

# Somatic Theology

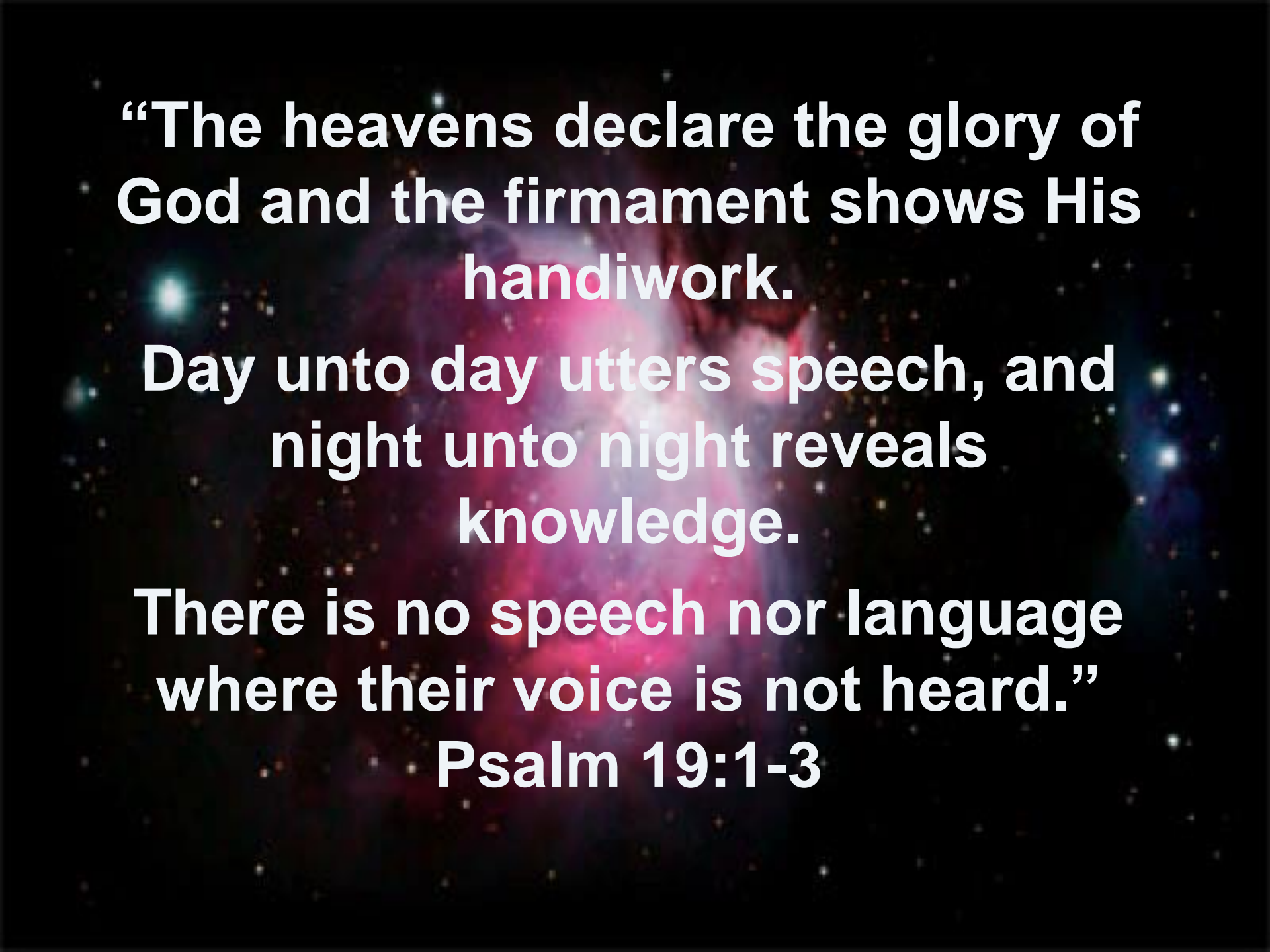
*The Biology of Holiness*

*LR Wing, PhD*

*luwing@calvarychapel.com*

# PSALM 19 & 139





**“The heavens declare the glory of  
God and the firmament shows His  
handiwork.**

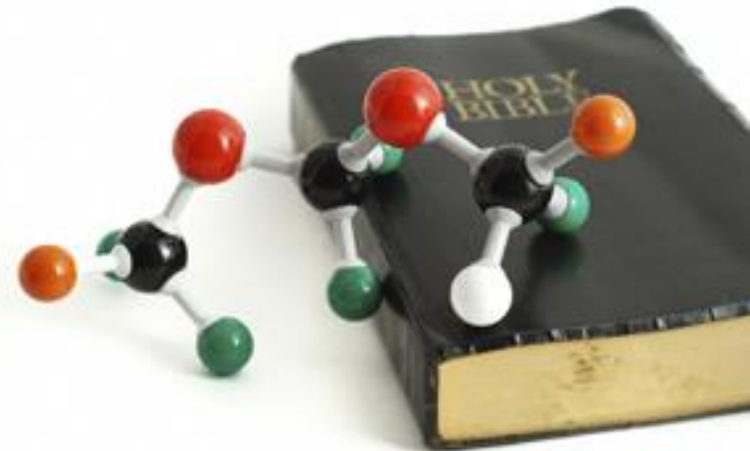
**Day unto day utters speech, and  
night unto night reveals  
knowledge.**

**There is no speech nor language  
where their voice is not heard.”**

**Psalms 19:1-3**

# *Revelation of God...Psalm 19*

- 1. General Revelation - CREATION (1-6)*
- 2. Special Revelation - WORD OF GOD (7-11)*
- 3. Personal Revelation - HEART (12-14)*





**His Word...**

**“The Law of the Lord is perfect, converting the  
soul...” v.7**

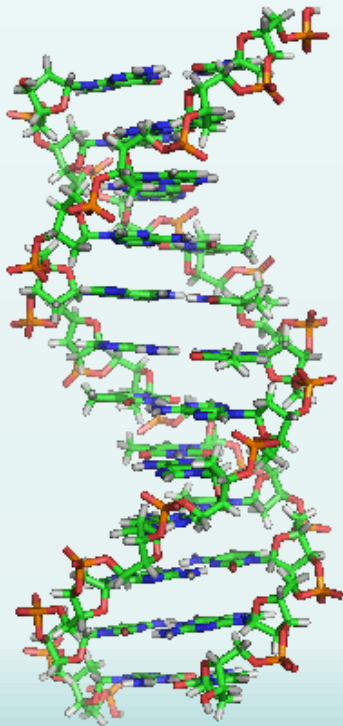
**Your heart...**

**“Who can understand his errors, cleanse from  
presumptuous sins...” v.12**

**“Let the words of my mouth, the meditation of  
my heart, be acceptable in Your sight, O Lord,  
my strength and my redeemer” v.14**



# Early life stress changes the way our genes function – *Psalm 139, “fearfully, wonderfully made”*



# SOMATIC THEOLOGY

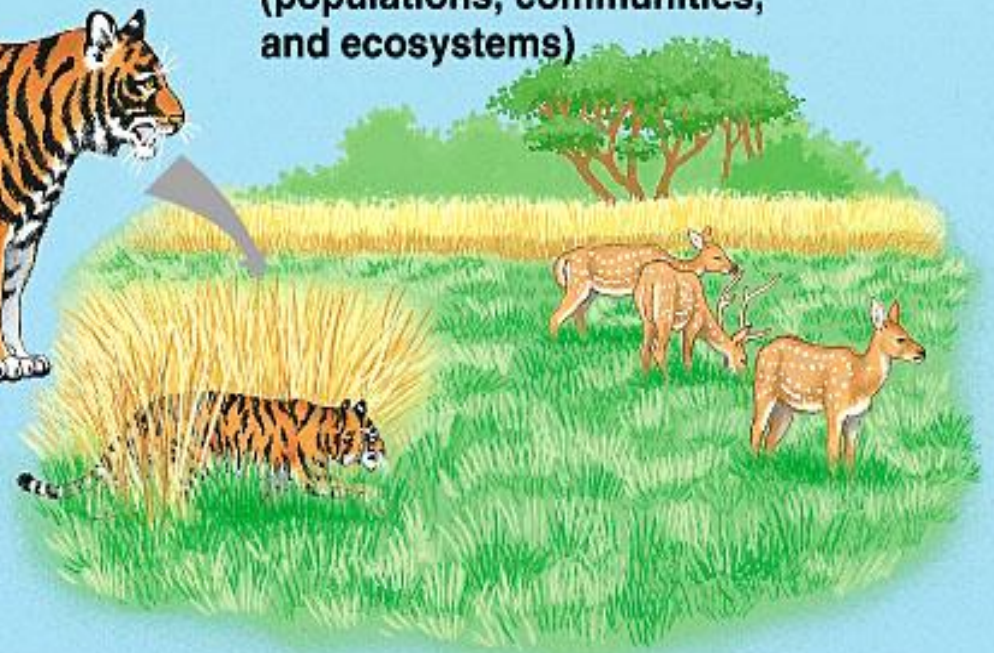
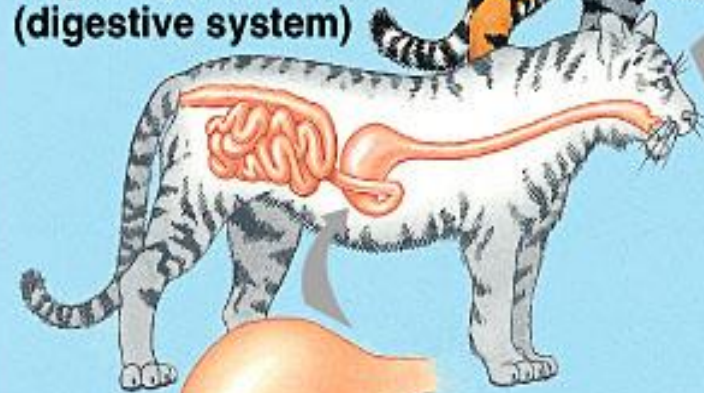
**Somatic** - of, relating to, or affecting the body

**Theology** - the study of the nature of God and religious belief

**Organism level**  
(consisting of many  
organ systems)

**Higher levels**  
(populations, communities,  
and ecosystems)

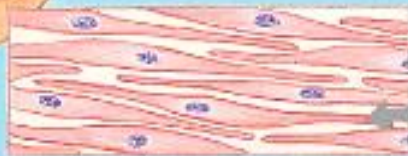
**Organ system level**  
(digestive system)



**Organ level**  
(stomach)

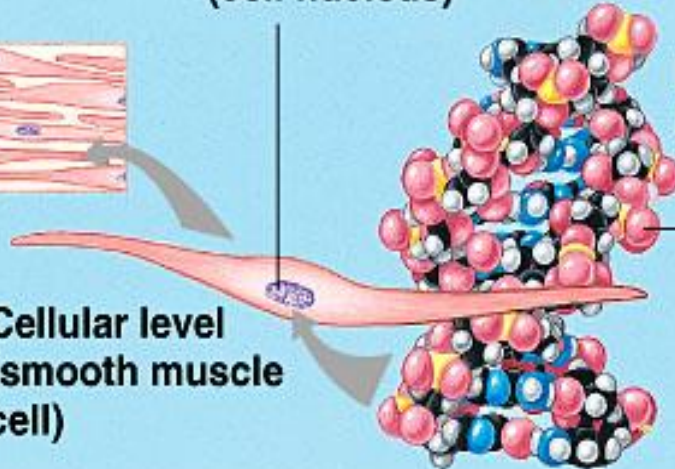


**Tissue level**  
(smooth muscle  
tissue)



**Organelle level**  
(cell nucleus)

**Cellular level**  
(smooth muscle  
cell)



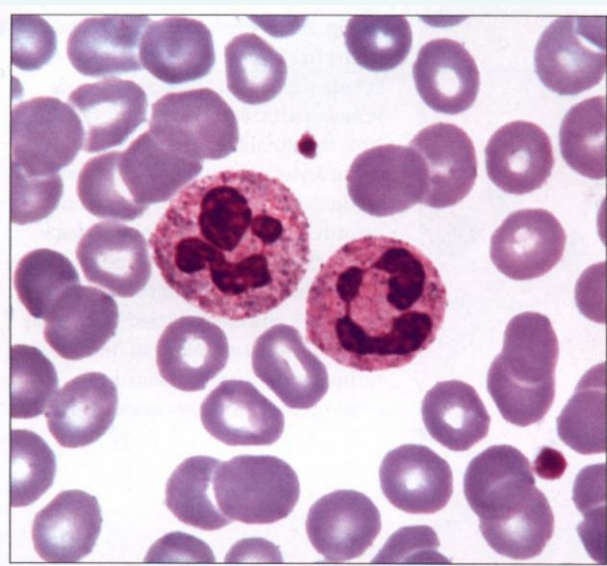
**Molecular level**  
(DNA)

