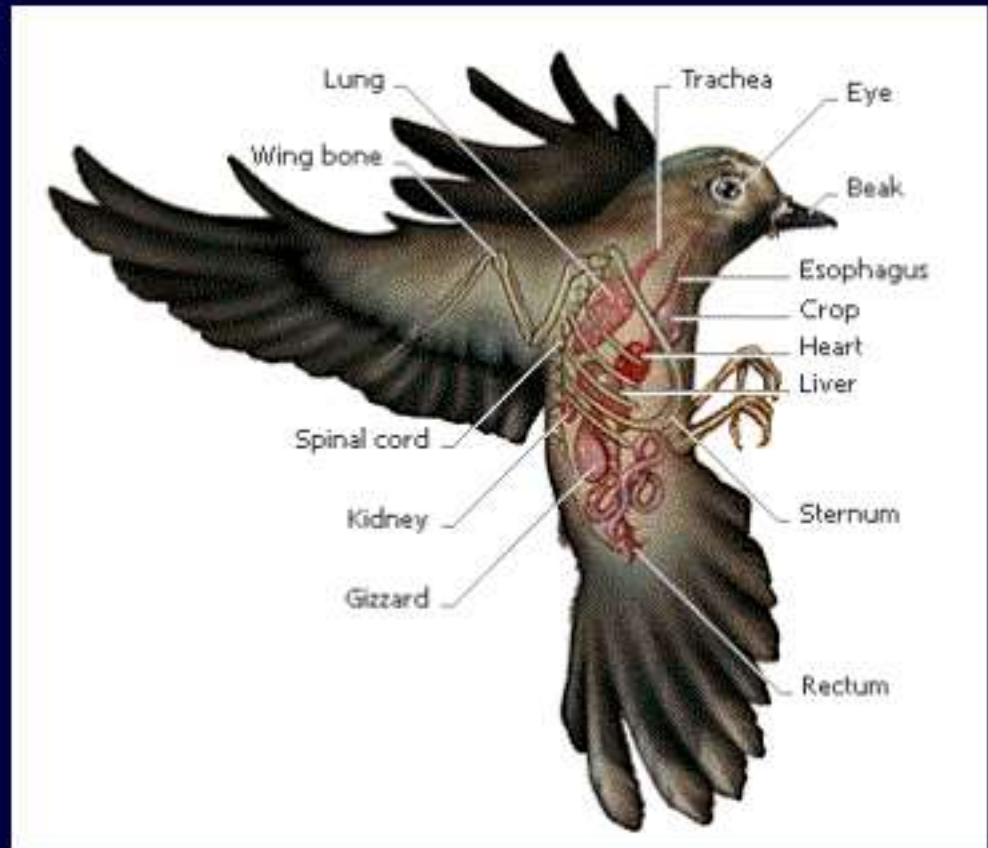


Feathers



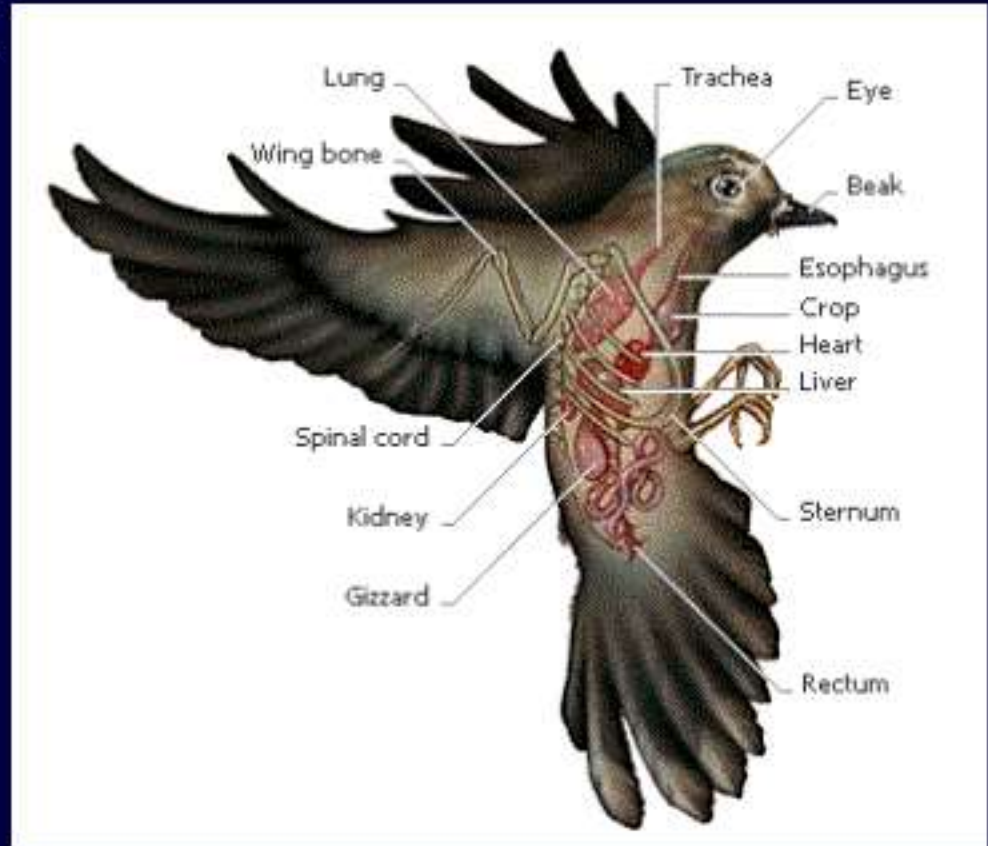
Designed for Flight

- Lightweight skeletons; hollow bones



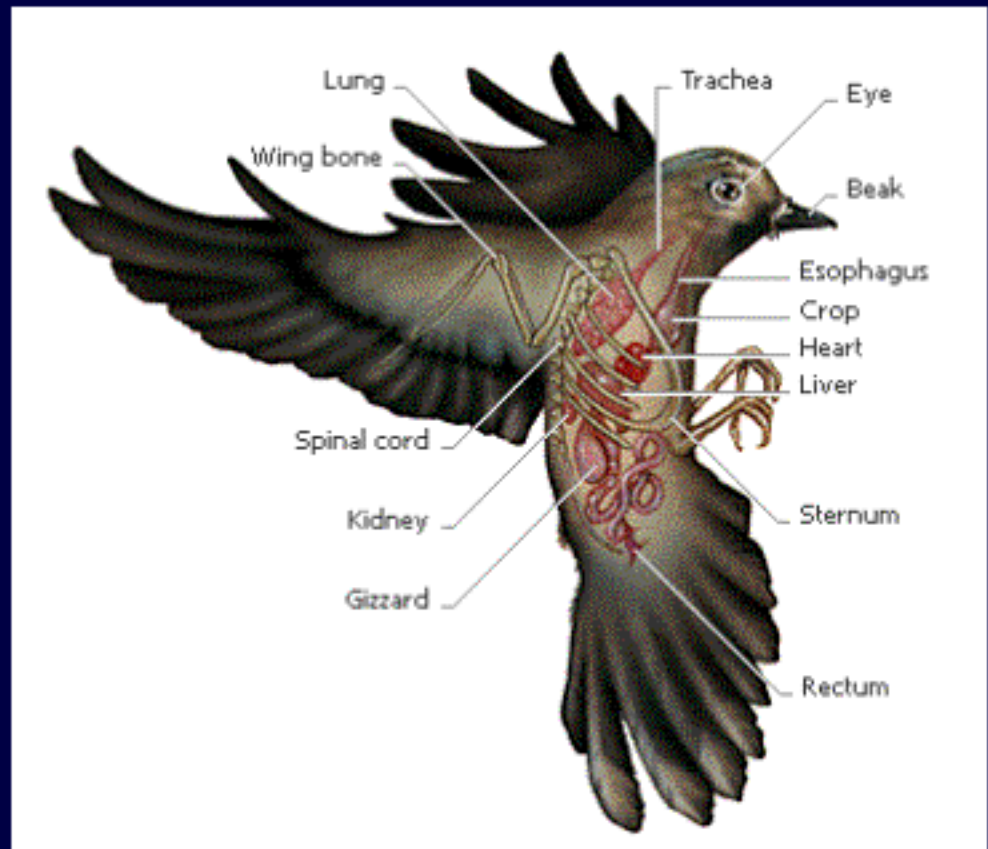
Designed for Flight

- Lightweight skeletons; hollow bones
- Fused furculum: absorbs shock, facilitates breathing



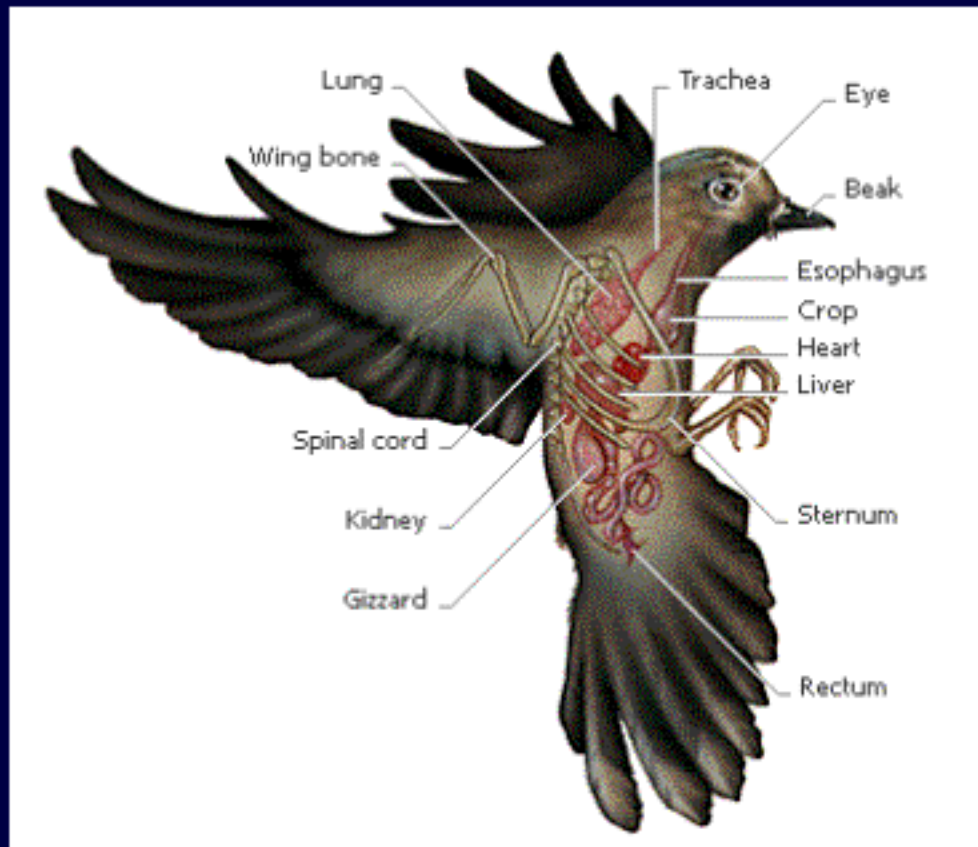
Designed for Flight

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- Egg laying enables young to develop outside of the body



Designed for Flight

- Lightweight skeletons; hollow bones
- Fused furculum: absorbs shock, facilitates breathing
- Egg laying enables young to develop outside of the body
- Reproductive organs atrophy outside of breeding season



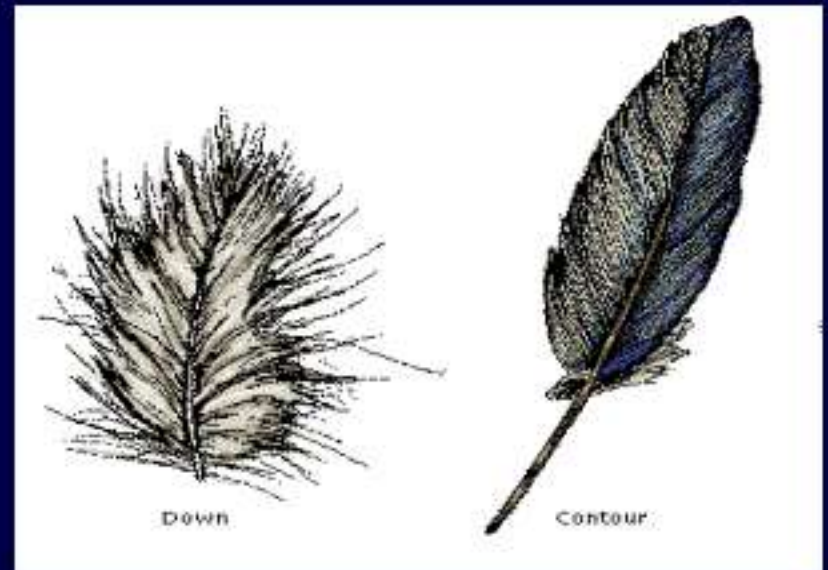
Physiology

- Fast metabolism;
 - high body temp (104° – 108° F)
 - Lungs open at each end & completely different than any other vertebrates
 - 450 breaths/min (vs. 30/min)
 - Larger heart to cope with higher altitude
 - 400 – 1000 bpm (vs. 160/min)



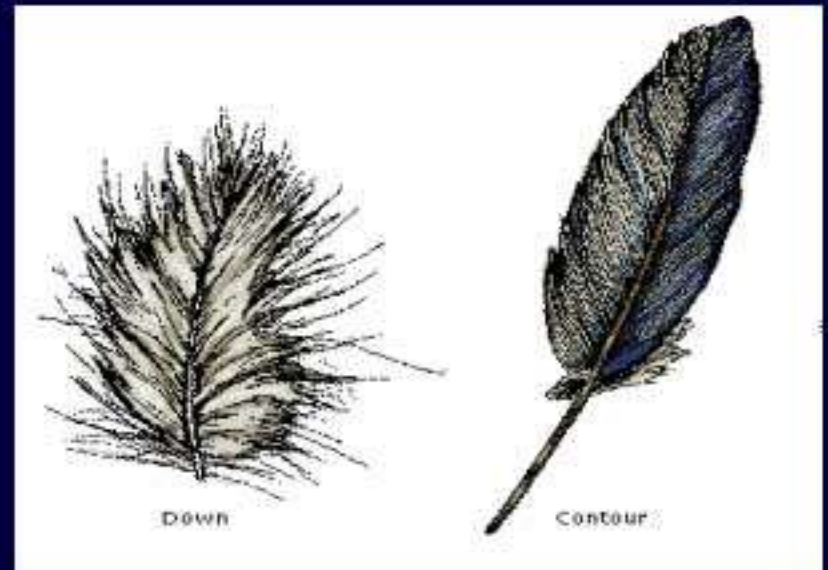
Feathers

- Aerodynamics
- Body heat



Feathers

- Aerodynamics
- Body heat



Feet

- Specifically designed for its unique lifestyle





Science vs. Evolution

The observable facts that challenge the unobservable myth

The Mutation Problem

Mutant Theory

- A mutation is a loss or rearranging of information
- From the letters in the word 'Christmas' you can make a number of other words,
- But you will never make the words **Xerox**, **Zebra** or **Queen** because the letters are not there to choose from!

Mutant Theory

- How could any creature choose the mutation it needed?
 - For example, let's assume a reptile could change into a bird
 - for that we also have to assume it was able to change from warm blooded to cold blooded, change its entire respiratory system, and change its skeletal structure –

Mutant Theory

- How could any creature choose the mutation it needed?
 - For example, let's assume a reptile could change into a bird



Mutant Theory

- how could that reptile choose that its front legs became feathers?
- Why would this mutation not randomly occur on the rear legs?
- How could any creature guide the random unguided mutations necessary?
- Why would the mutation affect both sides of the body in exactly the same way?
- And why at the same time?

Mutant Theory

- What often is not told is that for every one 'beneficial' mutation that occurs, there would be 10,000 mutations that at best are neutral...
- ...but many of which would be lethal!
- Given the number of mutations required to change one creature into another the odds are clearly stacked against it!

Mutant Theory

“We have reviewed compelling evidence that, even when ignoring deleterious mutations, mutation/selection cannot create a single gene within the human evolutionary timescale. When deleterious mutations are factored back in, we see that mutations / selection cannot create a single gene, ever. This is overwhelming evidence against the Primary Axiom [theory of evolution]. In my opinion this constitutes what is essentially a formal proof that the Primary Axiom is false.”

– Dr J.C. Sanford “Genetic Entropy & The Mystery of the Genome”

Woodpecker

- Strong beak



Woodpecker

- Strong beak
- Special Cartilage



Woodpecker

- Strong beak
- Special Cartilage
- Resilient tail feathers



Woodpecker

- Strong beak
- Special Cartilage
- Resilient tail feathers
- 2+2 toes (vs. 3+1)



Woodpecker

- Strong beak
- Special Cartilage
- Resilient tail feathers
- 2+2 toes (vs. 3+1)
- Unusually long tongue with barbs and special glue



Woodpecker

- Strong beak
- Special Cartilage
- Resilient tail feathers
- 2+2 toes (vs. 3+1)



- **U European Green Woodpecker:** Tongue:
W down the throat, out the back of the neck,
G around the back of the skull beneath the skin,
and over the top between the eyes
terminating just below the eye socket.

Migration still a Mystery

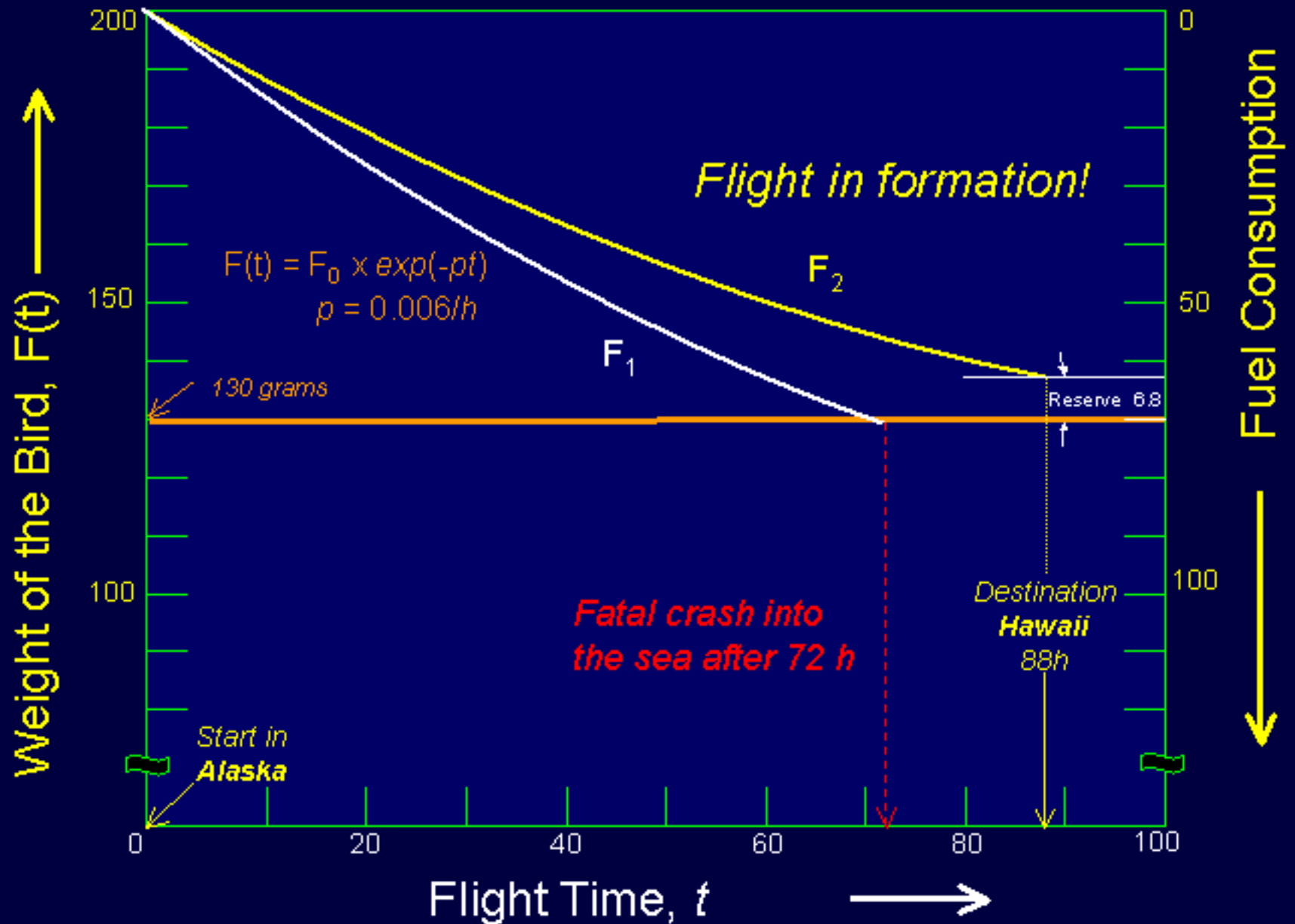


How does a young bird instinctively know how to travel 25,000 miles to its destination with no map or previous experience?

