

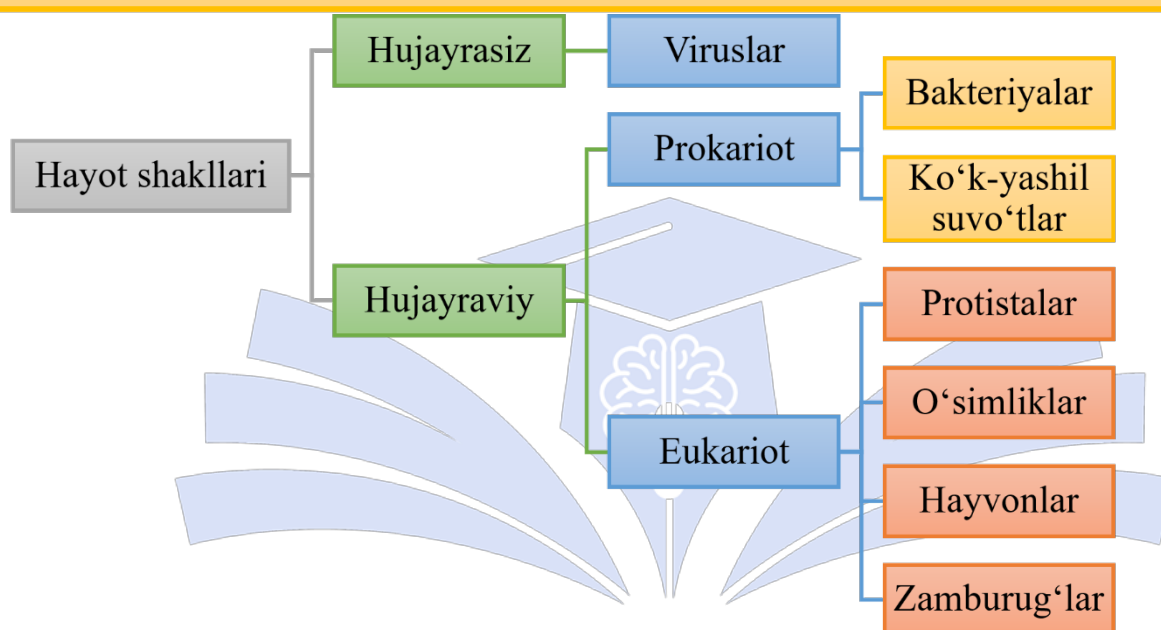
1-modul

3-mavzu

Hayotning hujayrasiz shakllari



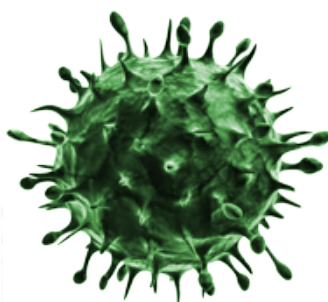
Organik olam klassifikatsiyasi



1892- yilda rus olimi **D.I.Ivanovskiy** tamaki o'simligida uchraydigan **tamaki mozaikasi** deb ataluvchi kasallik qo'zg'atuvchisining o'ziga xos xususiyatlarini aniqladi

F.Leffler va P.Froshlar uy hayvonlarida uchraydigan **oqsil kasalligini** qo'zg'a-tuvchilar ham bakteriyali filtrdan o'tib ketar ekan, degan xulosaga keldilar.

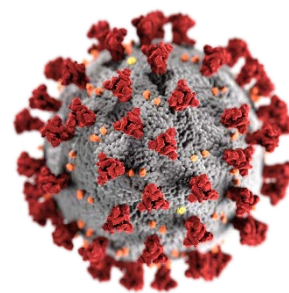
1917- yil kanadalik bakteriolog **F.de Erell** bakteriyalarni zararlovchi **bakteriofag-virusni** kashf etdi.