**Atomic level**  
(oxygen)

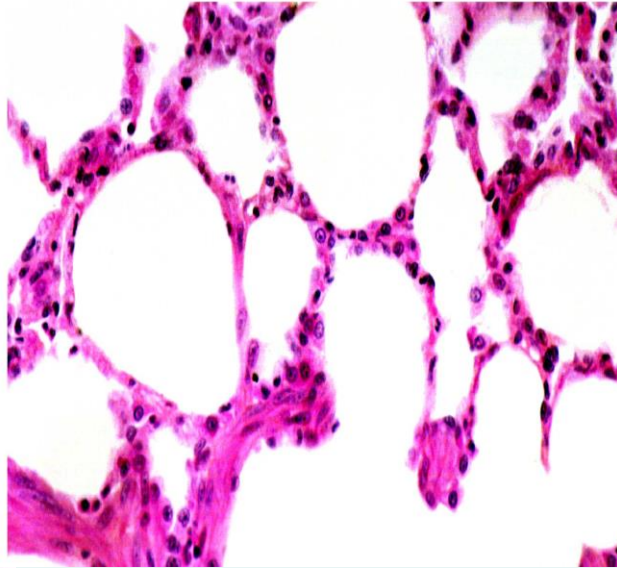




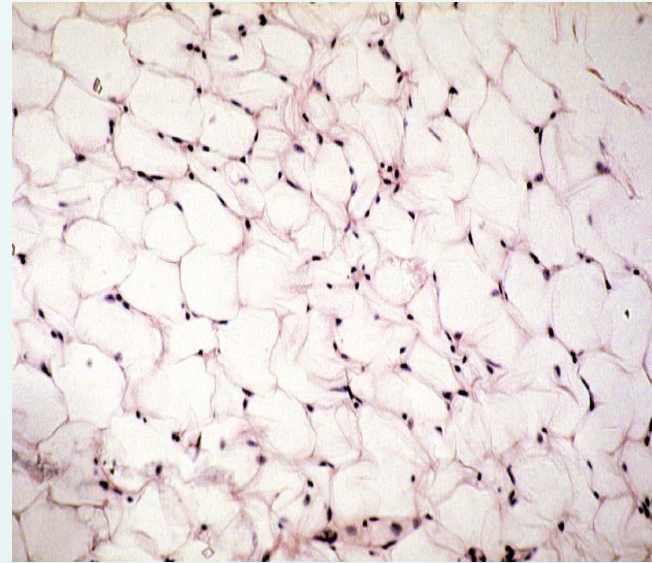
# Tissues



Blood

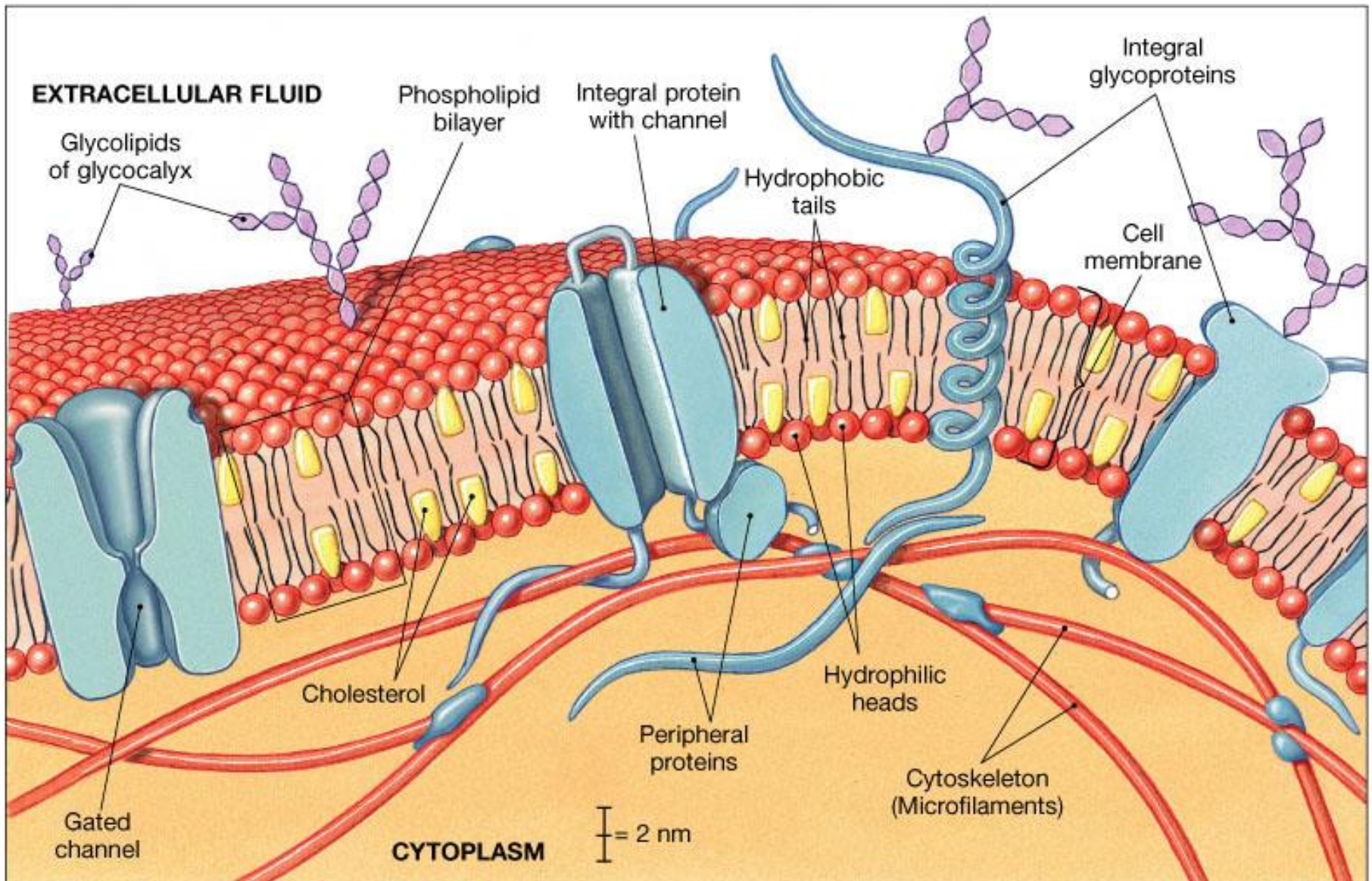


Lung



Fat

# Holiness = Cell Membrane



# Holy

Set apart,  
Useful to God,  
To distinguish, cut, separate, dissect, purify,  
DISCERN

# Somatic Theology

Olfaction and the 'Aroma of Rest'

Adrenaline Addiction

Clean and Unclean

Leaven

Blood and *Nephesh*

Leprosy

Gene Editing

Epigenetics

Cannabis, Opioids, CAR-T Therapy



# Leviticus

Handbook of Holiness for a newly redeemed  
nation written by Moses

Third Book of the Torah

30-day Prescription for Holiness

*'And He called'*

85% of the book is God speaking

## Leviticus 20:26

“And you shall be holy to Me, for I  
the Lord am holy, and have  
separated you from the peoples,  
that you should be Mine.”

# Burnt Offering – *United to Christ*

Leviticus 1:9

“...And the priest shall burn all on the altar as a burnt sacrifice, an offering made by fire, a sweet aroma to the Lord.”

