



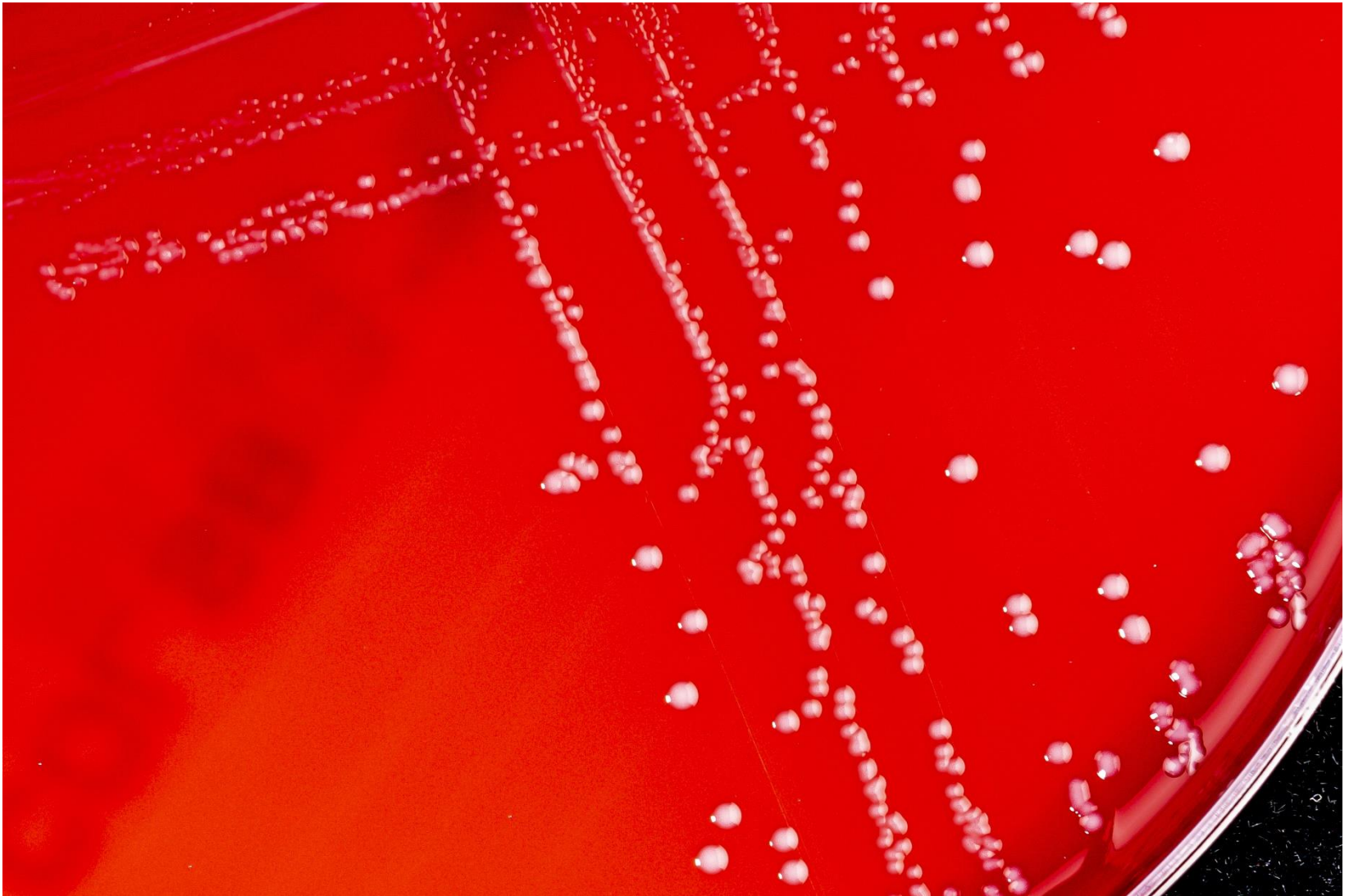
2. LÉKAŘSKÁ FAKULTA
UNIVERZITA KARLOVA

Bacterial cultures for practical exam

Microbiology II

2023/2024

1. *Enterococcus faecalis*



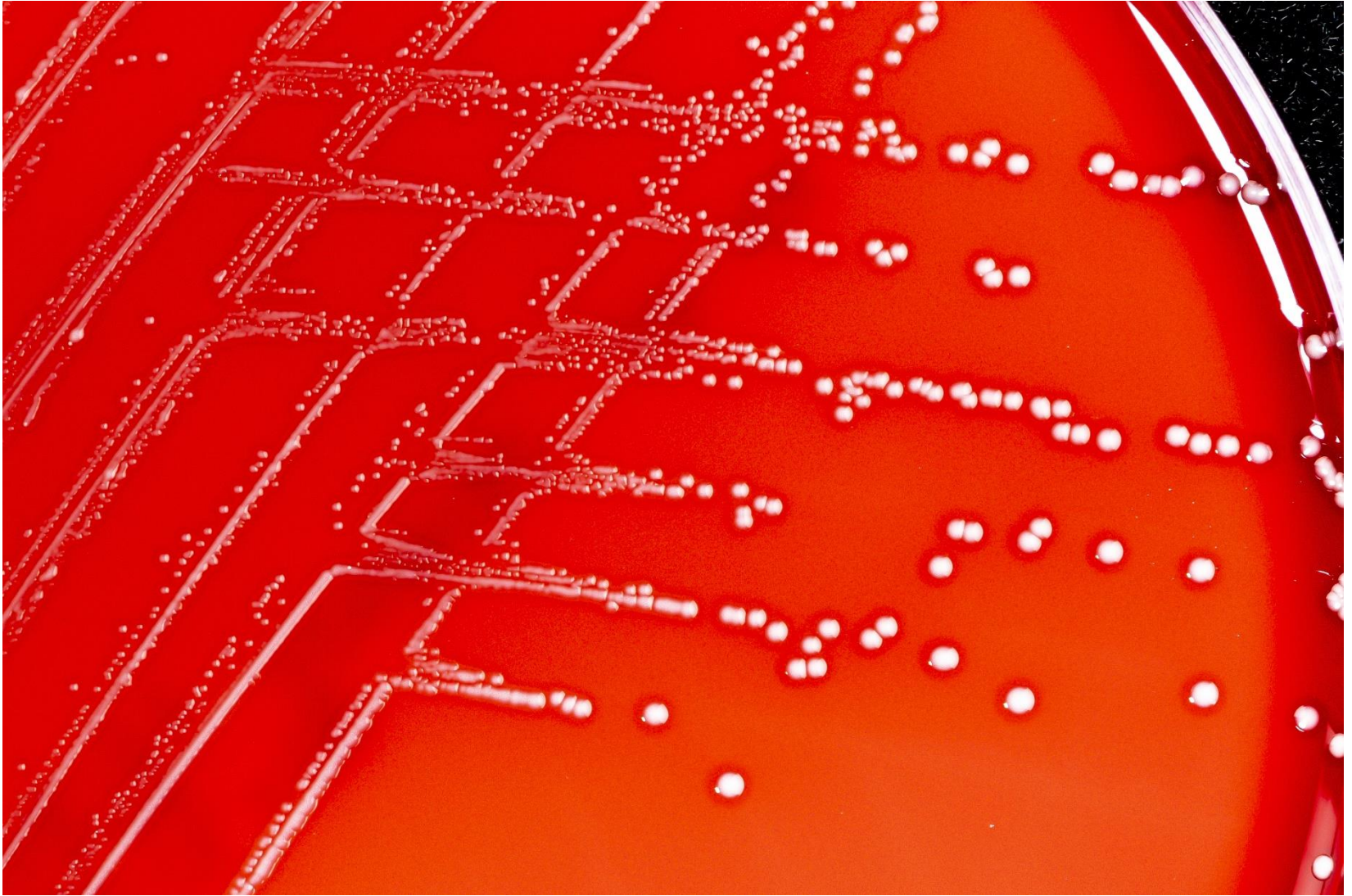
2. *Enterococcus faecium*

Blood agar



Gamma-hemolysis;
Catalase-, PYR+

2. *Enterococcus faecium*



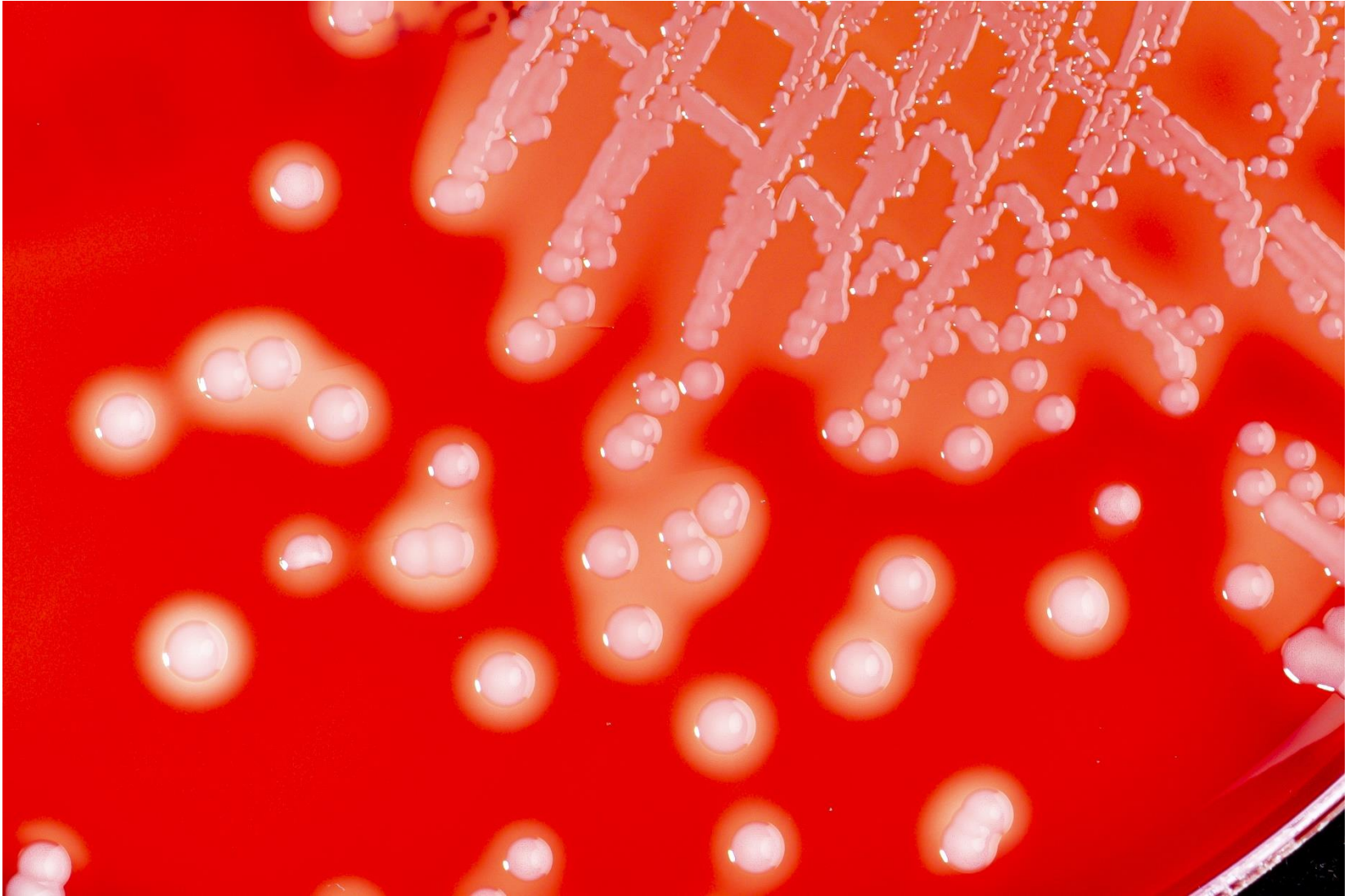
3. *Staphylococcus aureus*

Blood agar

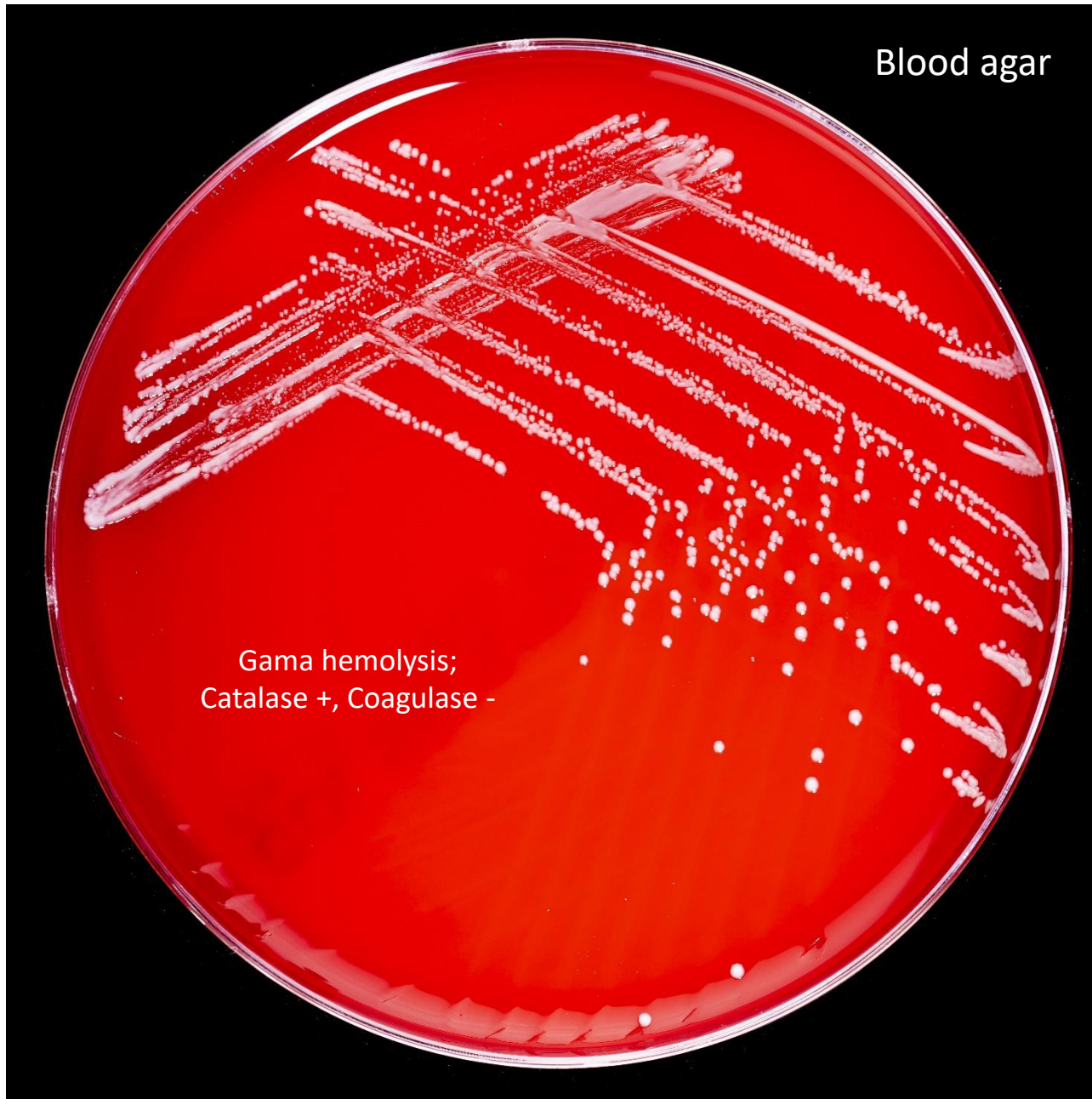
Beta hemolysis;
Catalase +,
Coagulase +



3. *Staphylococcus aureus*