The Golden Plover



Flight Plan: Golden Plover





I read about the reason migrating geese fly in a V-formation. Each goose flapping its wings creates an upward lift for the goose that follows. When all the geese do their part, the whole flock has a 71% greater flying range than if each bird were to fly alone. Also, when a goose begins to lag behind, the others 'honk' it into position. The teamwork applications here are tremendous! I am sure it is at least 71% easier to work the teamwork way (flying in the flock) than to try it alone, and it is good to have the advantage of being moved back into position if we stray from our goals.



Science vs. Evolution

The observable facts that challenge the unobservable myth

Think of a problem and
double it!

Male & Female

- *If every creature “evolved” with no Creator, there would be numerous problems. Take for instance the first bird.*
- *Was it male or female? Let's say it was male. How did it produce offspring without a mate? If a female also evolved, why did it evolve with differing reproductive organs?*
- *Did it evolve by chance, or did it evolve because it knew that it was needed by the male of the species?*

Male & Female

- *How did it know what needed to be evolved if its brain hadn't yet evolved? Did the bird breathe? Did it breathe before it evolved lungs? How did it do this? Why did it evolve lungs if it was happily surviving without them?*
- *Did the bird have a mouth? How did it eat before it evolved a mouth? Where did the mouth send the food before the stomach evolved?*

Male & Female

- *How did the bird have energy if it didn't eat (because it didn't yet have a mouth)? How did the bird see what there was to eat before its eyes evolved?*
- *Evolution is intellectual suicide. It is an embarrassment.*

- Ray Comfort

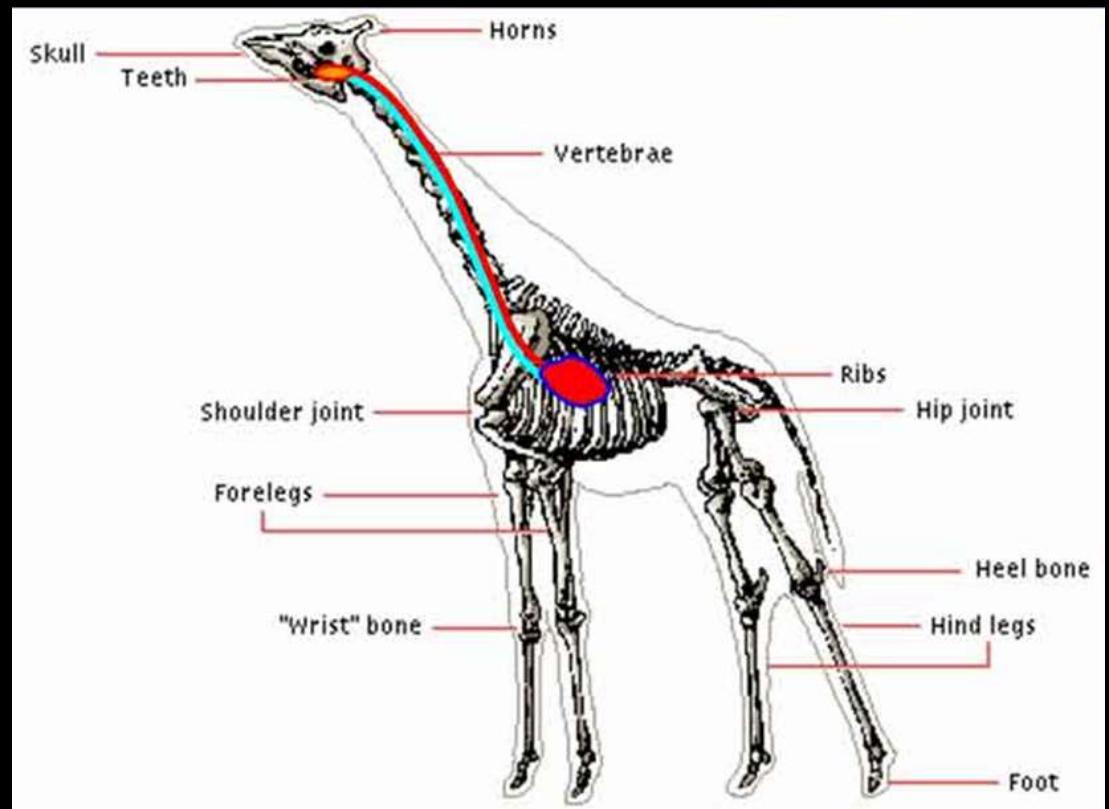
24 And God said, Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his kind: and it was so.

25 And God made the beast of the earth after his kind, and cattle after their kind, and every thing that creepeth upon the earth after his kind: and God saw that it was good.

Genesis 1:24-25

The Living Creatures

- More evidence of design:
- Giraffe:

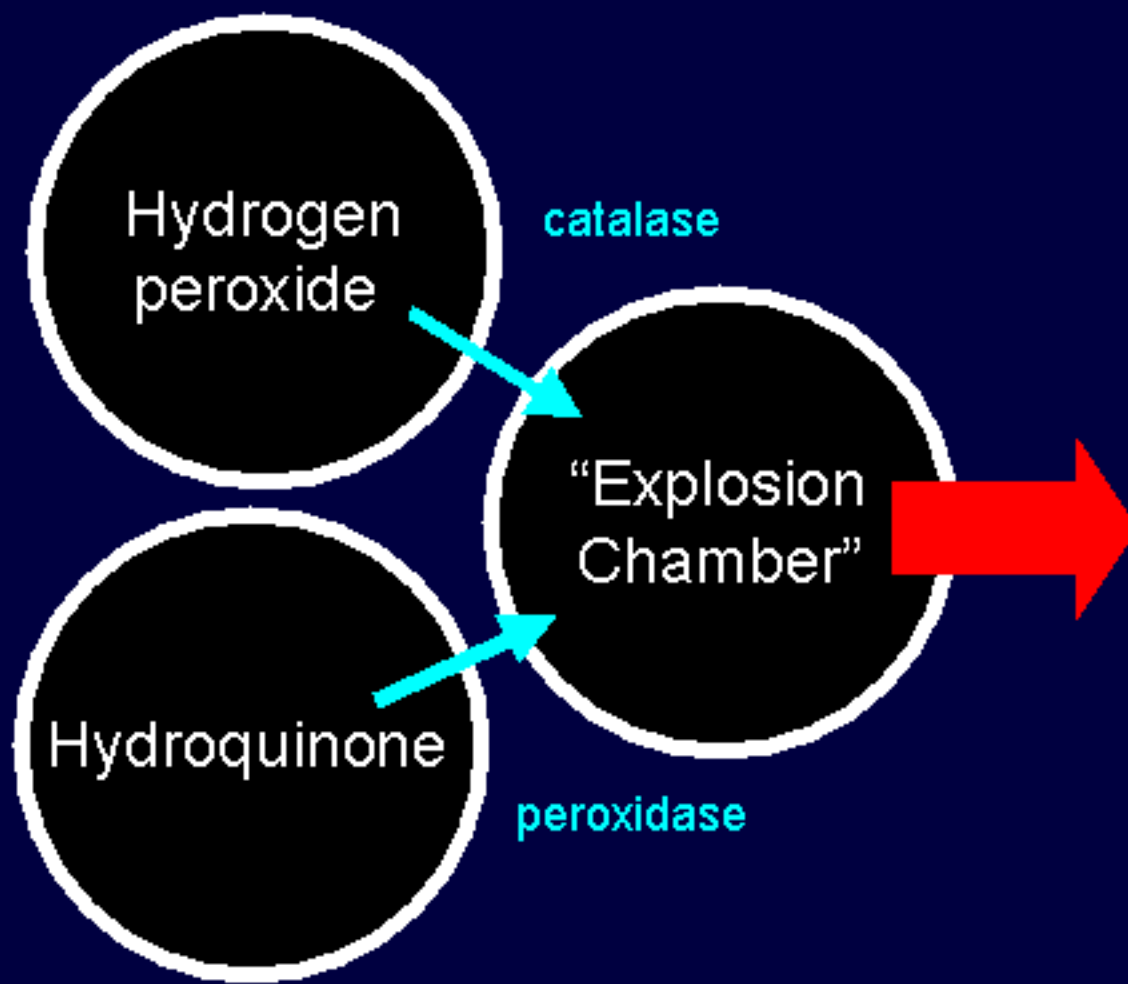


Bombardier Beetle

Brachinus fumans



Defensive Chemistry





SESSION 4

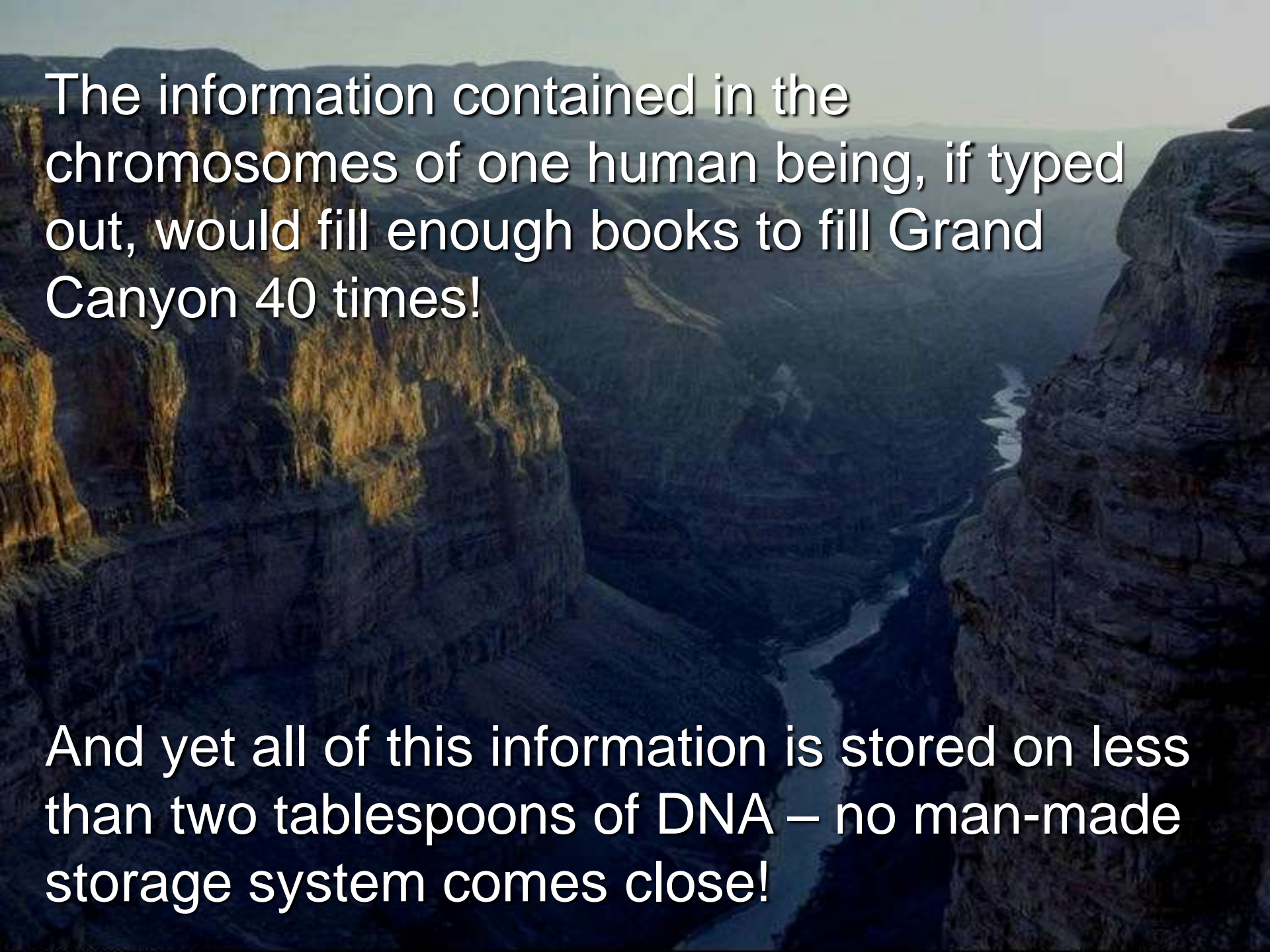
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26 And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

27 So God created man in his own image, in the image of God created he him; male and female created he them.

Genesis 1:26-27

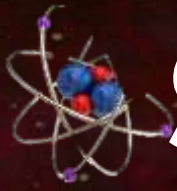


The information contained in the chromosomes of one human being, if typed out, would fill enough books to fill Grand Canyon 40 times!

And yet all of this information is stored on less than two tablespoons of DNA – no man-made storage system comes close!

From conception until birth the baby adds 15,000 cells per minute to its body. Each cell is more complex than a space shuttle!





Science vs. Evolution

The observable facts that challenge the unobservable myth

The Chicken & The Egg Problem

What came first, Protein or DNA?

How to make a Protein

Undeniable evidence of a
Supernatural Creator!