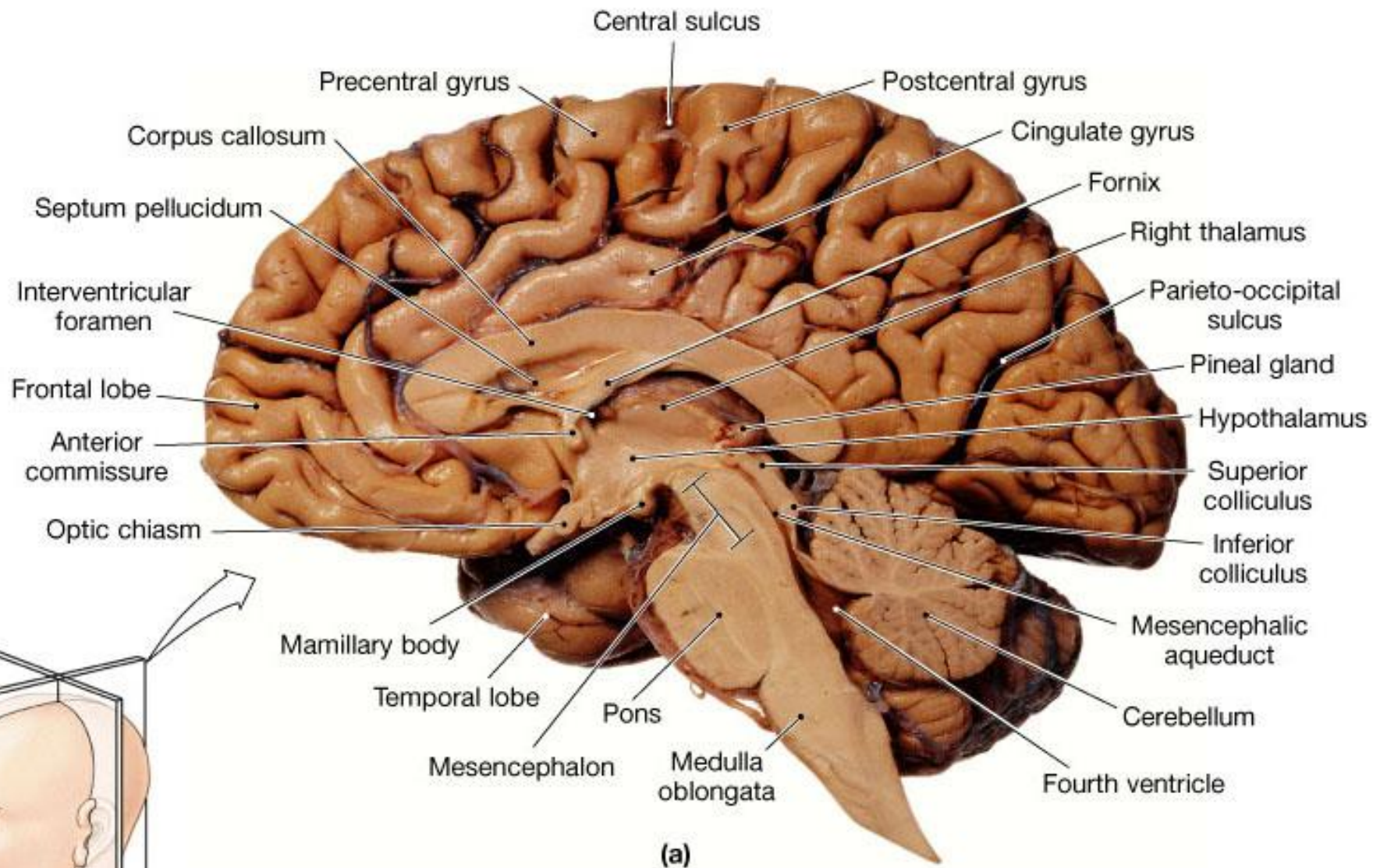
# *Holocaust*

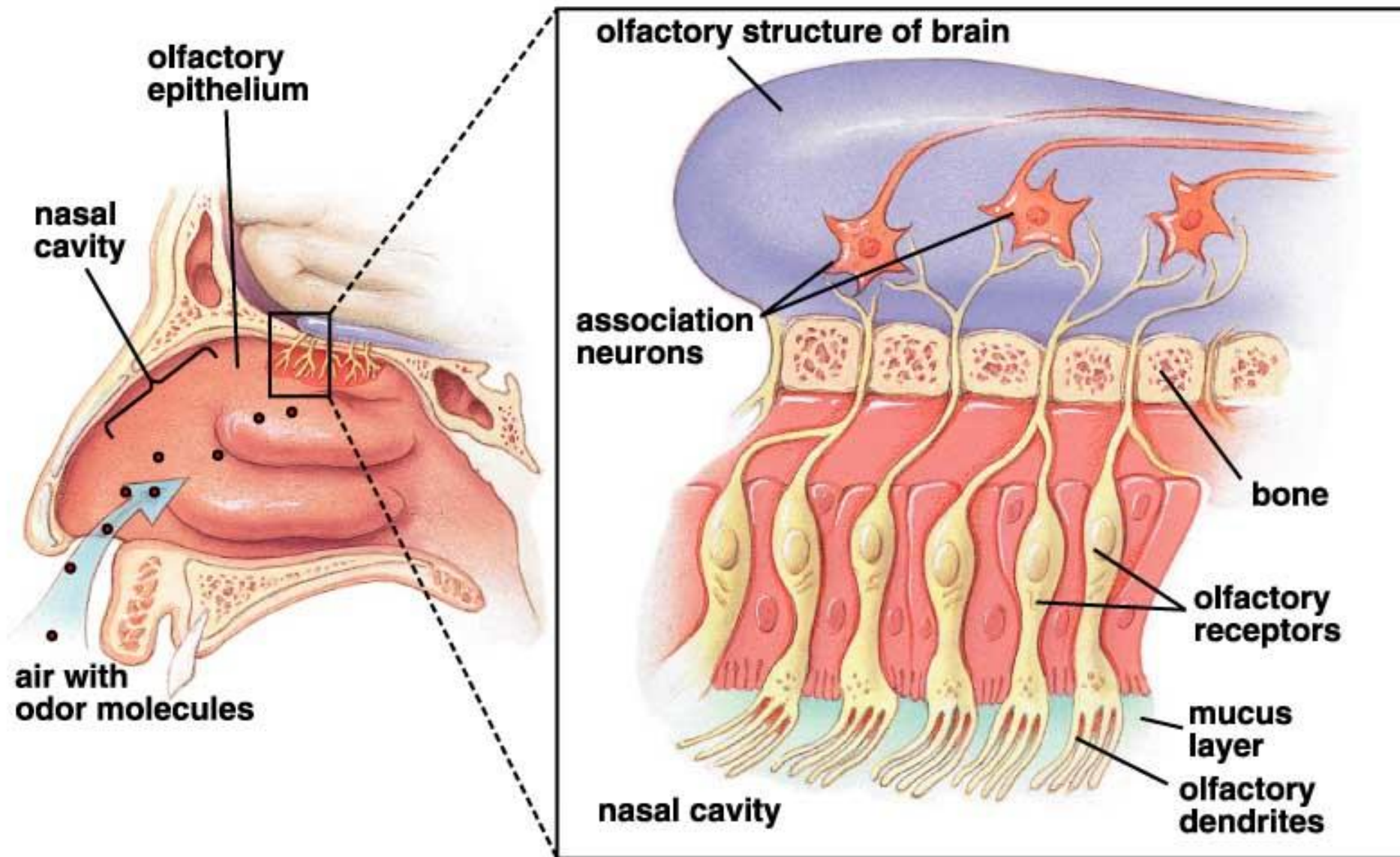
*'Ola' – 'What Ascends' - Savor of Rest*

Olfactory Lobe and the Amygdala

Emotional Memory







# AROMA OF LIFE...

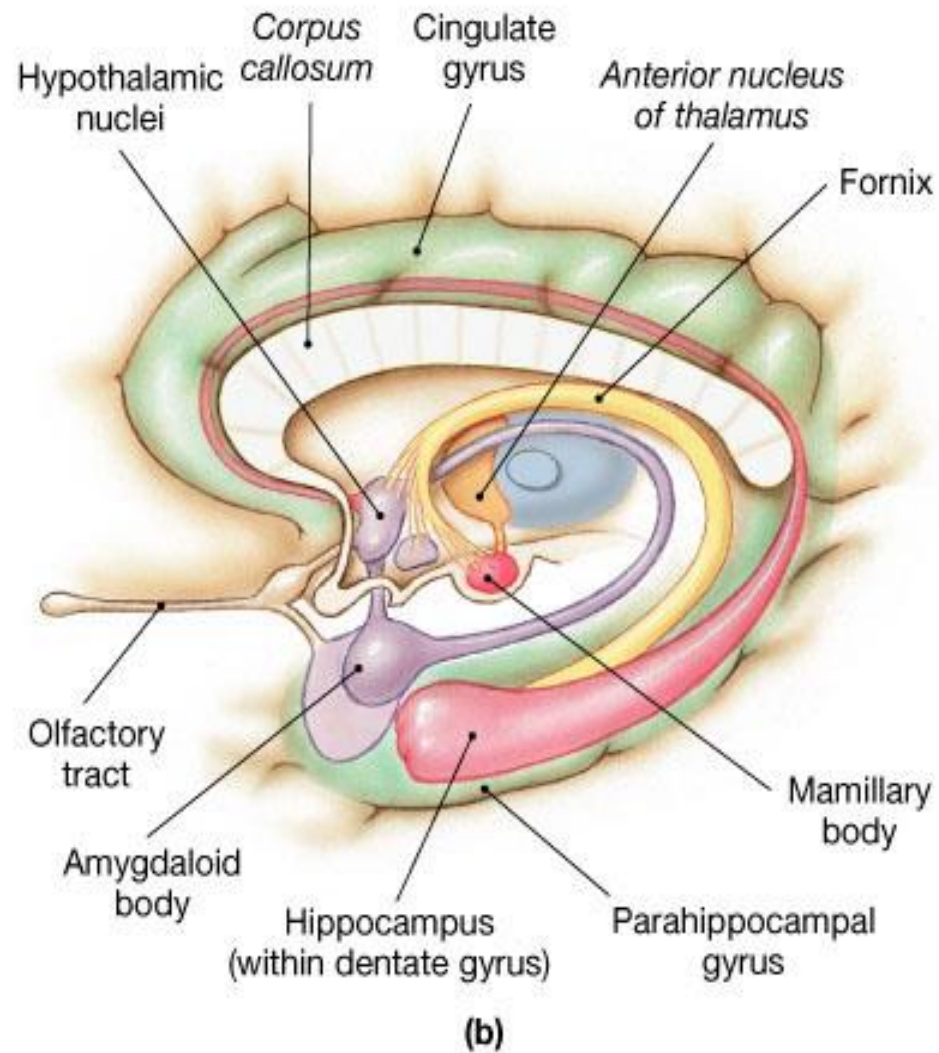
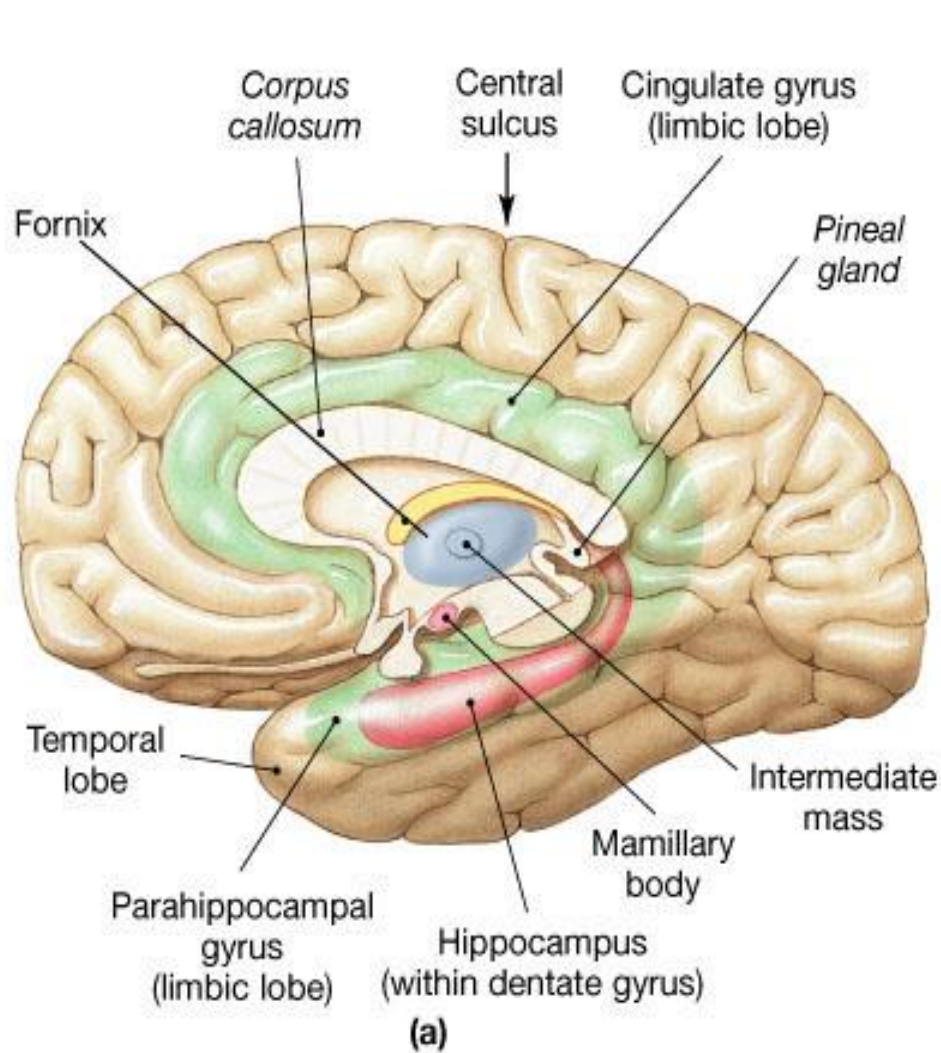
“For we are to God the fragrance of Christ among those who are being saved and among those who are perishing.

To the one *we are* the aroma of death *leading* to death, and to the other the aroma of life *leading* to life. And who *is* sufficient for these things?

2 CORINTHIANS 2:15,16



# Olfaction and Amygdala





# Leaven, Honey...Salt

“...for you shall burn no leaven nor any  
honey in any offering to the Lord  
made by fire...

And every offering of your grain offering you  
shall season with salt”

Leviticus 2:11-13

# Leaven

‘yeast’ – ‘fastest growth rate of any known microorganism’



# LEAVEN OF THE PHARISEES...

“Take heed, beware of the leaven of  
the Pharisees  
and the leaven of Herod.”

Mark 8:11-21

Leaven is Legalism

- limits God (Ps 78:41)
- outward holiness (Heb 10:22)

# Peace Offering

## ENDING ADRENALINE ADDICTION

Leviticus 3:4, 10, 15

“the two kidneys and the fat that is on them by the flanks, and the fatty lobe attached to the liver *above the kidneys*, he shall remove;”