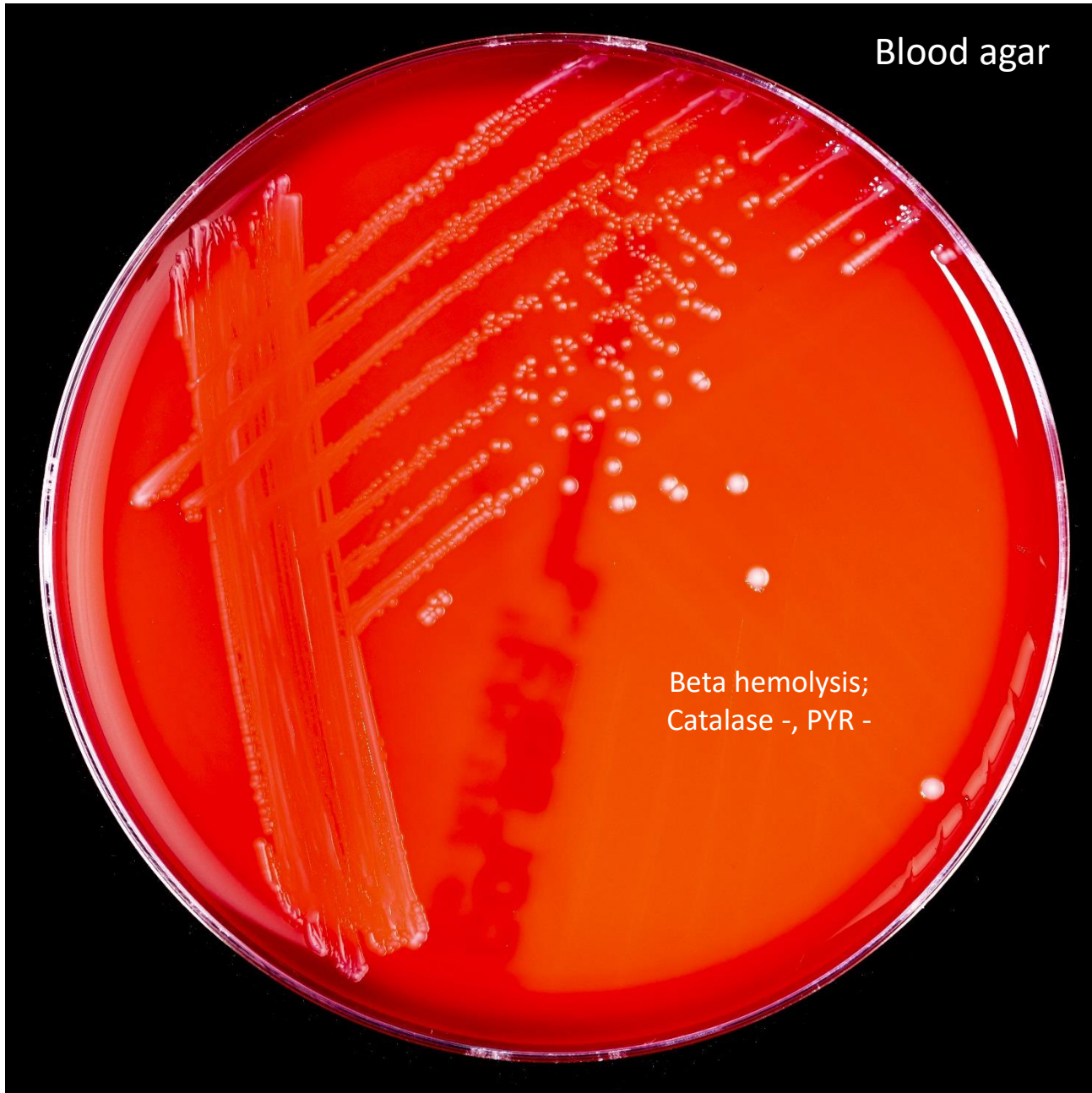
4. *Staphylococcus hominis*



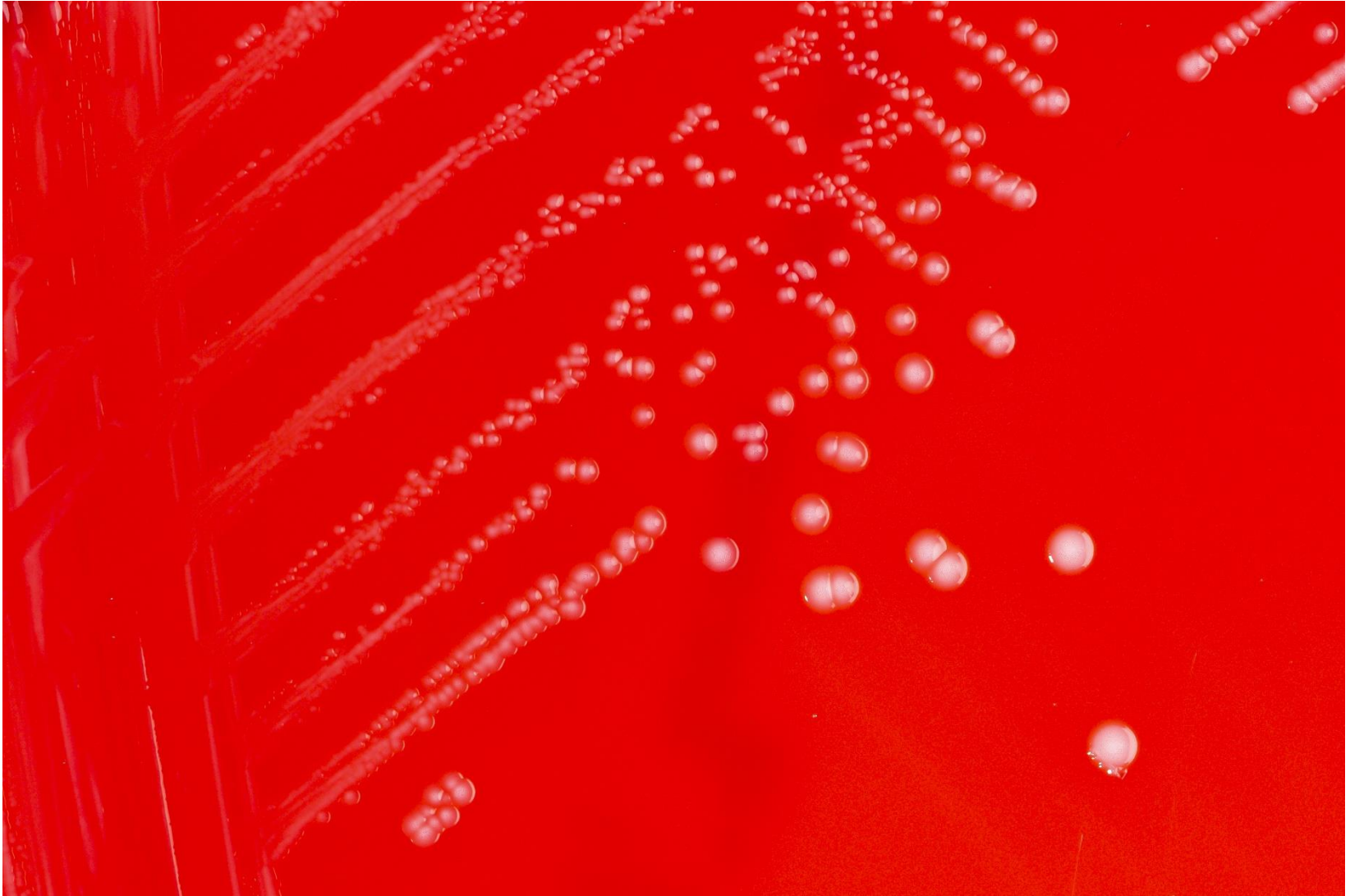
4. *Staphylococcus hominis*



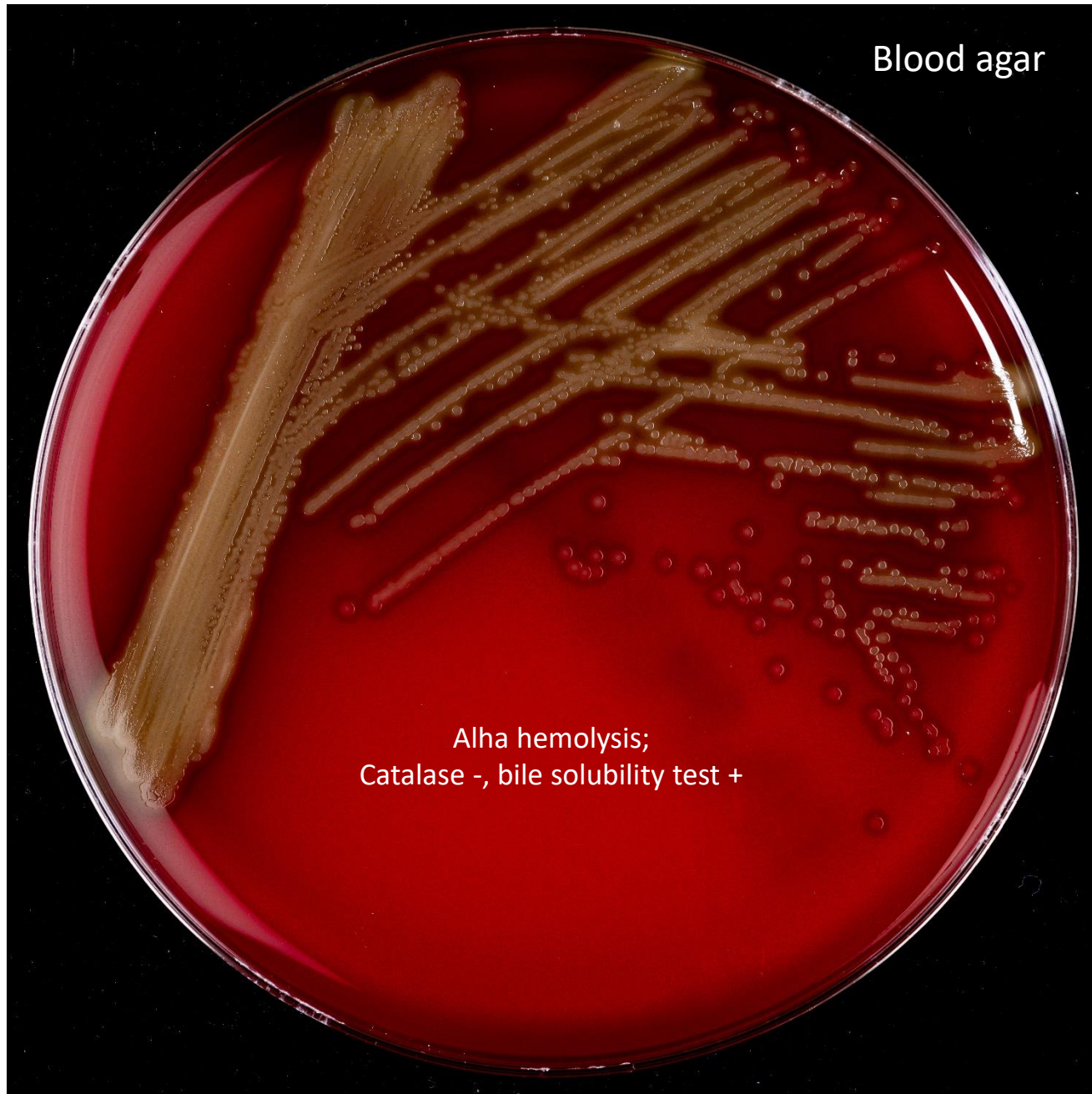
5. *Streptococcus agalactiae*



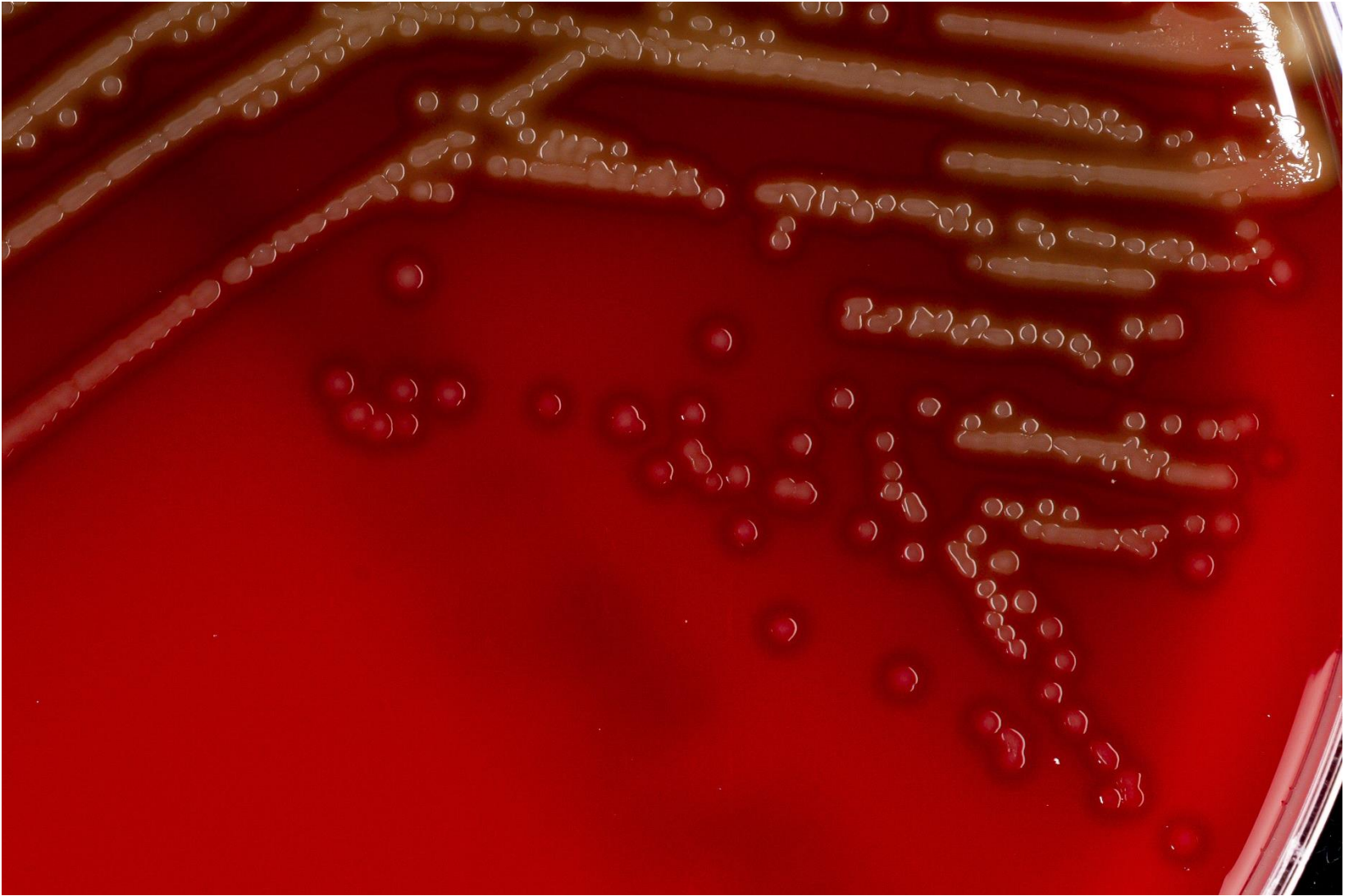
5. *Streptococcus agalactiae*



6. *Streptococcus pneumoniae*



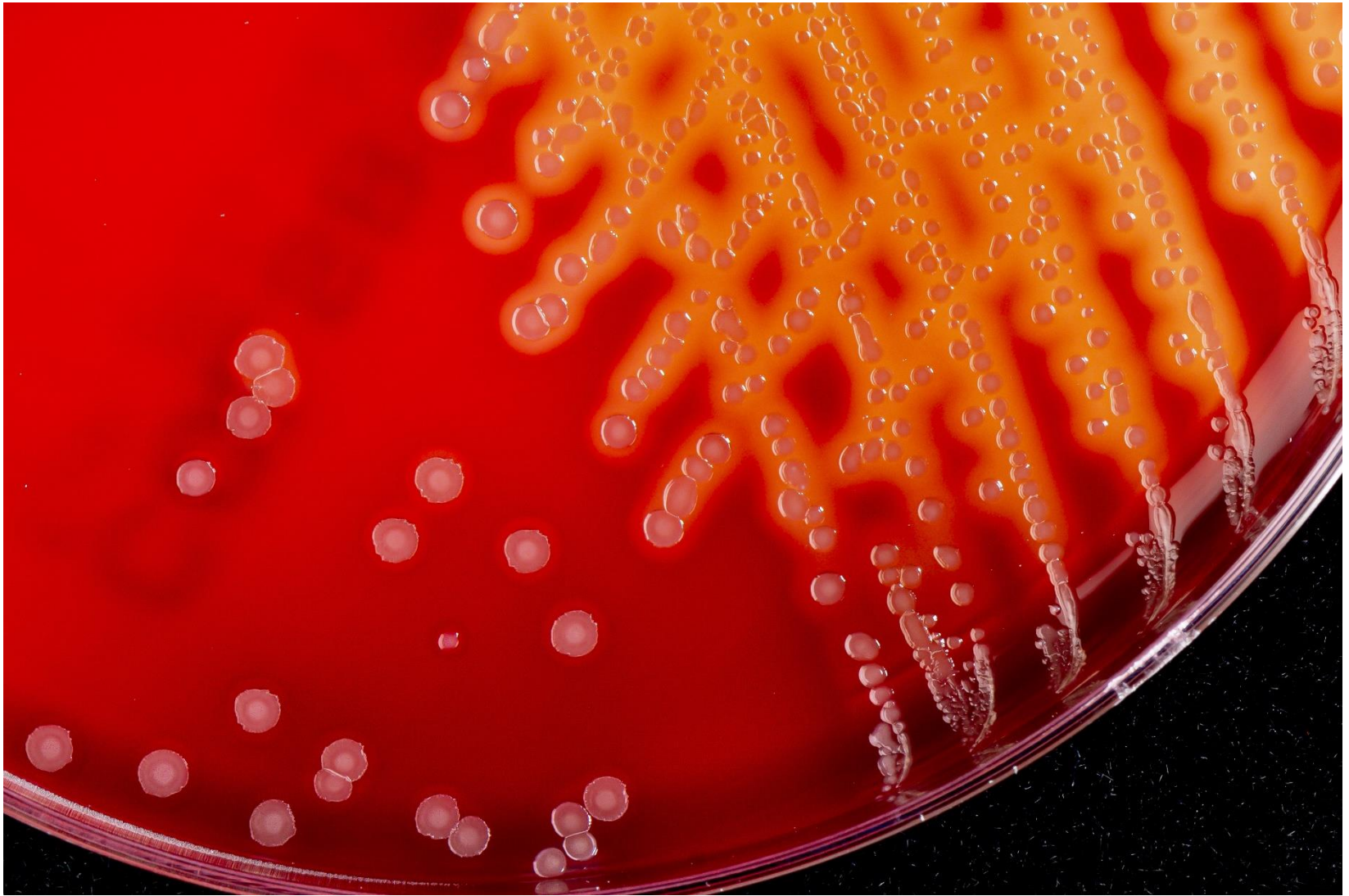
6. *Streptococcus pneumoniae*



7. *Streptococcus pyogenes*



7. *Streptococcus pyogenes*



8. *Clostridioides difficile*

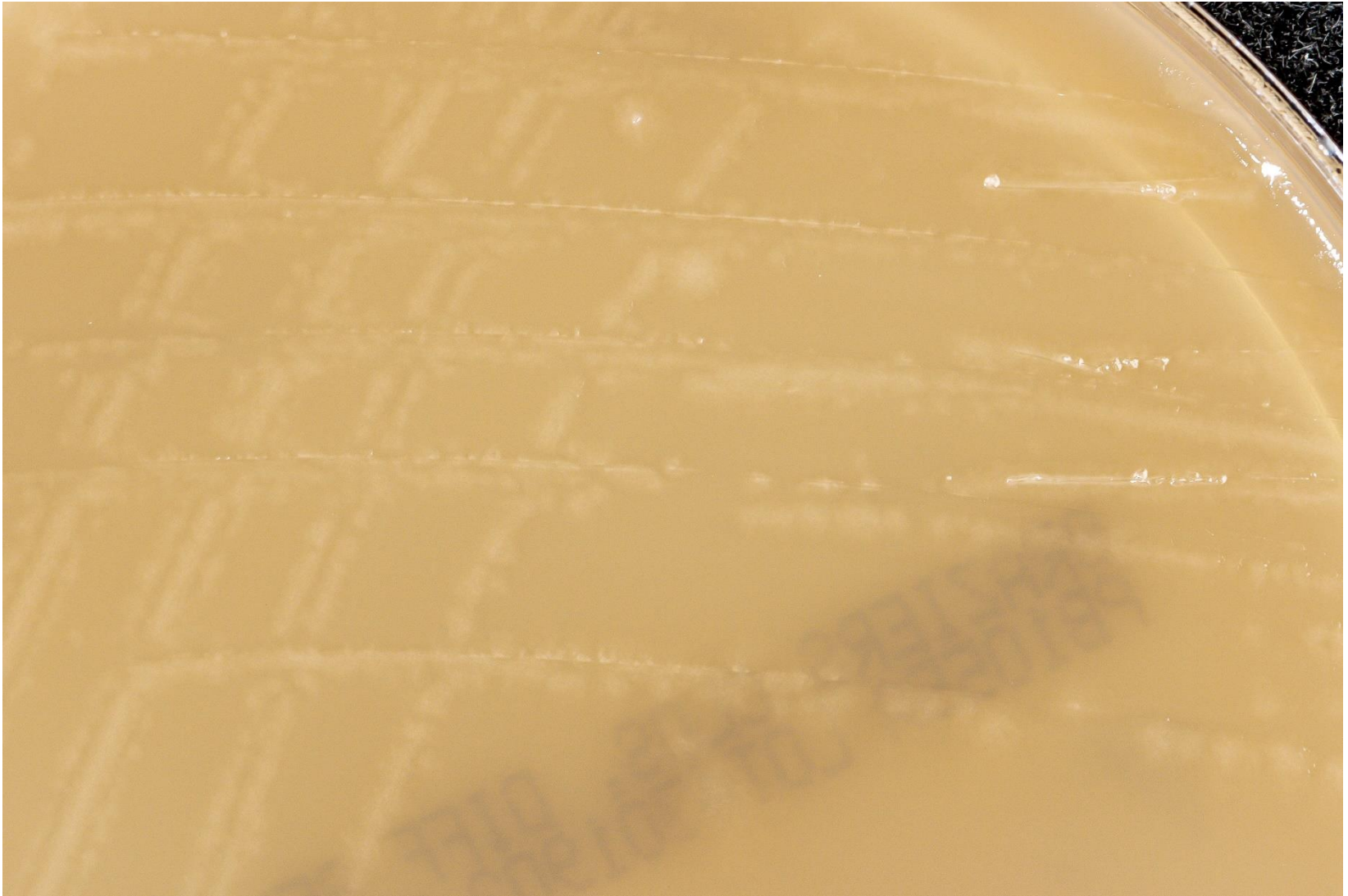