The Cell

Plasma Membrane

Gateways for exchanges
Signal receptors

Cytoplasm

Nucleus

Information Center
Master Library

Nucleolus

Automated Factories
Product manufacturing

Mitochondrion

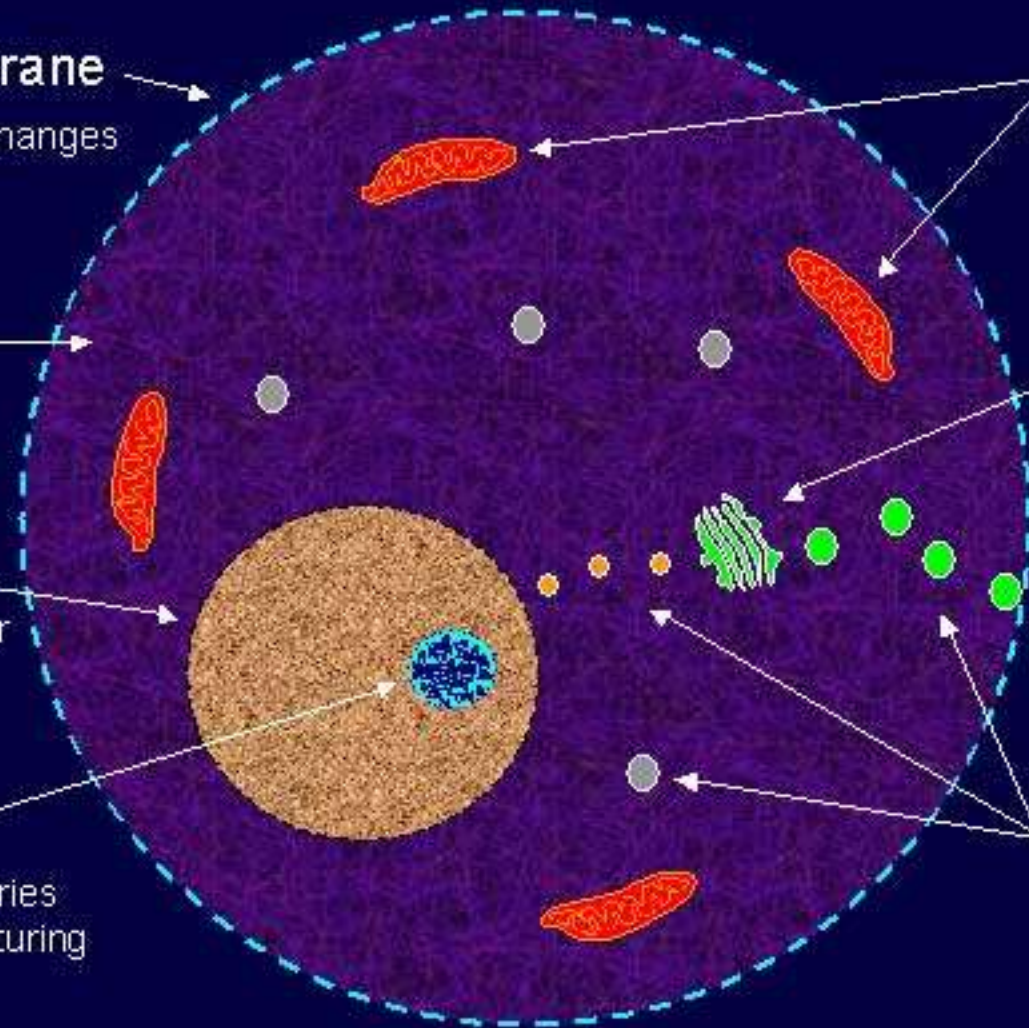
Power Plants
Energy Source

Golgi Apparatus

Processing
Packaging
Shipping
Export Preparation

Vesicles

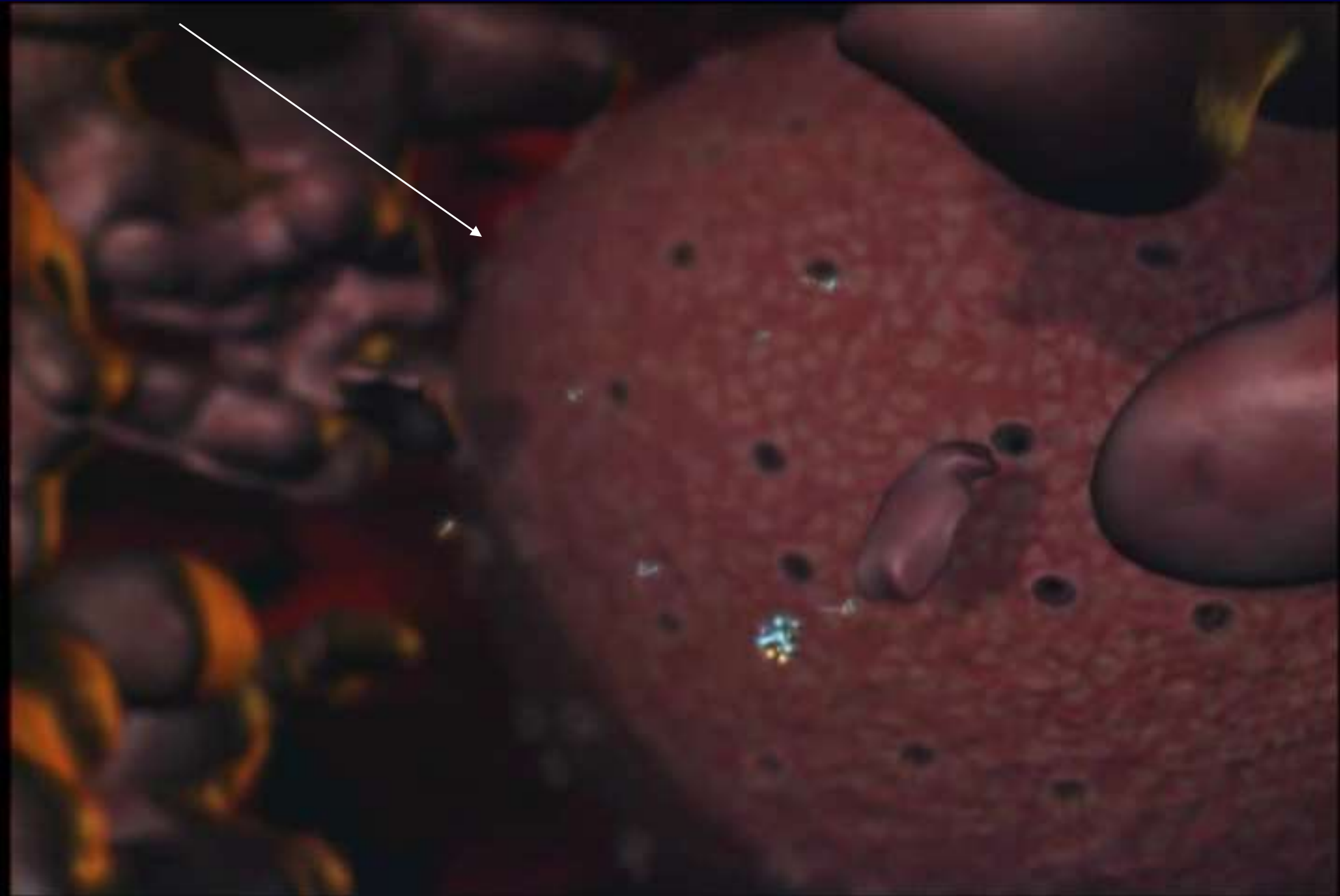
Storage
Transport
Trash Disposal



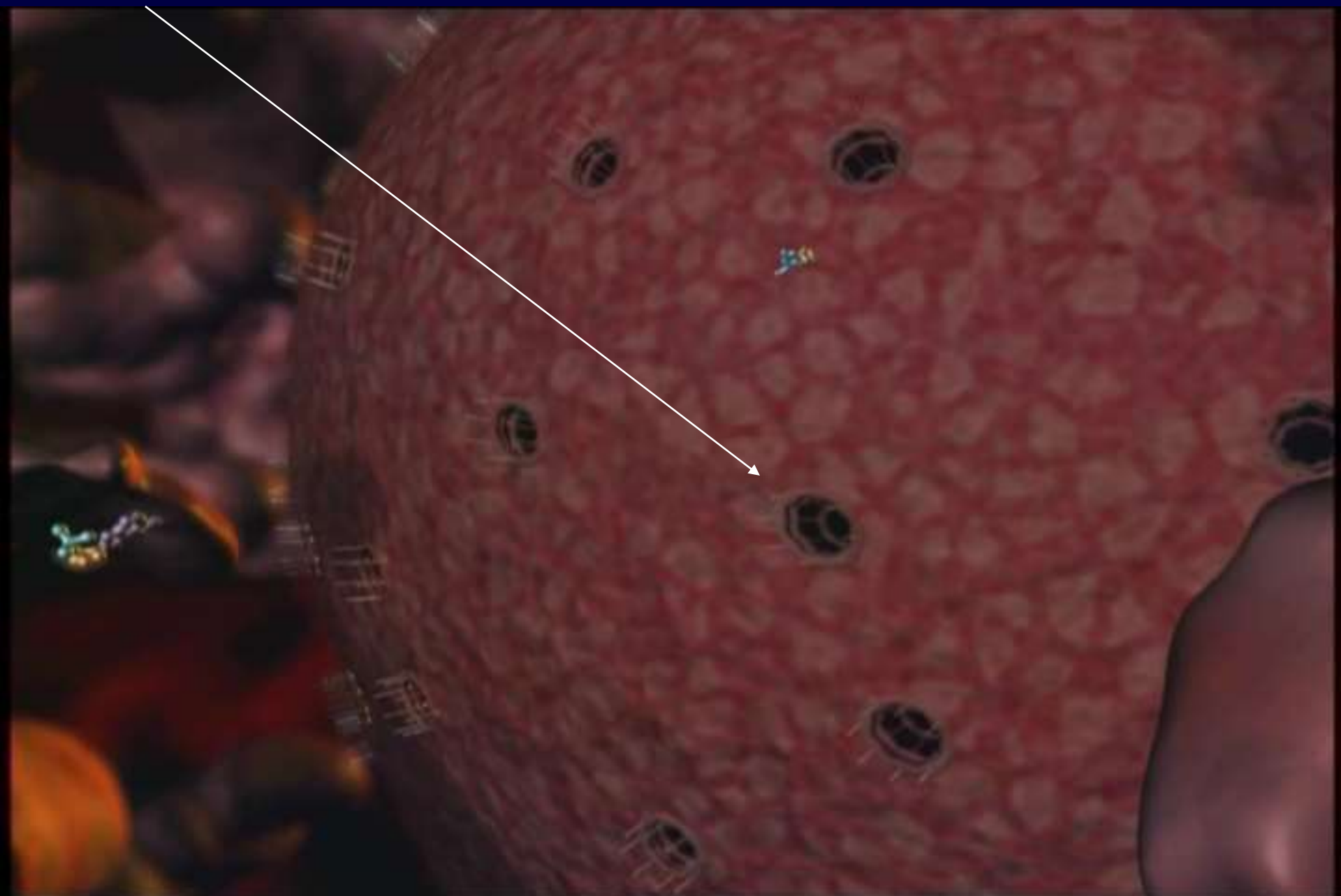
The Cell – Nucleus



The Cell – Nucleus

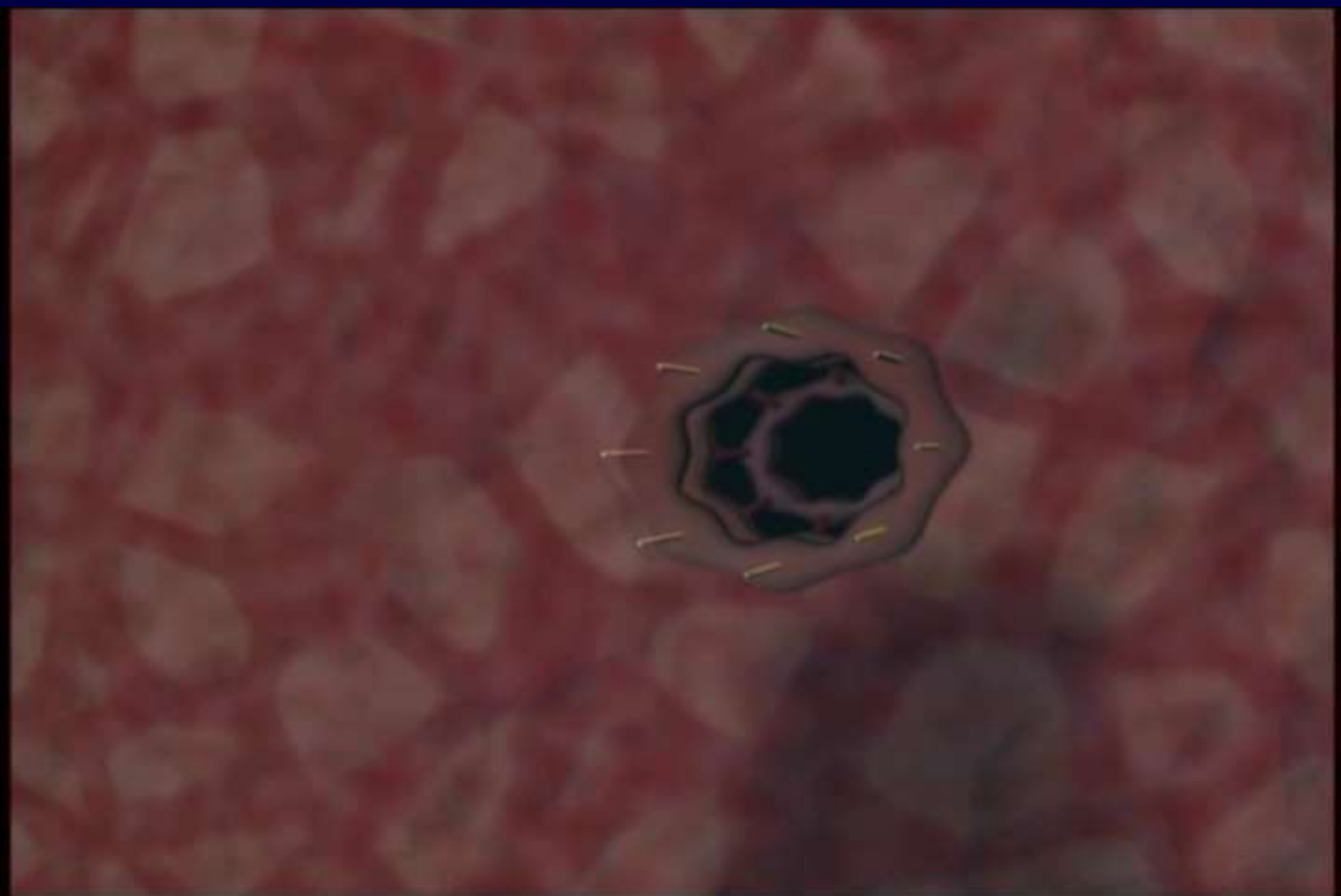


Nuclear Pores (gateway to the nucleus) are complex structures...