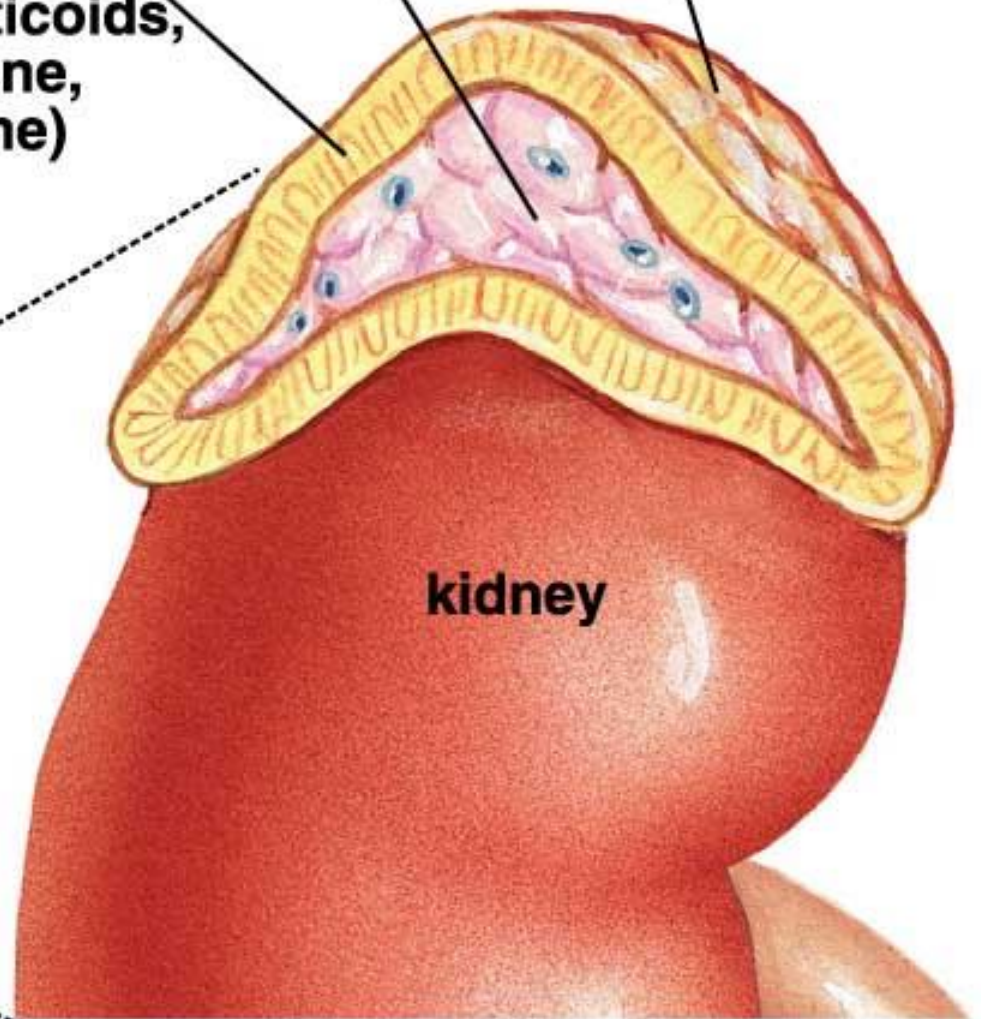
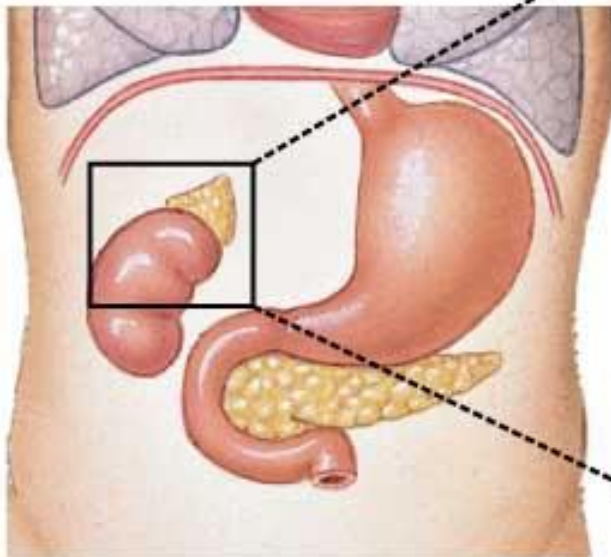


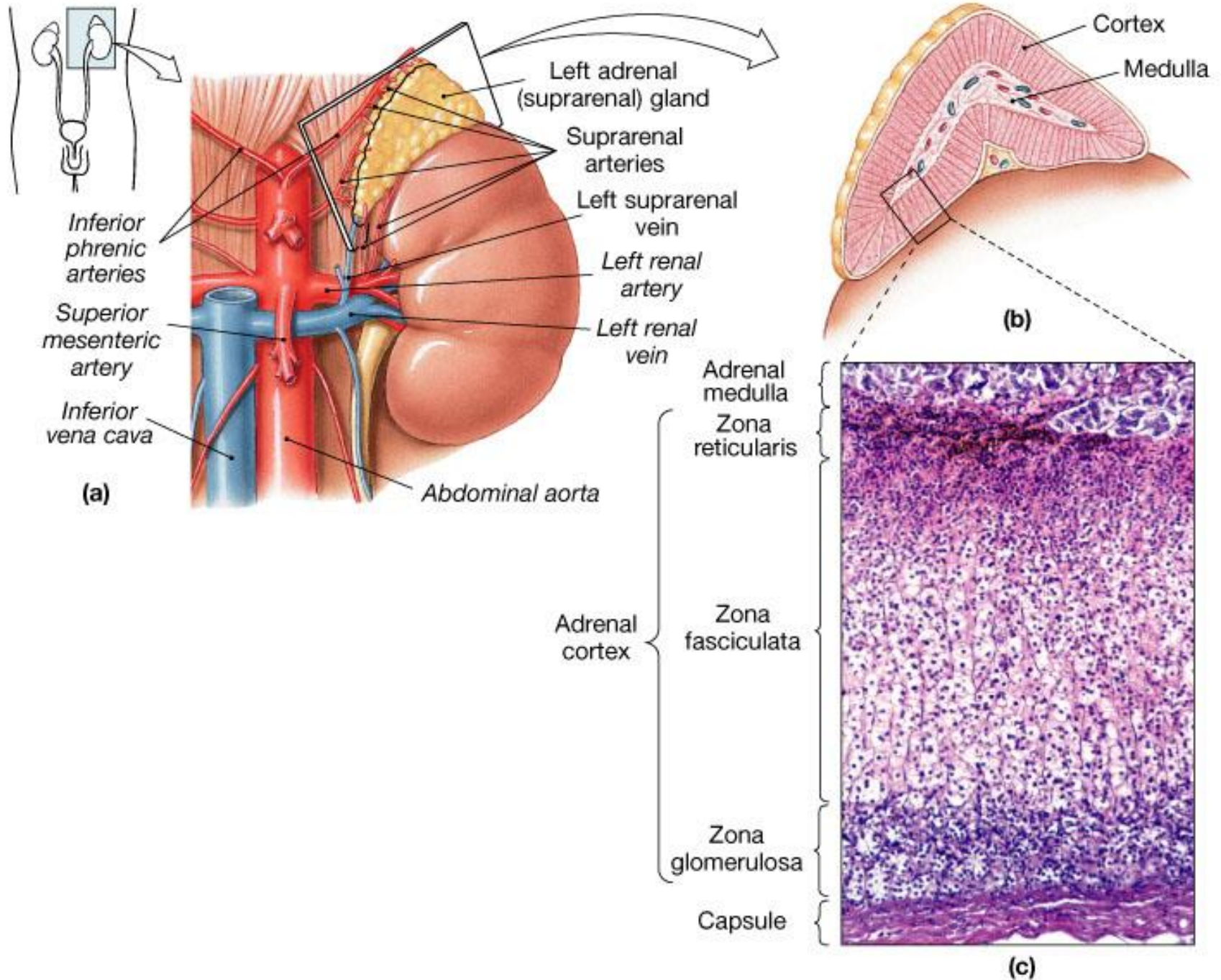
**adrenal medulla  
(epinephrine,  
norepinephrine)**