Brazier's agar

C. difficile diagnostic medium



Transparent large colonies with
with irregular margins

8. *Clostridioides difficile*



9. *Clostridium perfringens*

Schaedler agar
to culture anaerobic bacteria



Double zone
hemolysis

9. *Clostridium perfringens*



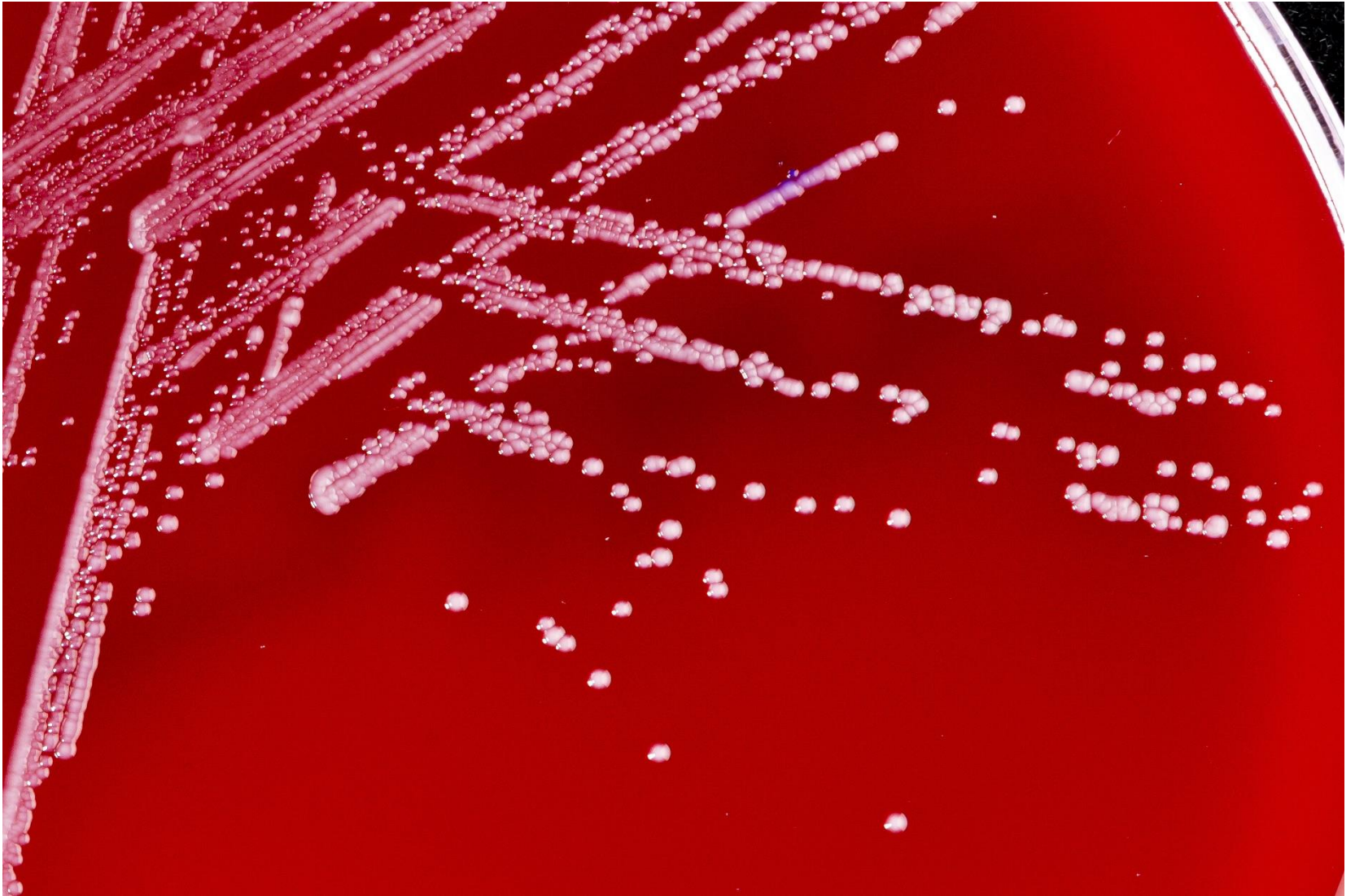
10. *Corynebacterium diphtheriae*

Blood agar

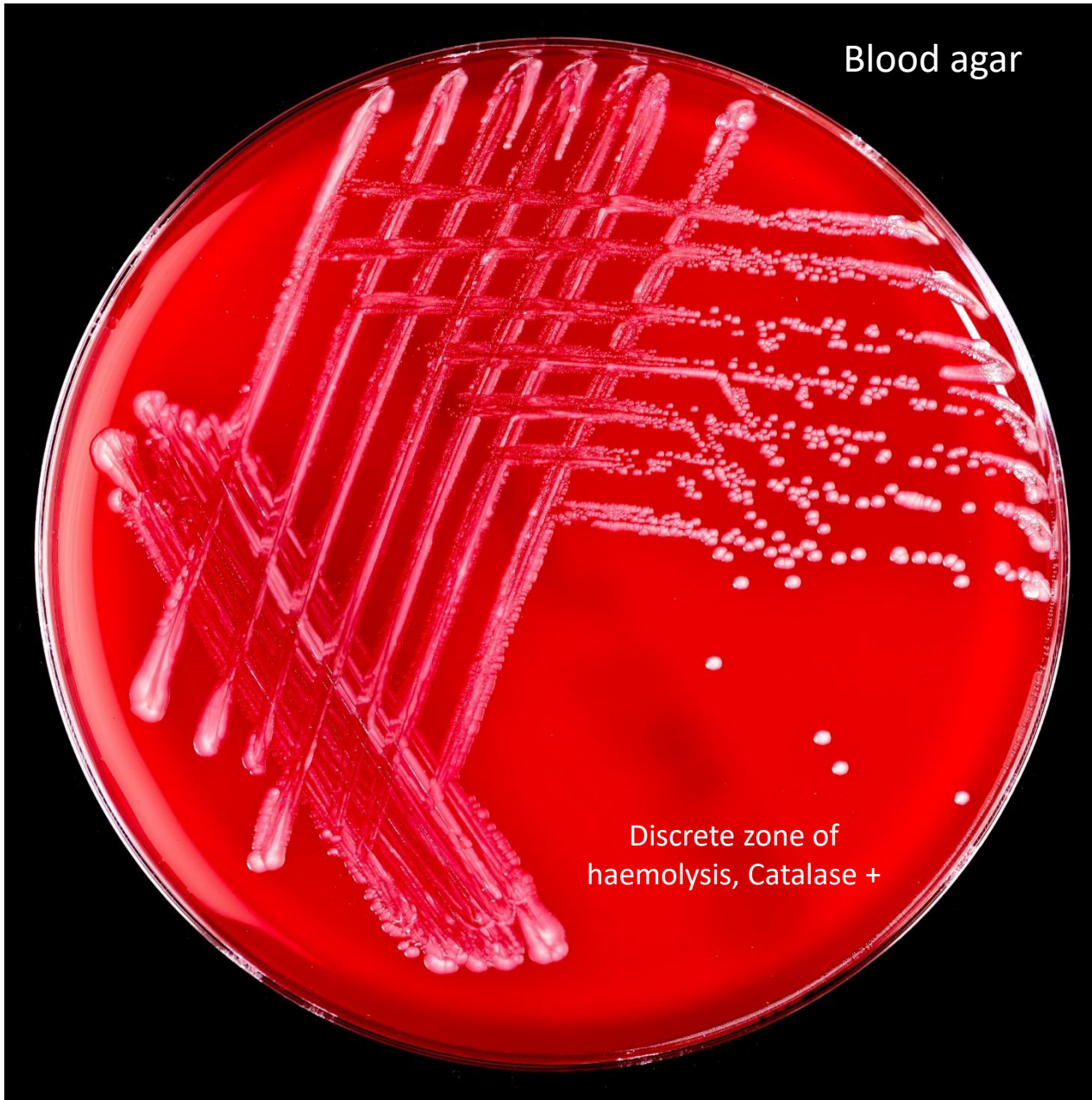


Hemolysis by biotype; may or may
not be a hemolytic colony;
Catalase +

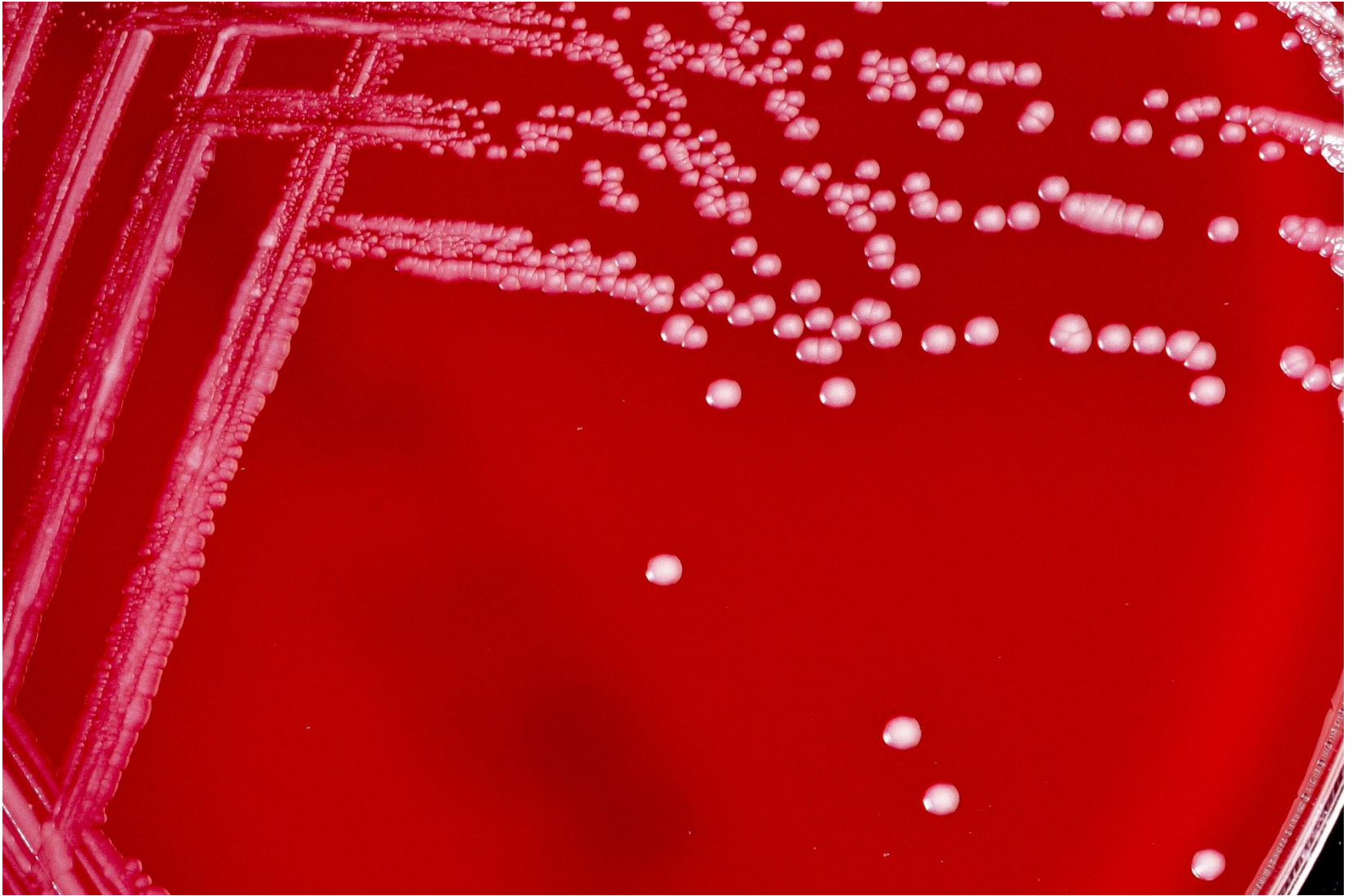