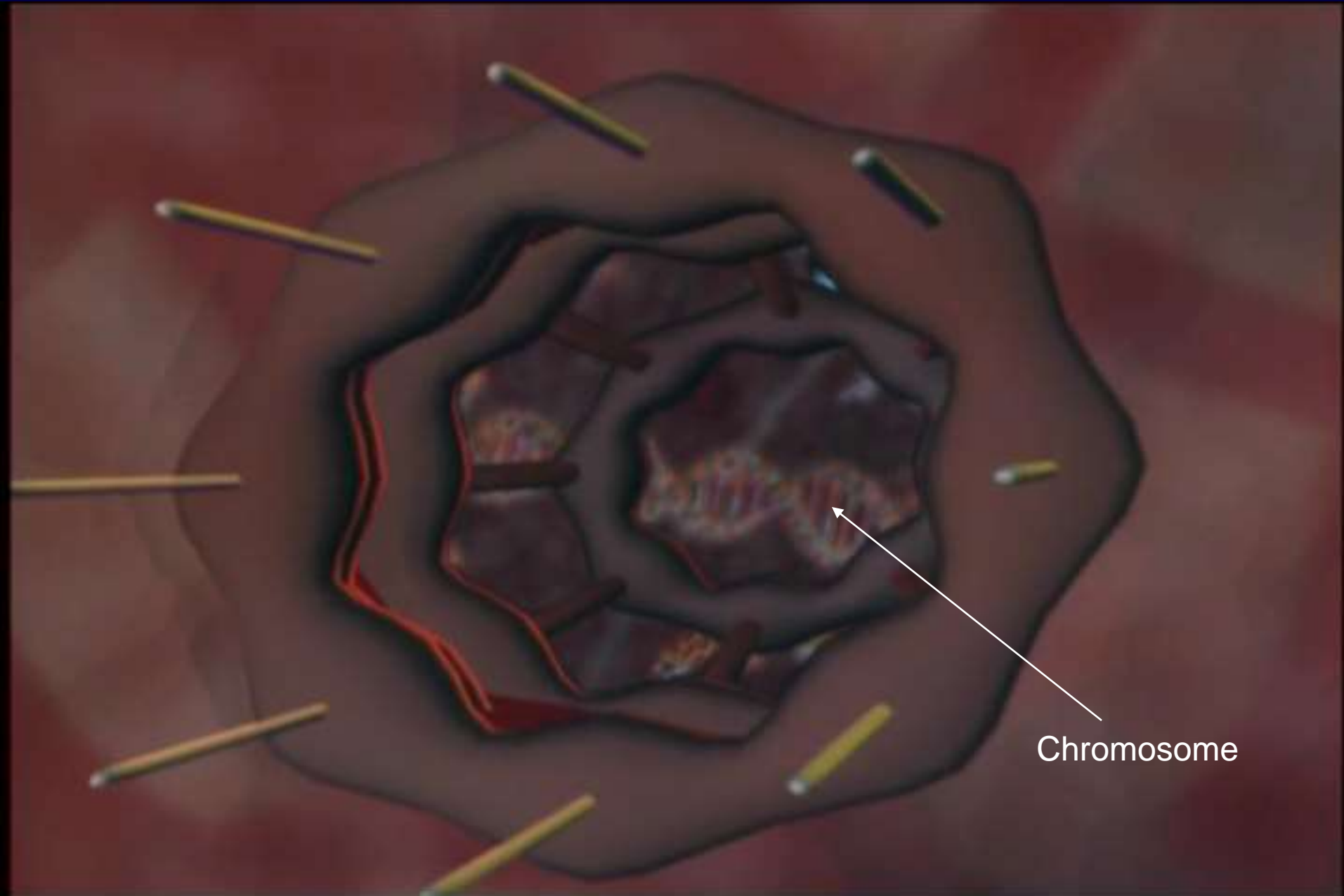


...they are comprised of 50-100 **proteins**

Nuclear Pores – 24 hour security guards of the nucleus



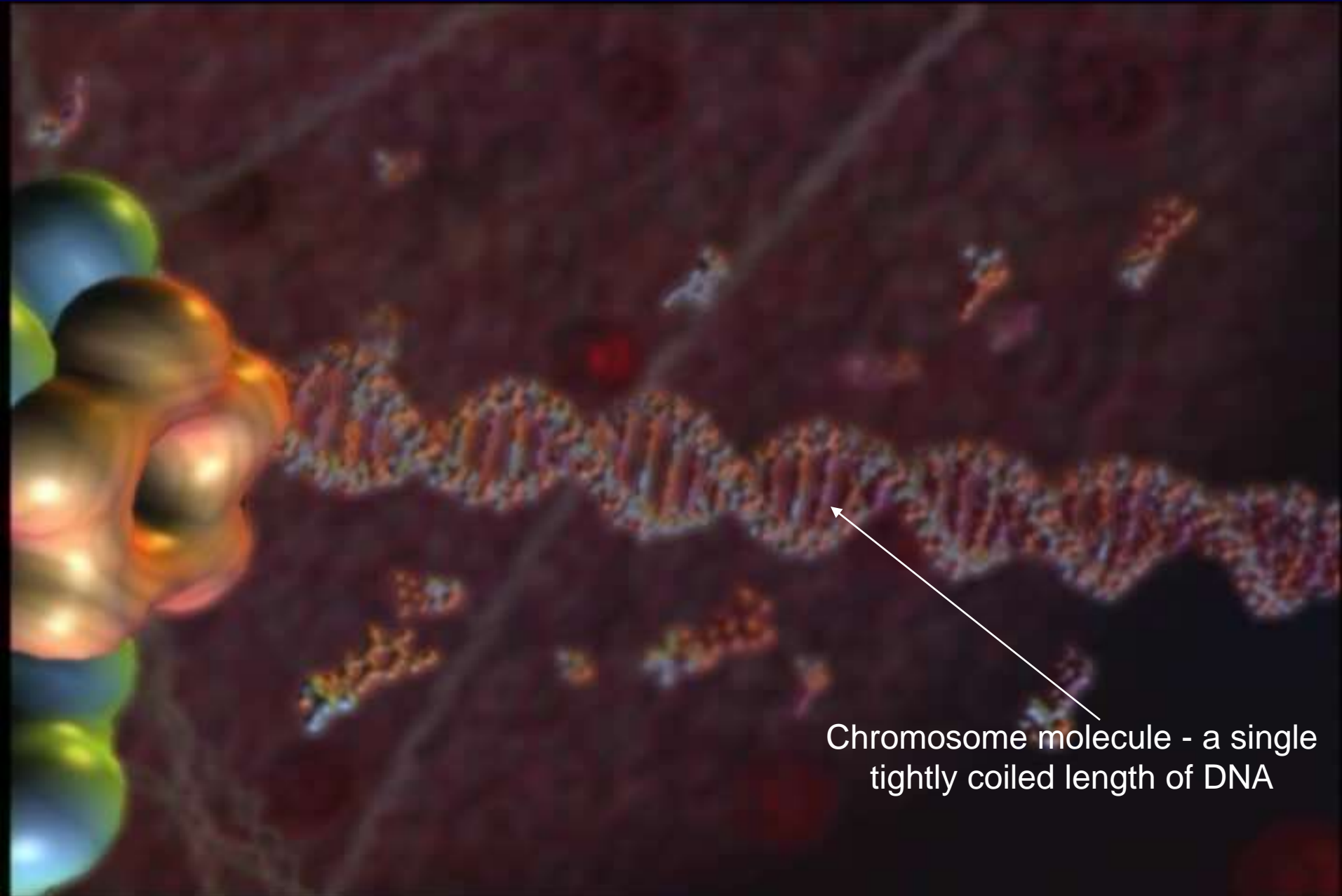
The Cell – Nucleus



Chromosome

Chromosome is name given to a large DNA molecule – Humans have 46 Chromosomes

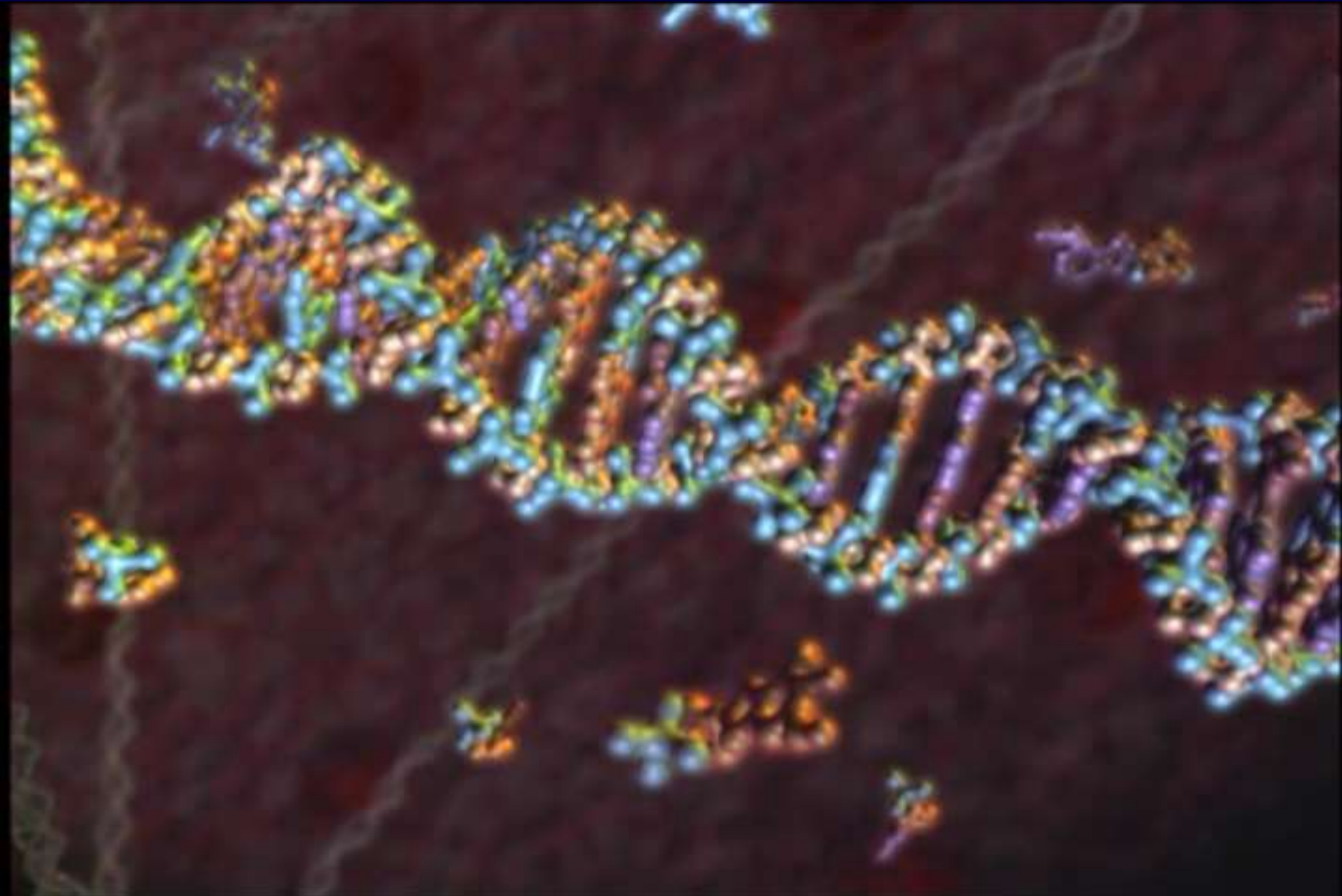
Inside The Nucleus



Chromosome molecule - a single tightly coiled length of DNA

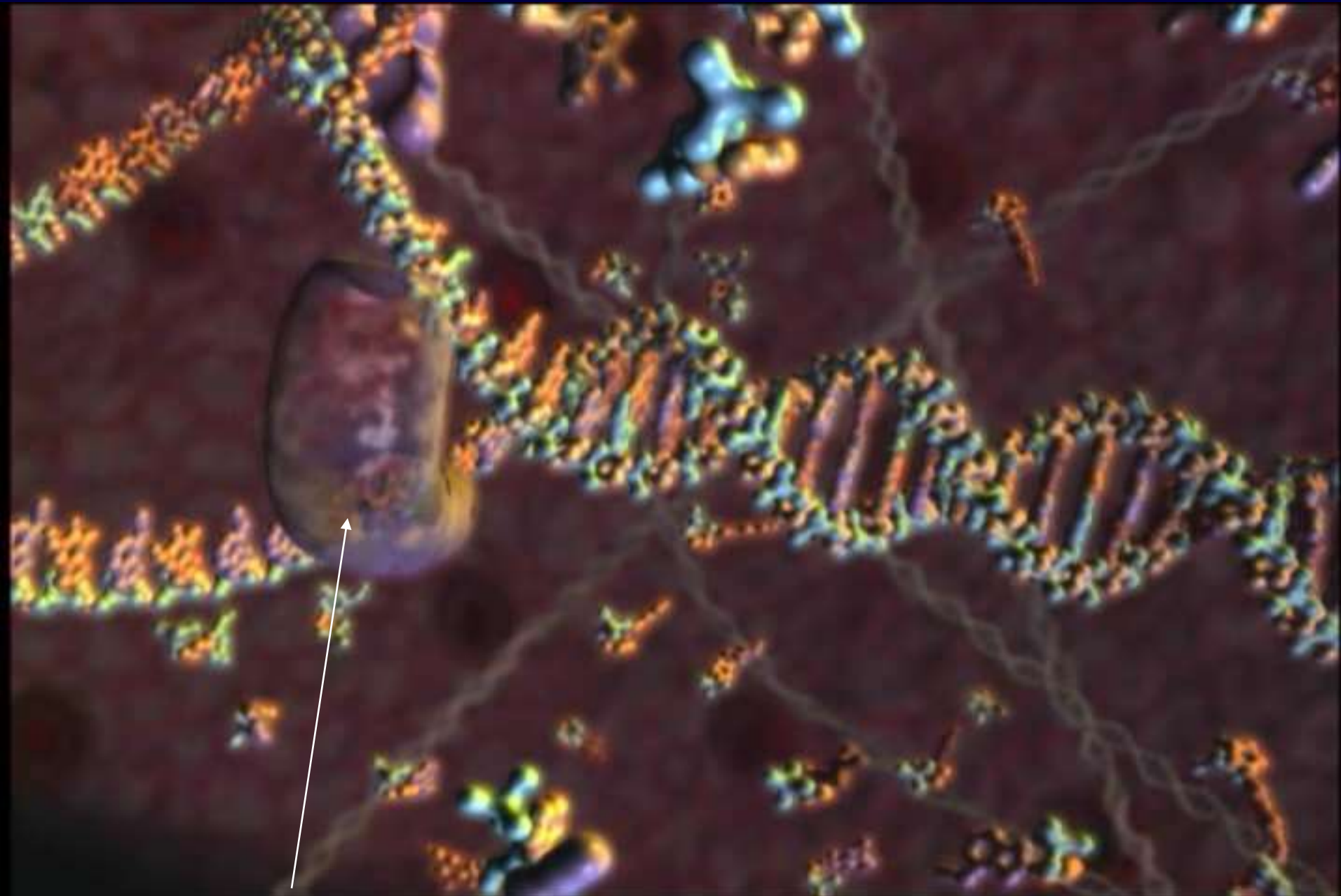
Tightly packed strands of DNA contain the largest library known to man

Inside The Nucleus

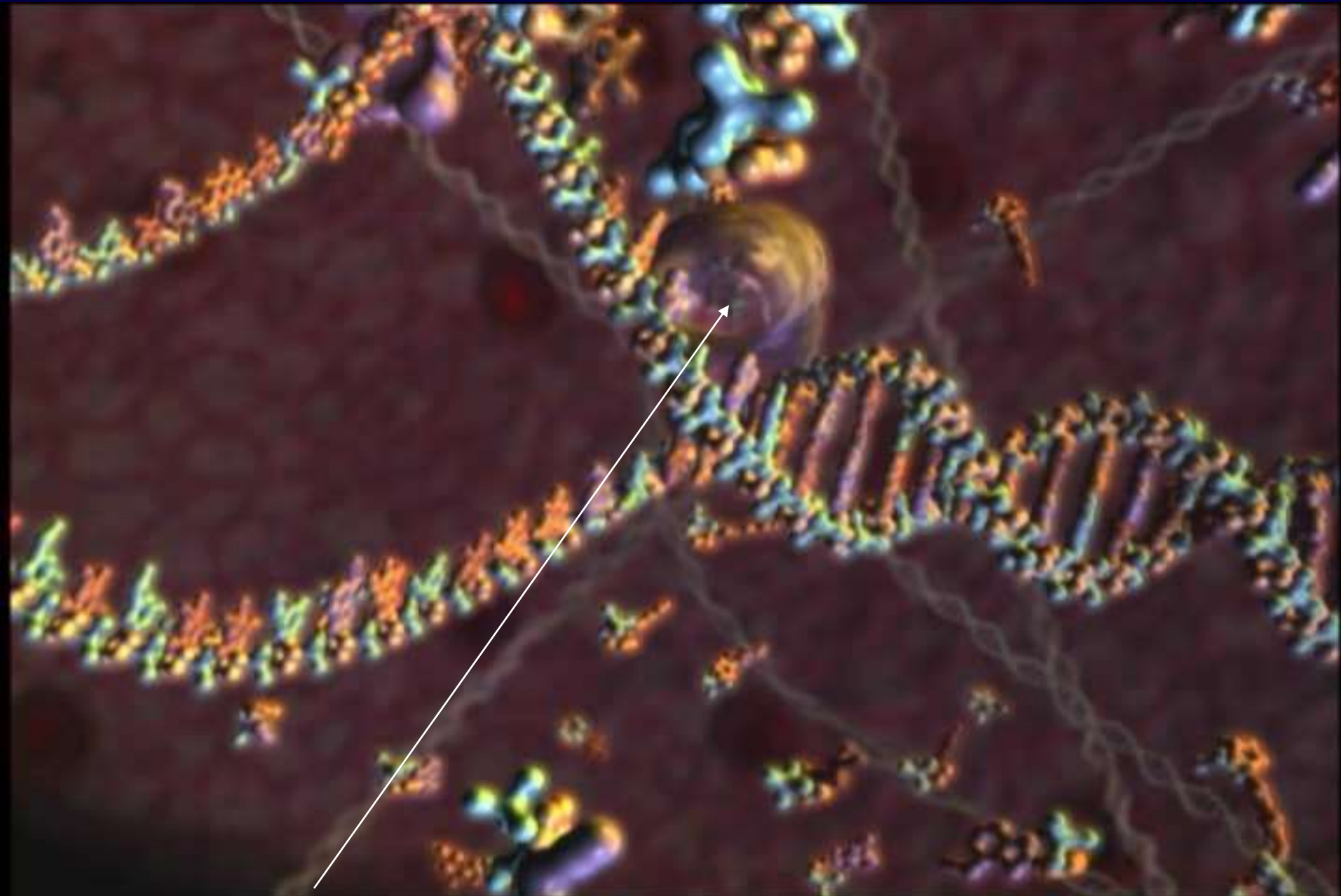


The information on a strand of DNA is stored digitally! (i.e. it cannot evolve by chance!)

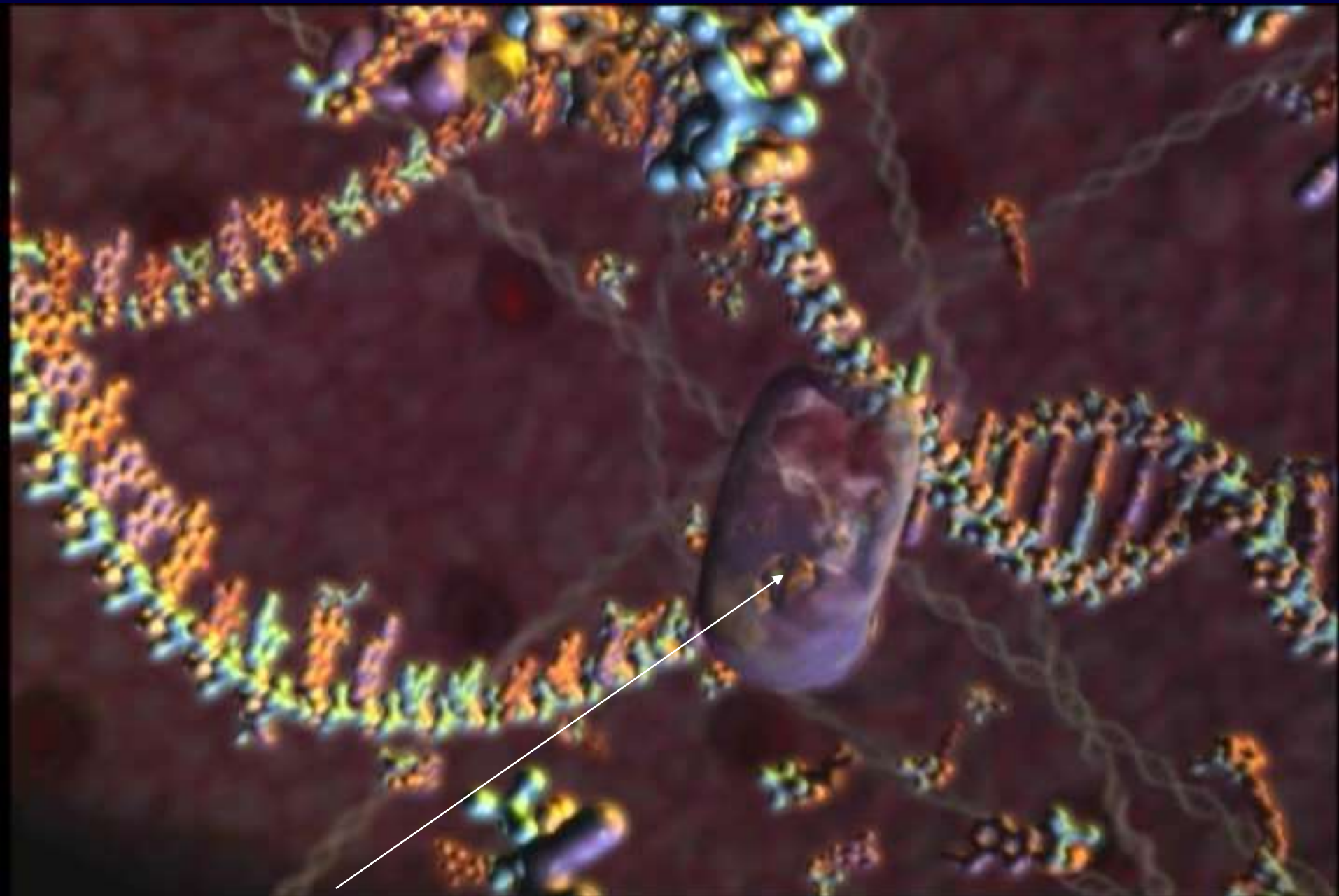
Transcription (making a copy of the information stored on the DNA)



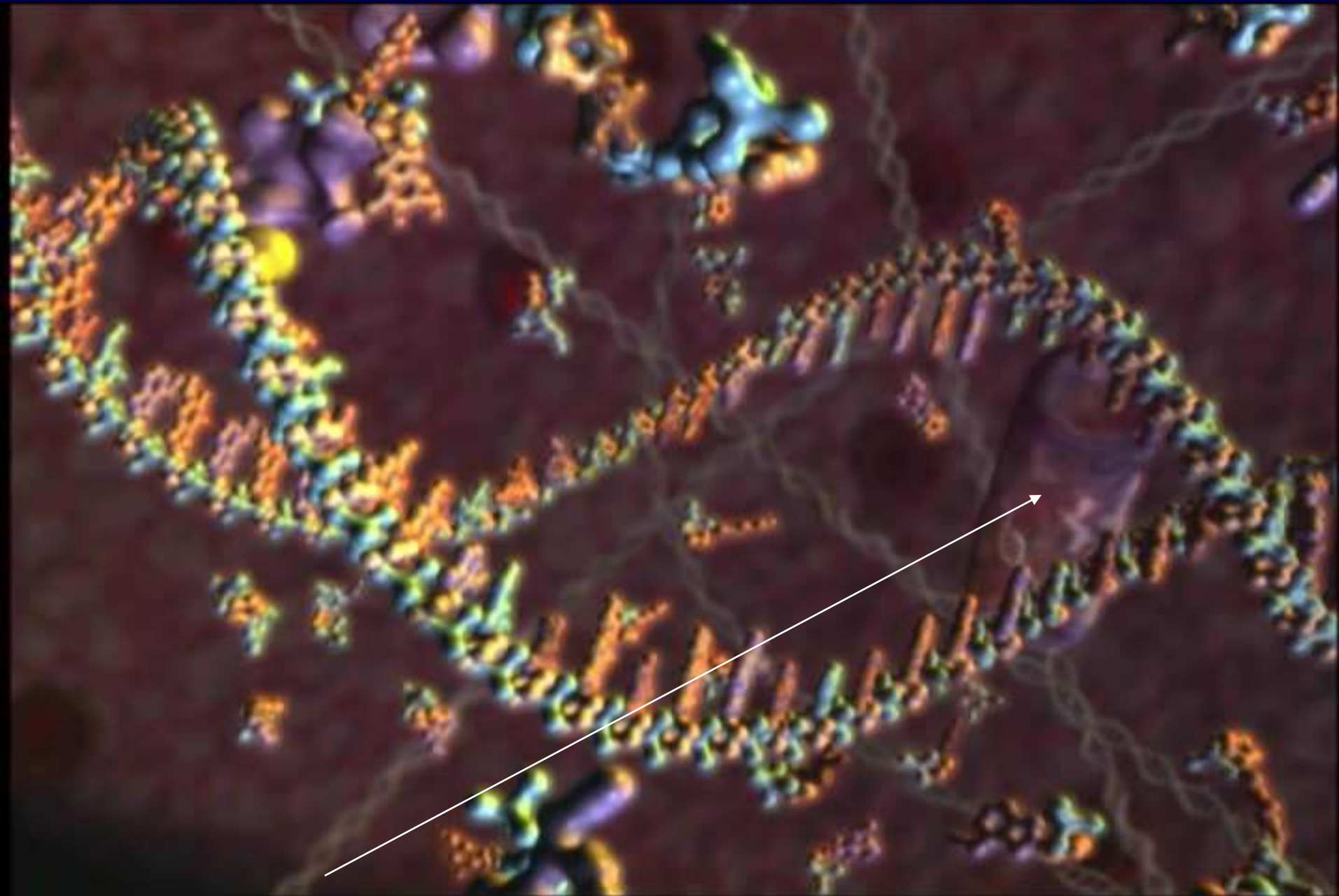
A molecular machine unwinds the section of the DNA to be copied



A molecular machine unwinds the section of the DNA to be copied

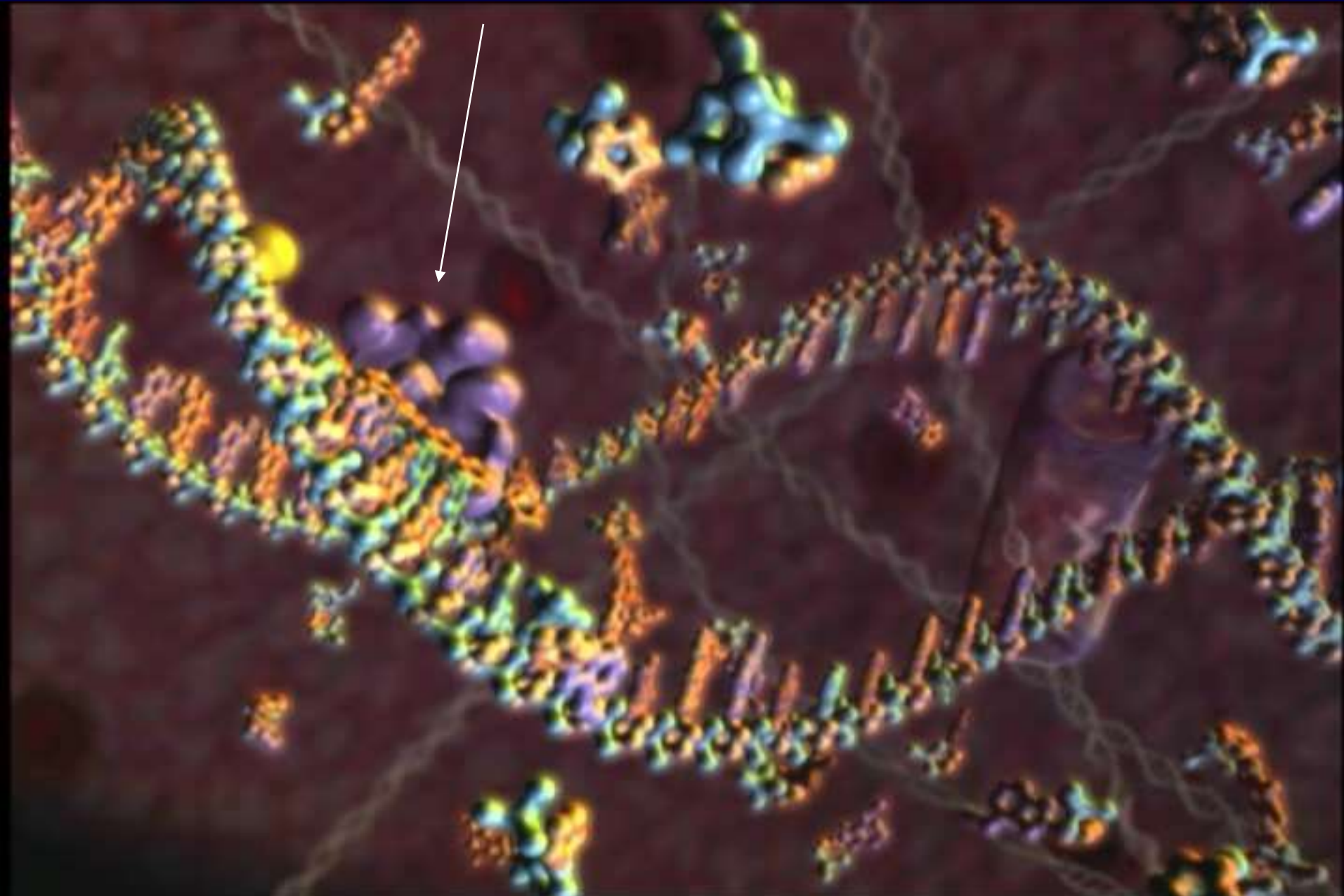


A molecular machine unwinds the section of the DNA to be copied



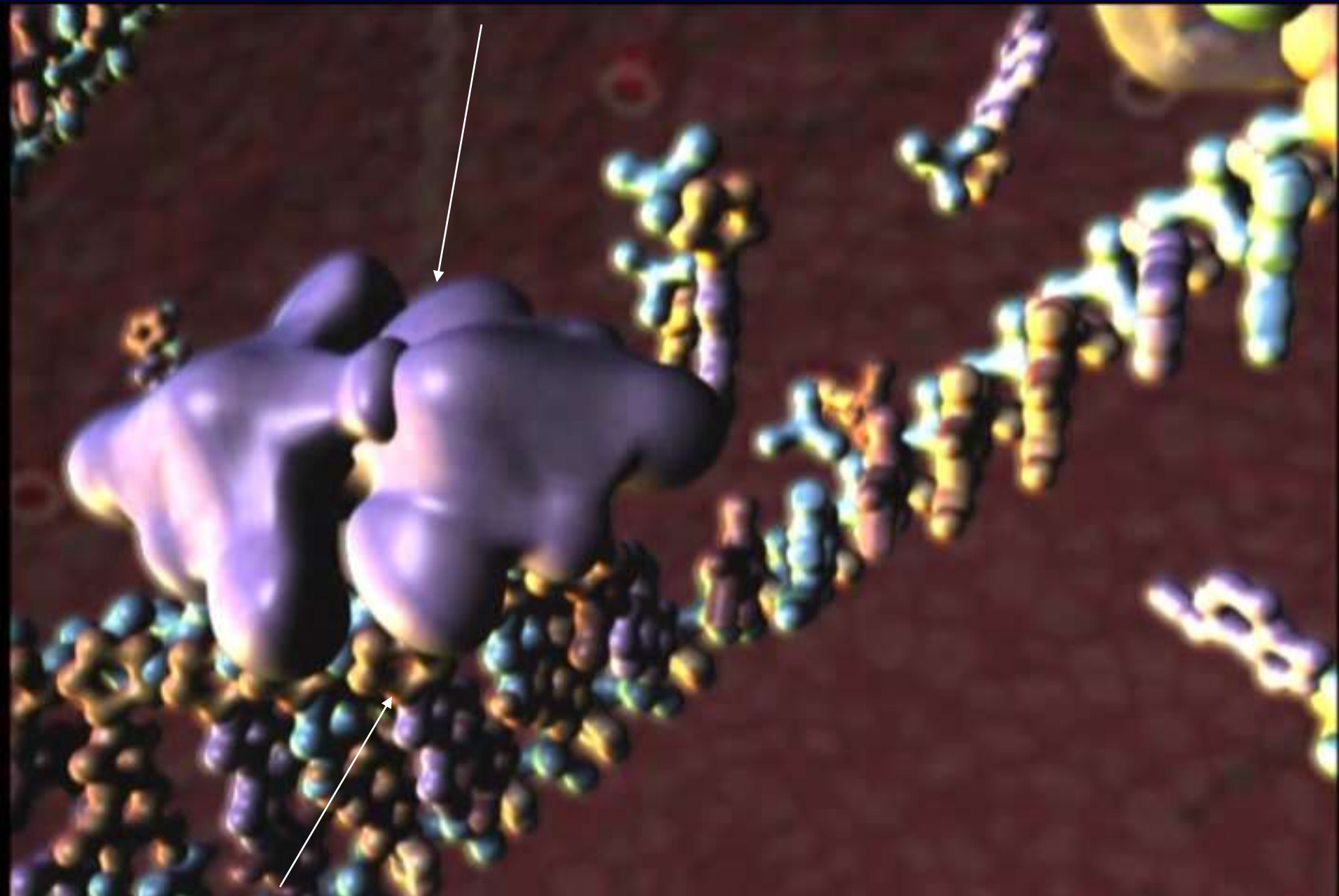
A molecular machine unwinds the section of the DNA to be copied

