

Laksepox kan gjenskapes eksperimentelt

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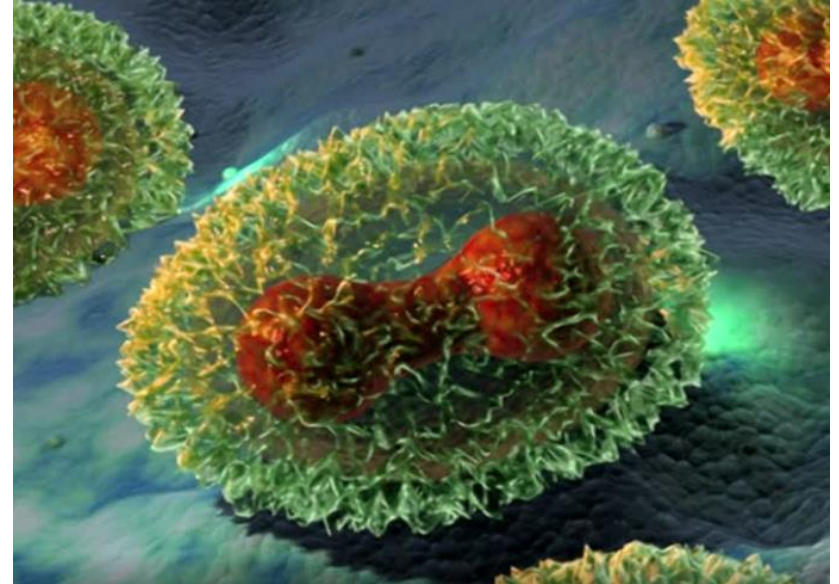


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Bakgrunn

- Poxviridae er store DNA virus
 - Chrodopoxvirus
 - Entomopoxvirus
- Variola er et poxvirus- gir kopper
- Vaccinia er et poxvirus- vaksine mot kopper



<https://www.framepool.com>



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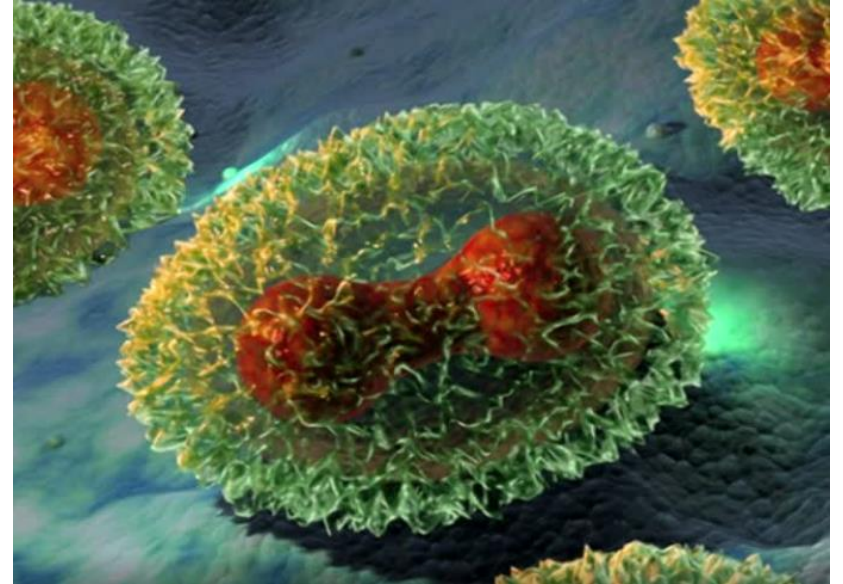


Bakgrunn

Salmon gill poxvirus: “laksepoxvirus”



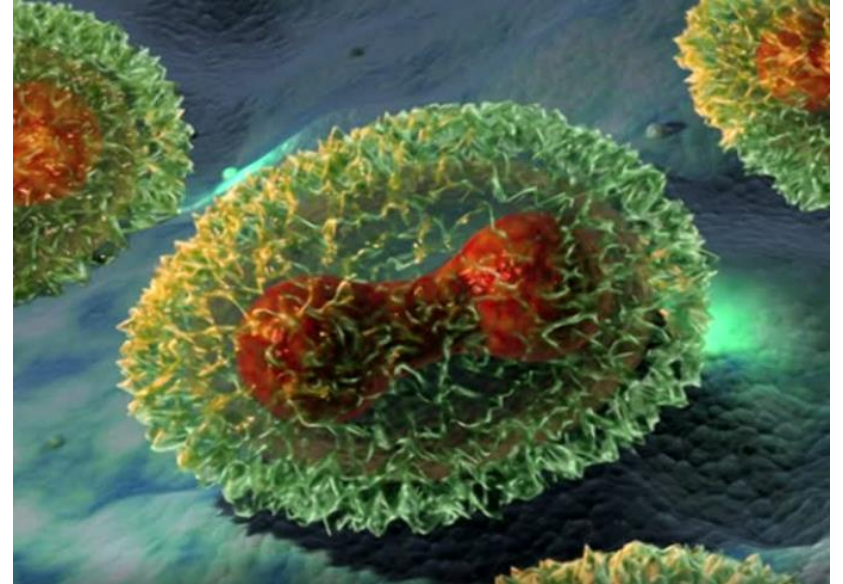
Sykdom pga laksepoxvirus: “laksepox”