10. *Corynebacterium diphtheriae*



11. *Listeria monocytogenes*



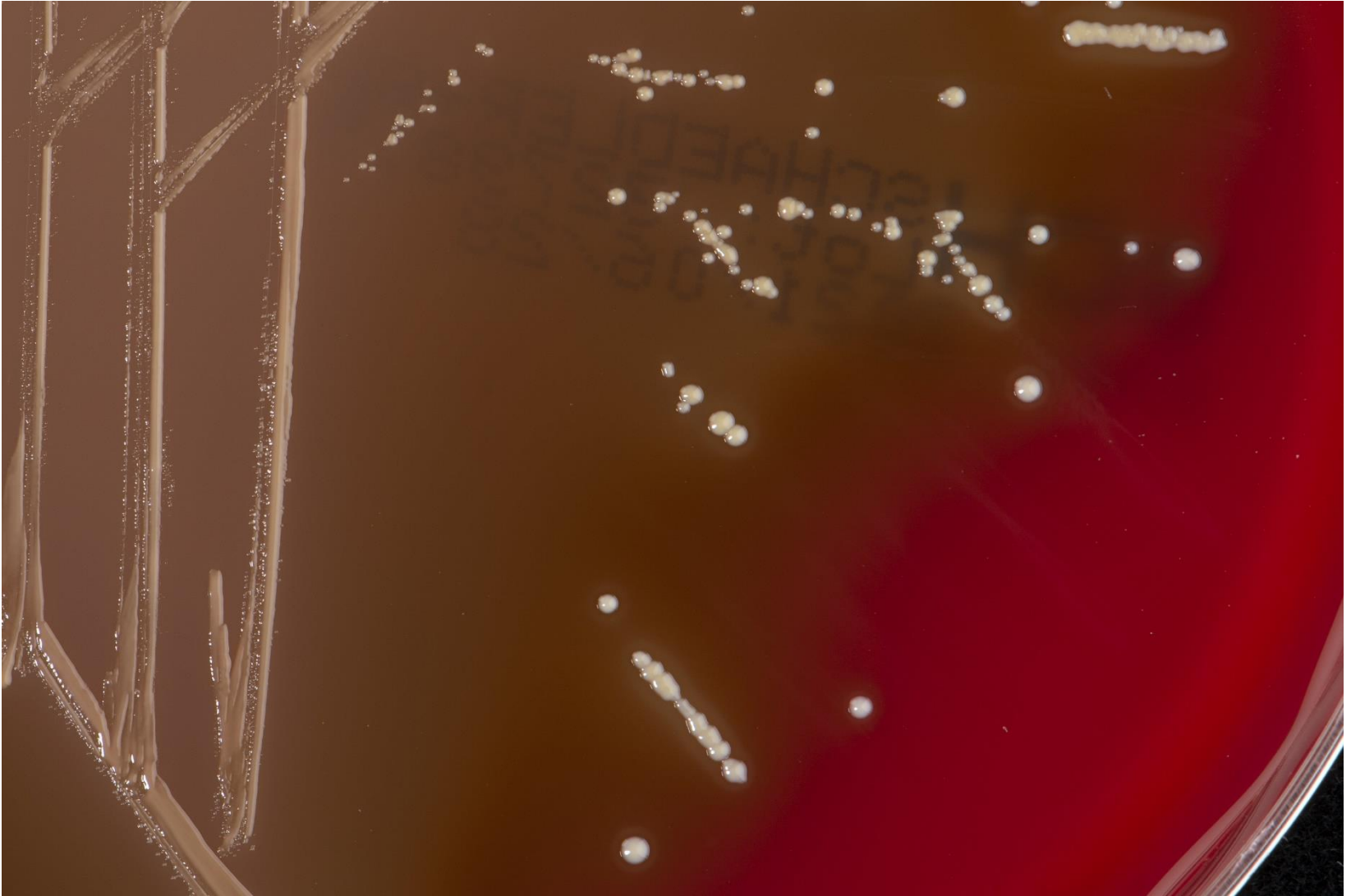
11. *Listeria monocytogenes*



12. *Actinomyces* sp.



12. *Actinomyces* sp.



13. *Cutibacterium acnes*

Schaedler's agar



Convex, shiny, and slightly
pigmented colonies;
smelly

13. *Cutibacterium acnes*



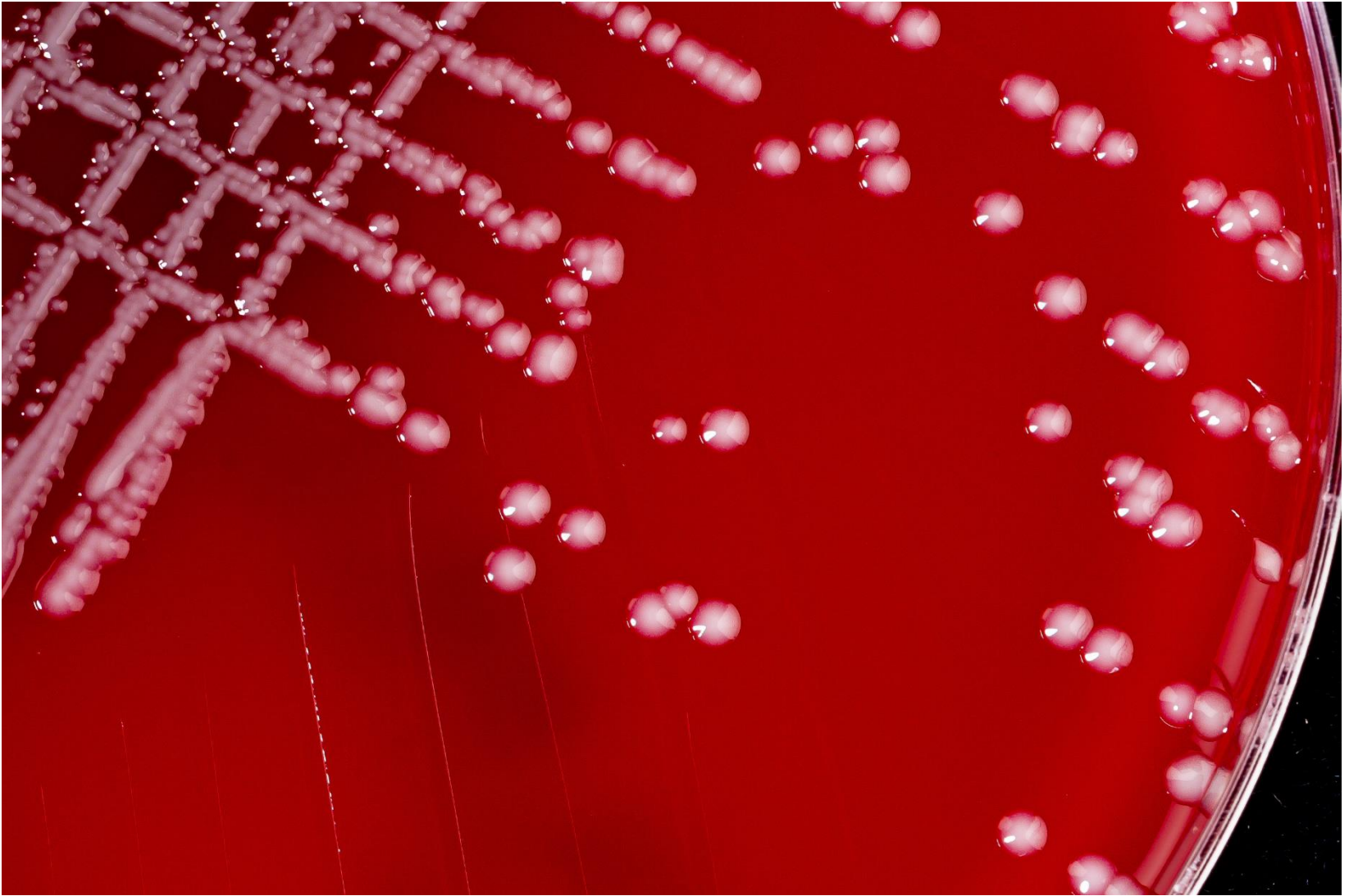
14. *Acinetobacter baumani*

Blood agar

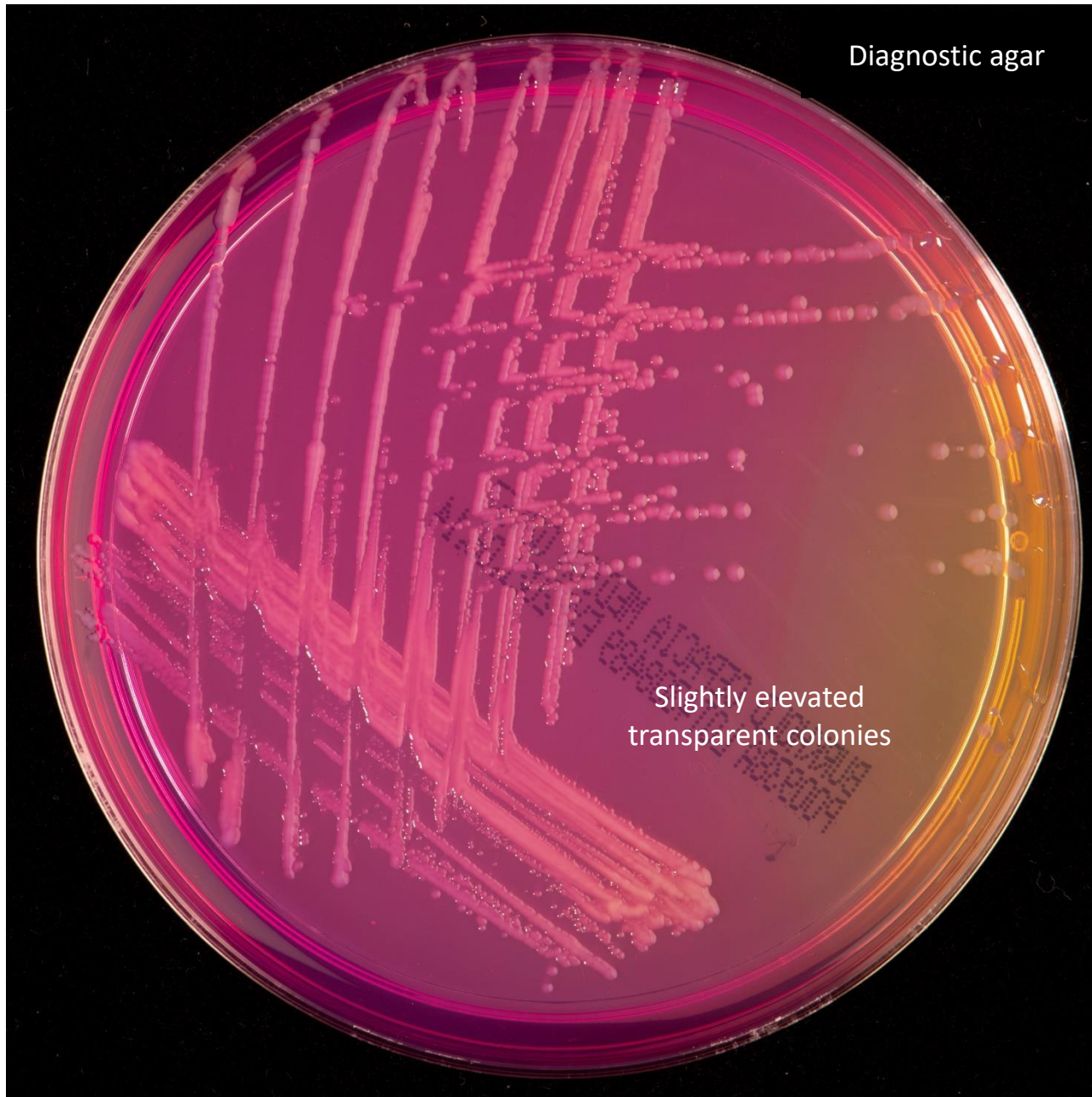


Convex, shiny and non-haemolytic colonies
(smaller in size than enterobacteria)