**adrenal  
gland**

**adrenal cortex  
(glucocorticoids,  
testosterone,  
aldosterone)**

**kidney**

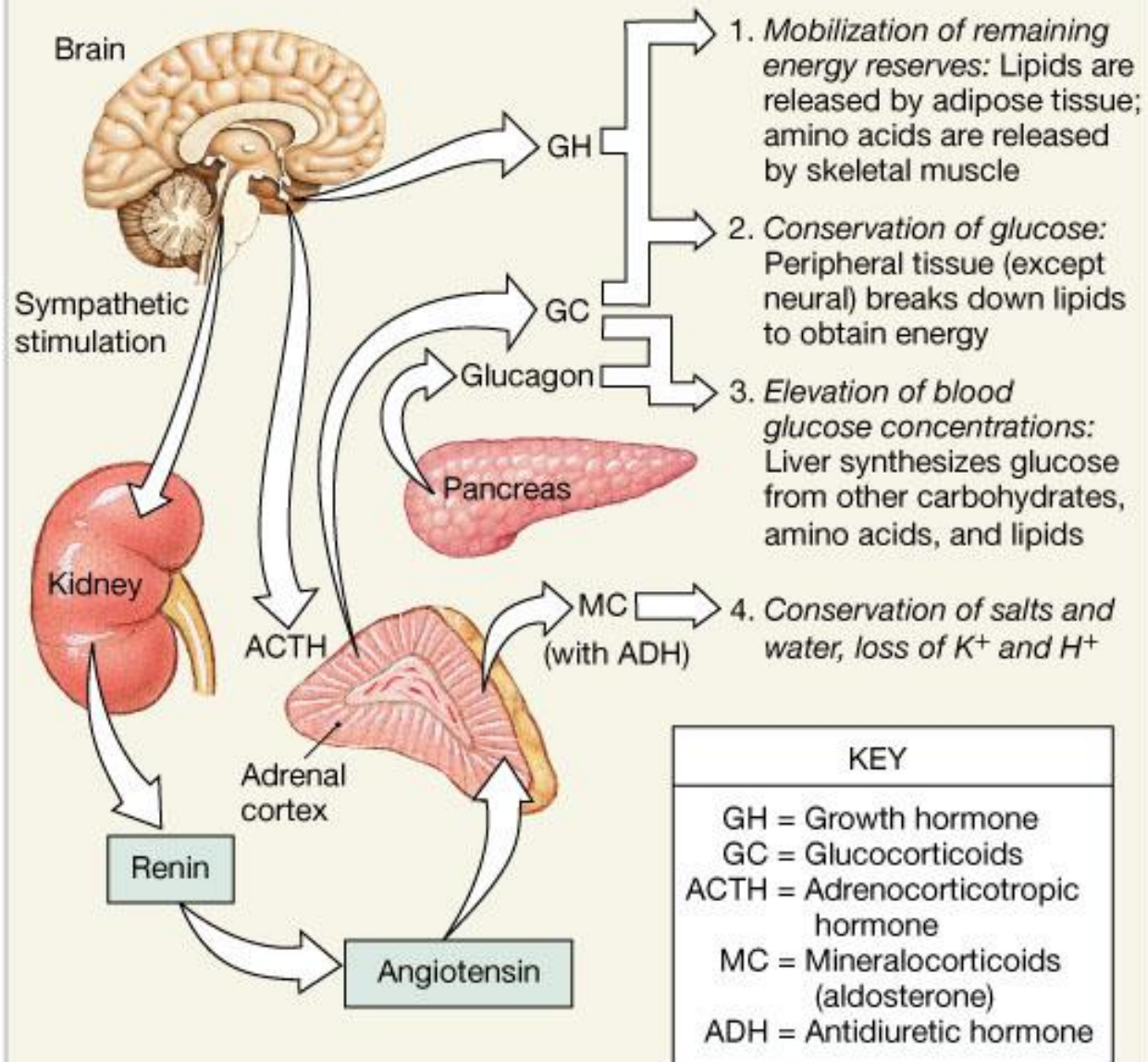






## Resistance Phase

### Long-term metabolic adjustments

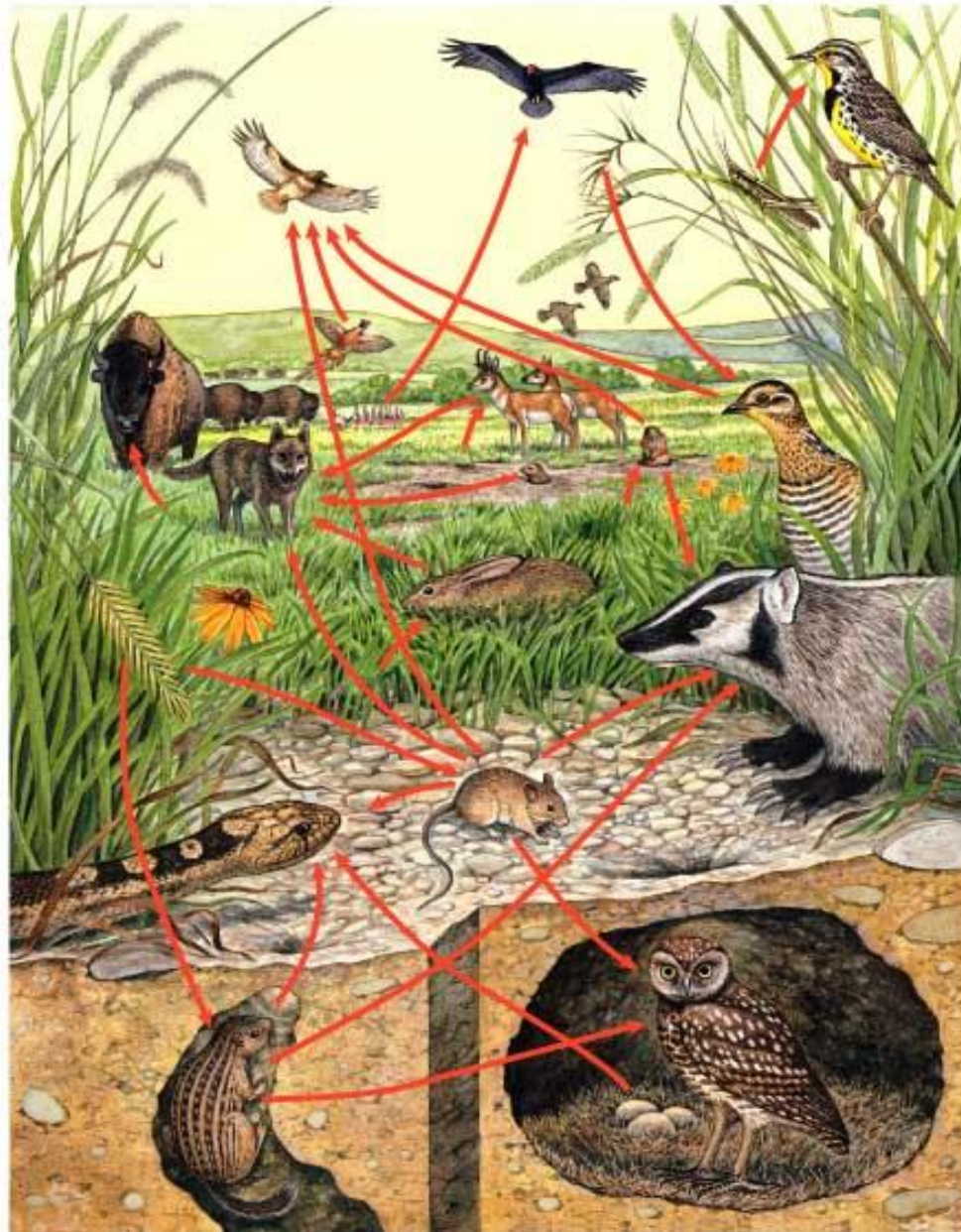


# Clean & Unclean

“to distinguish between the unclean and the clean, and between the animal that may be eaten and the animal that may not be eaten.”

Leviticus 11:47

# Lev 11: Clean vs. Unclean





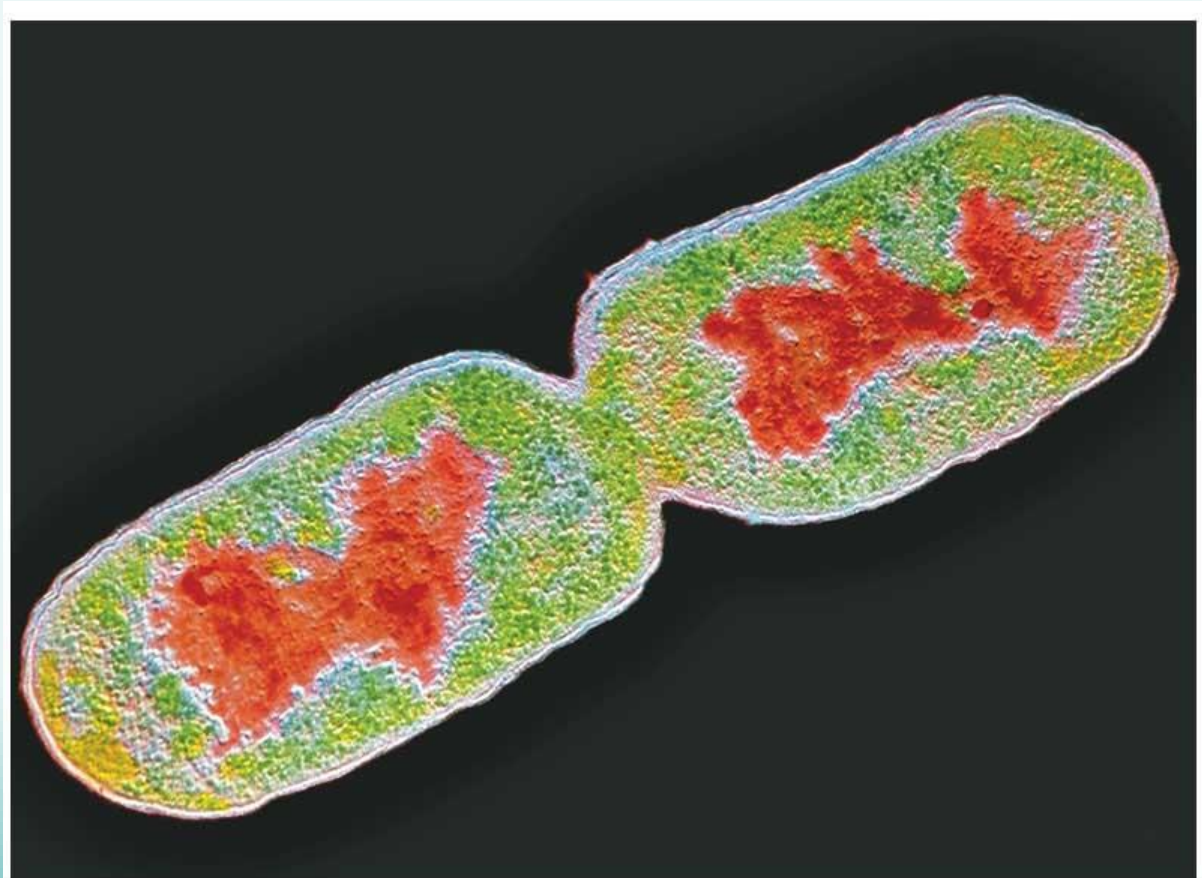
# Gut Microbes and Cancer

“microbes in the gut might not be idle bystanders, rather, they may be critical for helping patients respond to new drugs called “immune checkpoint inhibitors” that help immune cells recognize tumor cells and attack them.”

*Could Your Gut Microbes Hinder Your Cancer Treatment? <https://www.rdmag.com/news/2018/07>*

# Biology of Leprosy

LEPROSY – *Mycobacterium leprae*, slowest growing microorganism known to man...



## Leprosy...

“Now the leper on whom the sore is,  
his clothes shall be torn and his  
head bare: and he shall cover his  
mustache, and cry, ‘Unclean!  
Unclean!...his dwelling shall be  
outside the camp’  
Leviticus 13:44, 45

# “Athlete for God”

Father Damien, Molokai, Hawaii







# Death from Leprosy or TB?

**“Co-infection of *Mycobacterium tuberculosis* and *Mycobacterium leprae* in human archaeological samples: a possible explanation for the historical decline of leprosy”**