<https://www.framepool.com>

Bakgrunn

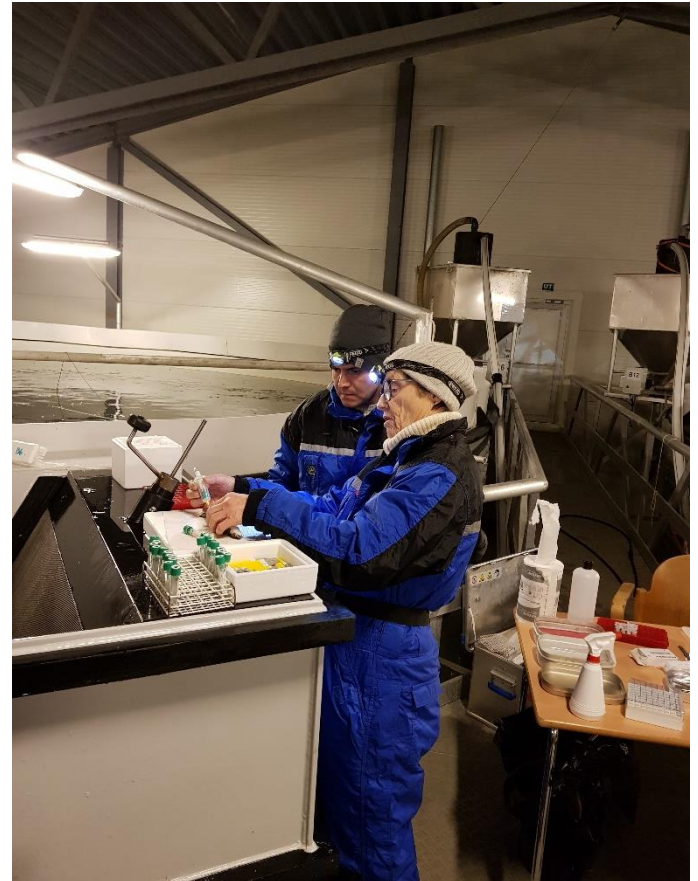
Veterinærinstituttets pcr mot laksepoxvirus er rettet mot DNA og ikke RNA