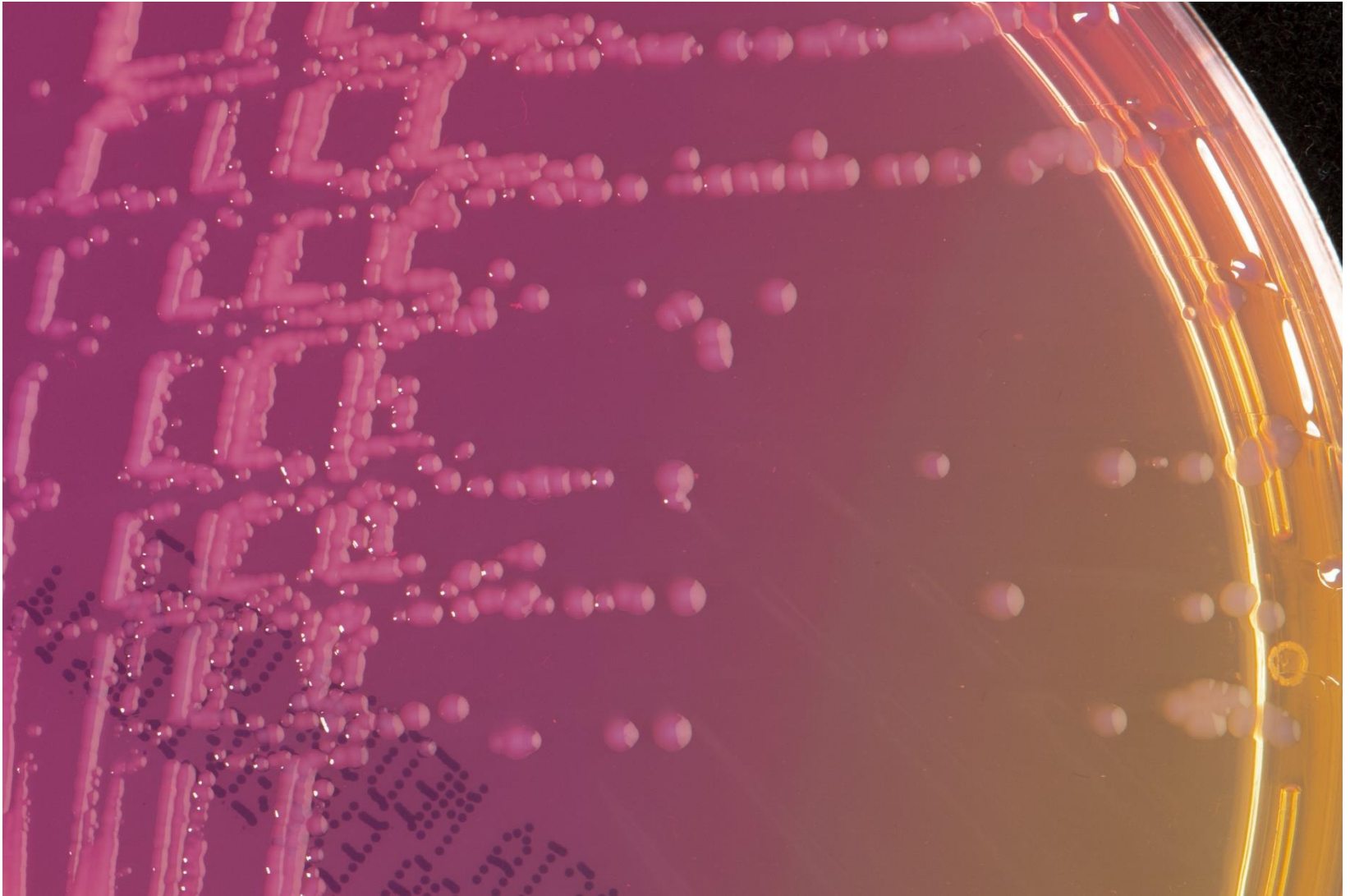
14. *Acinetobacter baumani*



15. *Burkholderia cepacia* komplex



15. *Burkholderia cepacia* komplex



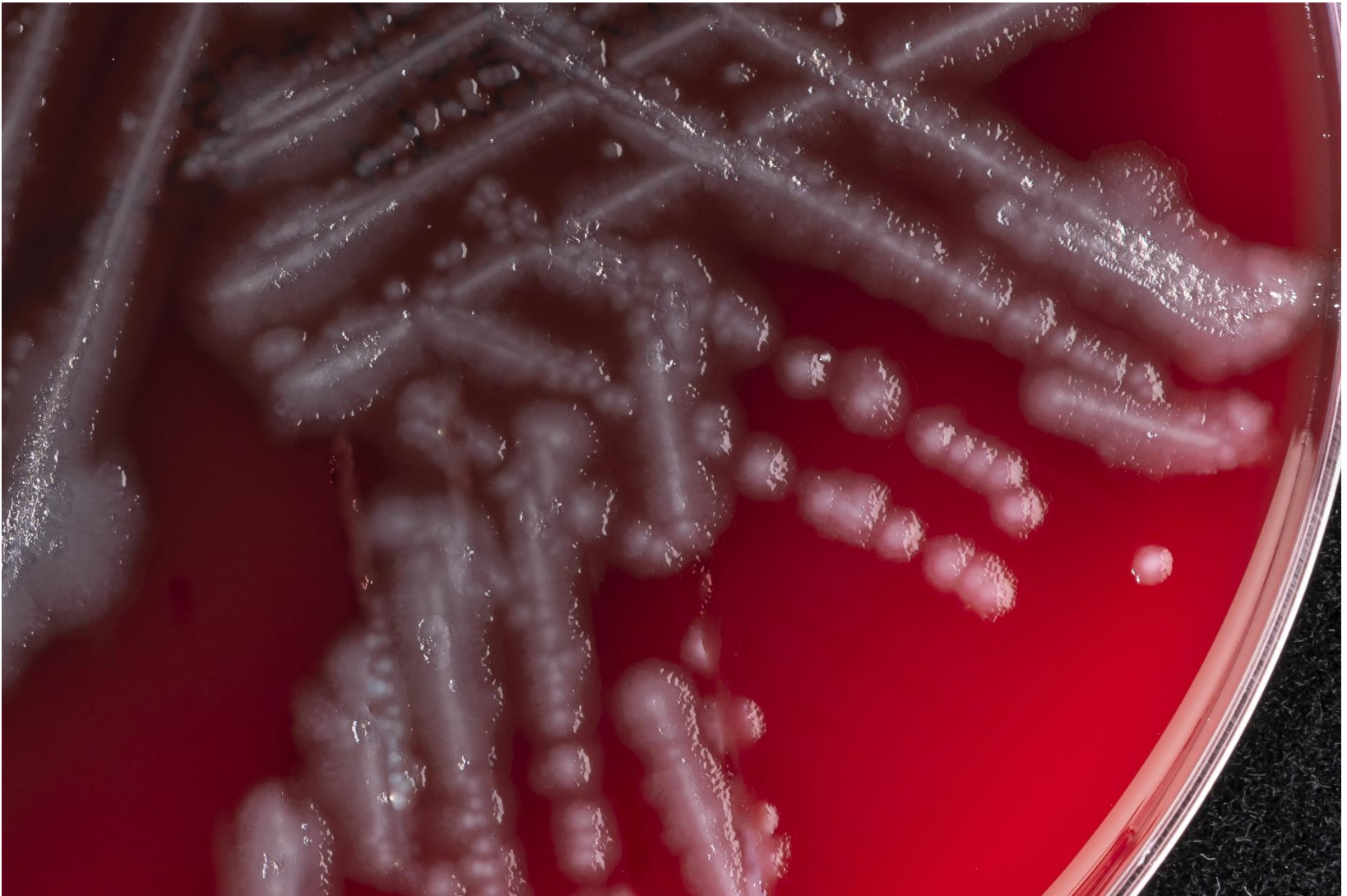
16. *Pseudomonas aeruginosa*

Blood agar



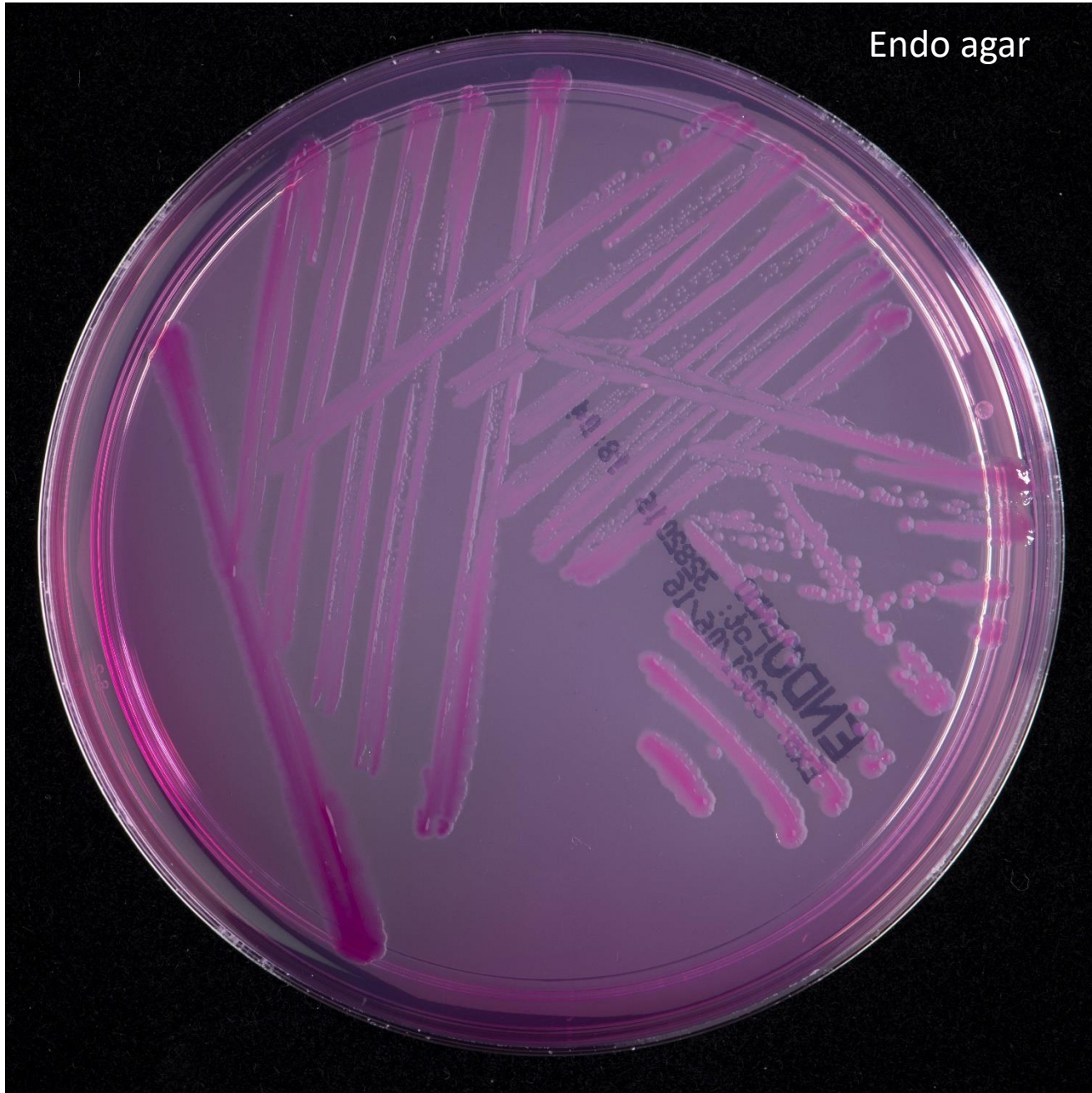
Colonies large, flat and spread out (typical odour)