Another machine starts to make a copy of the DNA



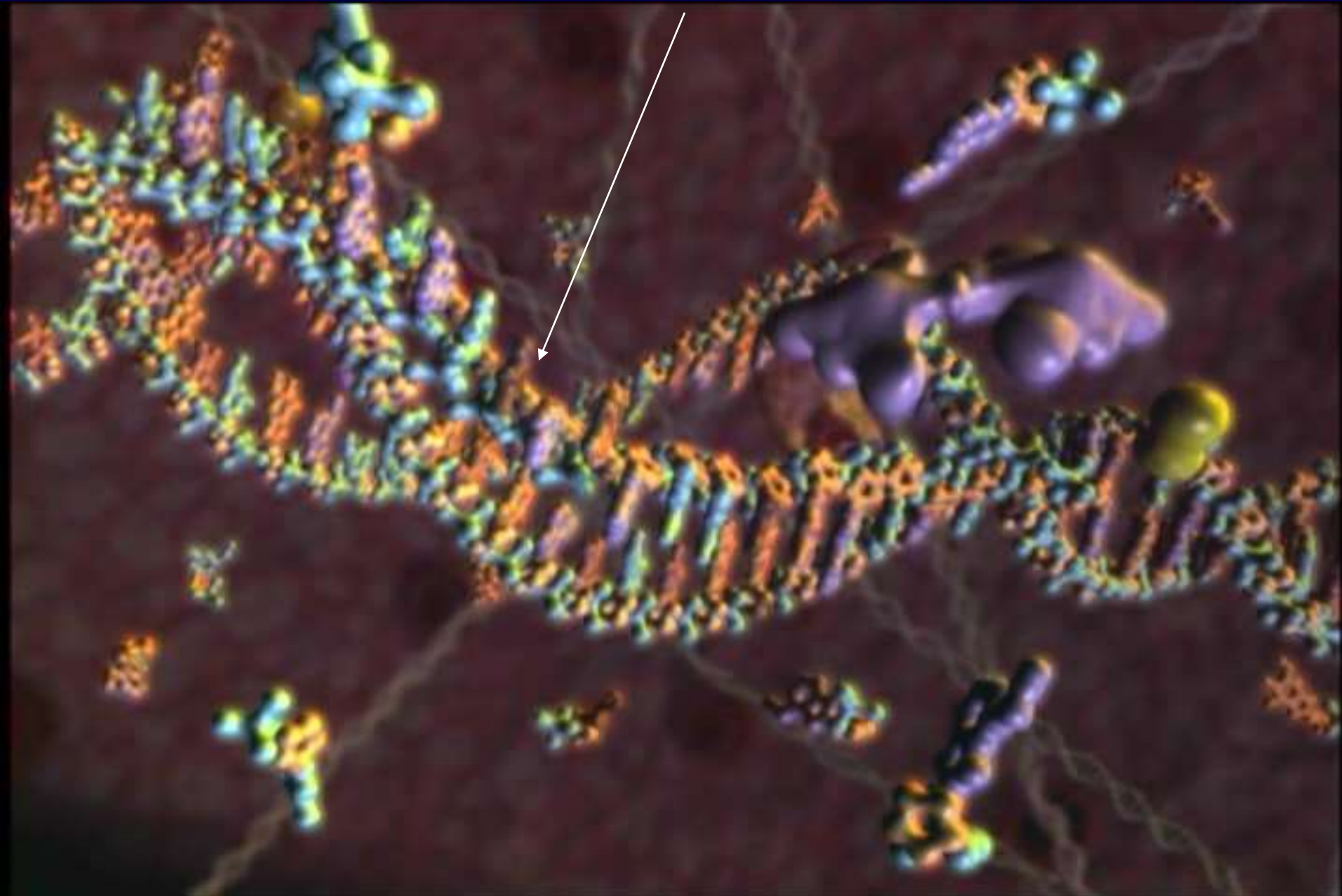
‘Gradually’ a mRNA (messenger RNA) chain is formed (an exact copy of the DNA)

Copying machine



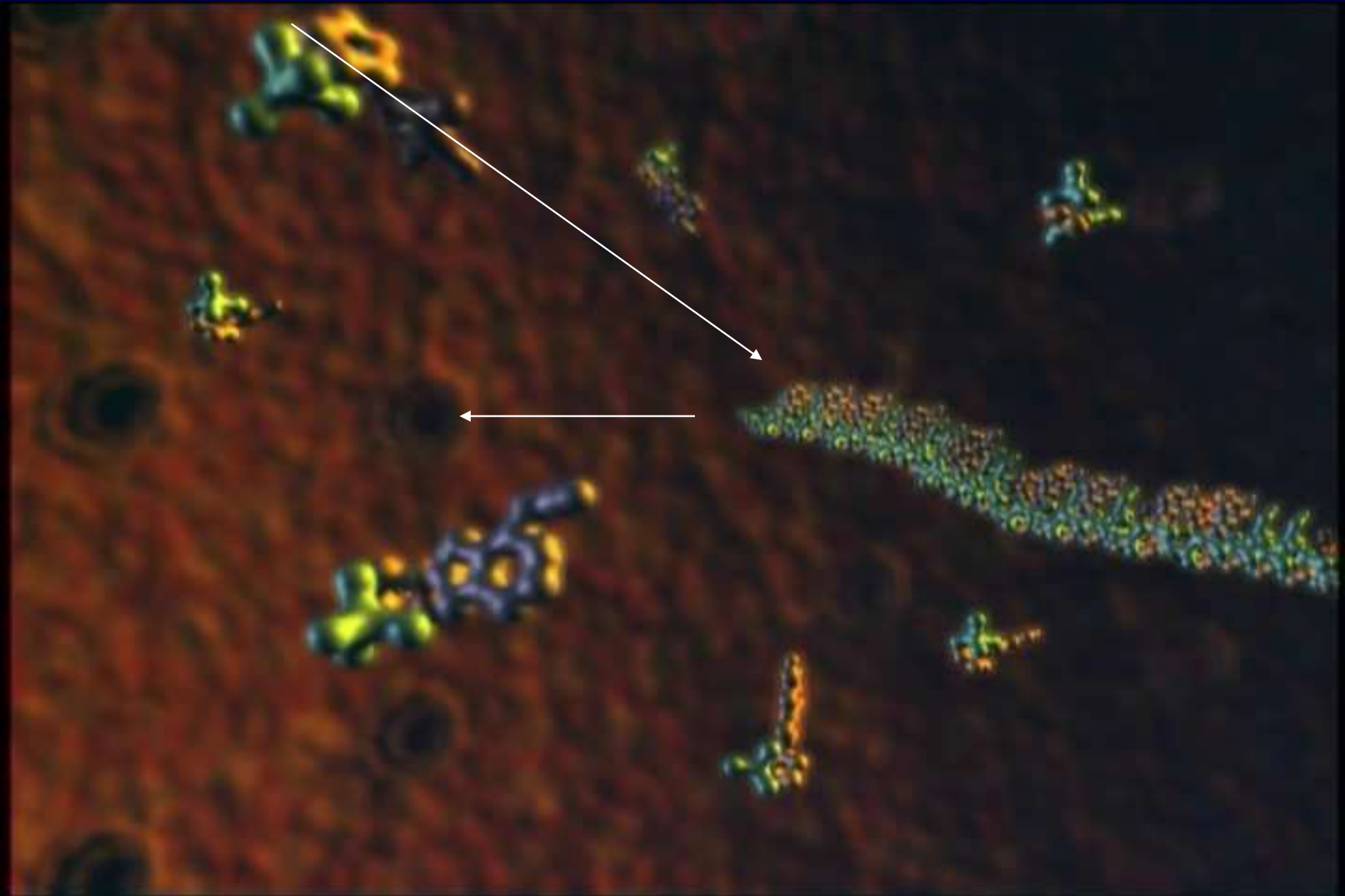
messenger RNA chain being formed

Once Transcription is complete, the mRNA chain is ready to leave....



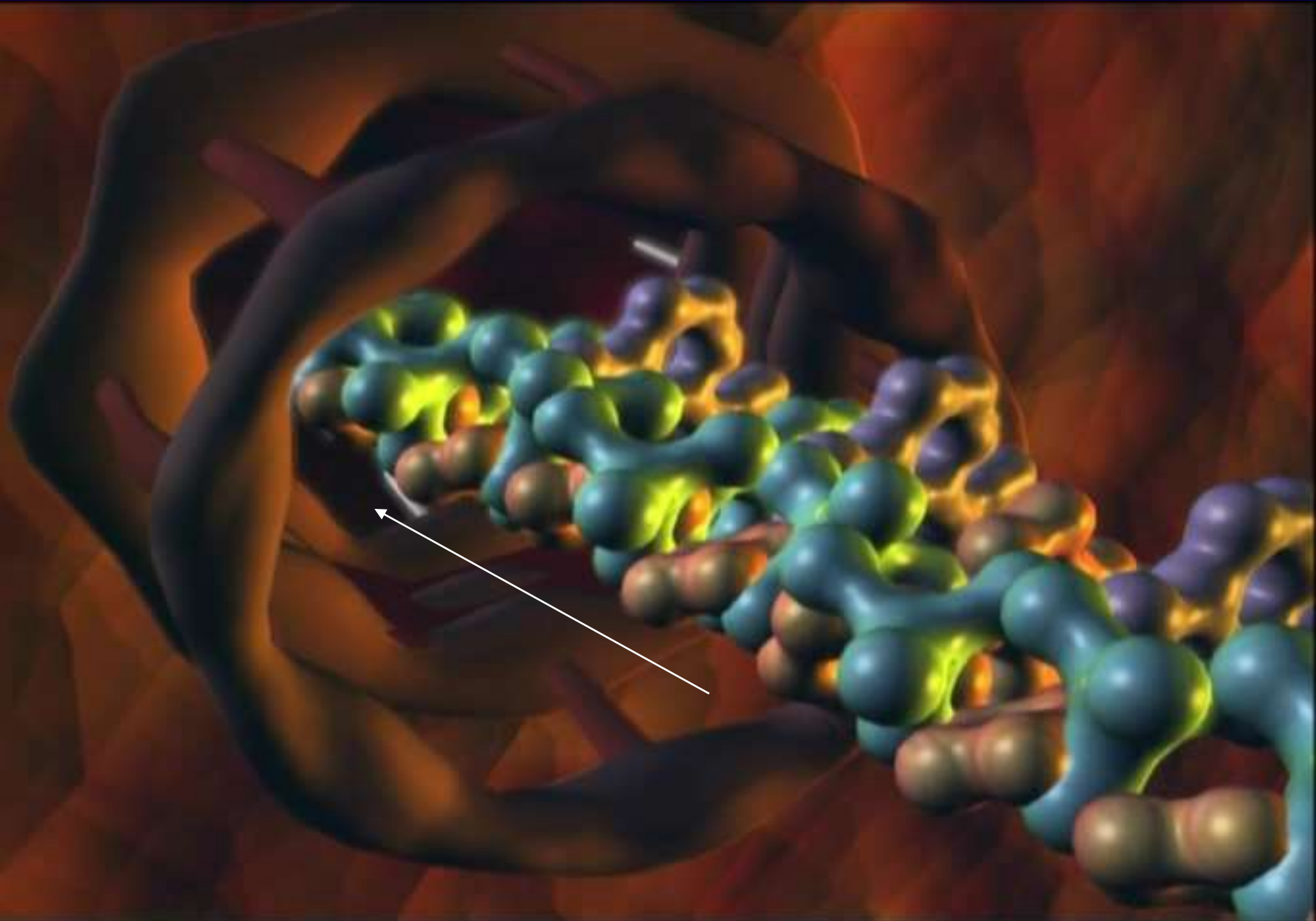
...and the DNA is once again tightly wound up / zipped up.

The mRNA chain starts its journey for the next part of the process to build a protein.



The mRNA heads to one of the nuclear pores to exit the nucleus (pores built from protein!)

The pores will only allow the right things in and out of the cell nucleolus...

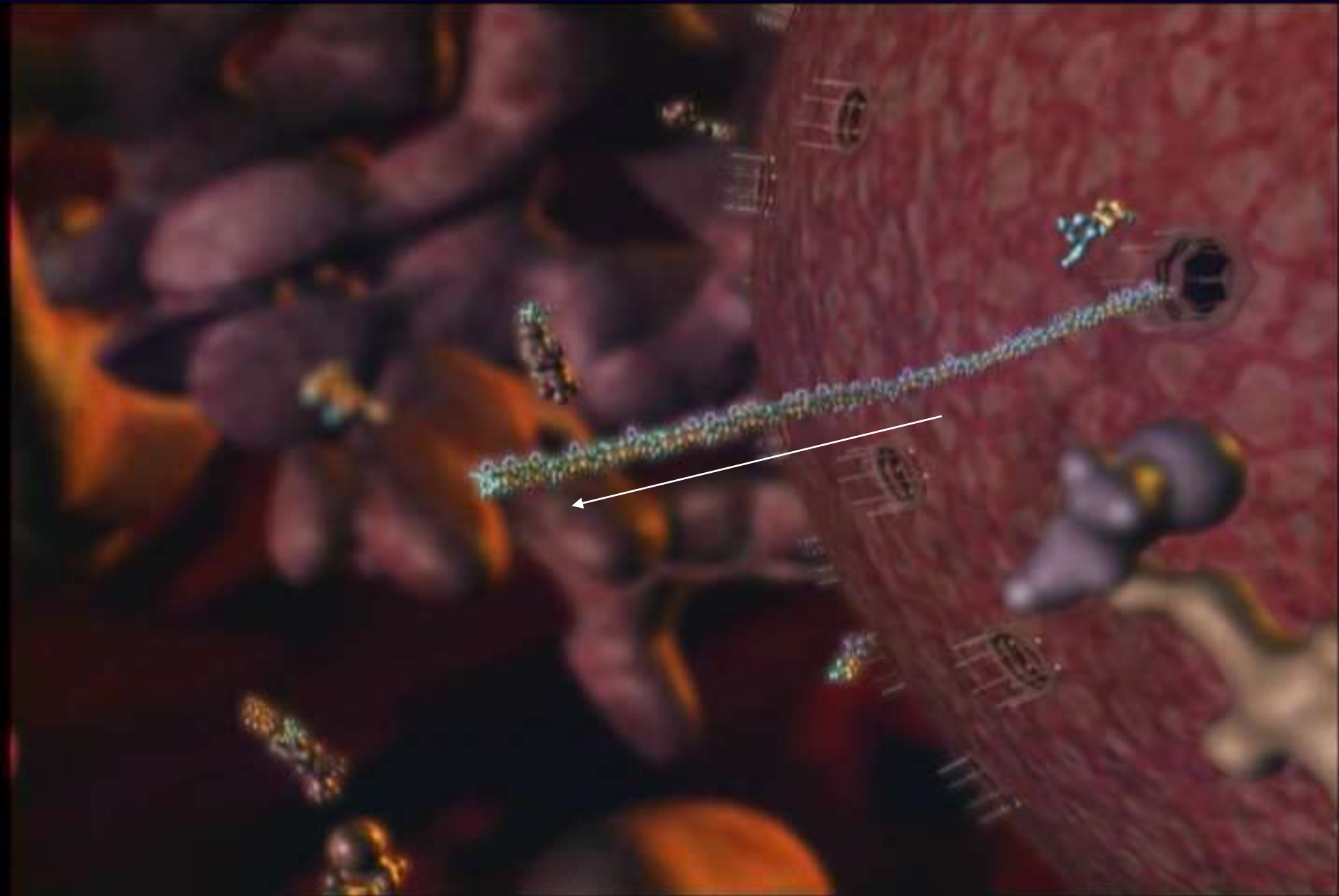


How does it know what to let in and what to stop? 'lucky guess'?

Once granted 'permission to leave', the mRNA heads back out into the cell



The mRNA heads toward the Ribosome – a two part molecular factory.