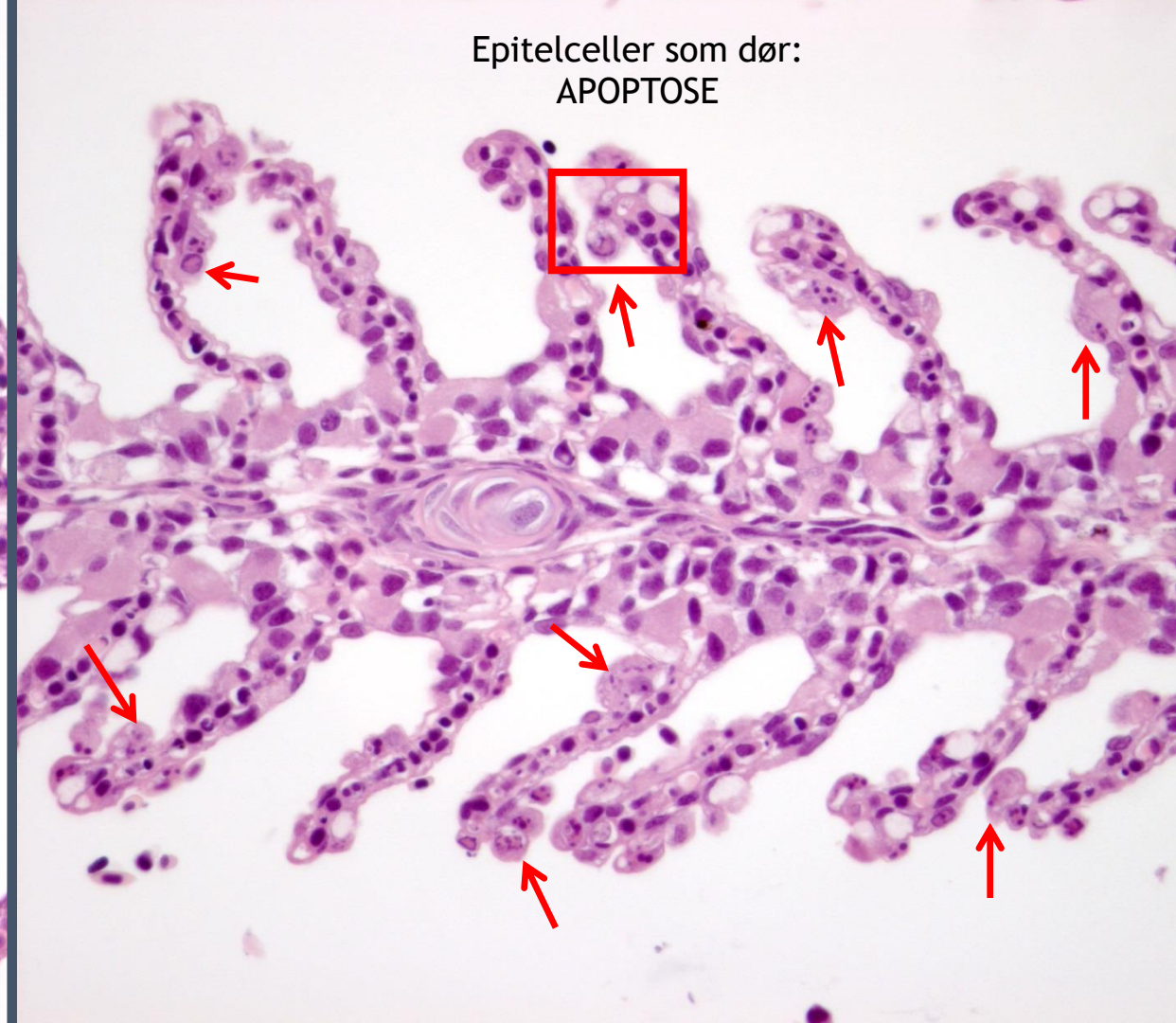
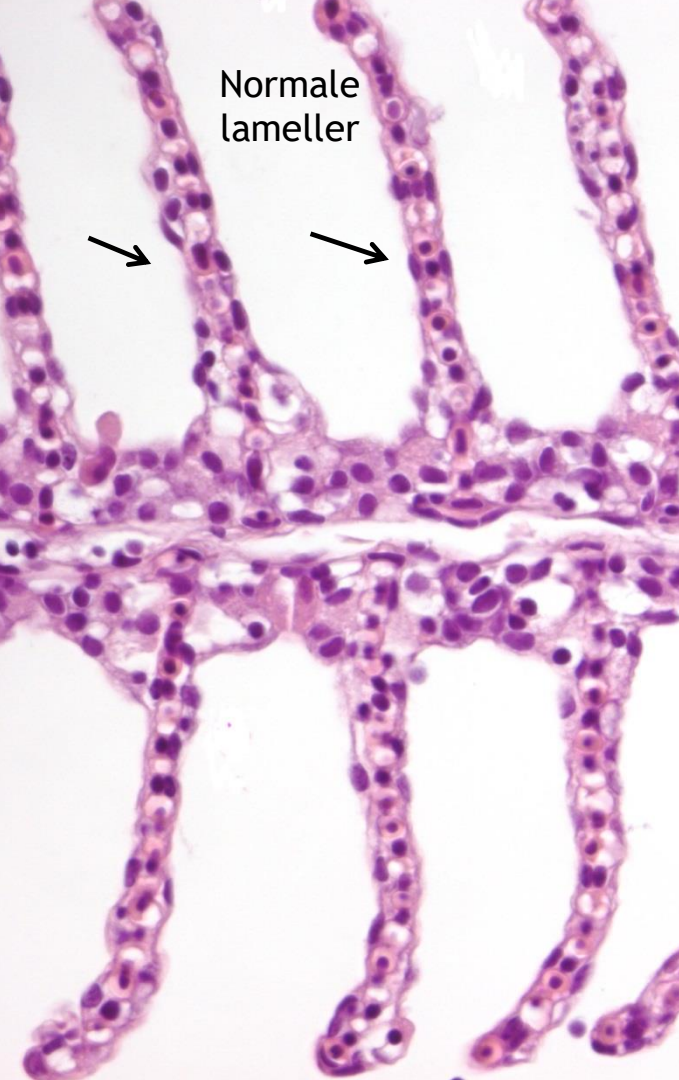