16. *Pseudomonas aeruginosa*

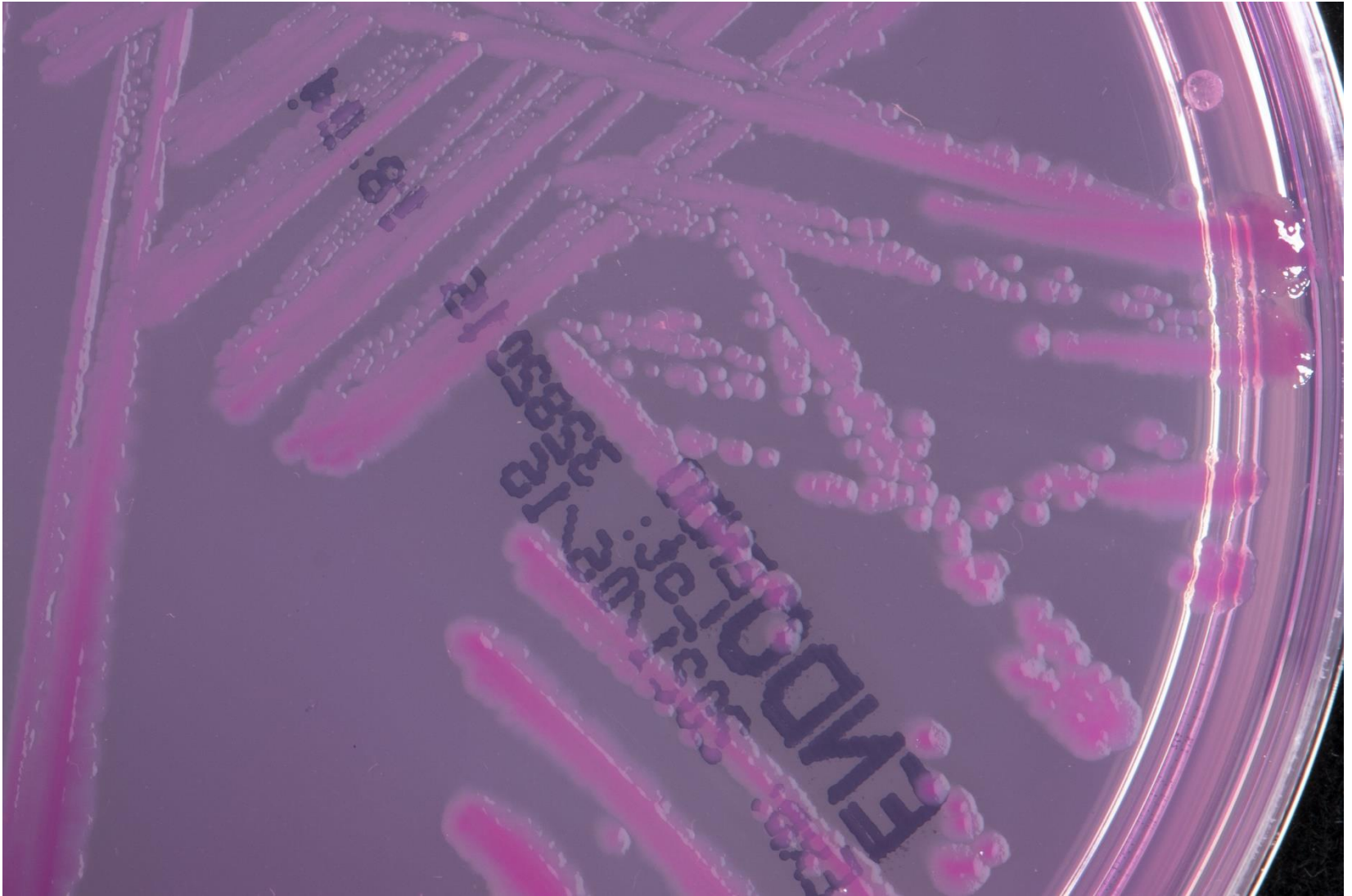


16. *Pseudomonas aeruginosa*

Endo agar



16. *Pseudomonas aeruginosa*



17. *Stenotrophomonas maltophilia*



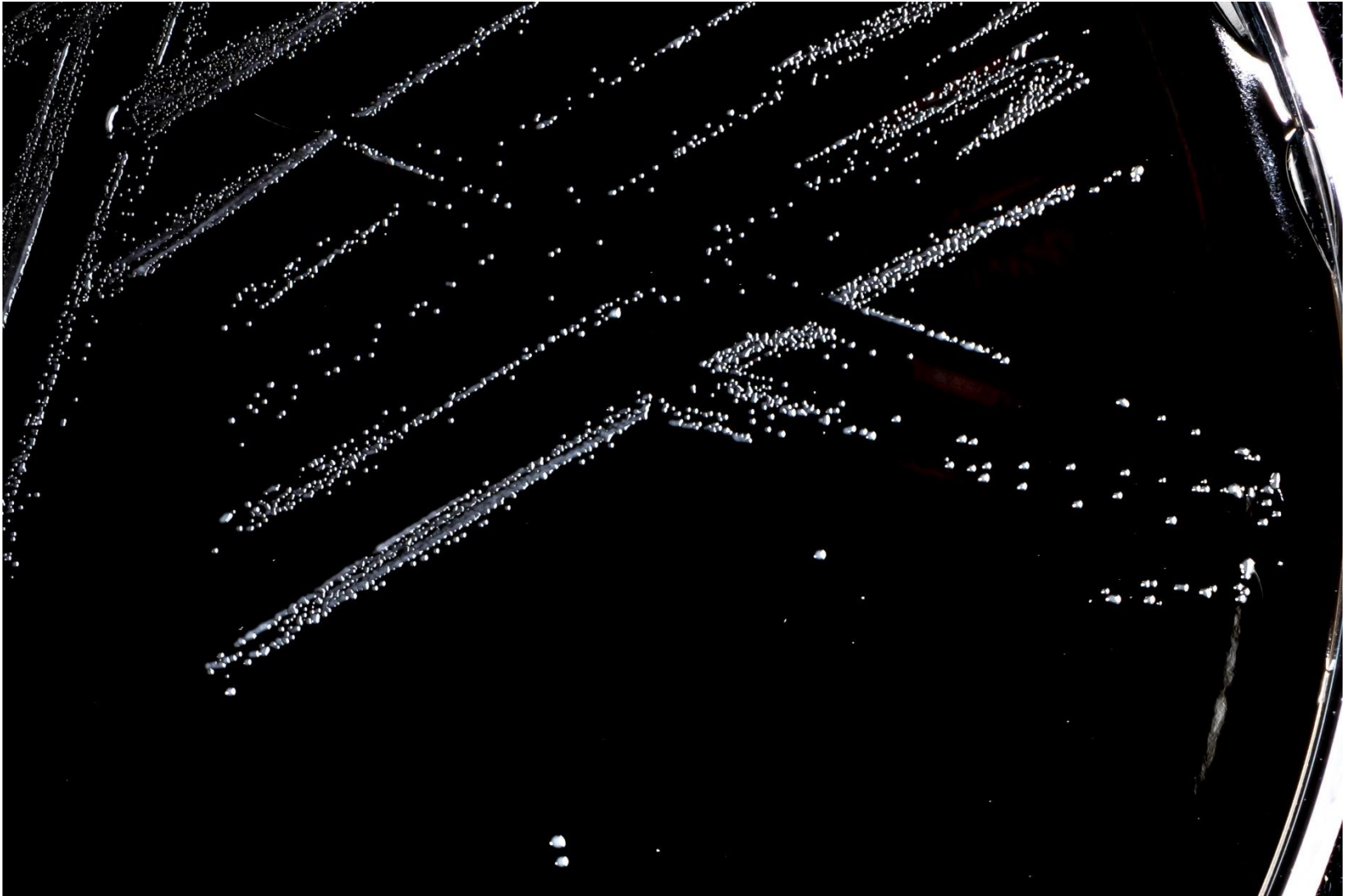
17. *Stenotrophomonas maltophilia*



18. *Bordetella pertussis*



18. *Bordetella pertussis*



19. *Campylobacter* sp.

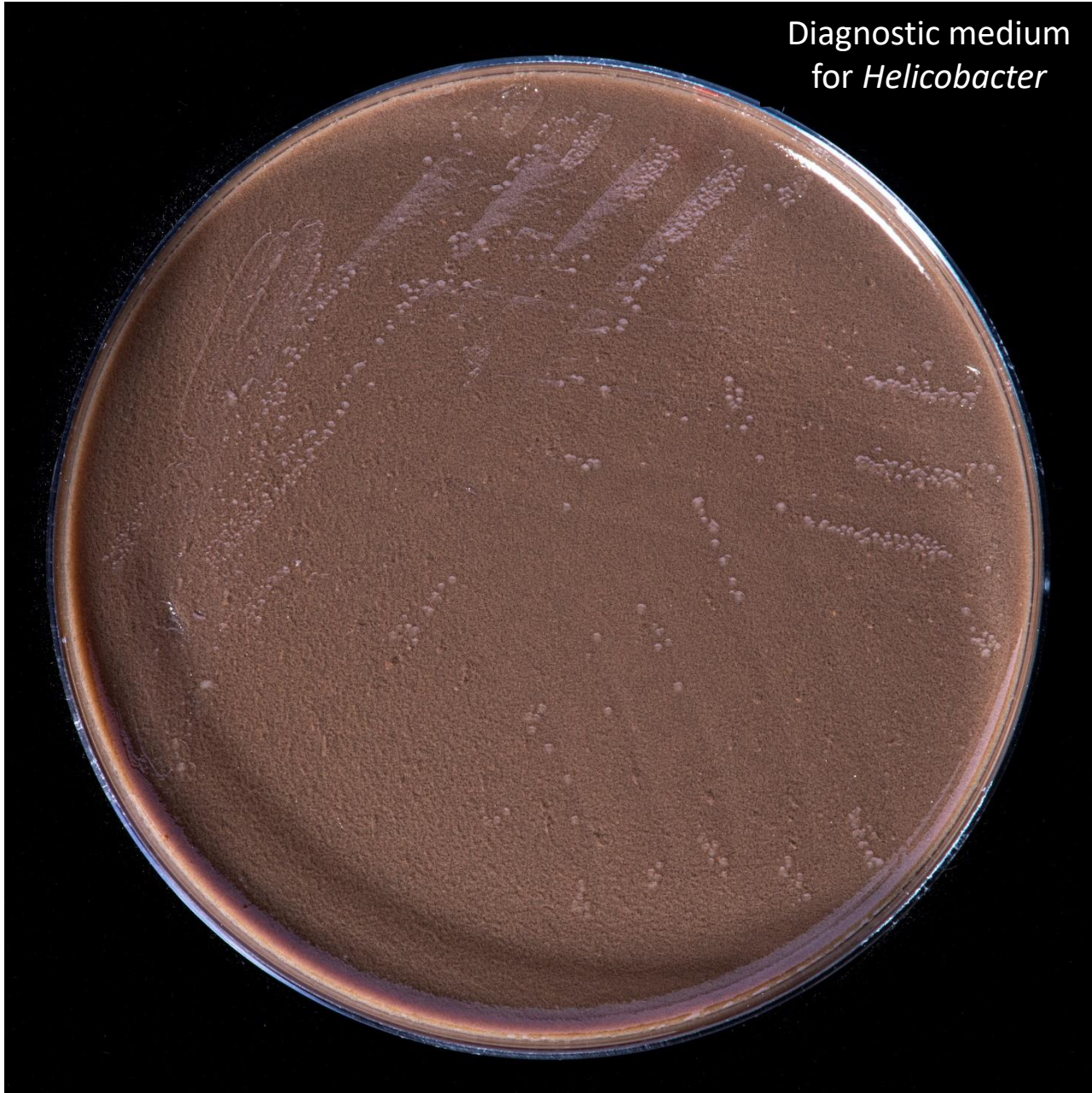


19. *Campylobacter* sp.