Donoghue et al, *Proc. R. Soc.* **272**, 389-394, 2005

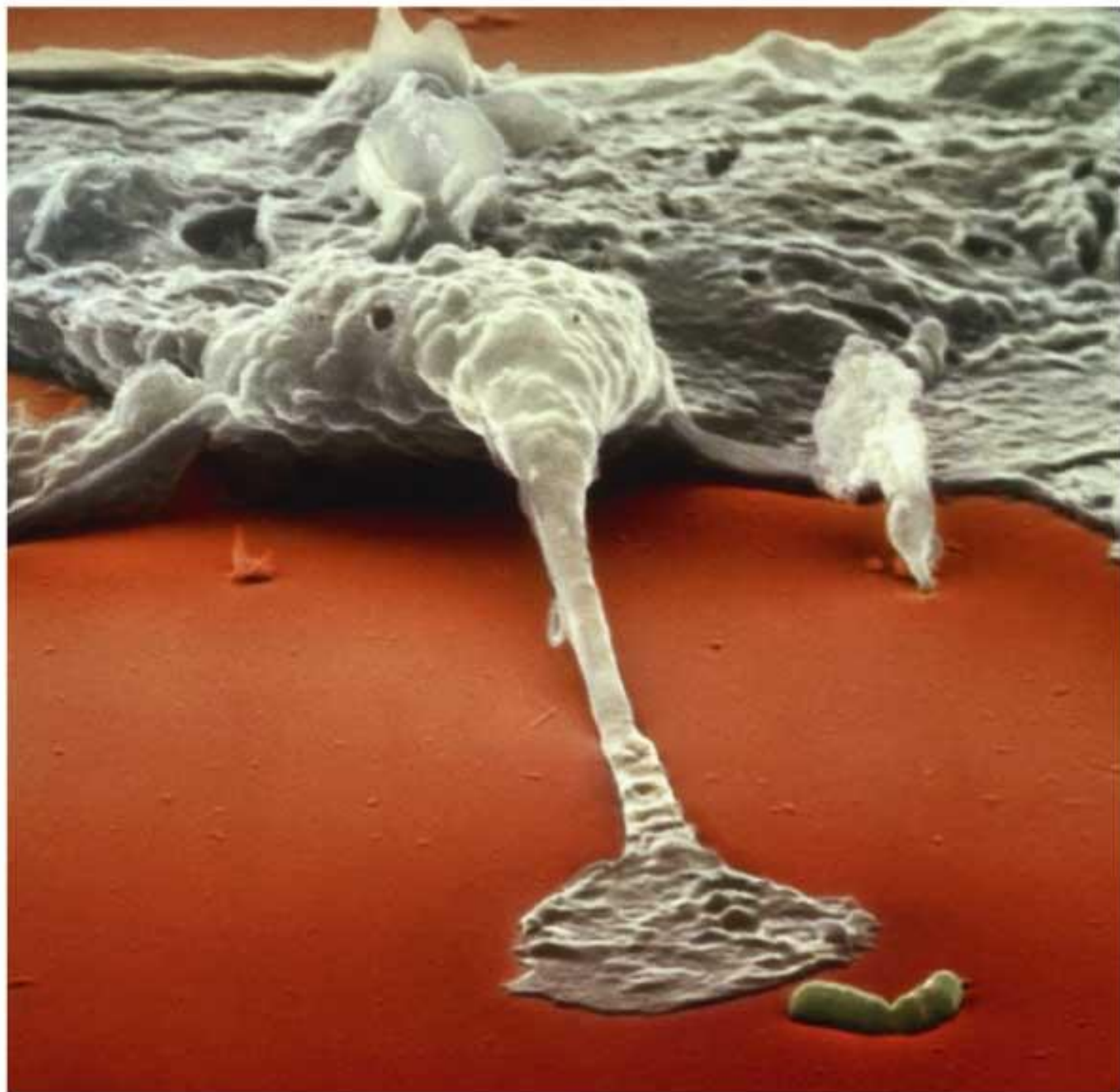
## Donoghue et al, 2005

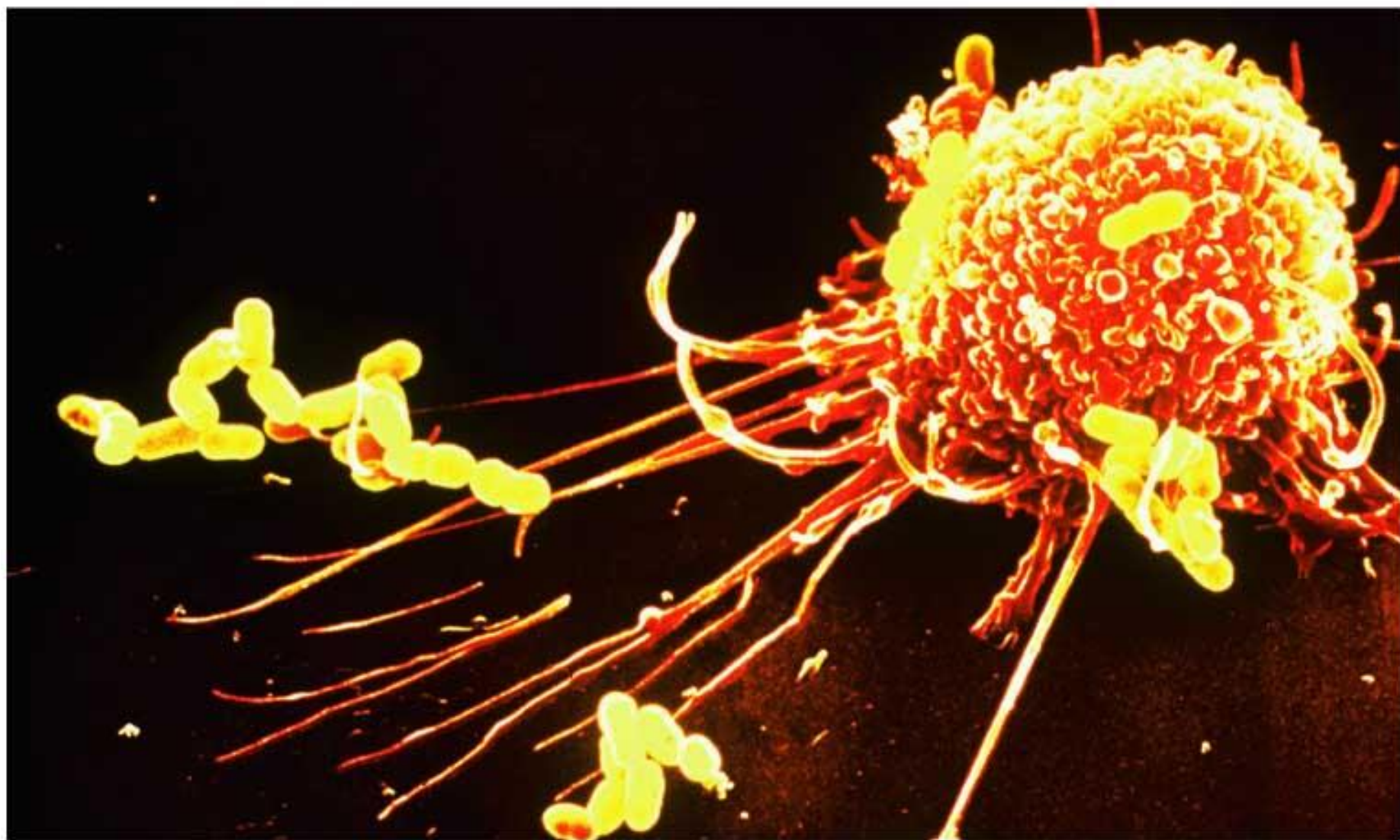
“One of the effects of leprosy, particularly owing to the fear it engendered in antiquity, is that these individuals would become isolated and therefore be more likely to suffer from poor nutrition and a weakening of the immune system, thereby paving the way for opportunistic co-infection or the resurgence of a latent infection.”

## Donoghue et al, 2005

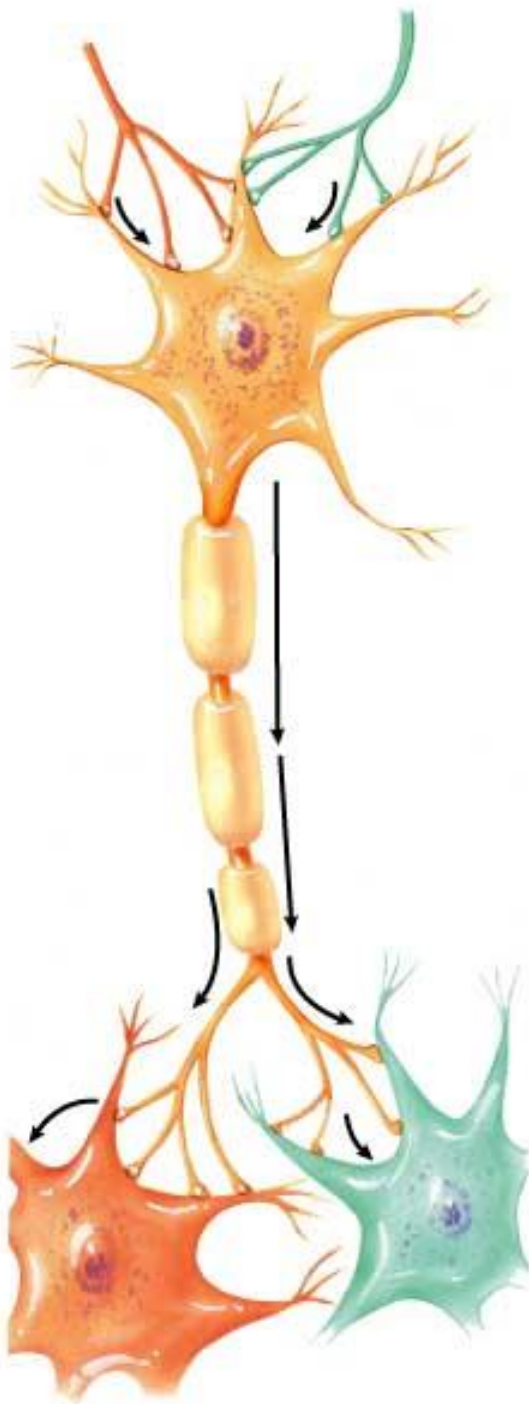
“It should not be forgotten that individuals suffering from leprosy often suffer social isolation and stigma (Bainson & Van den Borne 1998), especially in the past (Cule 2002).

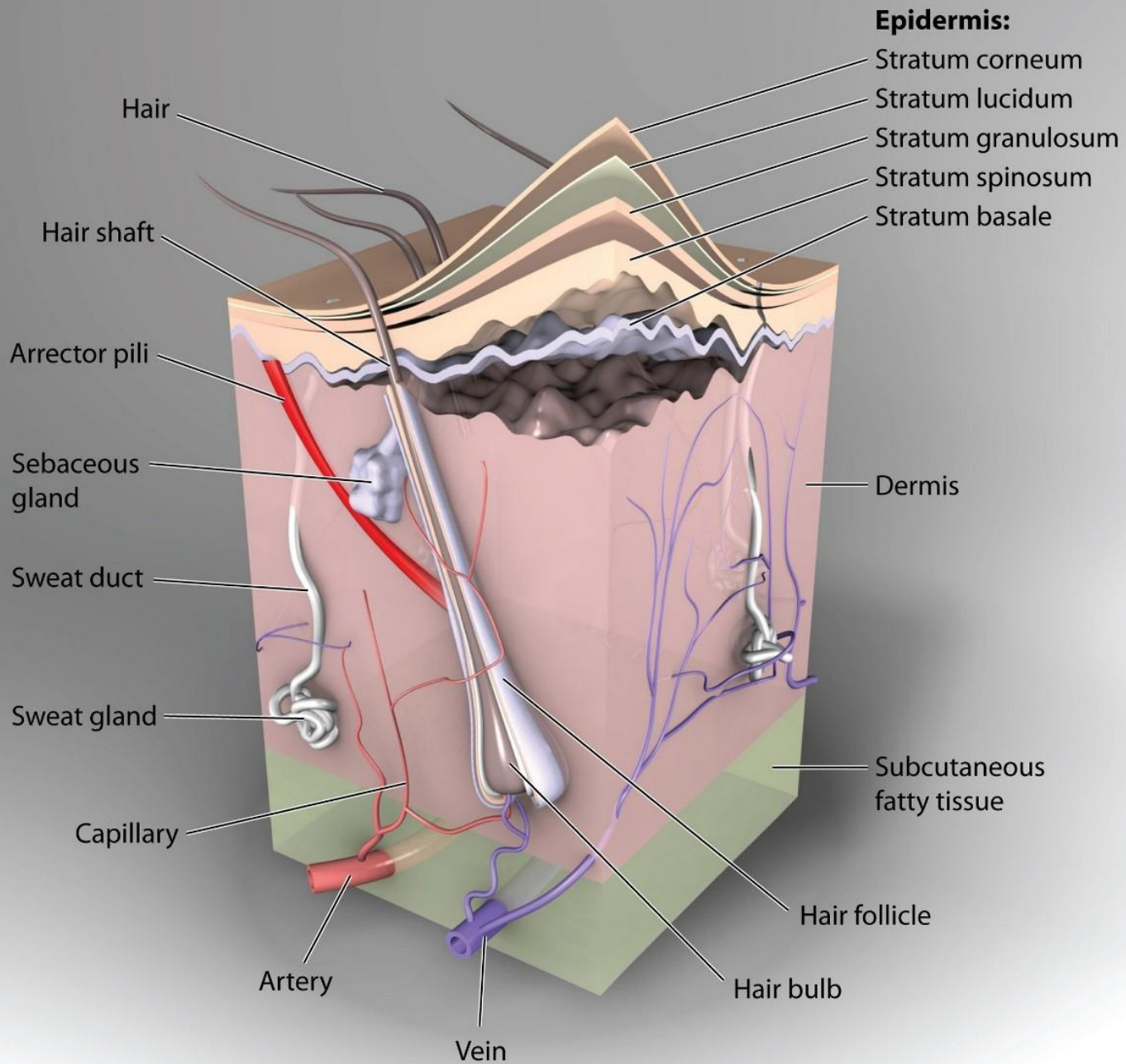
This can lead to physical and mental stress that has an adverse effect on resistance to infectious diseases.”