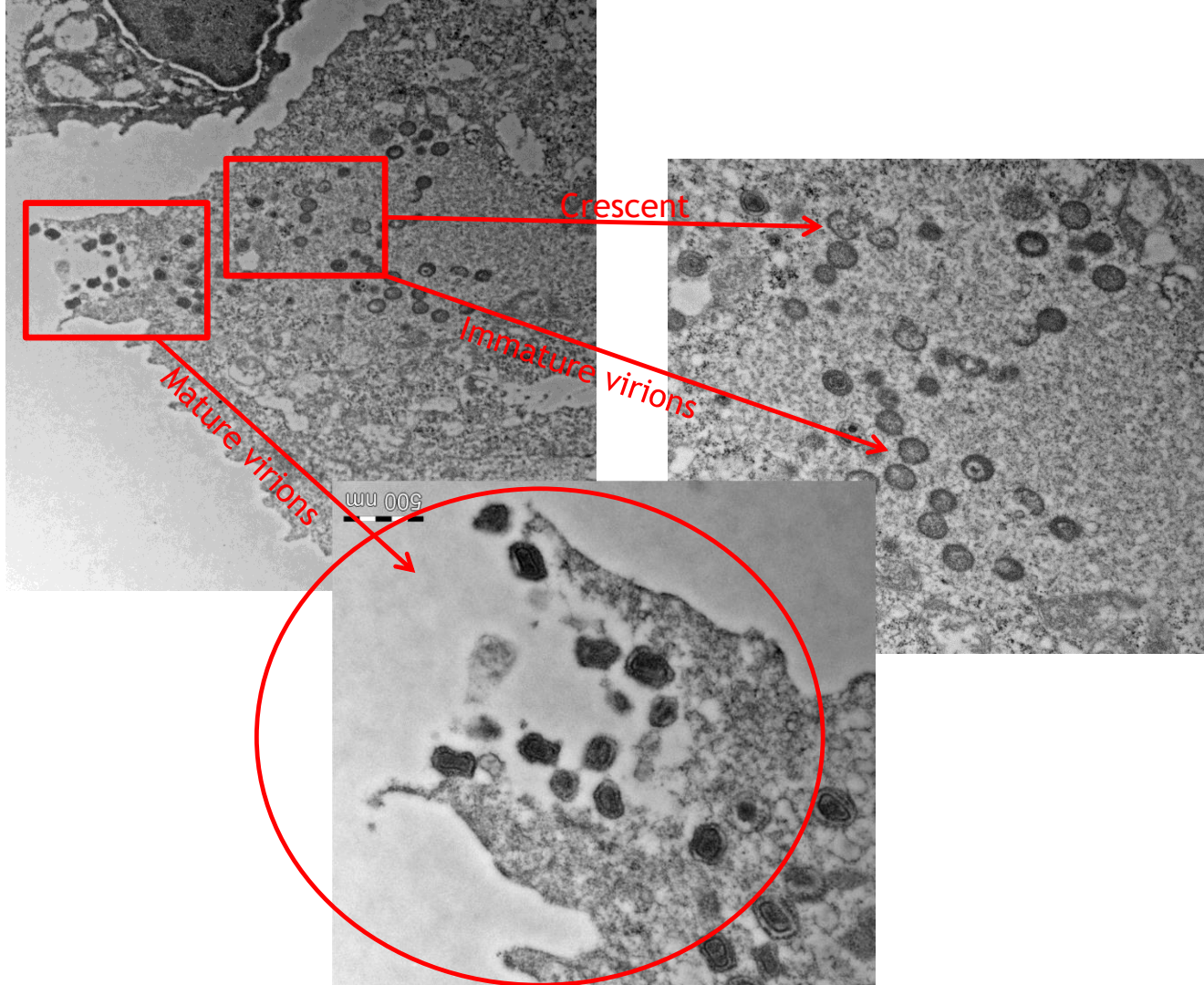
<https://www.framepool.com>

Bakgrunn

- Kjent siden 1995
- Mistanke om virus
- Akutt med høy dødelighet
- Kan spre seg raskt
- Gjentakende
- Slapp fisk med pustebesvær







Bakgrunn

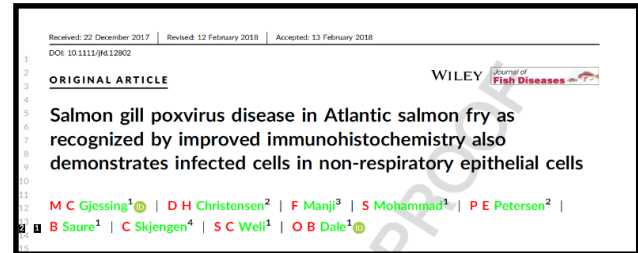
Første poxvirusgenom fra en fisk
«rent» utbrudd

Laksepoxvirus sammen med andre
gjellepatogener

Kan laksepox bane vei for andre agens?