20. *Helicobacter pylori*

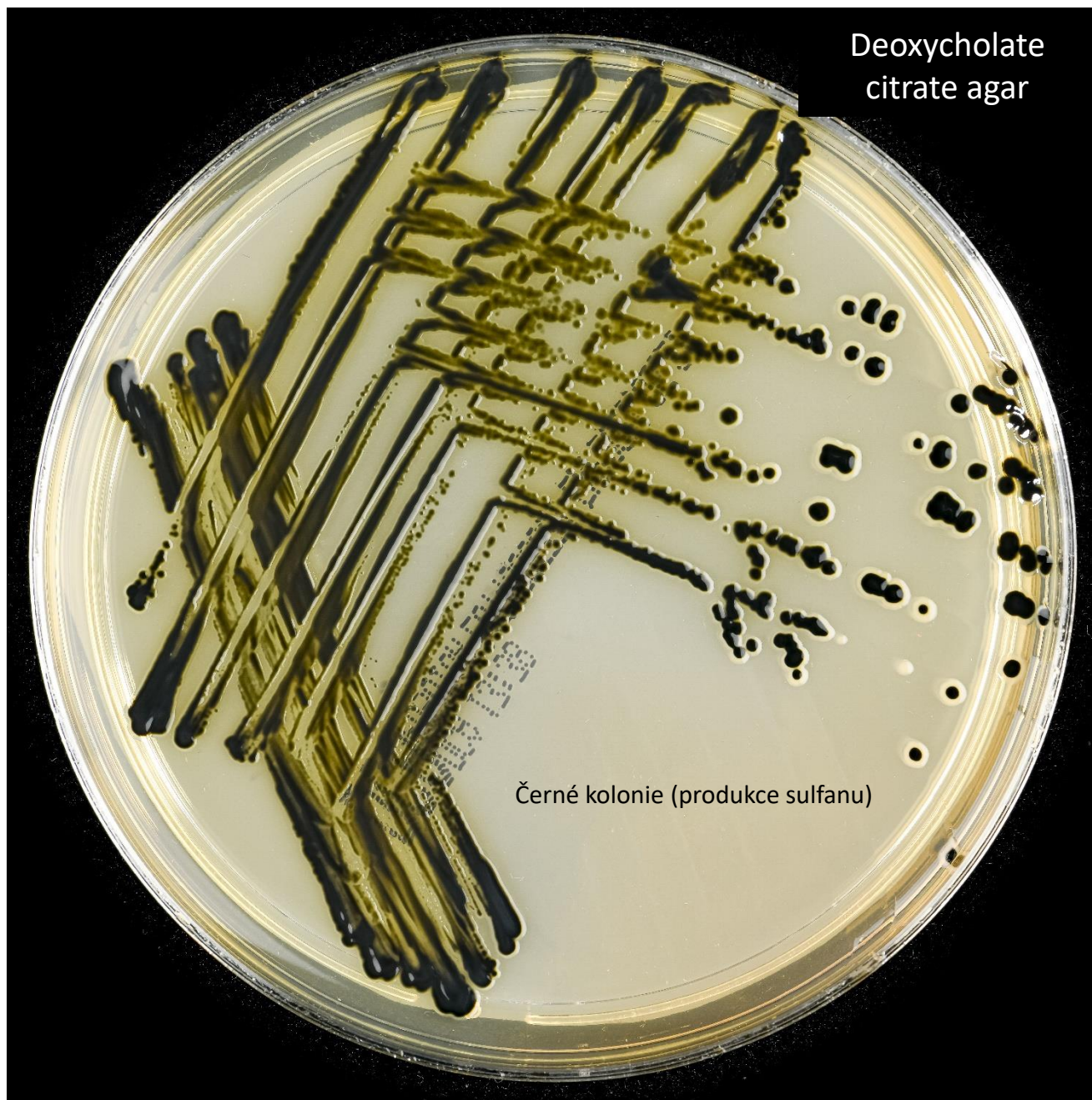
Diagnostic medium
for *Helicobacter*



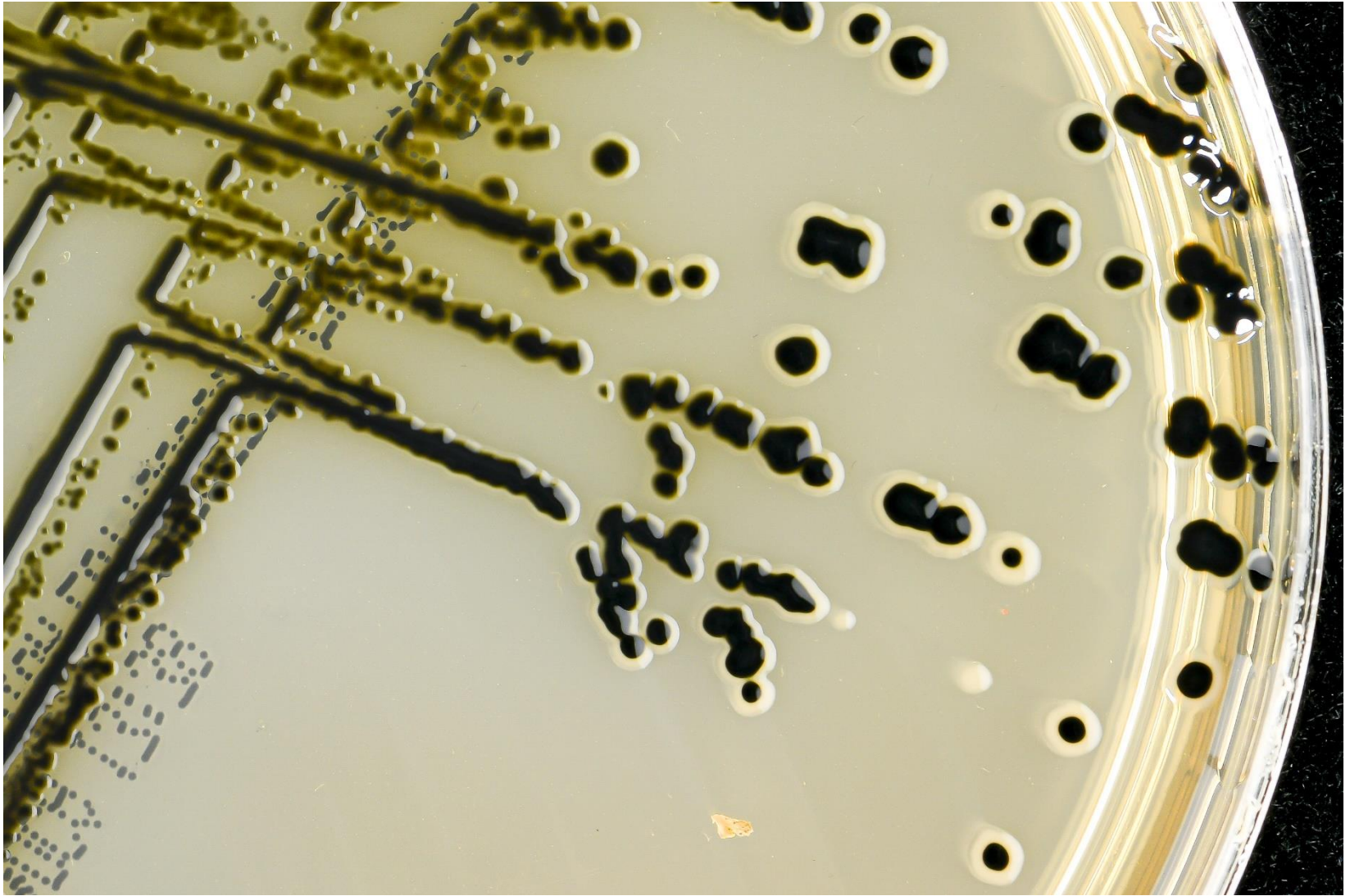
20. *Helicobacter pylori*



21. *Citrobacter freundii*



21. *Citrobacter freundii*



22. *Enterobacter cloacae*

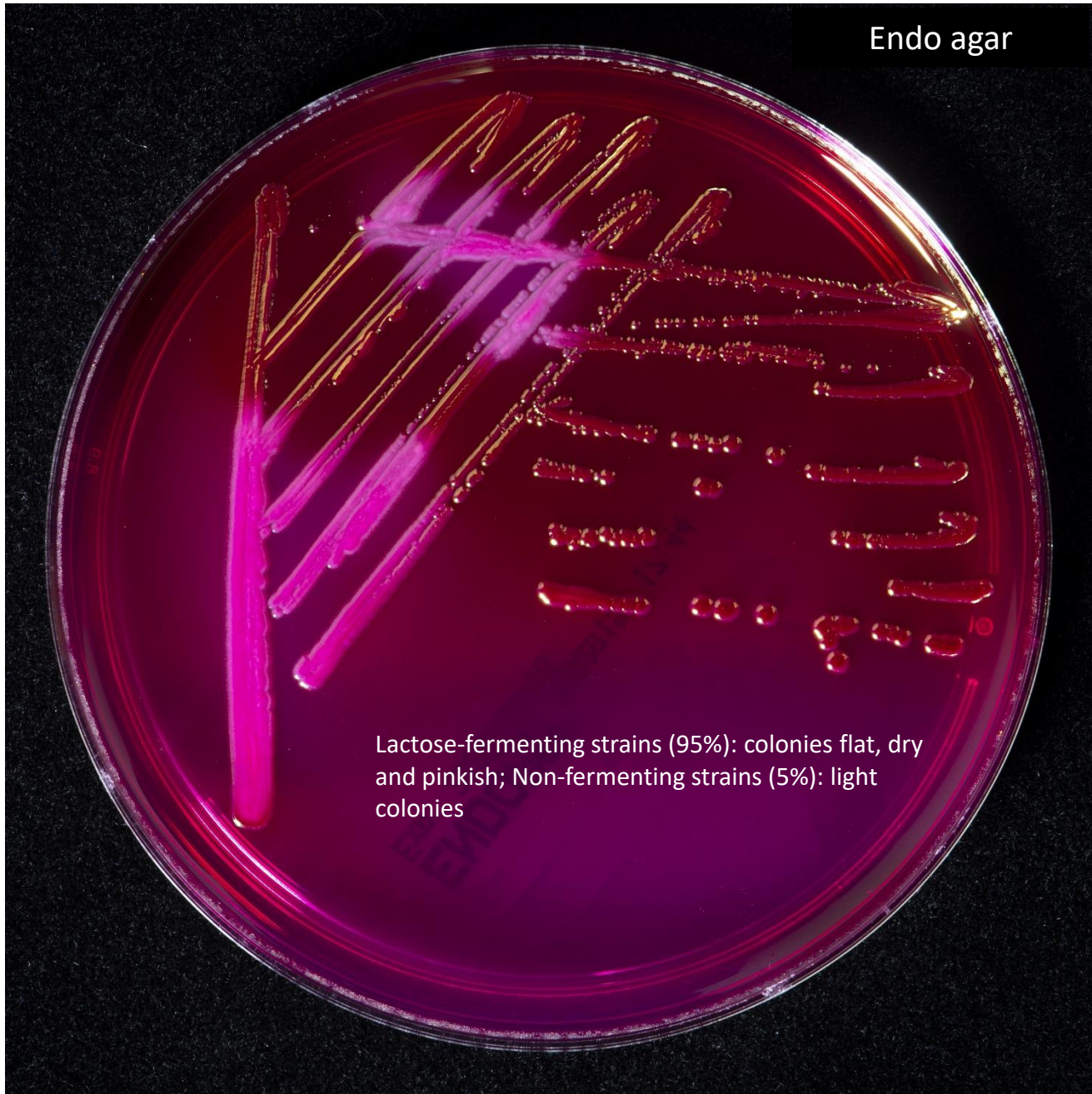


22. *Enterobacter cloacae*



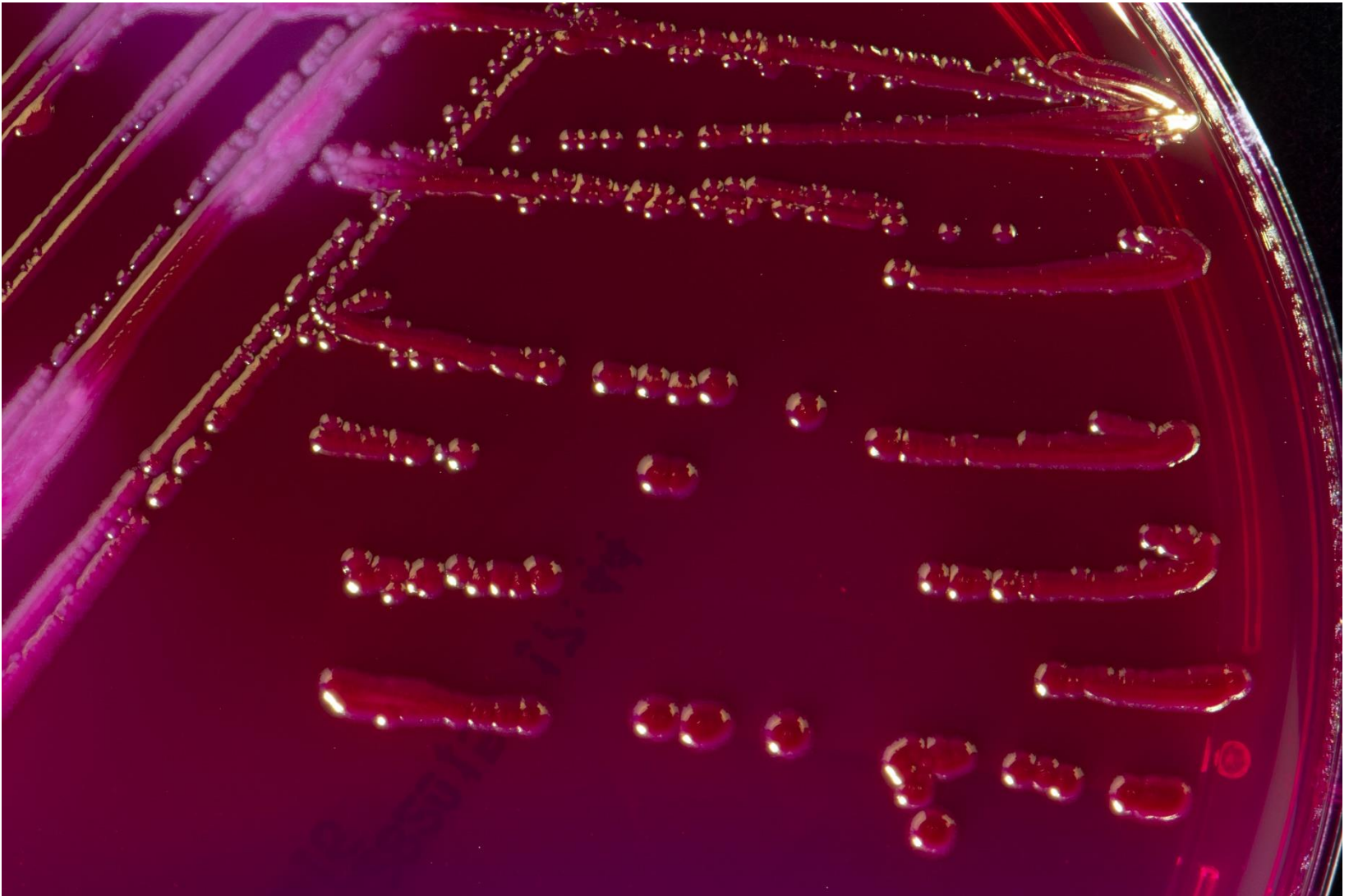
23. *Escherichia coli*

Endo agar



Lactose-fermenting strains (95%): colonies flat, dry and pinkish; Non-fermenting strains (5%): light colonies

