Biofilm in chronic bovine mastitis

PhD study
ACROBAT group

Cand.scient Regitze Renee Pedersen

Department of Veterinary Clinical Sciences

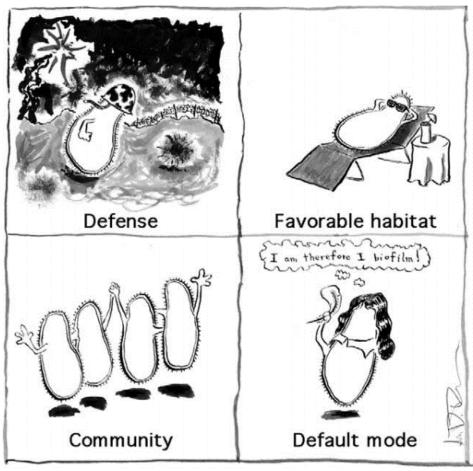
Costerton Biofilm Centre

KØBENHAVNS UNIVERSITET





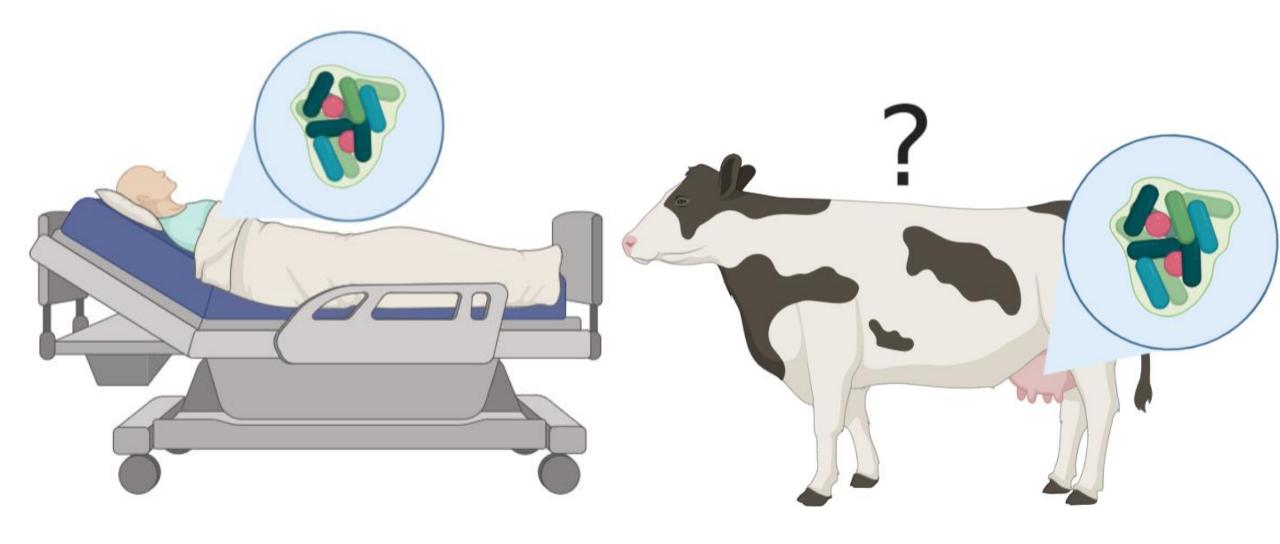
Biofilm



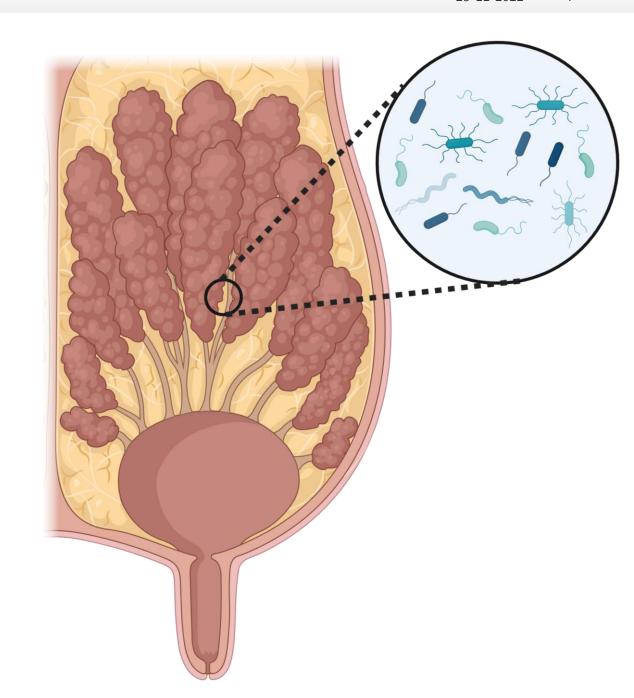


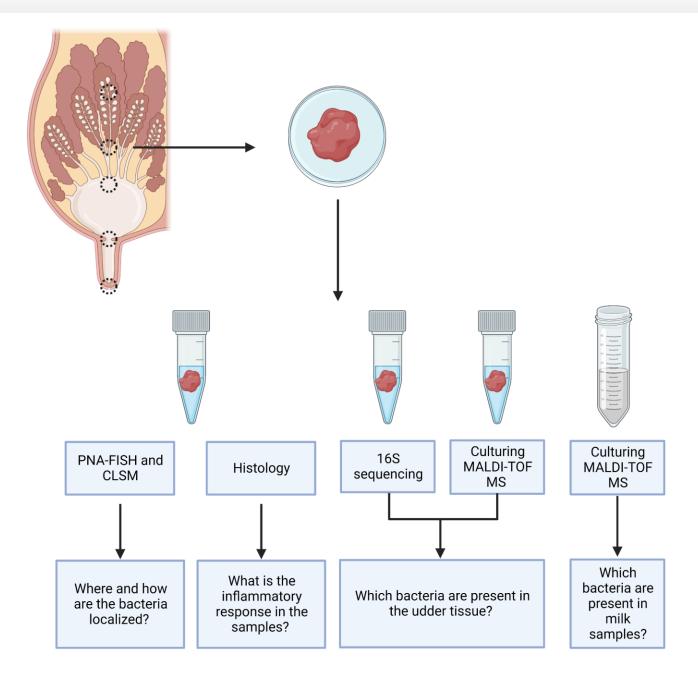
Jefferson et al. 2004

Biofilm and chronic bovine mastitis

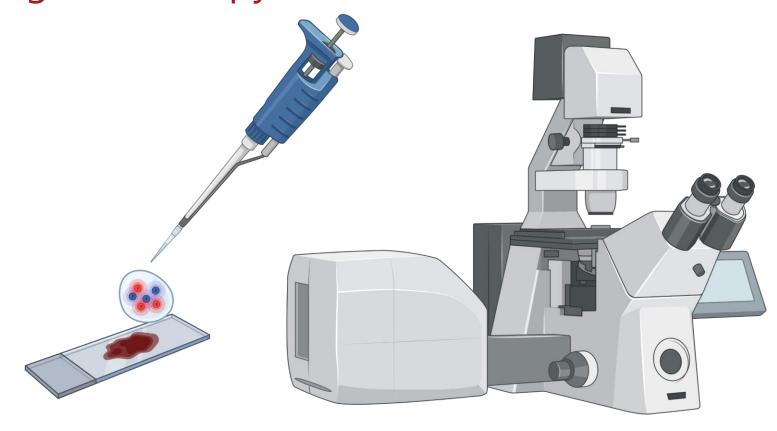


What is happening inside the udders?





Preliminary results from PNA-FISH* and Confocal Laser Scanning Microscopy



^{*}peptide nucleic acid fluorescence *in situ* hybridization

Preliminary conclusion and perspectives

Large aggregates in some samples

- What is the link between these cases?
- What does this mean for the cows?
- How do we diagnose, treat and prevent this?



Cow #1 after euthanization



Thank you for your time – questions?

Thanks to:

- Emma Hornemann
- Farmers; Bjarne Nebel, Niels Peter Nielsen, Morten Jørgensen, Jens Borum, Erik Furbo, Bent Jørgensen, Peter Clausen
- Dyrlæger and Ko
- Copenhagen Zoo
- Holsted Slaughter house
- Kjellerup Slaughter house
- My supervisors: Thomas Bjarnsholt, Volker Krömker, Rikke Buhl, Kirstin Dahl-Pedersen, Elin Jørgensen



Department of Veterinary and Animal Sciences



Institut for Klinisk Veterinærmedicin

And many other!

Contact: regitze.pedersen@sund.ku.dk



Mælkeafgiftsfonden
FrimodtHeineke Fonden

Illustrations are created with biorender.com