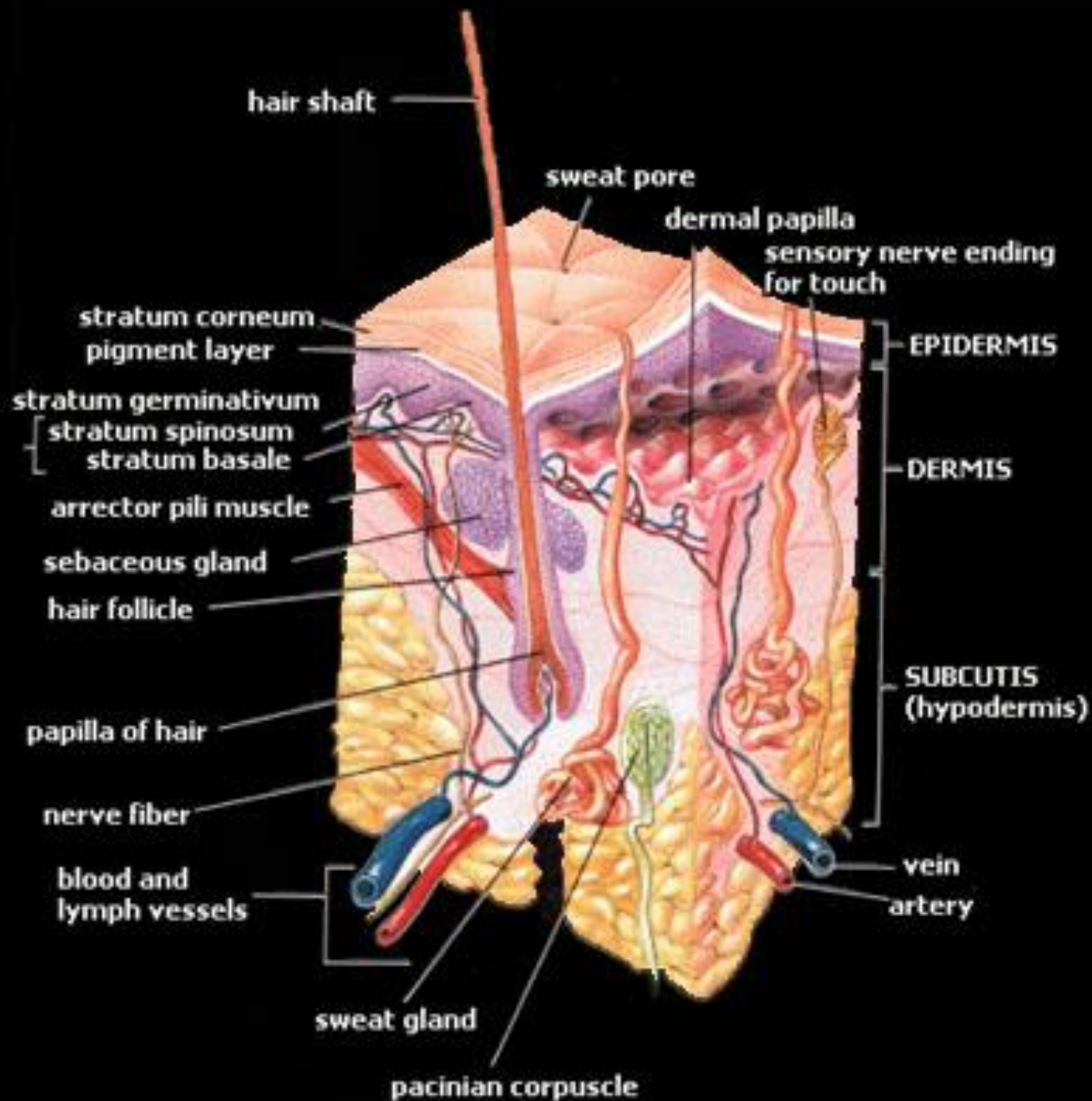






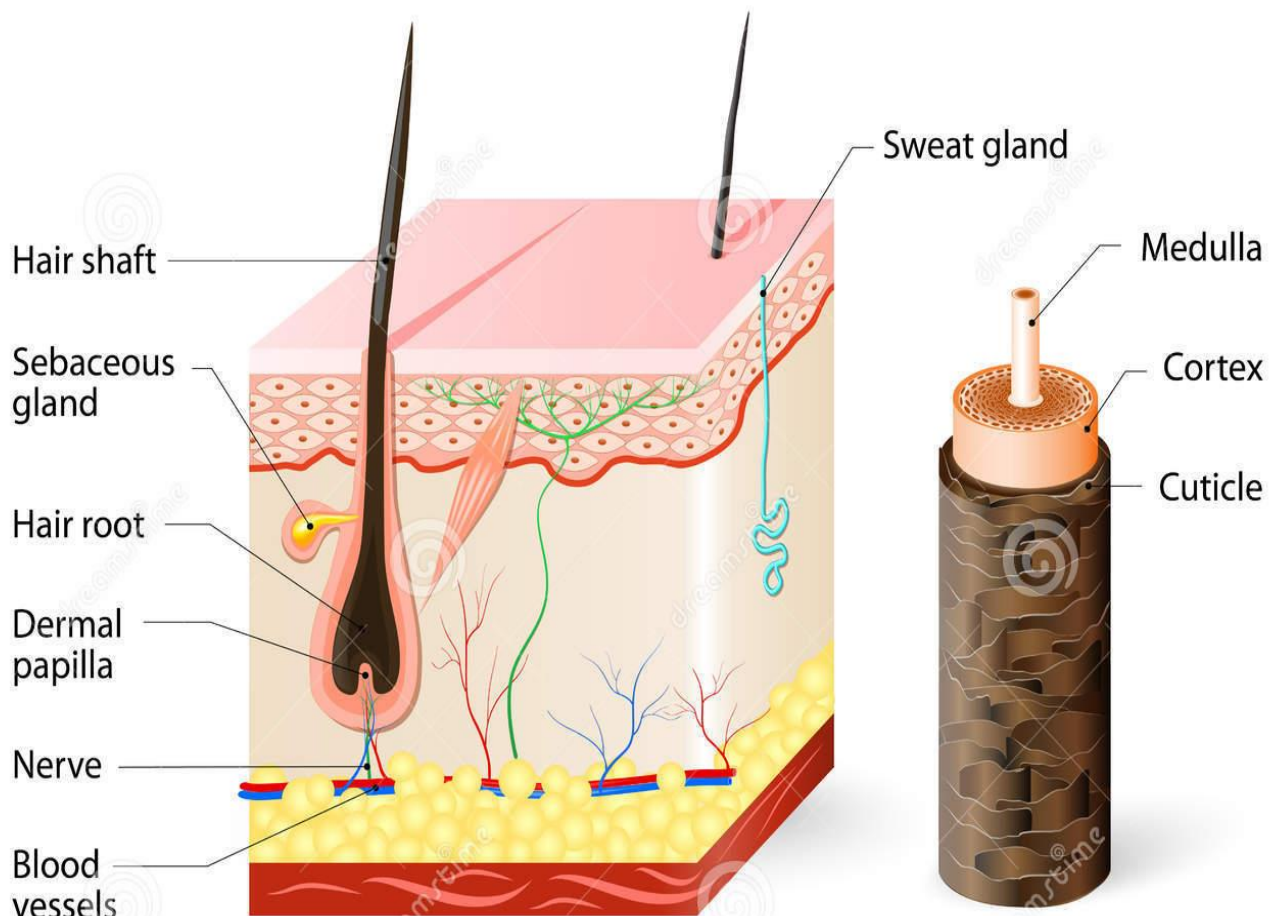






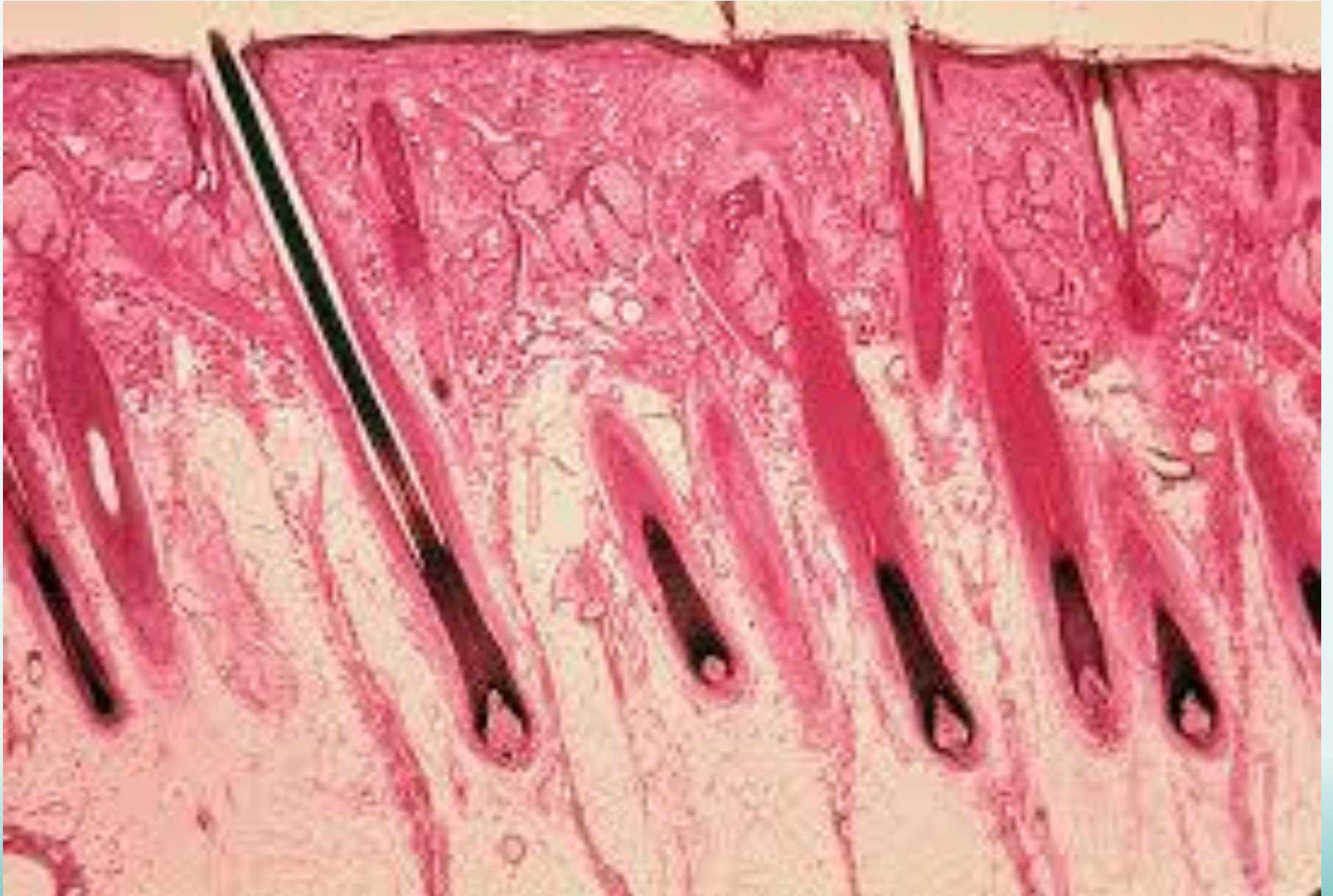
Lev 13:3, “The priest shall examine the sore on the skin of the body; and if the hair on the sore has turned white, and the sore appears *to be* deeper than the skin of his body, it *is* a leprous sore. Then the priest shall examine him, and pronounce him unclean.

# HAIR ANATOMY



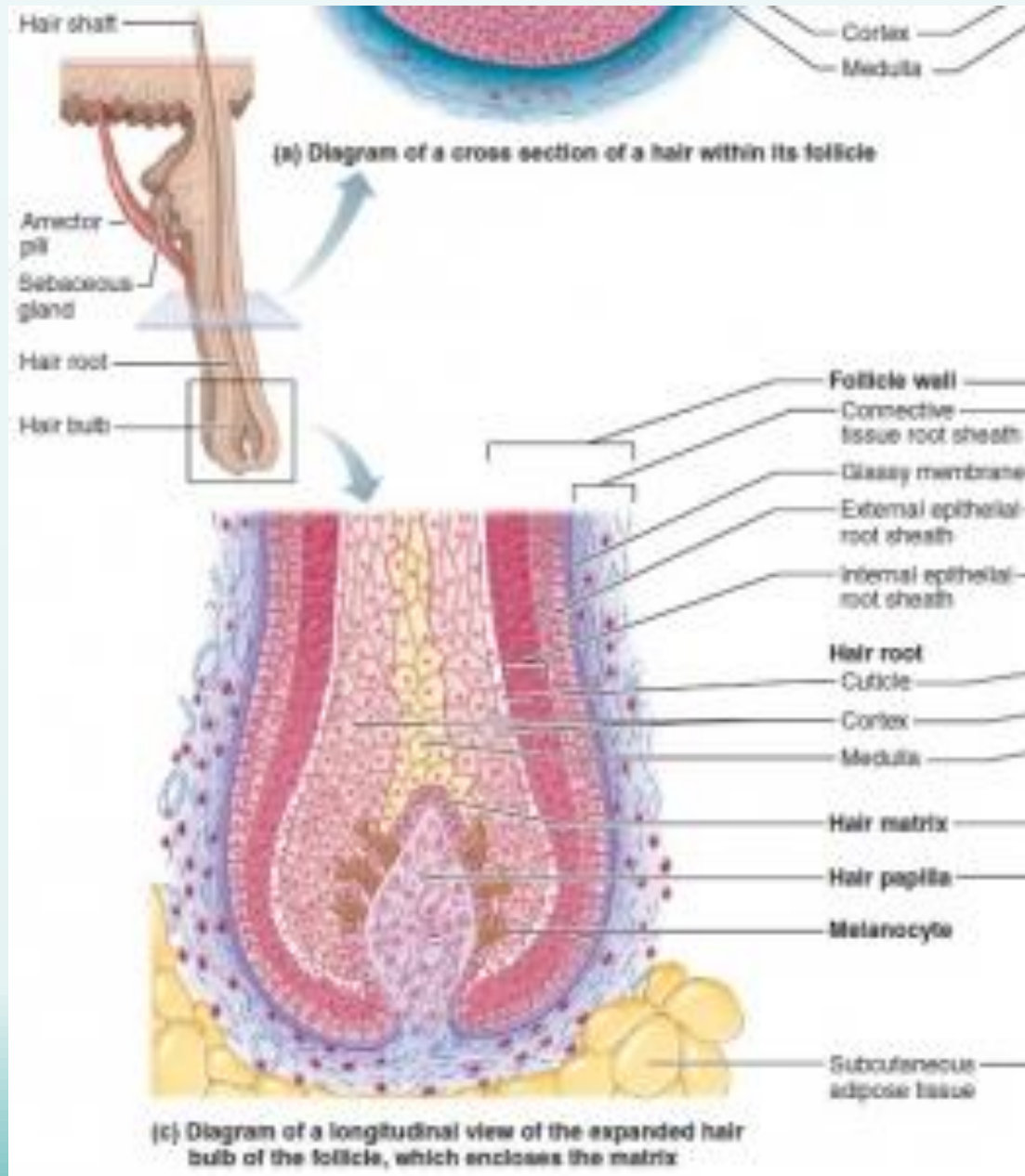


# Hair Follicle





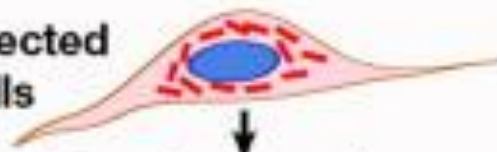
# Diagnosis of Leprosy



**Masaki et al, *Cell*152; 51–67, 2013**

**“Reprogramming Adult Schwann  
Cells to Stem Cell-like Cells by  
Leprosy Bacilli Promotes  
Dissemination of Infection.”**