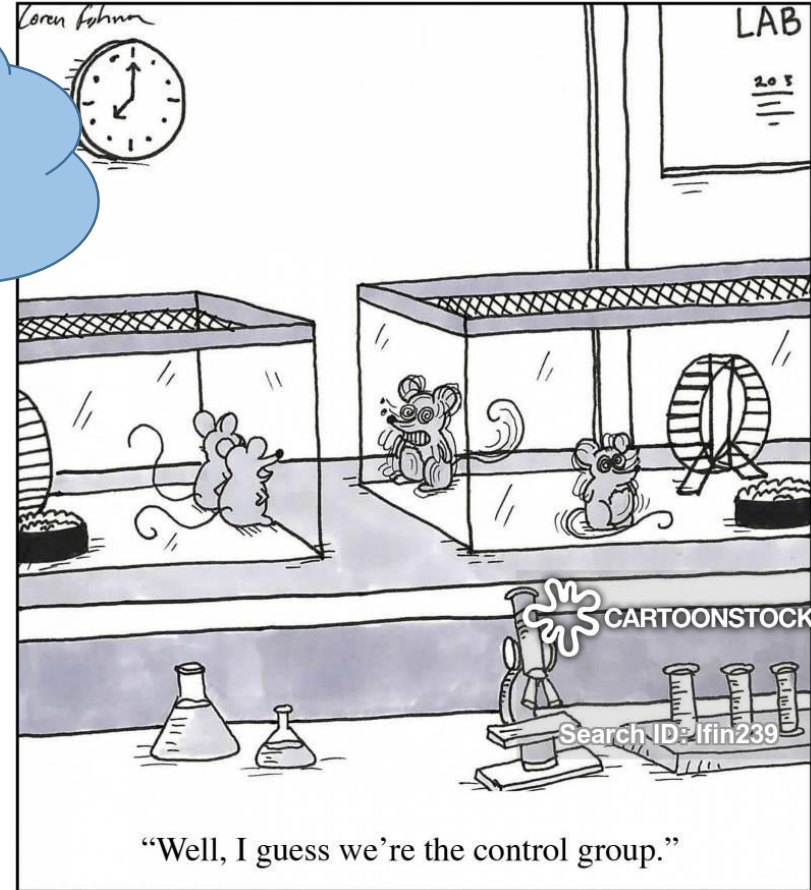
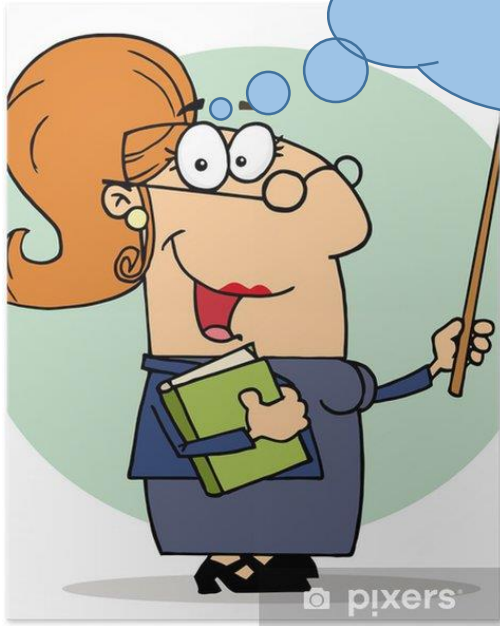
Manifestasjon av laksepox i yngel

Nå: lage en smittemodell for laksepox

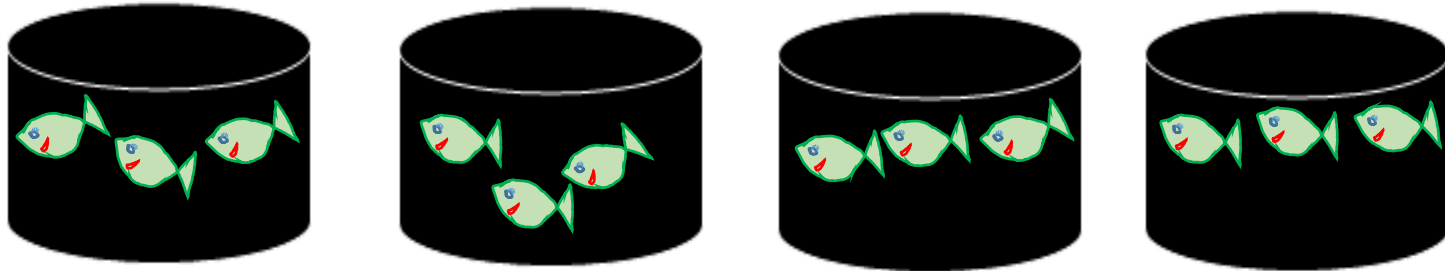


Hypotese

Kortisol fremprovoserer
laksepox...



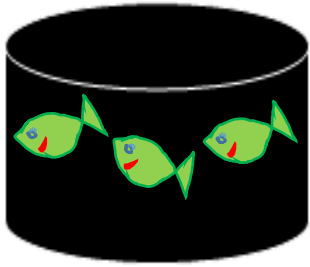
Forsøksoppsett



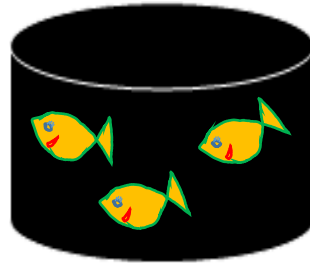
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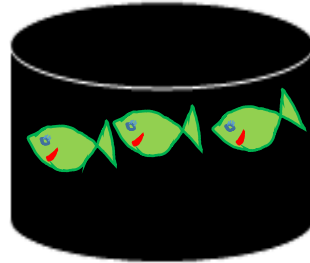
Forsøksoppsett



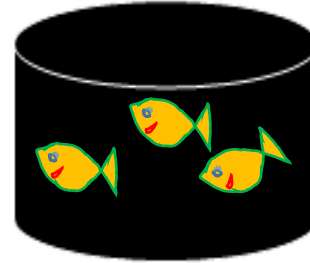
Sham injected (S)



**Hydrocortisone
(H)**



Sham injected (S)



**Hydrocortisone
(H)**

Forsøksoppsett



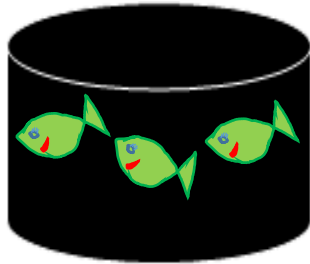
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Forsøksoppsett