- Viruslar faqat **hujayralarda yashaydi**. Ular hujayra ichi parazitlaridir.
- Viruslar hujayradan **tashqarida erkin va faol holatda uchramaydi**, ko'payish xususiyatiga ham ega emas.
- O'z metabolizimiga, ya'ni mustaqil **oqsil sintezlash xususiyatiga** ega emas.

- bakteriyali filtrdan o'ta oladi.

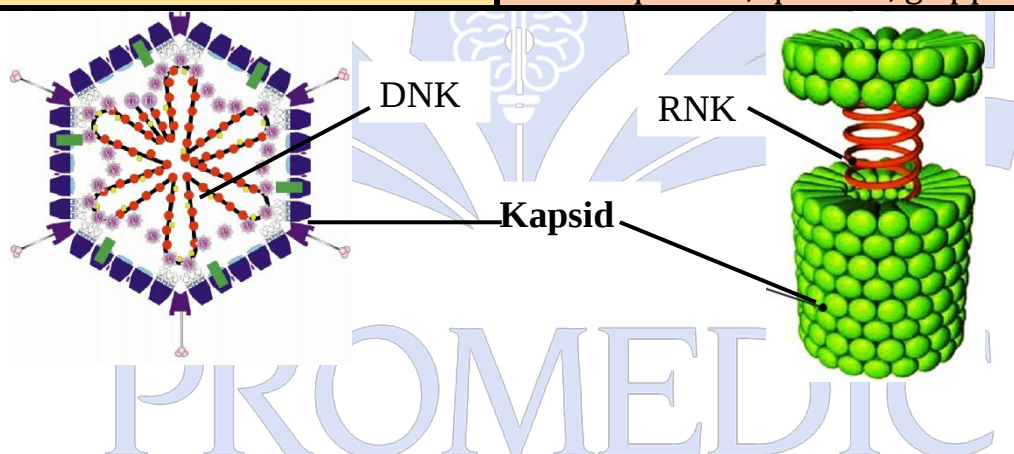
- avtonom genetik tuzilmalar
- Taxminlarga ko'ra viruslar va bakteriofaglar hayotning hujayraviy shakllari bilan birgalikda rivojlangan hujayraning maxsus irsiy elementlari hisoblanadi.
- **Virusologiya** fani o'rganadi
- **gripp, quturish, sariq kasalligi, ensefalit, qizilcha** va boshqalarning qo'zg'atuvchilari hisoblanadi



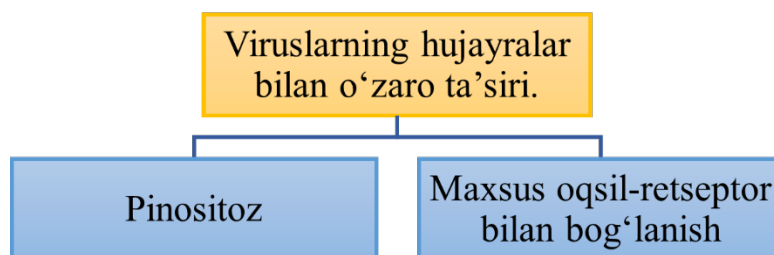
➤ Viruslar nukleoproteinlarga o'xshash bo'lib:

- nuklein kislota (DNK yoki RNK)
- oqsillardan iborat virus qobig'i- kapsiddan iborat

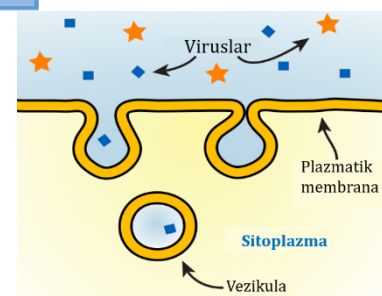
DNK li viruslar	RNK li viruslar
Bakteriofag, adenovirus	ensefalit, qizamiq, qizilcha, quturish, gripp



Viruslarning hujayralar bilan o'zaro ta'siri.