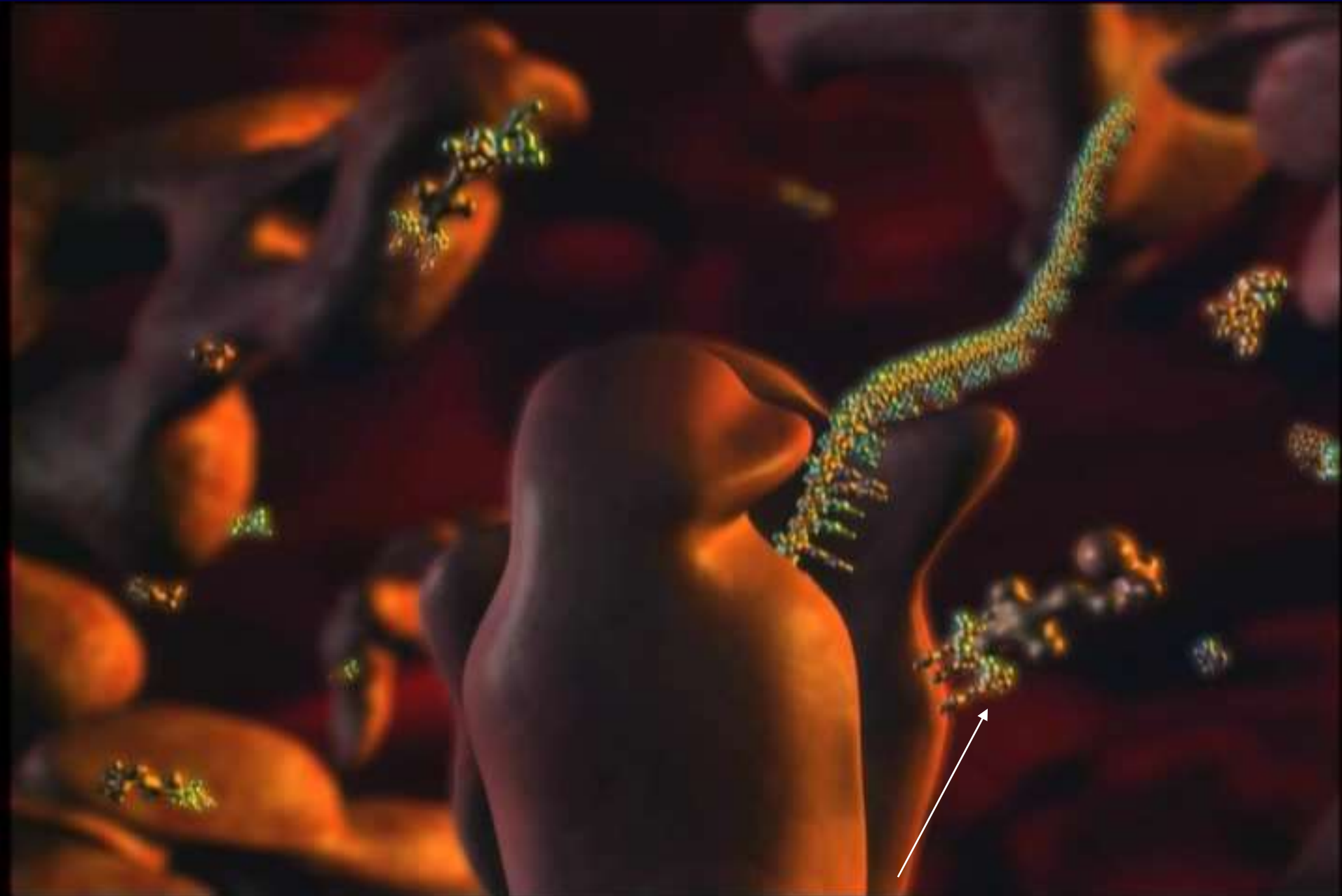
Who told it where to go?

The mRNA heads toward the Ribosome – a two part molecular factory.



Ribosome (this is a complex structure made up of a number of **proteins**)

Once securely in the Ribosome, the process of translation begins



Meanwhile....the first amino acid is already being brought to the Ribosome by tRNA

Inside the Ribosome a molecular assembly line starts to build a long complex chain

Error checking system



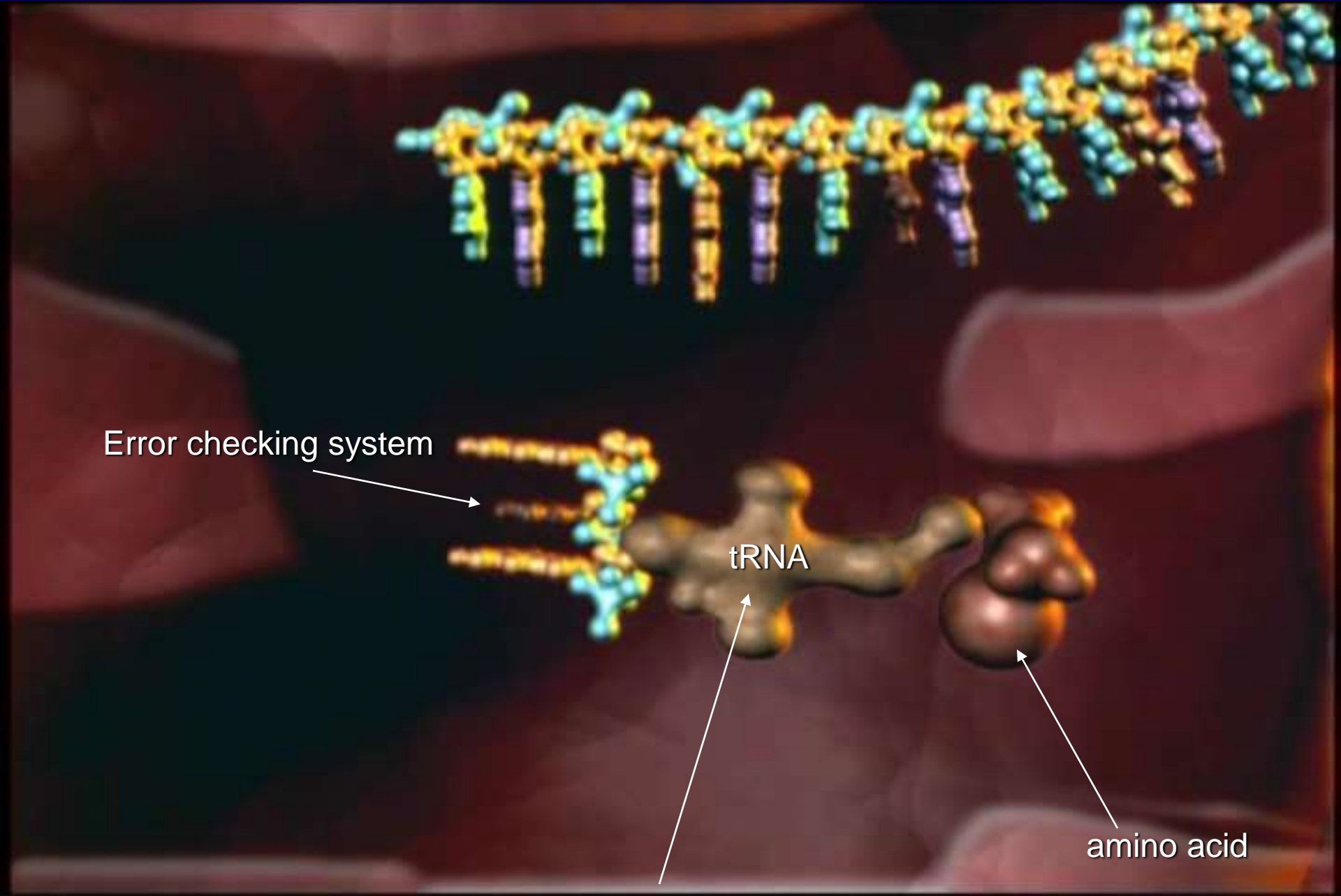
tRNA



amino acid



The amino acid carrier is called a transfer RNA (tRNA)



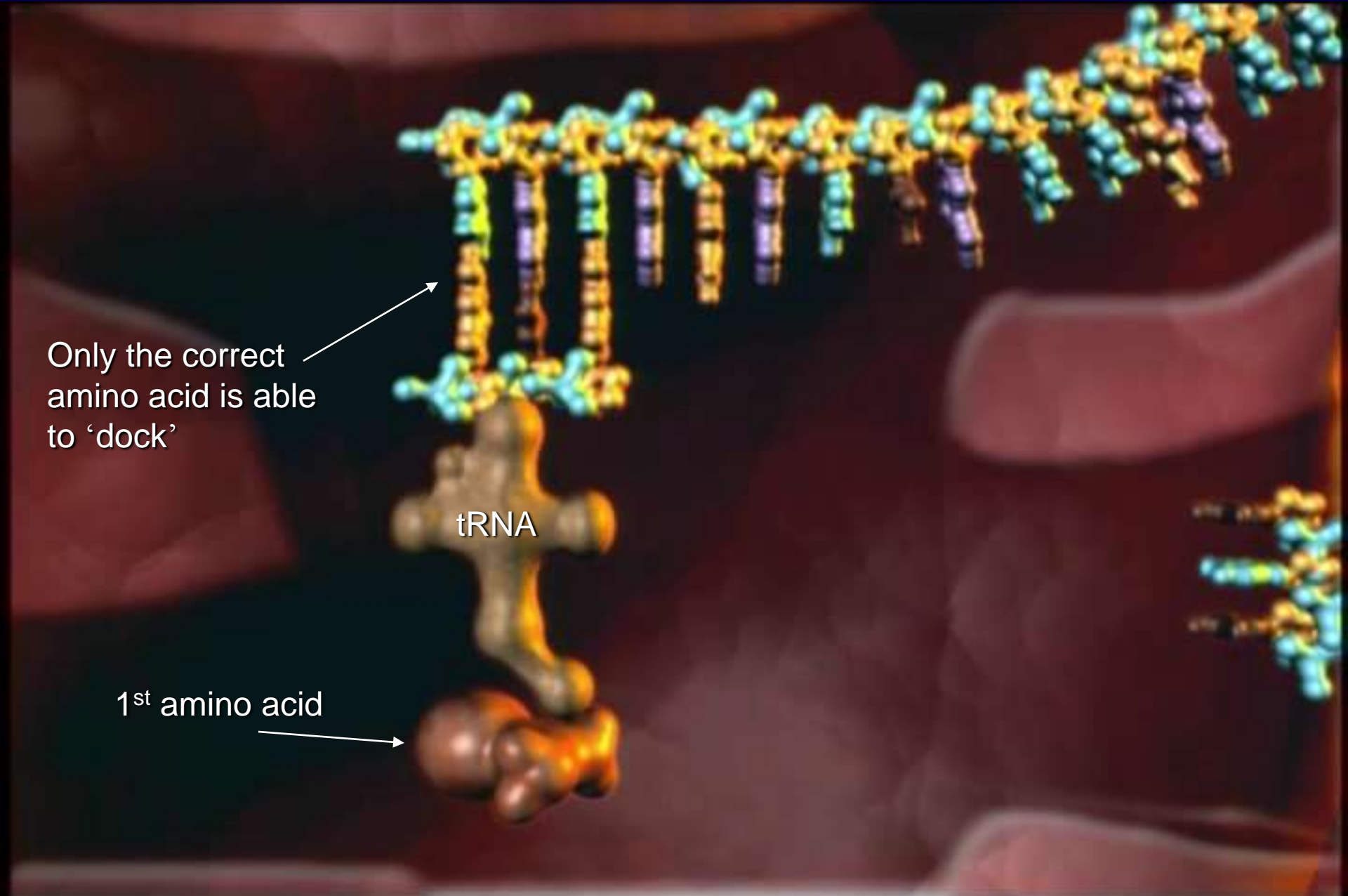
The chain is made up of amino acids...

Only the correct amino acid is able to 'dock'

tRNA

1st amino acid

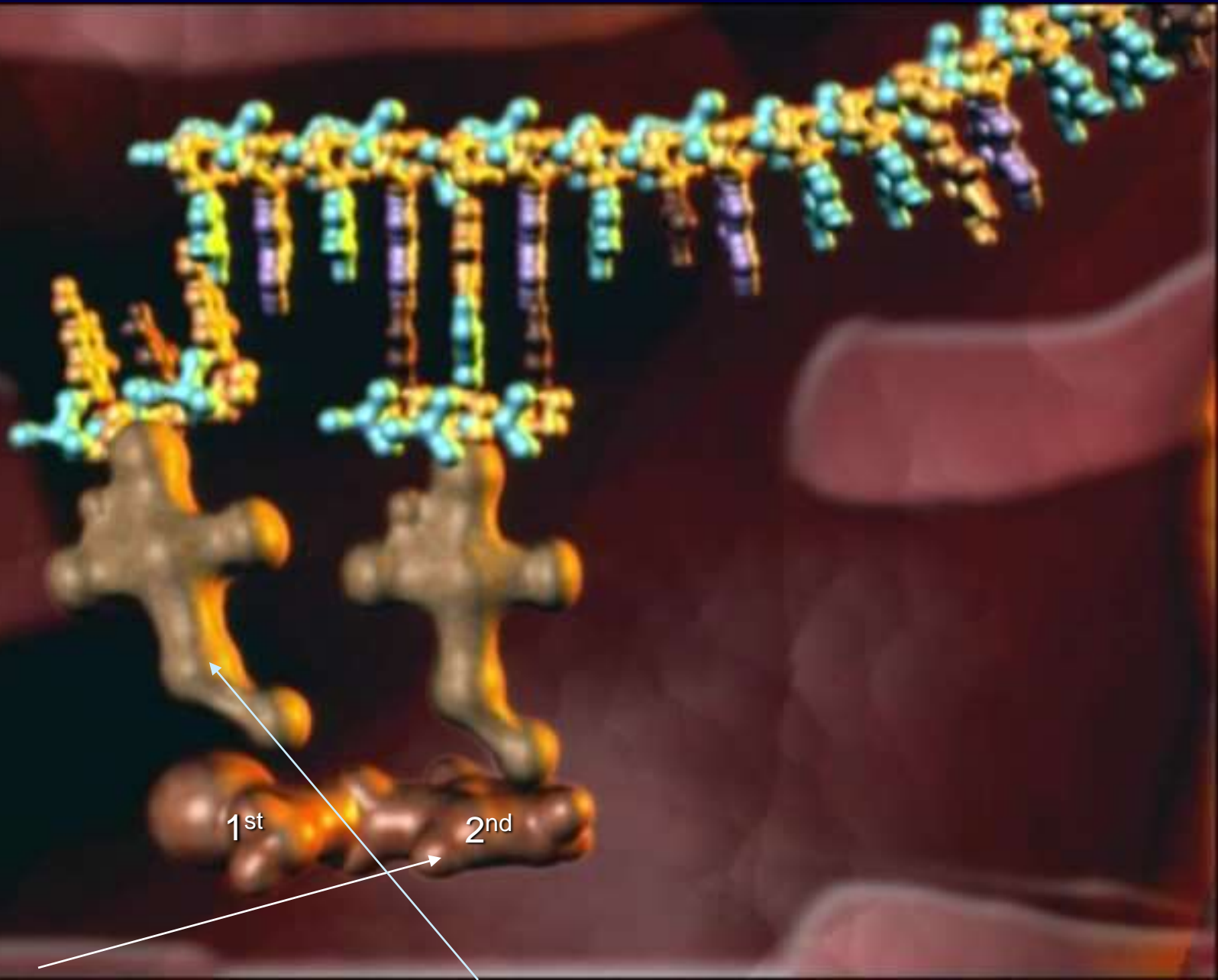
... which have to be assembled in a specific sequence



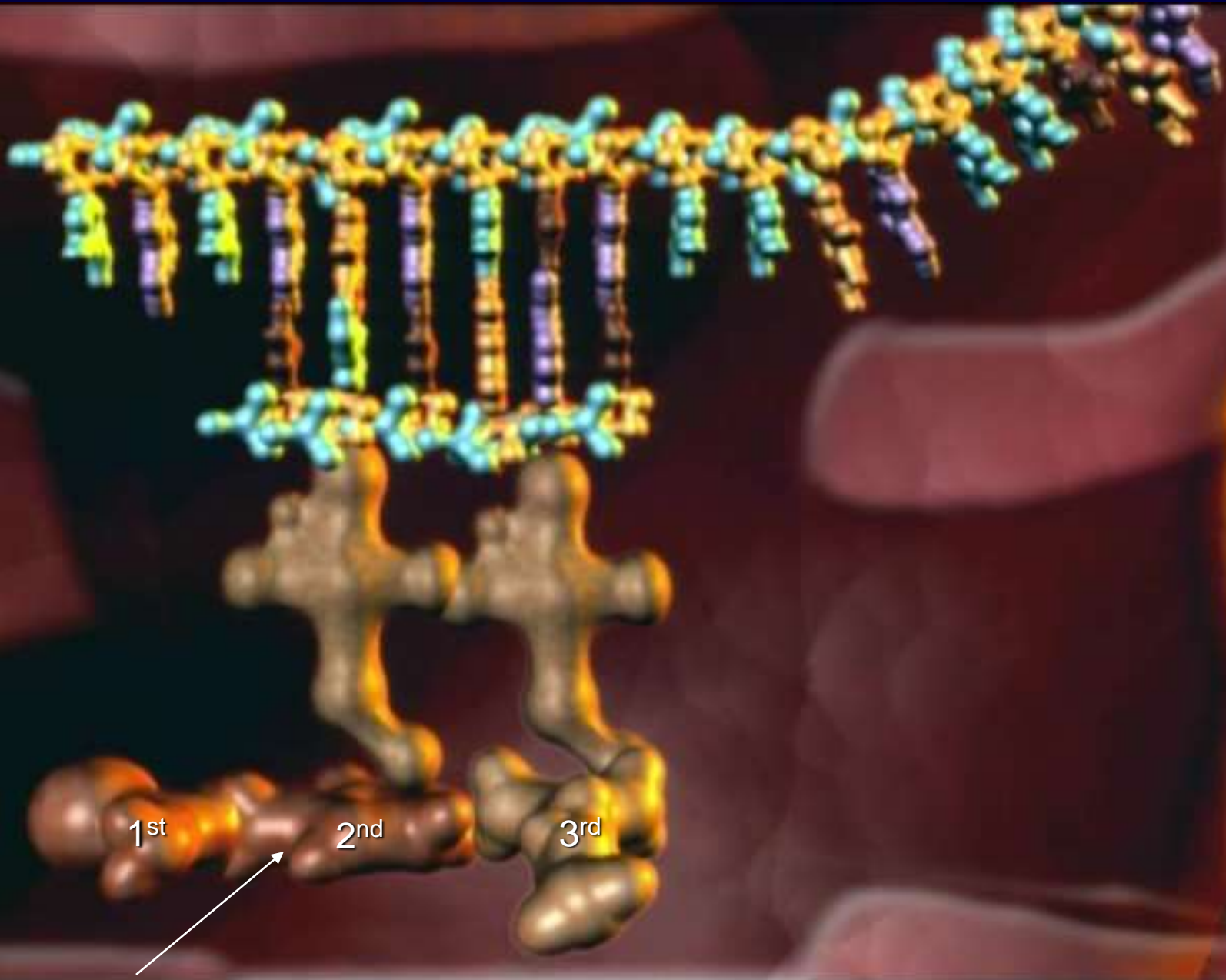
The details for the sequence are supplied by the mRNA



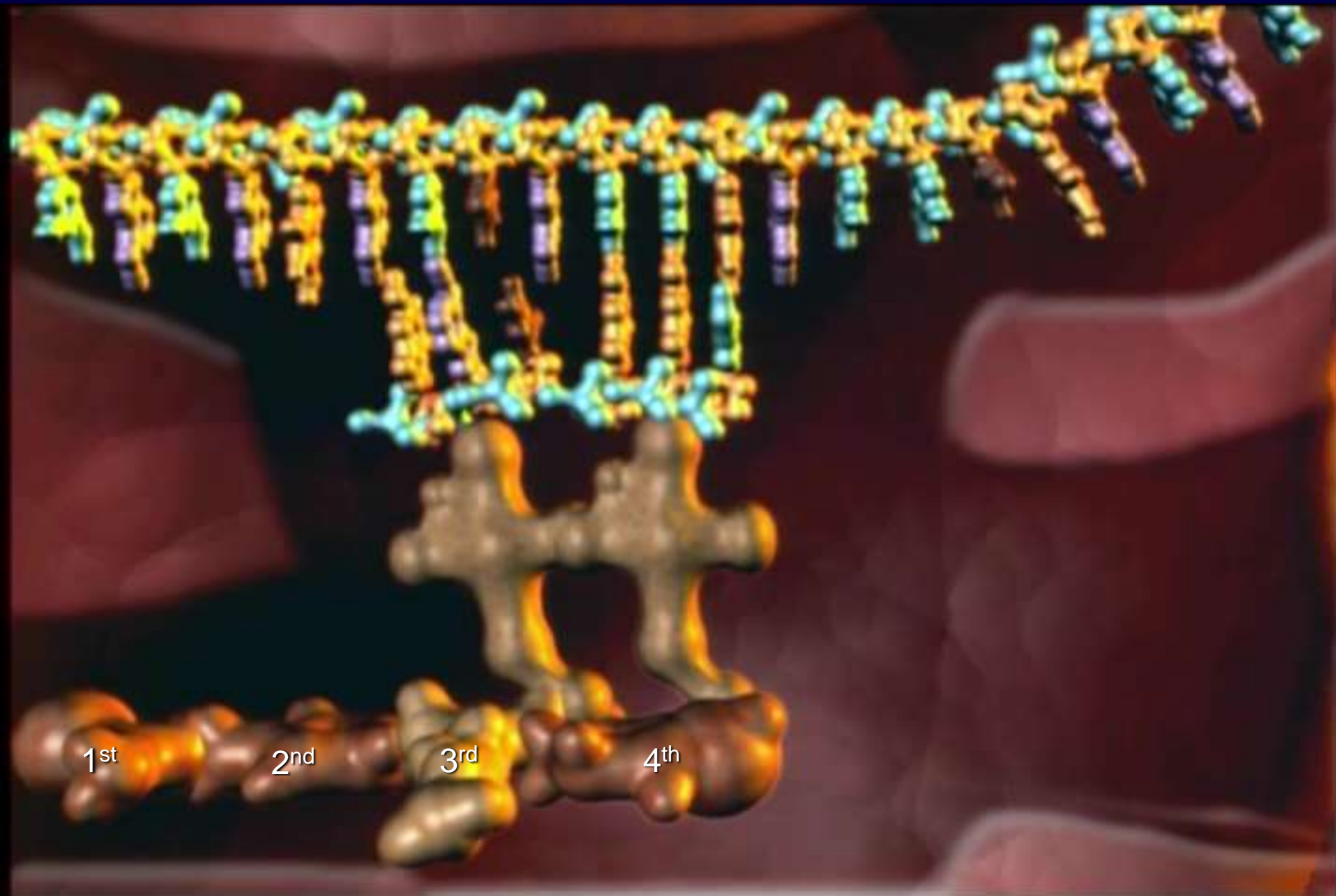
Incredibility, the correct amino acids are brought into the Ribosome in order!