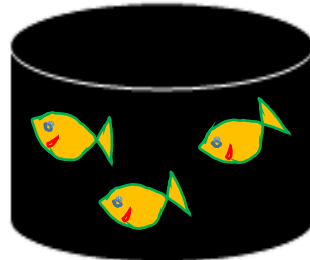


Kar I



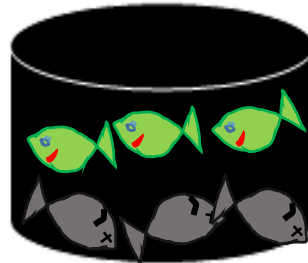
Sham injected (S)

Kar II



Hydrocortisone (H)

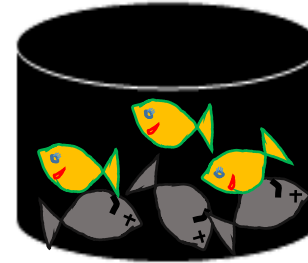
Kar III



Sham injected (S)

challenged

Kar IV



Hydrocortisone (H)

challenged



Control
no hydrocortisone
C.S



Control
hydrocortisone
C.H



Newly dead fish
from pox outbreak

Prøvetakning og analyser



kortisol i plasma og
poxvirus i blodceller



svaberprøver

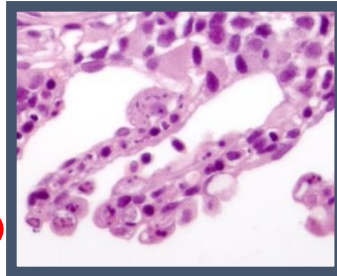