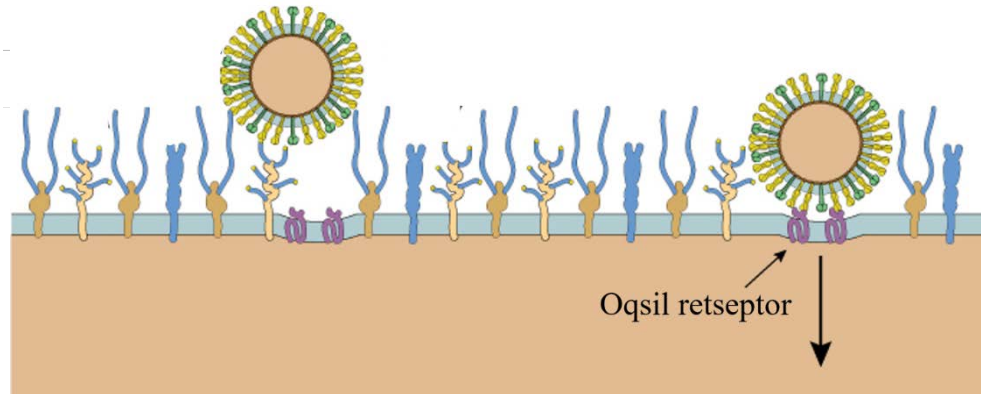


- **Pinositoz**- hujayra oralig'i muhitidagi suyuqlikdan hosil bo'lgan vakuolalar orqali tasodifan hujayra ichiga virus kirishi mumkin.

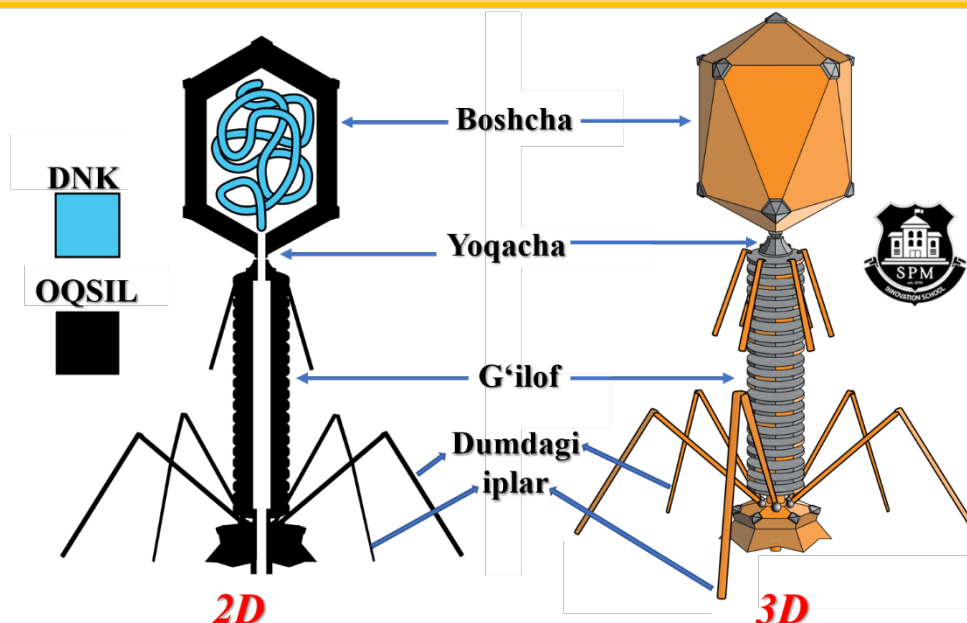


➤ **Maxsus oqsil-retseptor bilan bog'lanish**

- viruslar hujayra sirtidagi sezgir ma'lum retseptorni **"tanib olish"** xususiyatiga ega.
- Virus bilan bog'langan hujayraning qismi **sitoplazmaga birlashib, vakuolaga aylanadi.**
- Sitoplazmatik membranadan tashkil topgan vakuola qobig'i boshqa vakuola yoki yadro bilan qo'shiladi. Ana shunday yo'l bilan virus hujayraning barcha qismiga tarqalishi mumkin.