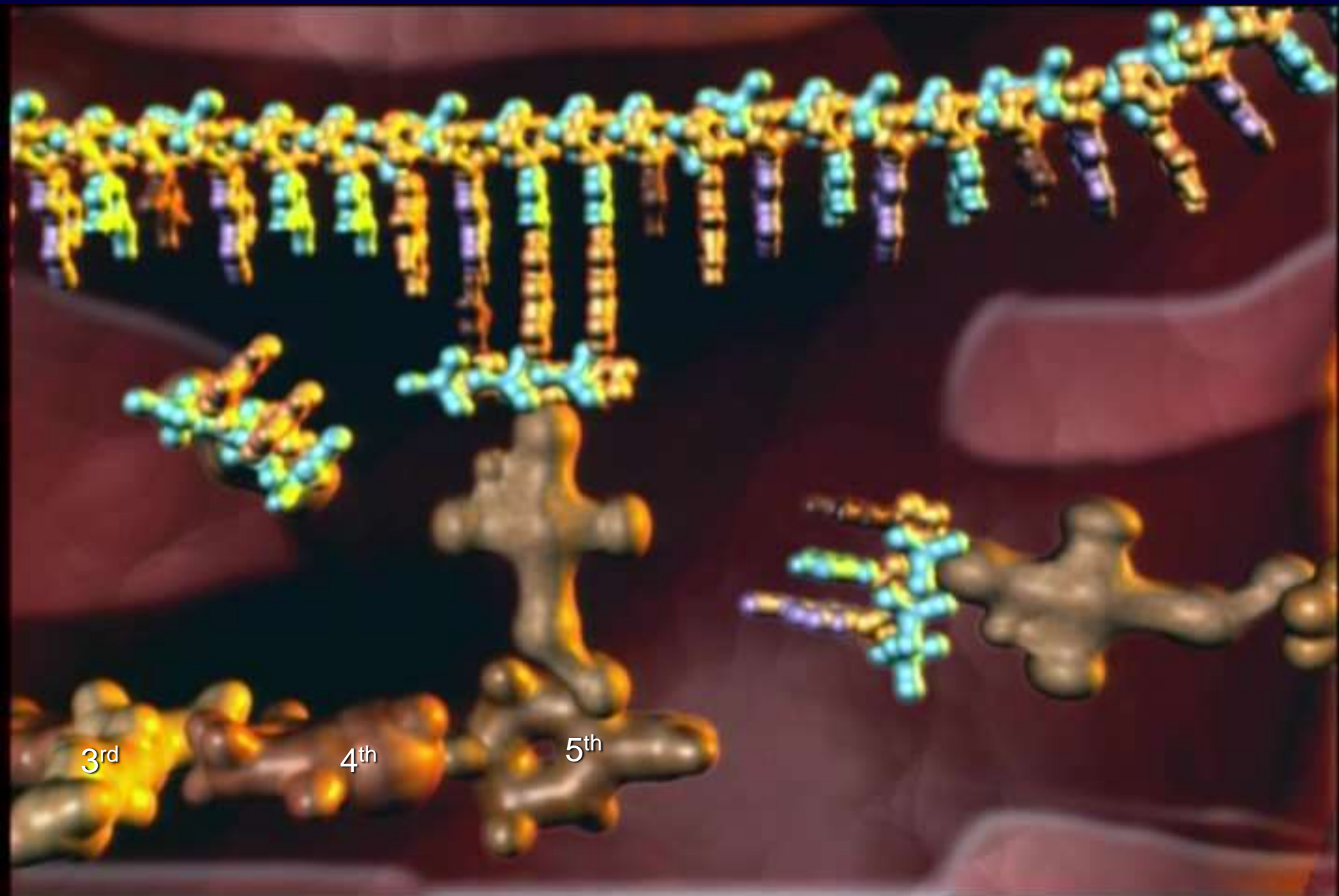
Once the 2nd amino acid is attached, the tRNA breaks away



‘Gradually’ our amino acid chain is formed.

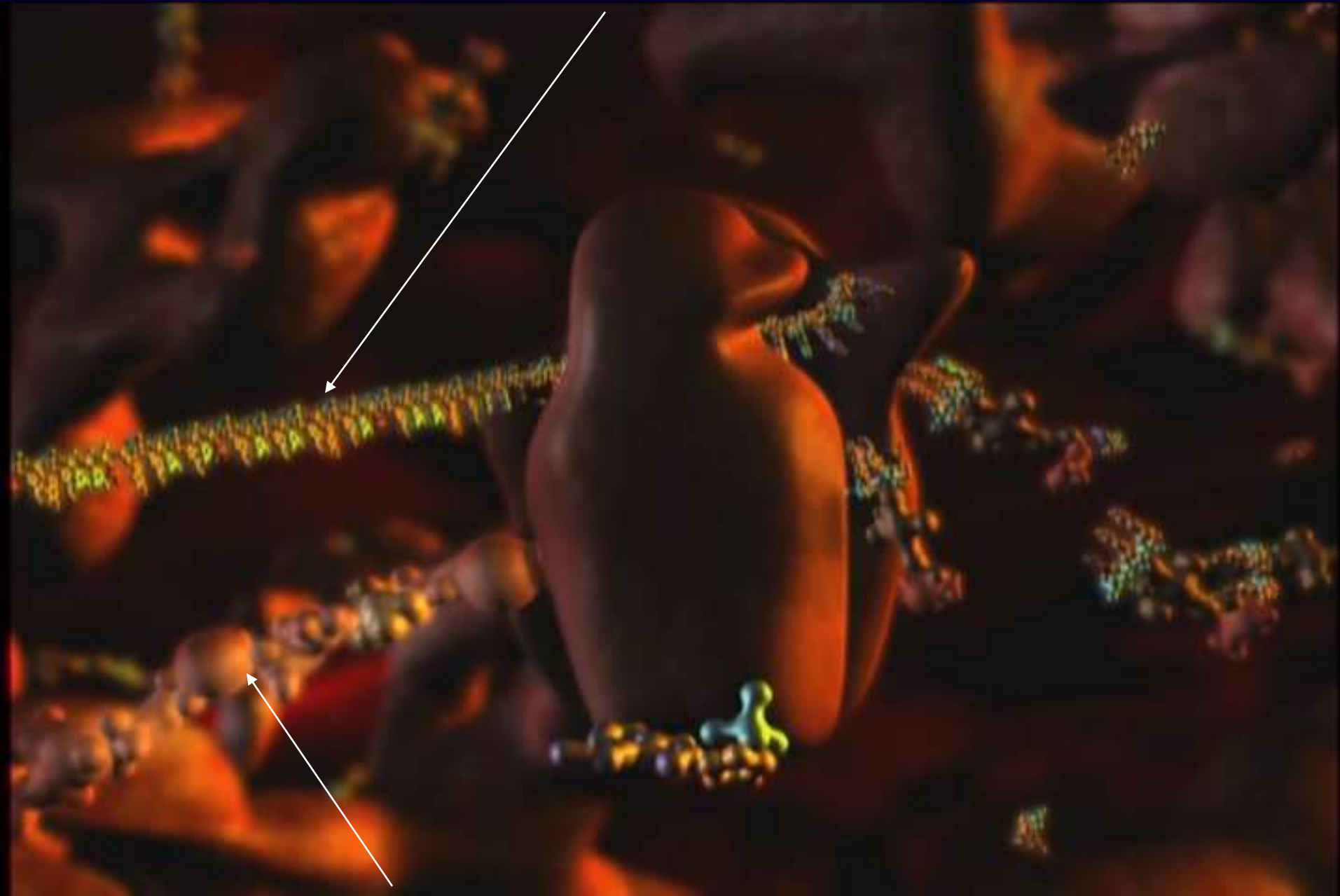


‘Gradually’ our amino acid chain is formed.



‘Gradually’ our amino acid chain is formed.

Once this process is completed the mRNA leaves...



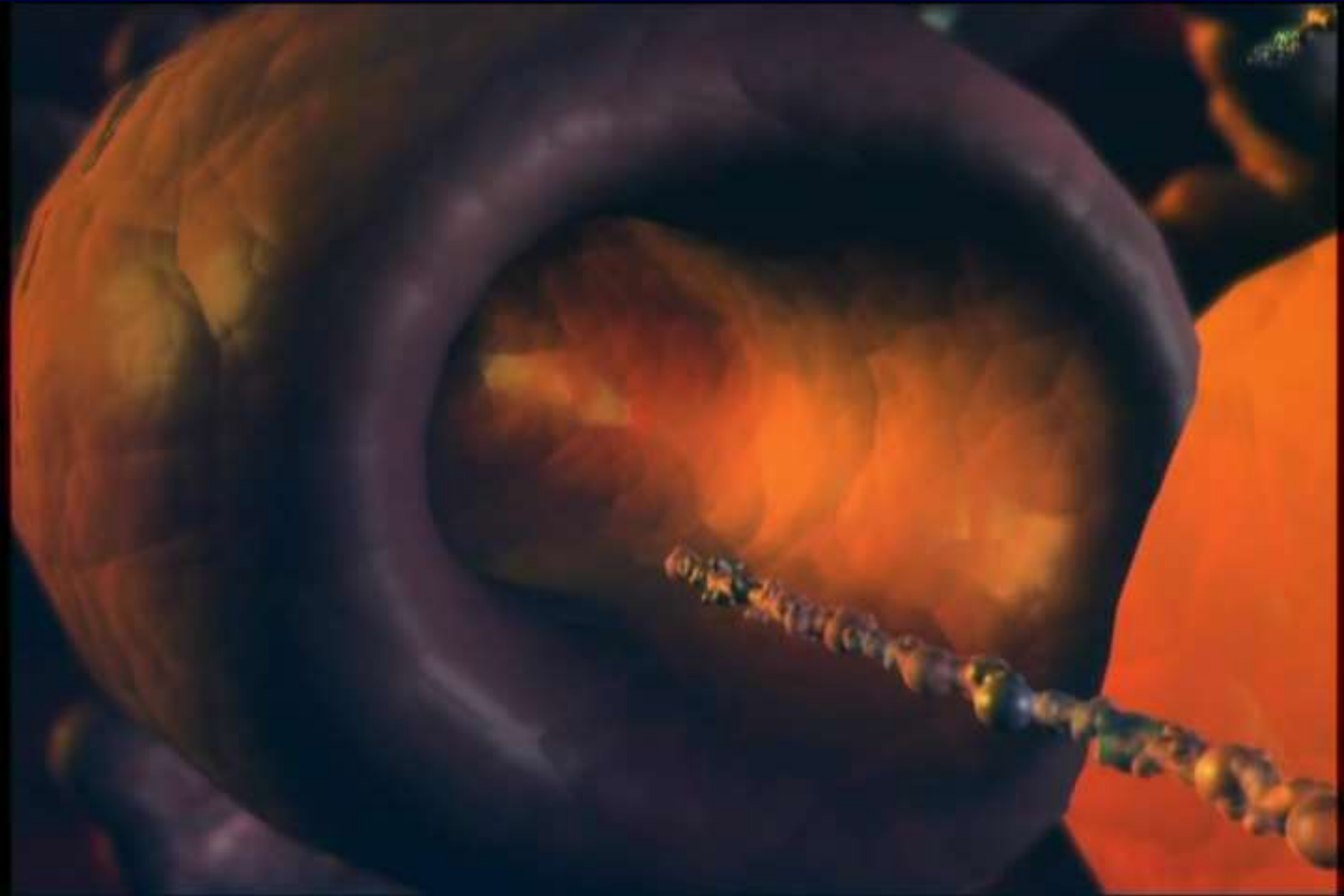
...as does the complete amino acid chain – now ready to be made into a protein

The amino acid chain (up to 1000 long!) now heads to the 'folding dept.'

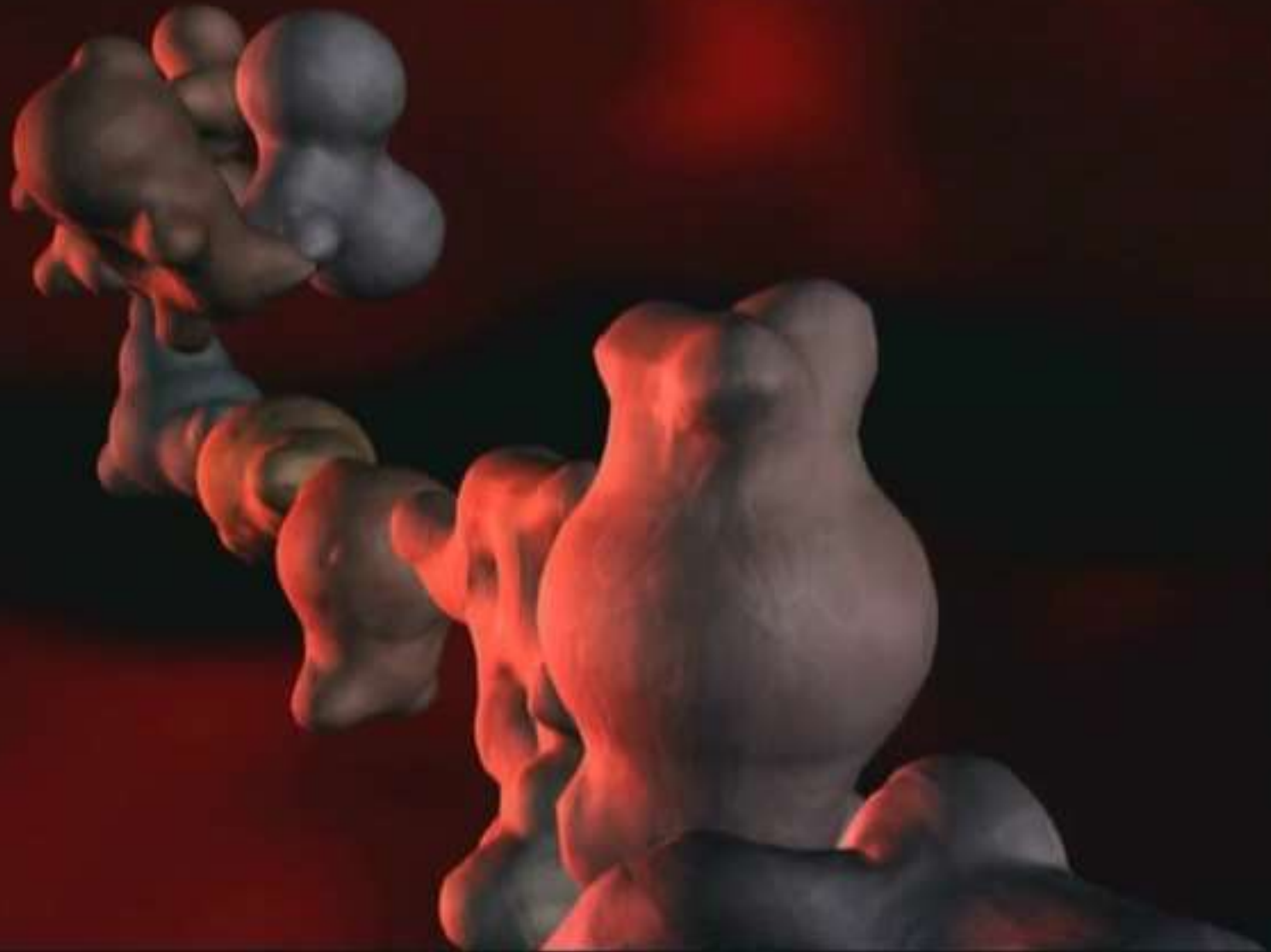


Here the amino acid chain will be folded into a protein

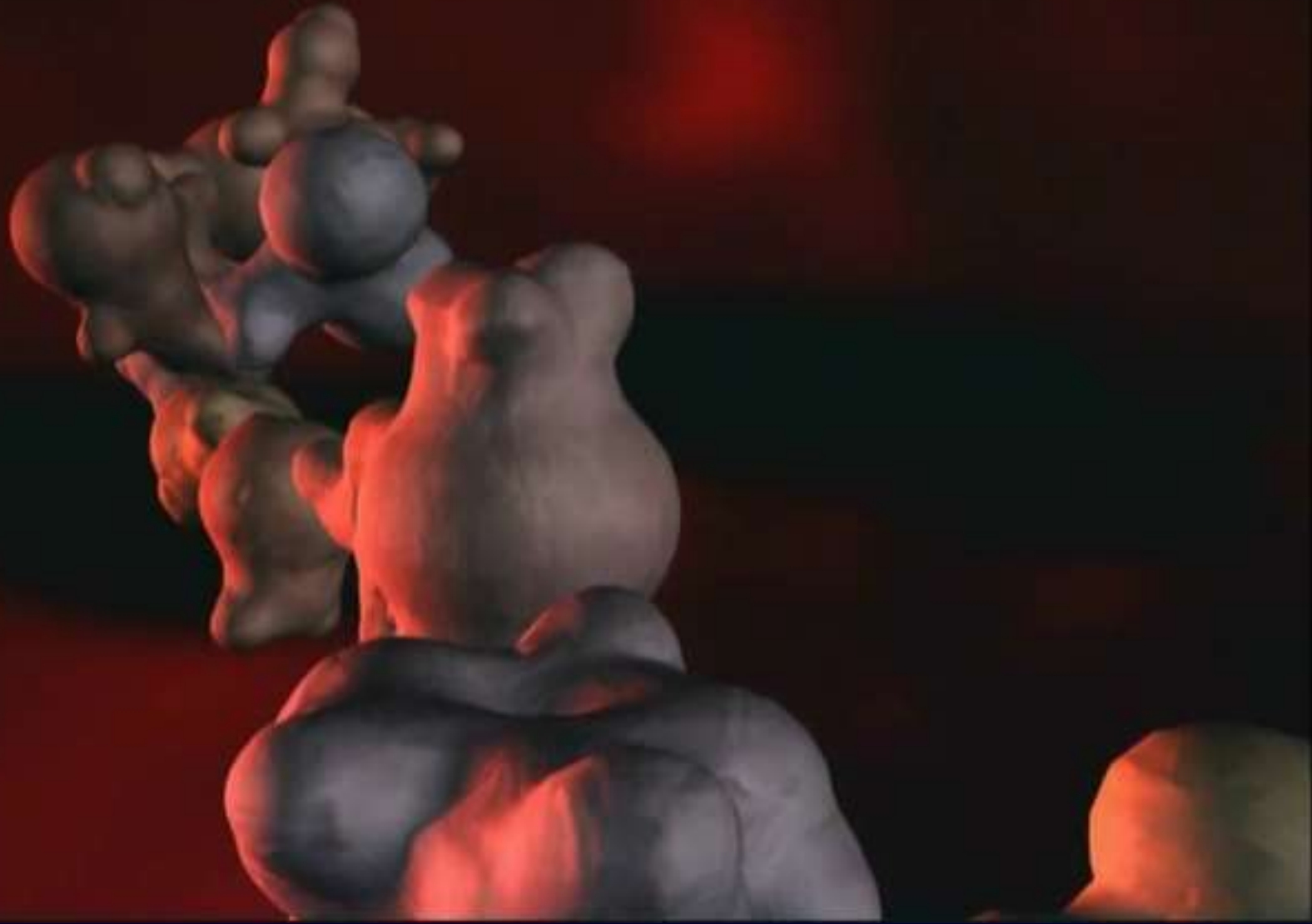
The 'folding dept.' is made up of, among other things, special **proteins!!!**



The chain has to be folded in precisely the right way to form the protein



The chain has to be folded in precisely the right way to form the protein



Chemical reactions should naturally cause the chain to fold as a result of attracting and repelling forces....