Gjeller
Nyre
Milt



poxvirus pcr

Histopatologi og *in situ*
hybridisering



Gjelleapotose score





Resultater



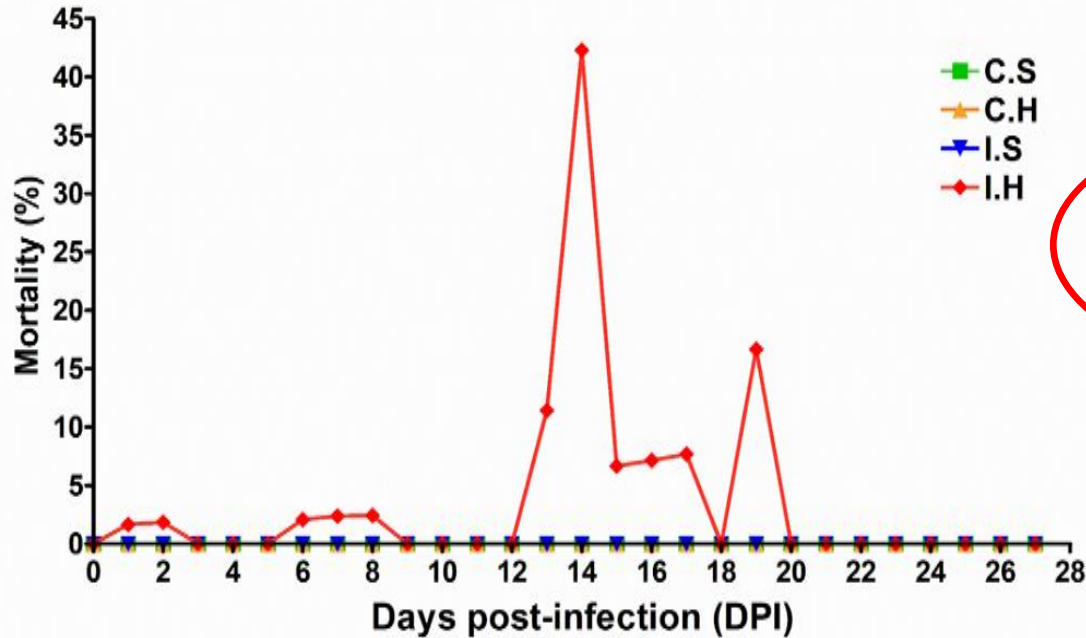
Mye laksepoxvirus i
smittematerialet



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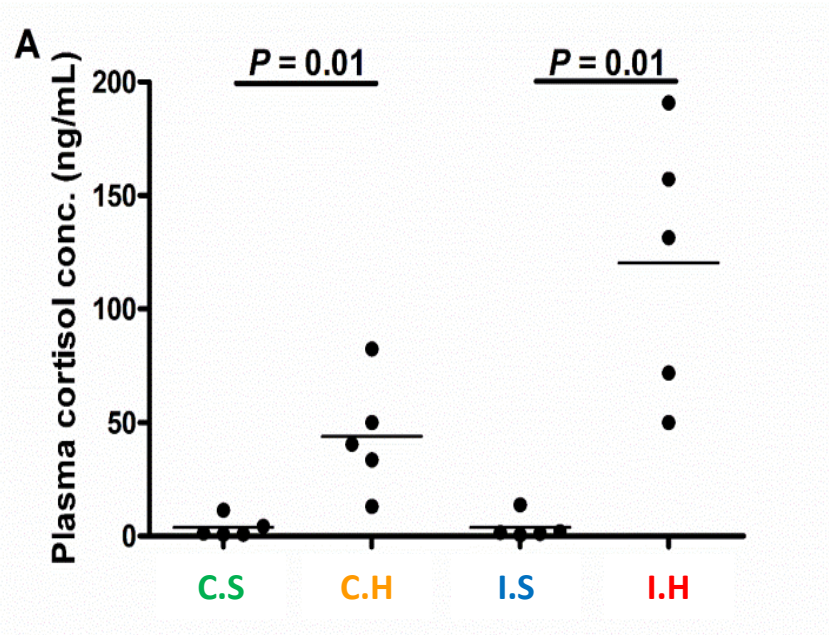
Resultater



Sykdom og dødelighet kun i smittet / kortison gruppe



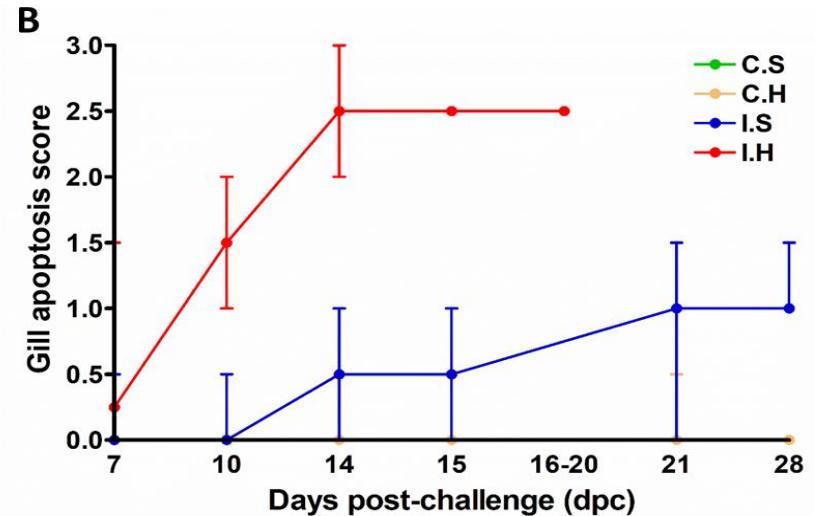
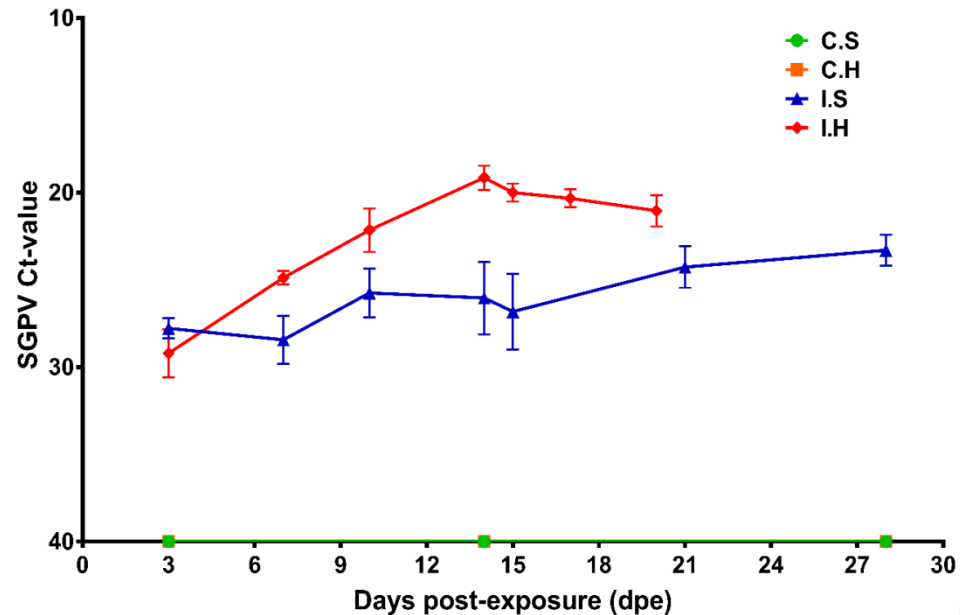
Resultater