**M. leprae infected  
Schwann cells  
(Adult nerve)**



↑ Developmental genes  
↓ Schwann cell genes

**↓ REPROGRAMMING**

**Progenitor  
Stem-like cells**



**Blood-Nerve barrier**

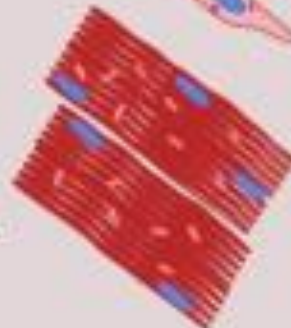
**Immune factors**

**1 DIRECT DIFFERENTIATION**

Infected  
smooth  
muscles



Infected  
skeletal  
muscles



**2 VIA MACROPHAGES**

Recruitment and  
bacterial transfer



Granuloma-like  
formation



Release of infected  
macrophages

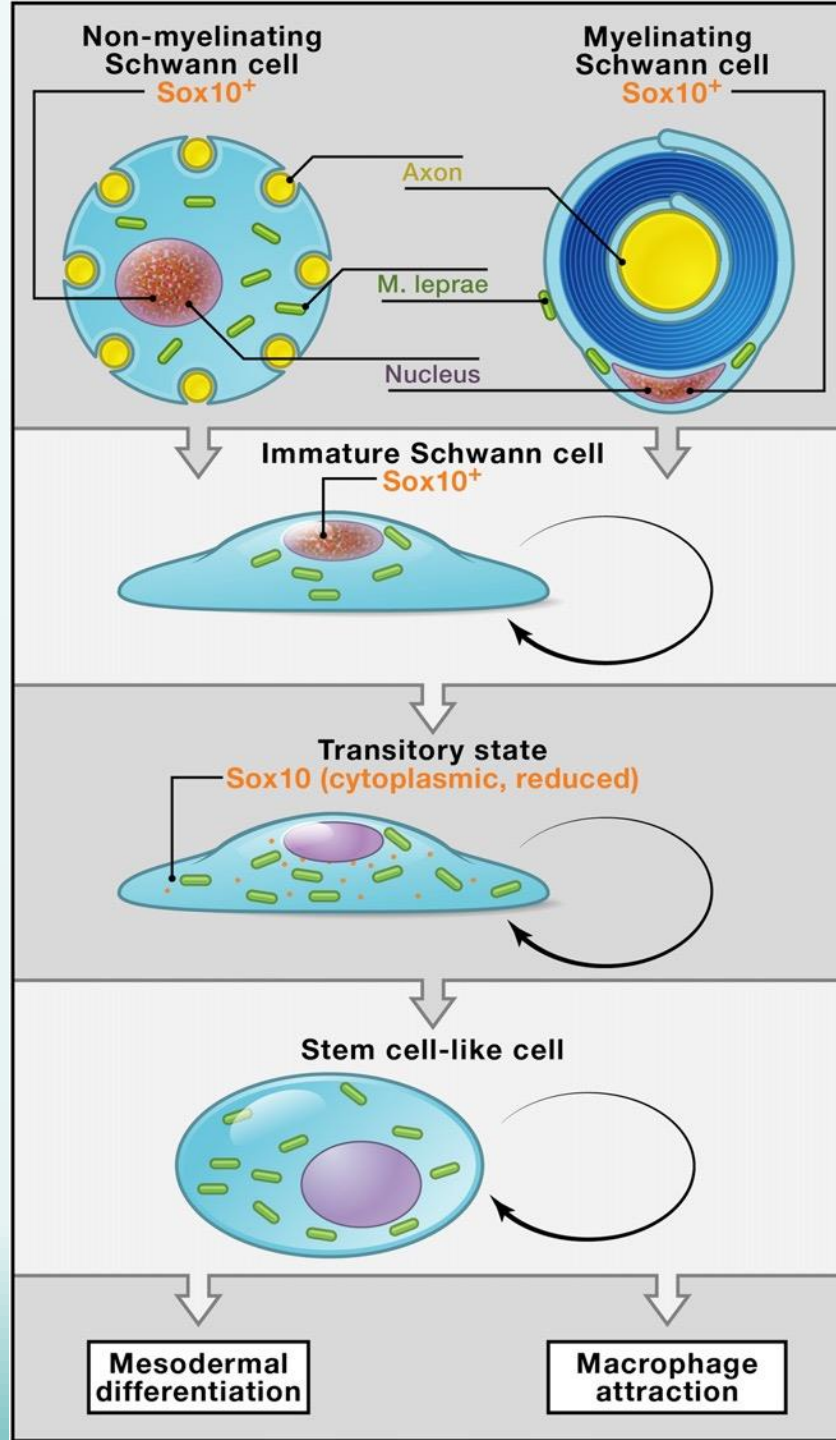


**BACTERIAL DISSEMINATION**

# **Mighty Bugs: Leprosy Bacteria Turn Schwann Cells into Stem Cells**

“Two aspects make this study (Malaki et al, 2000 particularly exciting: first, it shows that a pathogen is capable of exploiting the genomic plasticity of a highly specialized differentiated cell by *erasing its identity and reprogramming it*. Second, it provides plausible *mechanisms for pathogen dissemination during the course of leprosy*.”

*M Wagner, Cell 152, January 17, 2013*





# M. Leprae - stem cell generation...

Does the bacterium target the loss of Sox10, the single most important factor for reprogramming Schwann cell's identity?

Regeneration?

# Regeneration

“two living and clean birds, cedar wood,  
scarlet and hyssop....”

“And the priest shall command that one of  
the birds be killed in an earthen vessel over  
running water.”

Leviticus 14:4,5

# Justification

“And he shall sprinkle it seven times on him who is to be cleansed from the leprosy, and shall *pronounce* him clean, and shall let the living bird loose in the open field.”

Leviticus 14:7

# Sanctification

“He who is to be cleansed shall wash his clothes, shave off all his hair, and wash himself in water, that *he may be clean*. After that he shall come into the camp, and shall stay outside his tent seven days.”

Leviticus 14:8

# Contemporary Science on Lev 14

“Contemporary building consultants may see some logic in all this, but I'll never be convinced that killing a bird "in an earthen vessel over running water" (the details of the method-shaking or drowning?- are not specified) approach to certifying that a home is purified.”

*“Carpet Monsters and Killer Spores”, NP Money, 2004*



# Microbiology

“And when he who has a discharge is cleansed of his discharge, then he shall count for himself seven days for his cleansing, wash his clothes, and bathe his body in *running water*, then he shall be clean.”

Leviticus 15:13

# Neisseria gonorrhoeae

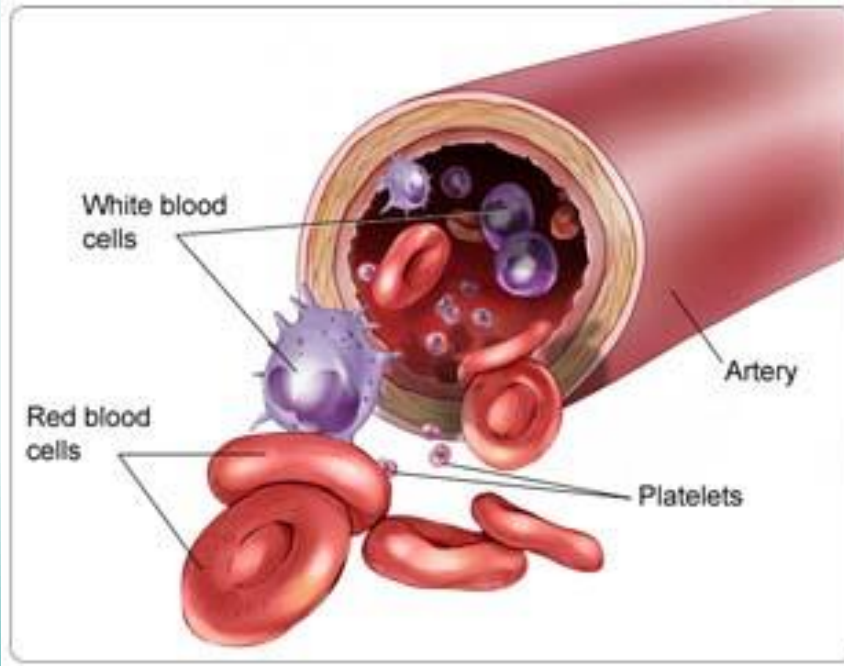
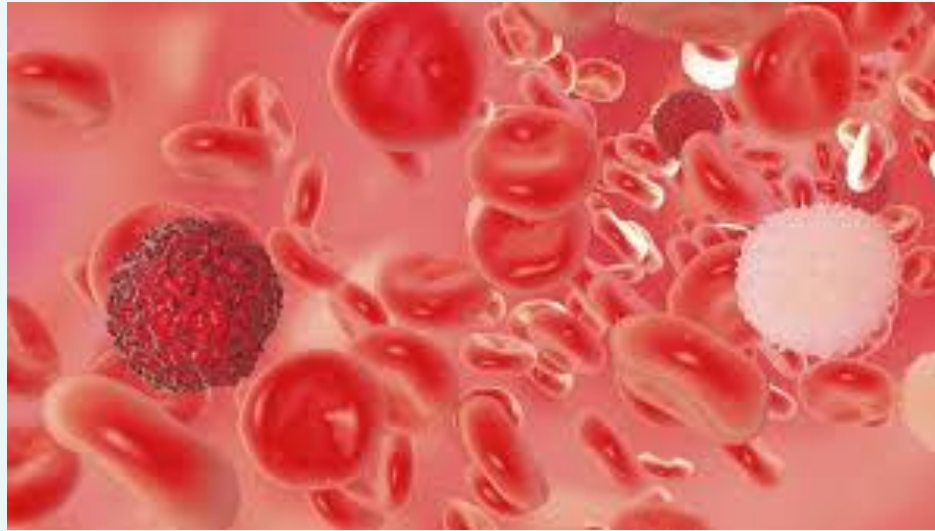
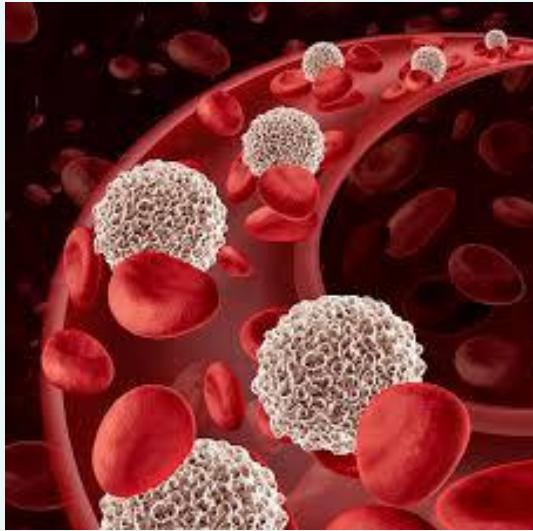


## Blood and *Nephesh*

“For the **life** of the flesh *is* in the blood, and I have given it to you upon the altar to make atonement for your **souls**; for it *is* the blood *that* makes atonement for the **soul.**”

Lev 17:11

# Blood – ‘life of the flesh’





# Love and the Law

“You shall not take vengeance, nor bear any grudge against the children of your people, but you shall love your neighbor as yourself: I *am* the LORD.”

Lev 19:18

*For all the law is fulfilled in one word, even in this: “You shall love your neighbor as yourself.” Gal 5:14*

# Playing God ...

## Mail-Order CRISPR Kits Allow Absolutely Anyone to Hack DNA

Experts debate what amateur scientists could accomplish with the powerful DNA editing tool—and whether its ready availability is cause for concern

<https://www.scientificamerican.com/2018>

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Escherichia coli HME63  
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Store @ 4C in Fridge  
Store @ -20C in Freezer

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# Challenges with Medical Marijuana

Evidence to support the medical benefits of smoking marijuana for the treatment of pain has become a challenge for many Christians. Due to the health problems, the psychoactive chemicals in marijuana and the peace we experience in Jesus Christ, can be affected by the altered state of mind produced by marijuana.

([calvarychapel.com](http://calvarychapel.com))



# “Sanctification and Epigenetics”

“Now may the God of peace Himself sanctify you completely; and may your **whole spirit, soul, and body** be preserved blameless at the coming of our Lord Jesus Christ.”

1 Thess 5:23

# Love and the Law

“You shall not take vengeance, nor bear any grudge against the children of your people, but you shall love your neighbor as yourself: I *am* the LORD.”

Lev 19:18

*For all the law is fulfilled in one word, even in this: “You shall love your neighbor as yourself.” Gal 5:14*