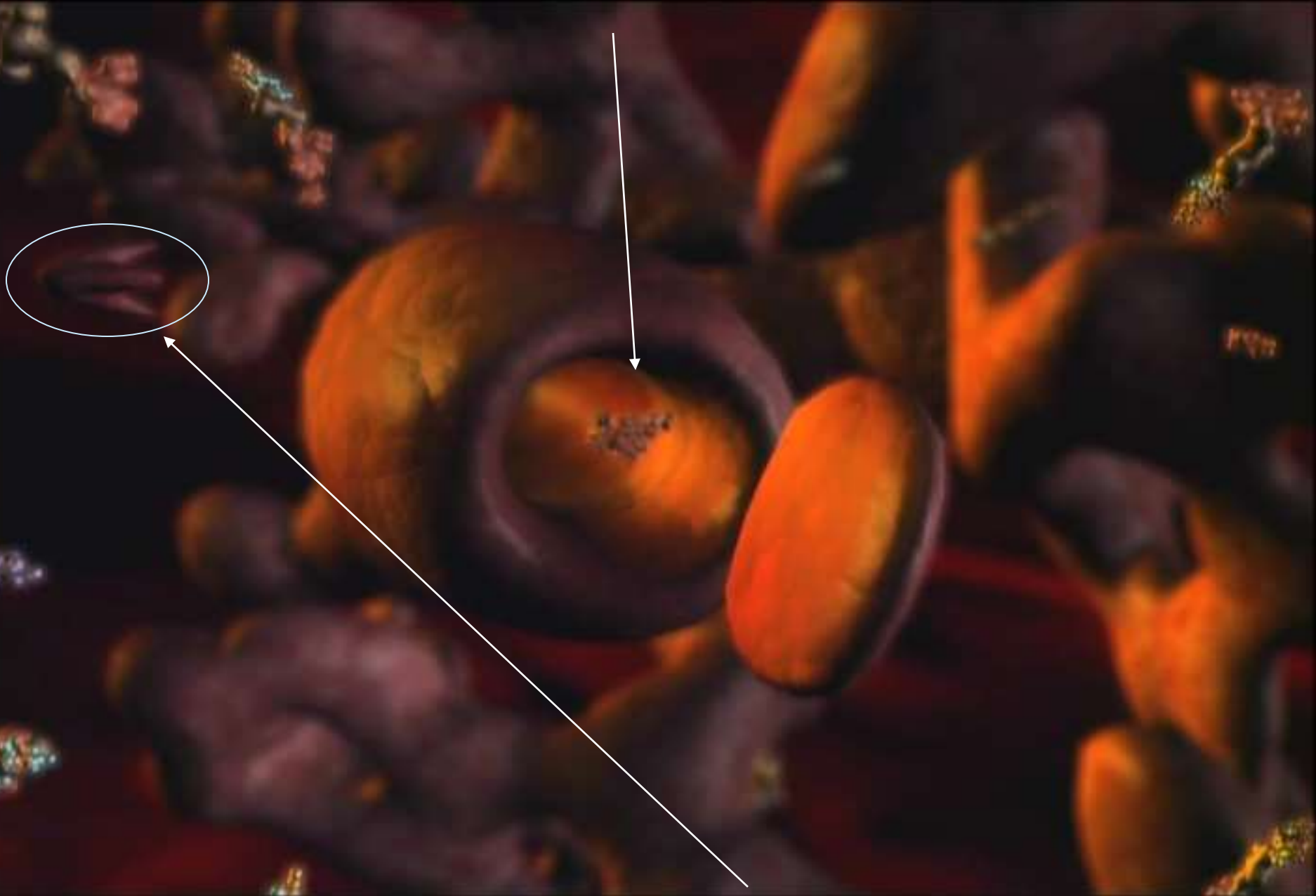
However 'chaperone' proteins assist in preventing our chain from folding into a useless blob. Instead they help mould it in to the correct shape.



The time it would take for a small, 100 amino acid, chain to 'randomly' fold into all the possible permutations, eventually 'hitting upon the right one' (which is what would be required for evolution) is estimated to be 10^{87} seconds.

The are 'only' 10^{66} seconds in a 16 Billion year old universe!!

Once our protein is formed, it leaves the 'factory'...



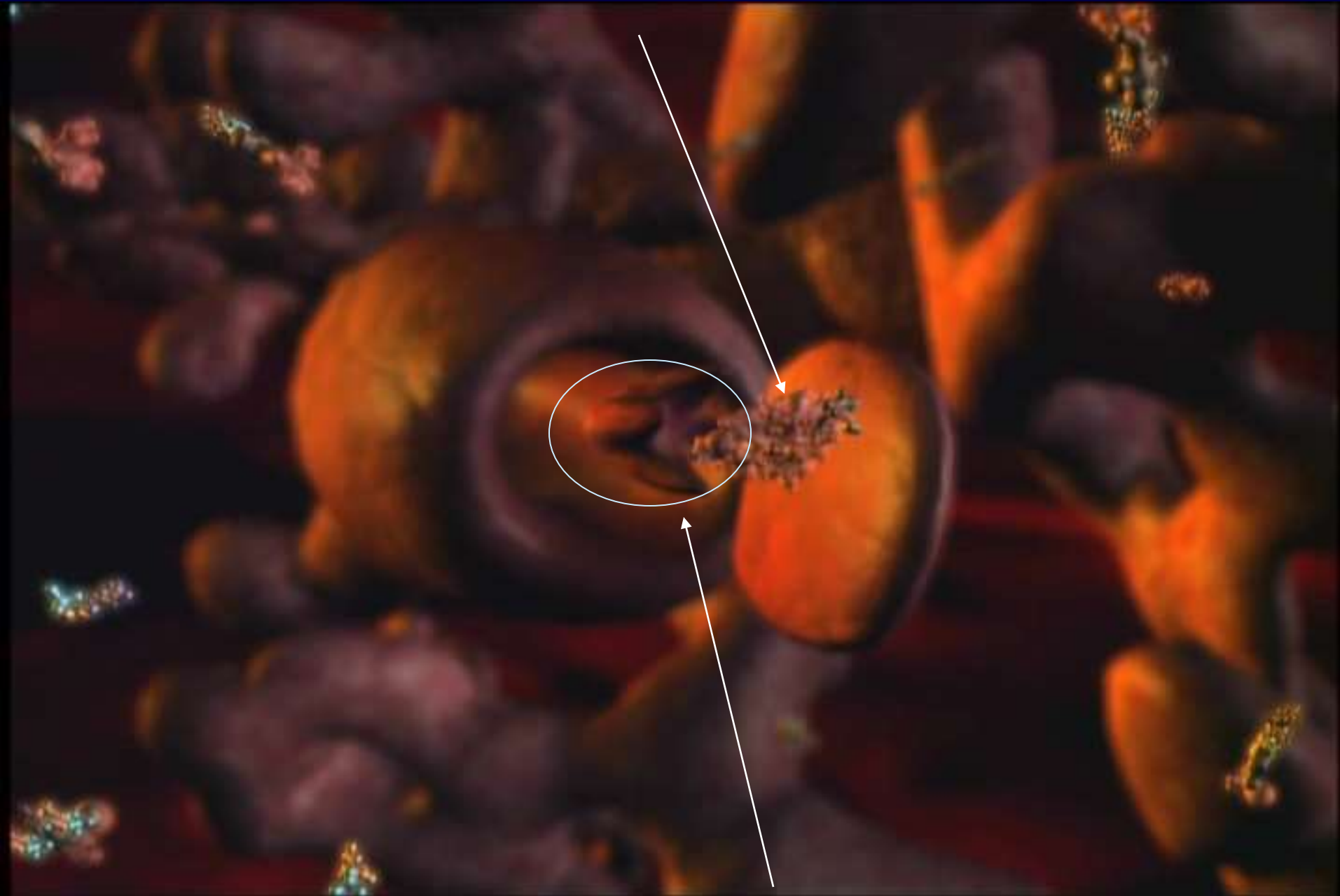
... and is ushered to its destination by yet another machine!

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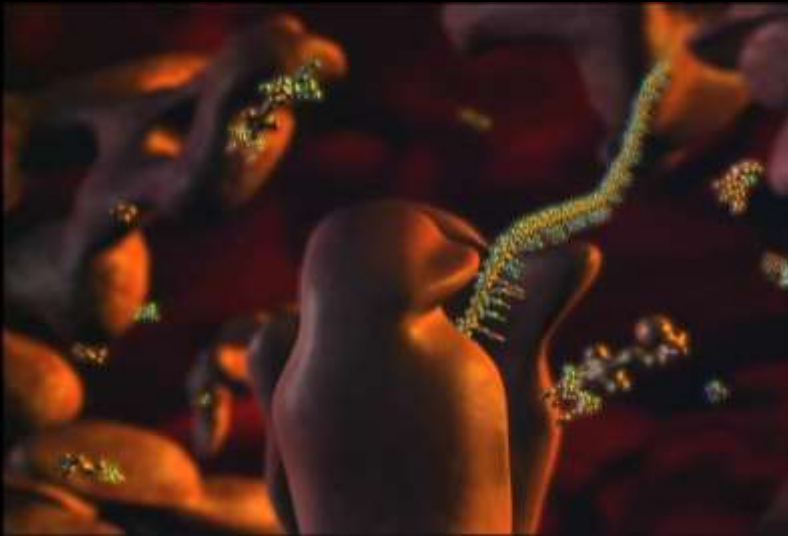
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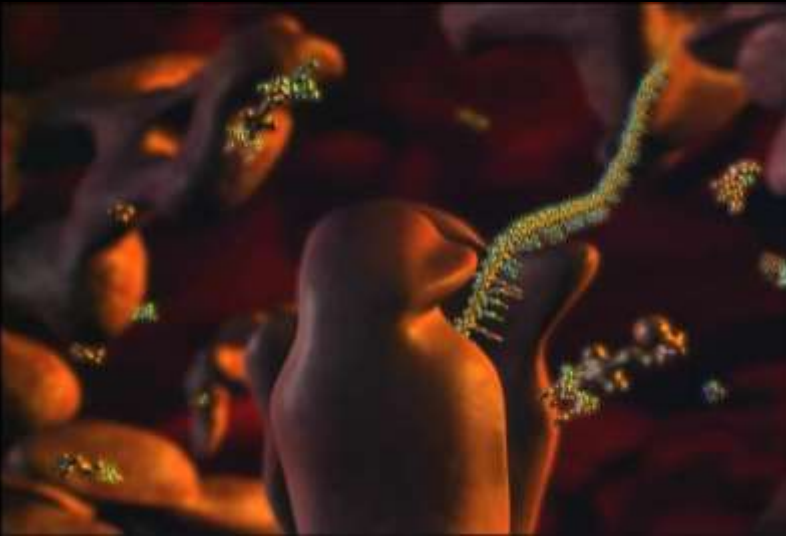
Dr Vij Soderer

In fact, the whole process is far more complicated than this, and involves a large number of other associated molecules and enzymes without which the rate of formation of peptide bonds would be very slow.



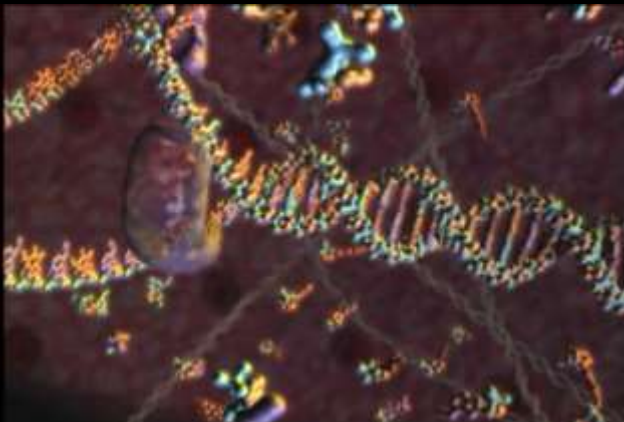
Dr Vij Soderer

However, the ribosome protein-making factory can speed up reactions a million, or even a million million times. In a typical mammalian cell, more than one million peptide bonds are formed each second.



Tangle-free Handling?

- Equivalent to two strands of monofilament fishing line 125 miles long, stored inside a basketball;
- Unzipped, copied, and restored on spools (at 3 times the speed of an airplane propeller), *without tangling!*



If all the chromosomes from one person were stretched out and laid end to end; it would stretch from the earth to the moon....and back again....5 million times!





The code in the chromosomes is more complex and holds more information than all the computer programs ever written by man....combined!

Our Response?

“Biologists must constantly keep in mind what they see was not designed, but evolved.”

Francis Crick, Noble Laureate, DNA Research

“I will praise thee; for I am fearfully and wonderfully made: marvellous are thy works; and that my soul knoweth right well.”

King David of Israel 1000 BC (Psalm 139:14)



SESSION 4

- Life Begins...
 - The importance of blood
- Marine Life
- The 'winged foul'
 - Evidence of design
- **God's masterpiece**
 - Fearfully & wonderfully
 - **In His image**
 - **What about Eve?**



Made in His Image

Soul

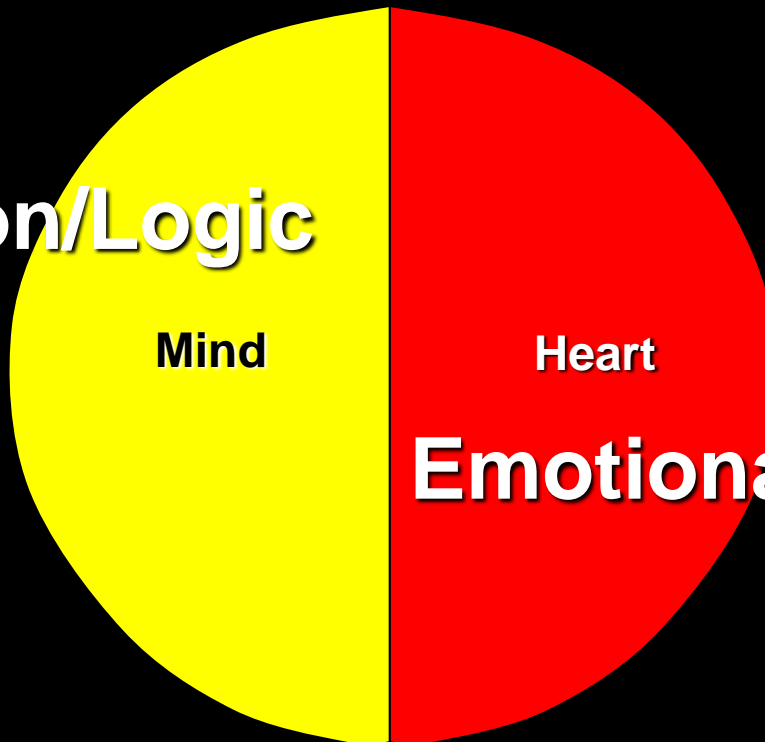
Reason/Logic

Mind

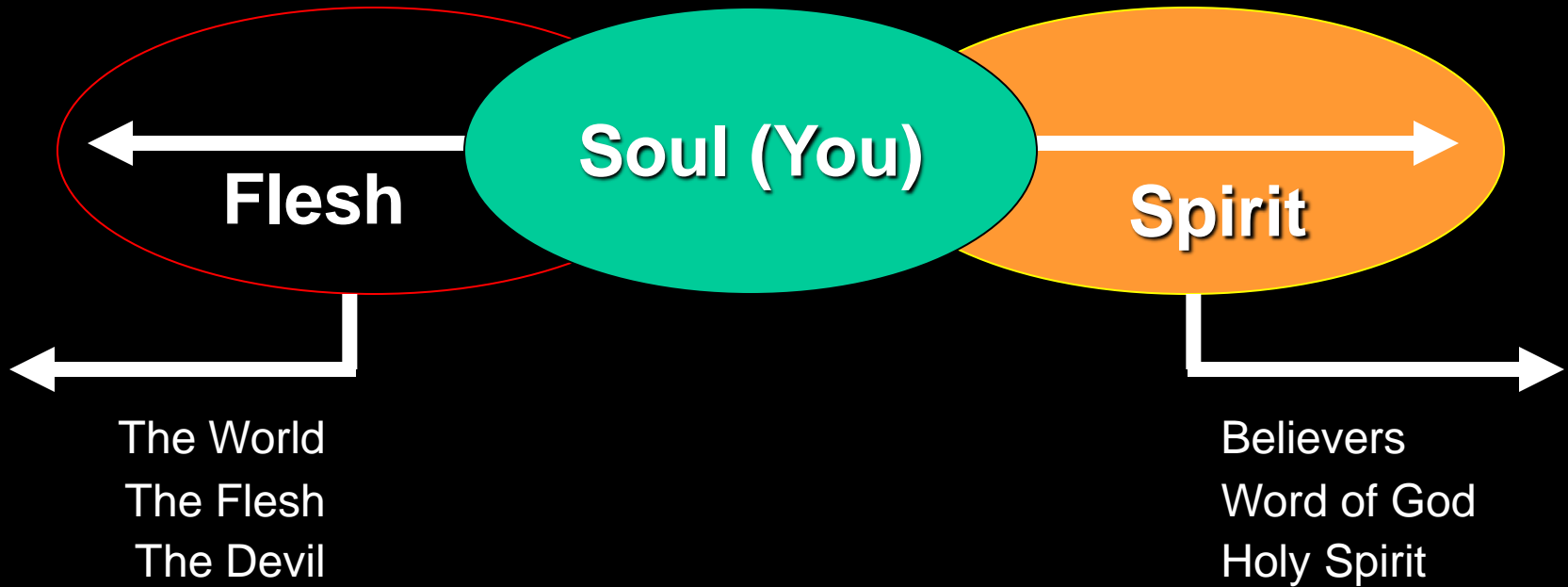
Heart

Emotionally Driven

Decision Making



The Battle



“greater is he that is in you, than he that is in the world.”

(1 John 4:4)

What About Eve?

27 So God created man in his own image, in the image of God created he him; male and female created he them.

Gen 1:27

God In His resemblance In His resemblance Man Alpha & Omega God Created out of nothing

אלהים Eloheim	בצל tseh-lem	בצלמו tseh-lem	האדם adam	את ?	אלהים Eloheim	ויברא bara
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him	created out of nothing	female	male	him	created out of nothing
אתם: 'eth	ברא bara	ונקבה neqebah	זכר zakar	אתו 'eth	ברא bara

28 And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

29 And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat.

Genesis 1:28-29

30 And to every beast of the earth, and to every fowl of the air, and to every thing that creepeth upon the earth, wherein there is life, I have given every green herb for meat: and it was so.

31 And God saw every thing that he had made, and, behold, it was very good. And the evening and the morning were the sixth day.

Genesis 1:30-31

The Bible

Basic **I**nformation **B**efore **L**eaving **E**arth

Thy word is true from the beginning

Psalm 119:160



The Book of Genesis

In the beginning...
מֵהֶלֶק אֵרַב תִּיבָרֵם