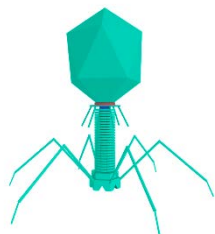
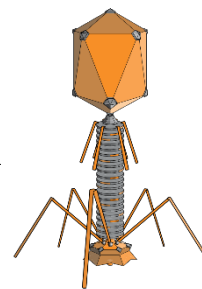


BAKTERIOFAGNING SXEMATIK TUZILISHI



- ❖ Bakteriyalarning **qalin hujayra qobig'i** hayvon hujayralaridek oqsil-retseptorli va unga birikkan virus bilan birgalikda sitoplazmaga kirib borishiga **imkon bermaydi**.

- ✚ Shuning uchun bakteriofag hujayrasiga ichi kovak tayoqcha yordamida uning boshchasida joylashgan **DNK (yoki RNK)** itarib kiritiladi.



Bakteriofagning **genomi sitoplazmaga tushadi**, kapsid **esa tashqarida qoladi**. Bakteriya hujayrasi sitoplazmasida bakteriofagning genomi **reduplikatsiyasi** boshlanadi hamda oqsil sintezlanib, uning kapsidi shakllanadi. Oradan ma'lum vaqt o'tgandan so'ng **bakteriya hujayrasi nobud** bo'ladi. Yetilgan fag zarrachalari esa tashqariga chiqadi.

Bakteriofagning hujayra ichiga kirishi

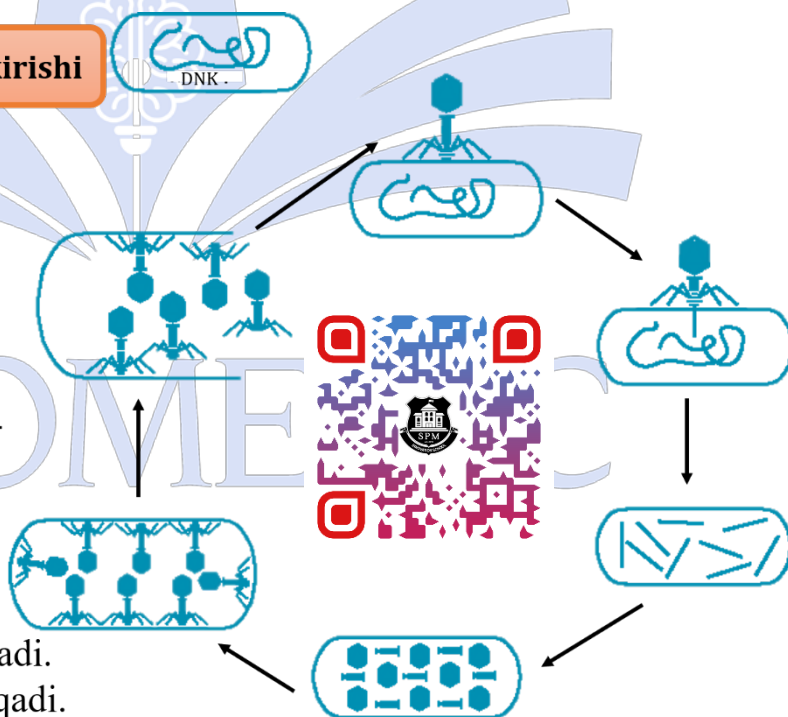
Genomi sitoplazmaga tushadi

Kapsid esa tashqarida qoladi.

Bakteriofag genomi reduplikatsiyasi boshlanadi

Kapsidi shakllanadi.

Bakteriya hujayrasi nobud bo'ladi.
Fag zarrachalari tashqariga chiqadi.



TELEGRAM KANALLARIMIZ:

https://t.me/biologiyamaktabi_uz

https://t.me/Biologiya_kimyo_blok_testlar



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