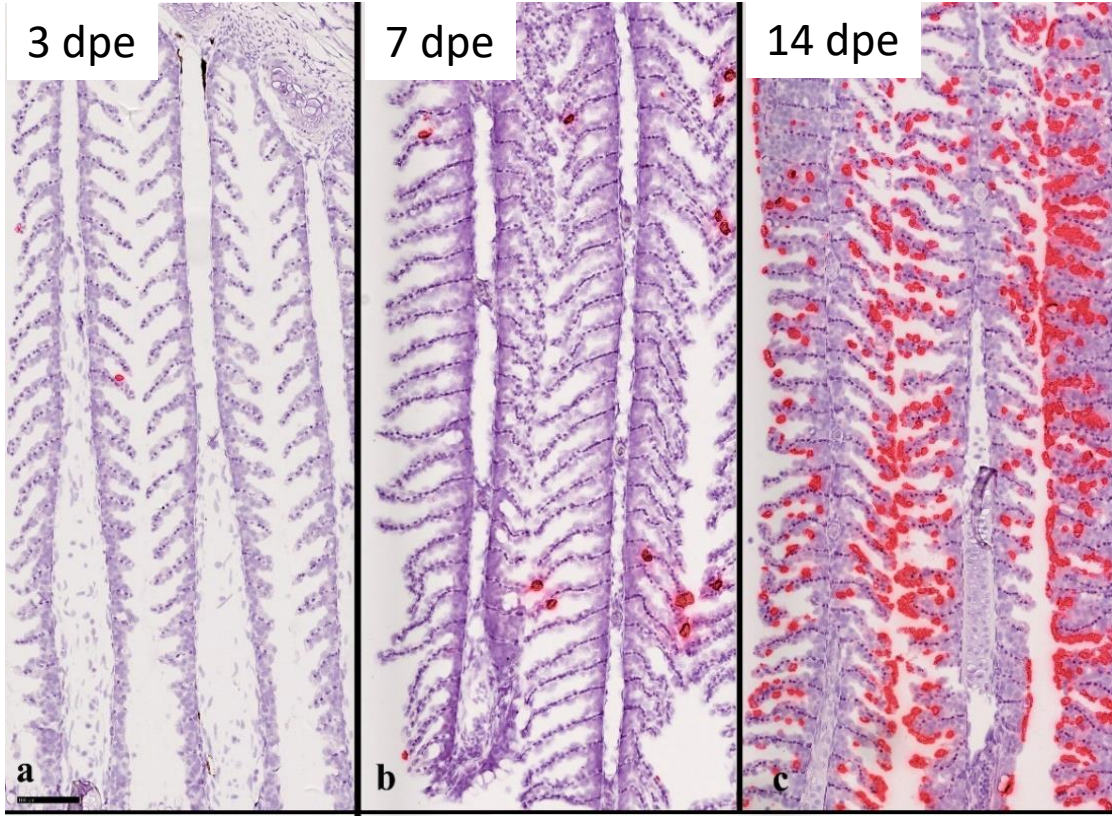
Høye nivåer av kortisol i plasma til fiskene som var injisert med hydrokortison

Resultater

Nivåer av laksepoxvirus
korresponderer til gjelleapoptose
og sykdomsutvikling



Resultater



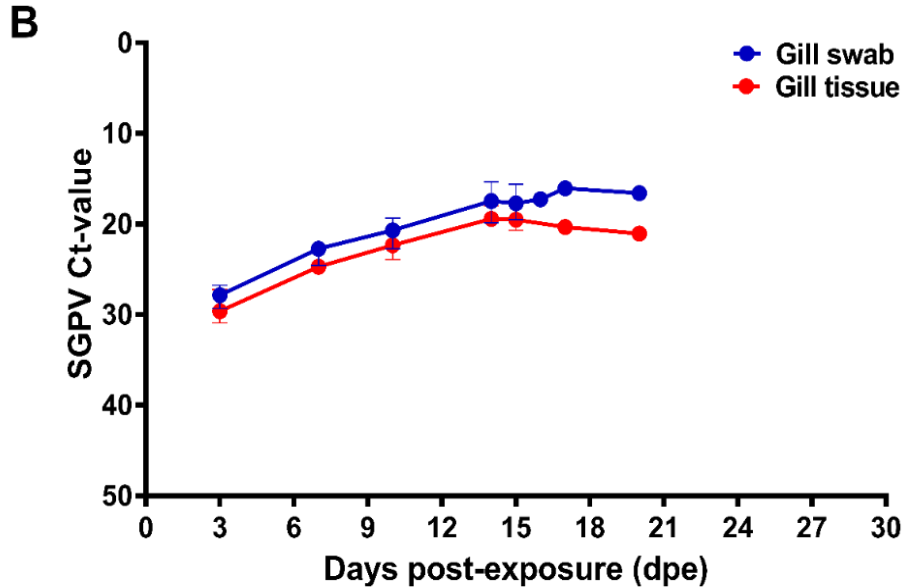
Laksepoxvirus påvist i
respiratorisk epitel i gjellene

Resultater

Fravær eller bare spor av
laksepoxvirus i milt, nyre og blod



Resultater



Mer laksepoxvirus i gjellesvaber
enn i gjellevev



Konklusjoner

- Lan
- Mengde
- M

**UNNGÅ
STRESS!!!**

peptose



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Pågående prosjekter

SALPOX



Mona Gjessing

EPIDEMIOLOGICAL STUDIES OF POXVIRUS IN SALMON FARMING



Brit Tørud

GILLMODEL



Anita Solhaug

IMMUNOPOX



Mona Gjessing

RED FLAG



Maria Dahle



Takk for oppmerksomheten