23. *Escherichia coli*



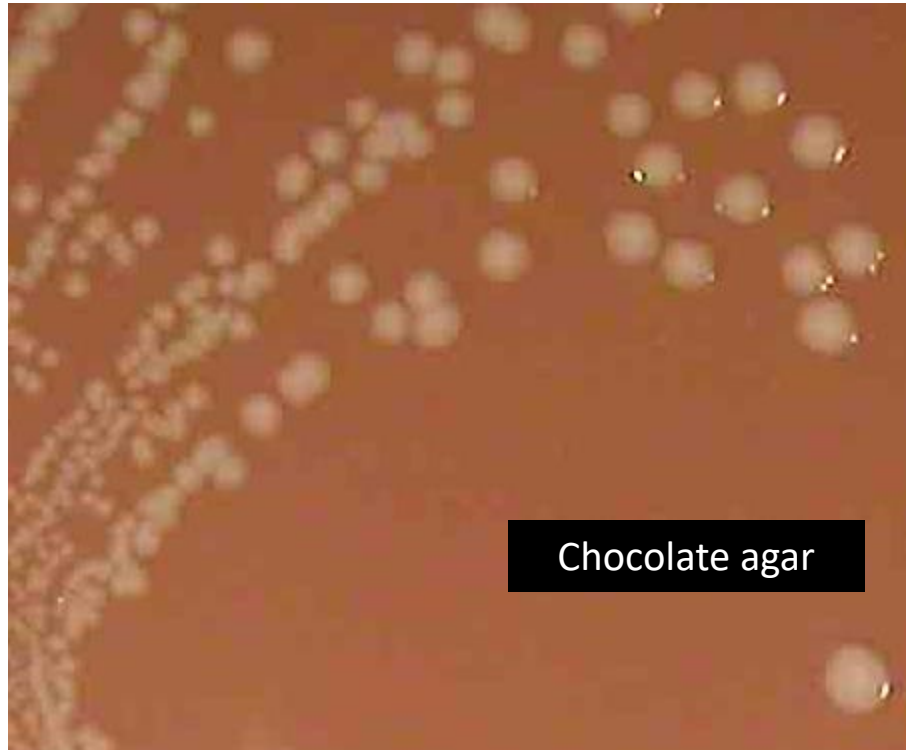
24. *Haemophilus influenzae*



24. *Haemophilus influenzae*



24. *Haemophilus influenzae*



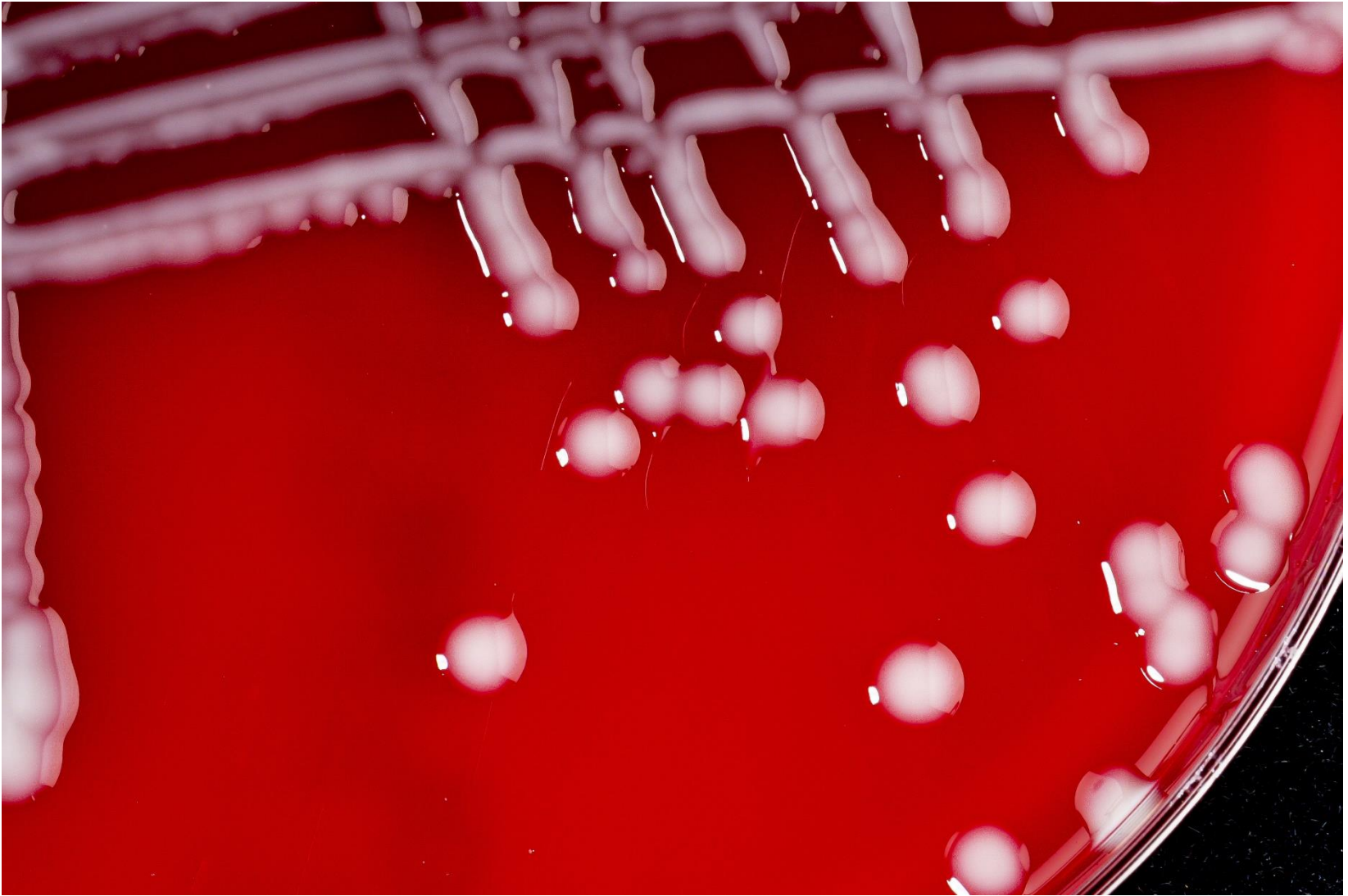
25. *Klebsiella pneumoniae*

Blood agar

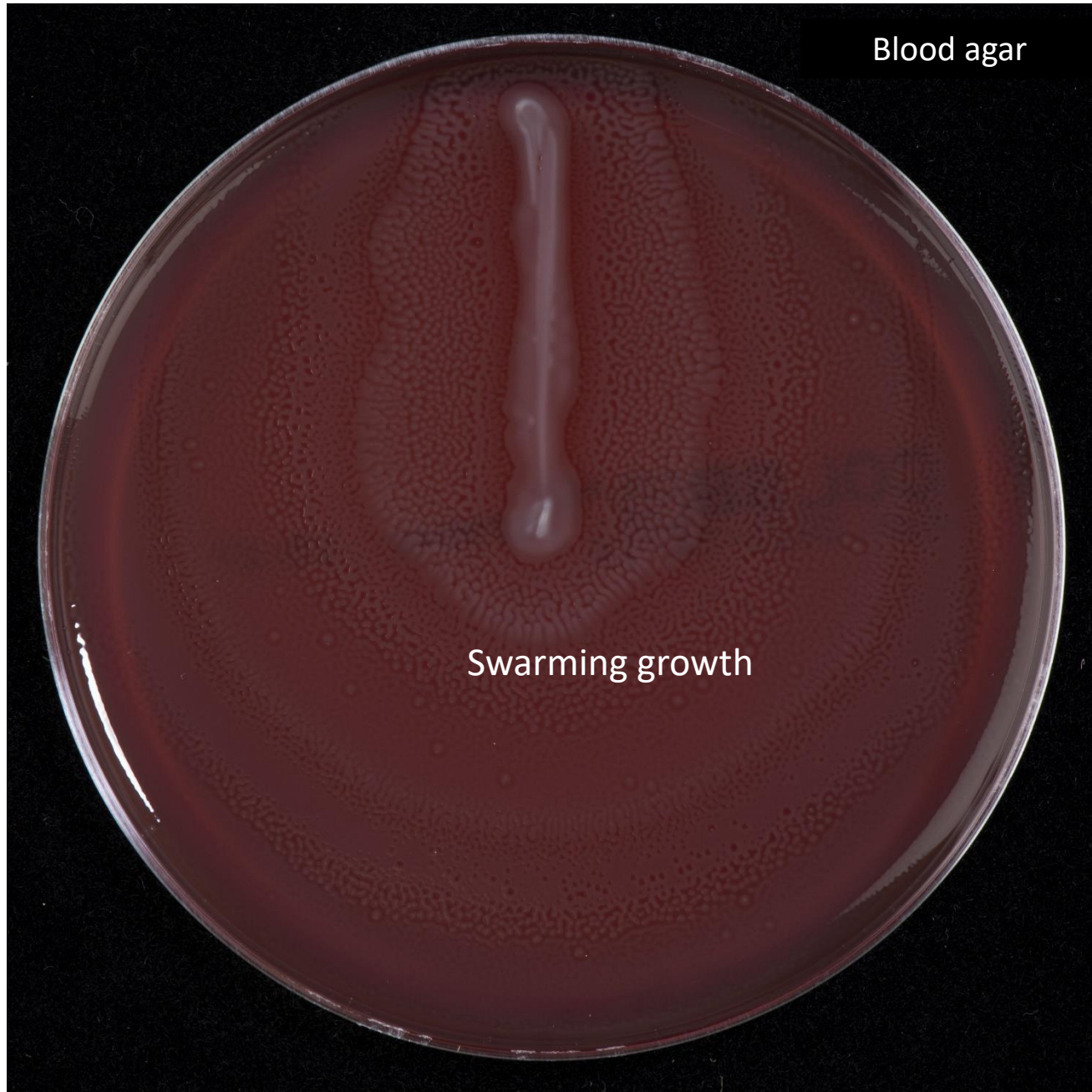


Colonies large, shiny and slimy
(ferment lactose in Endo agar)

25. *Klebsiella pneumoniae*

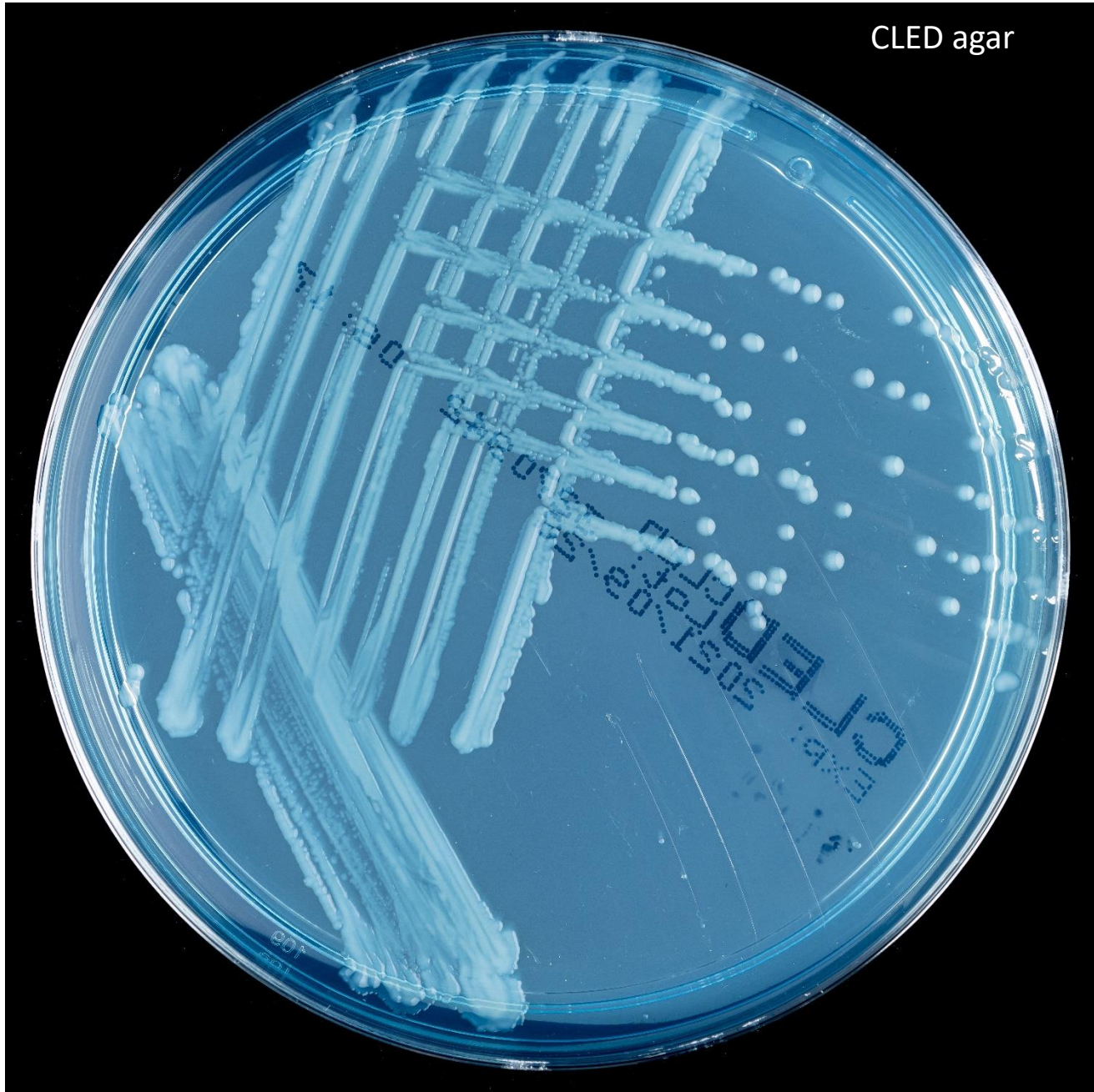


26. *Proteus mirabilis*

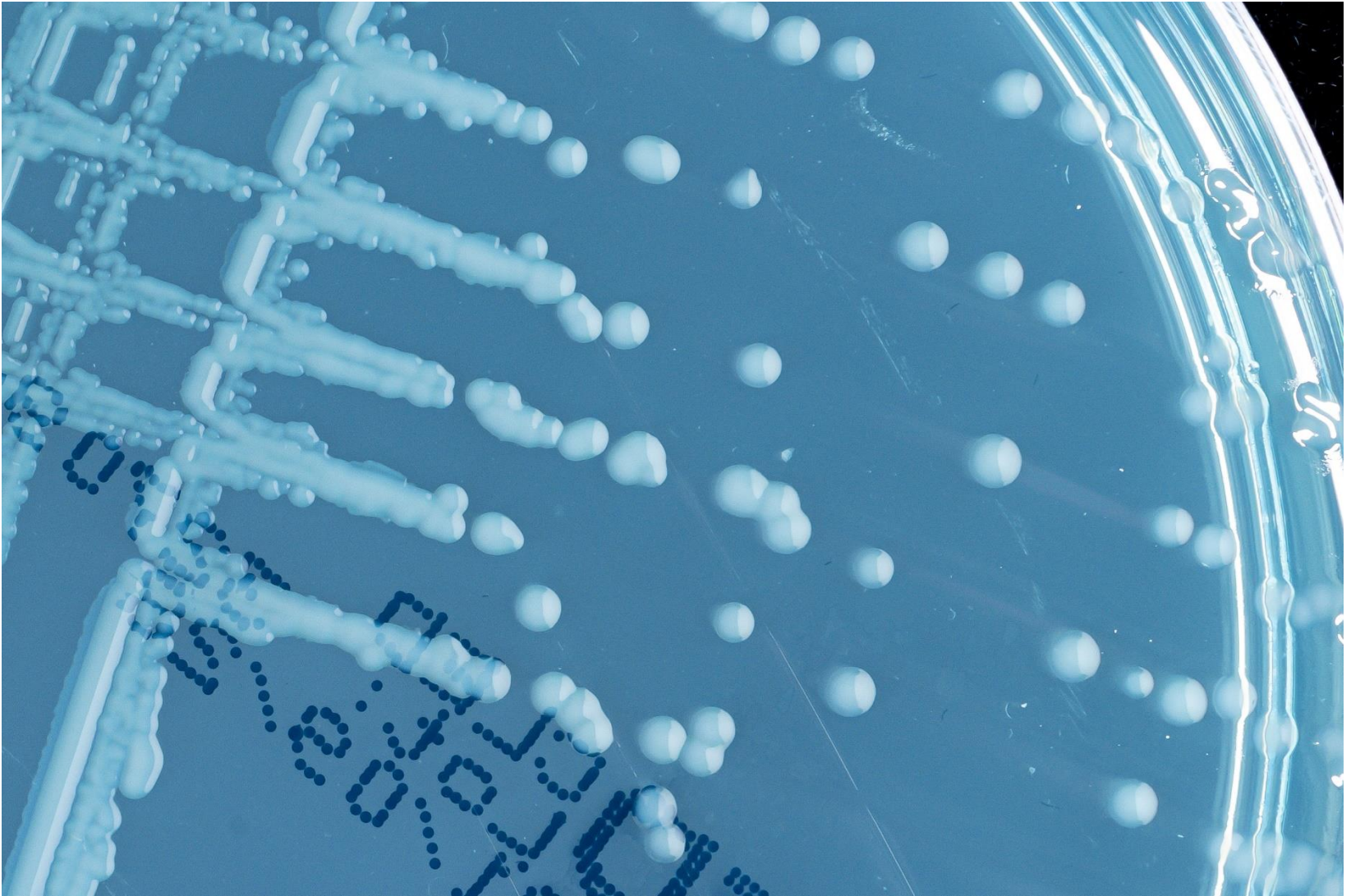


26. *Proteus mirabilis*

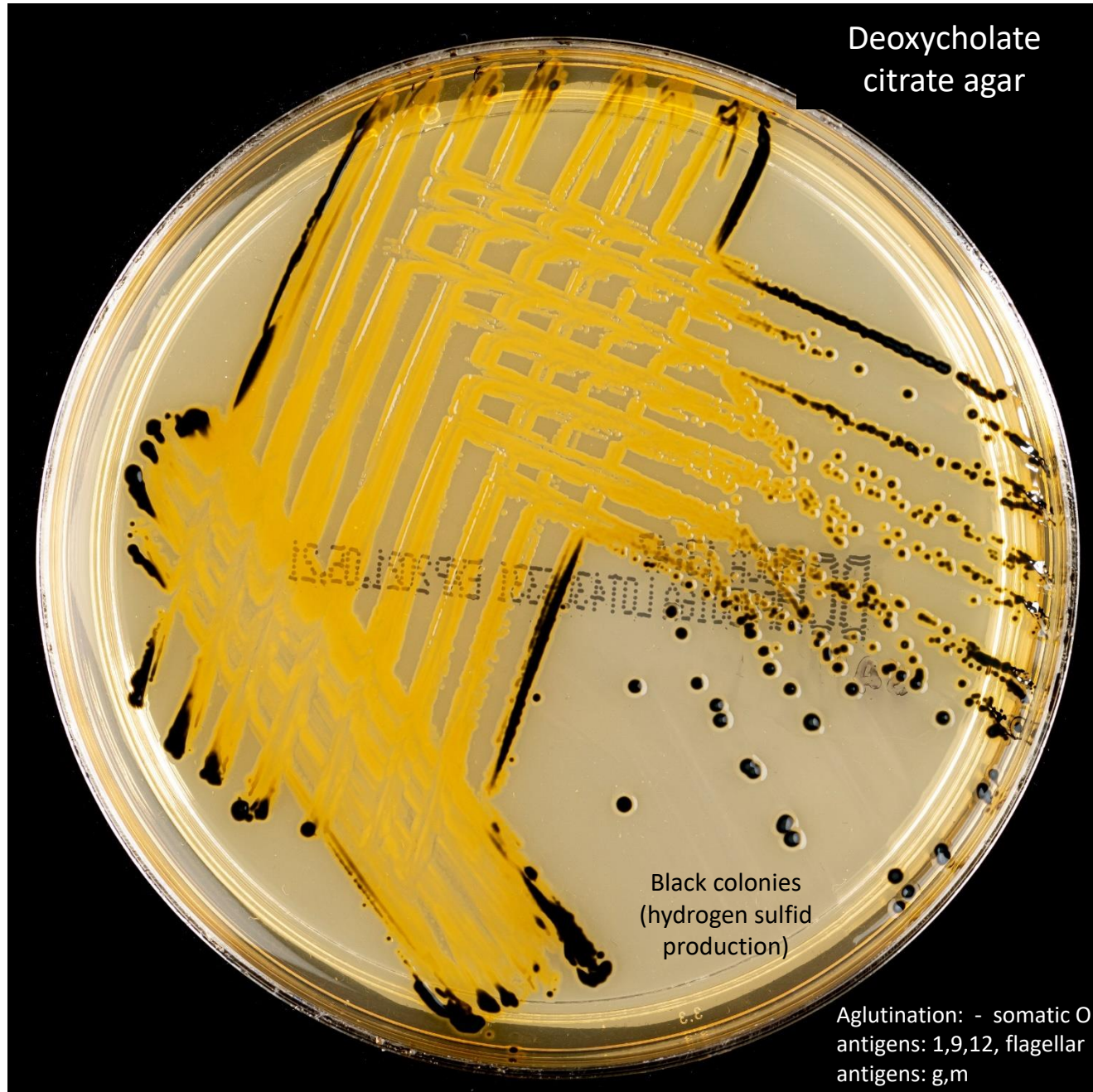
CLED agar



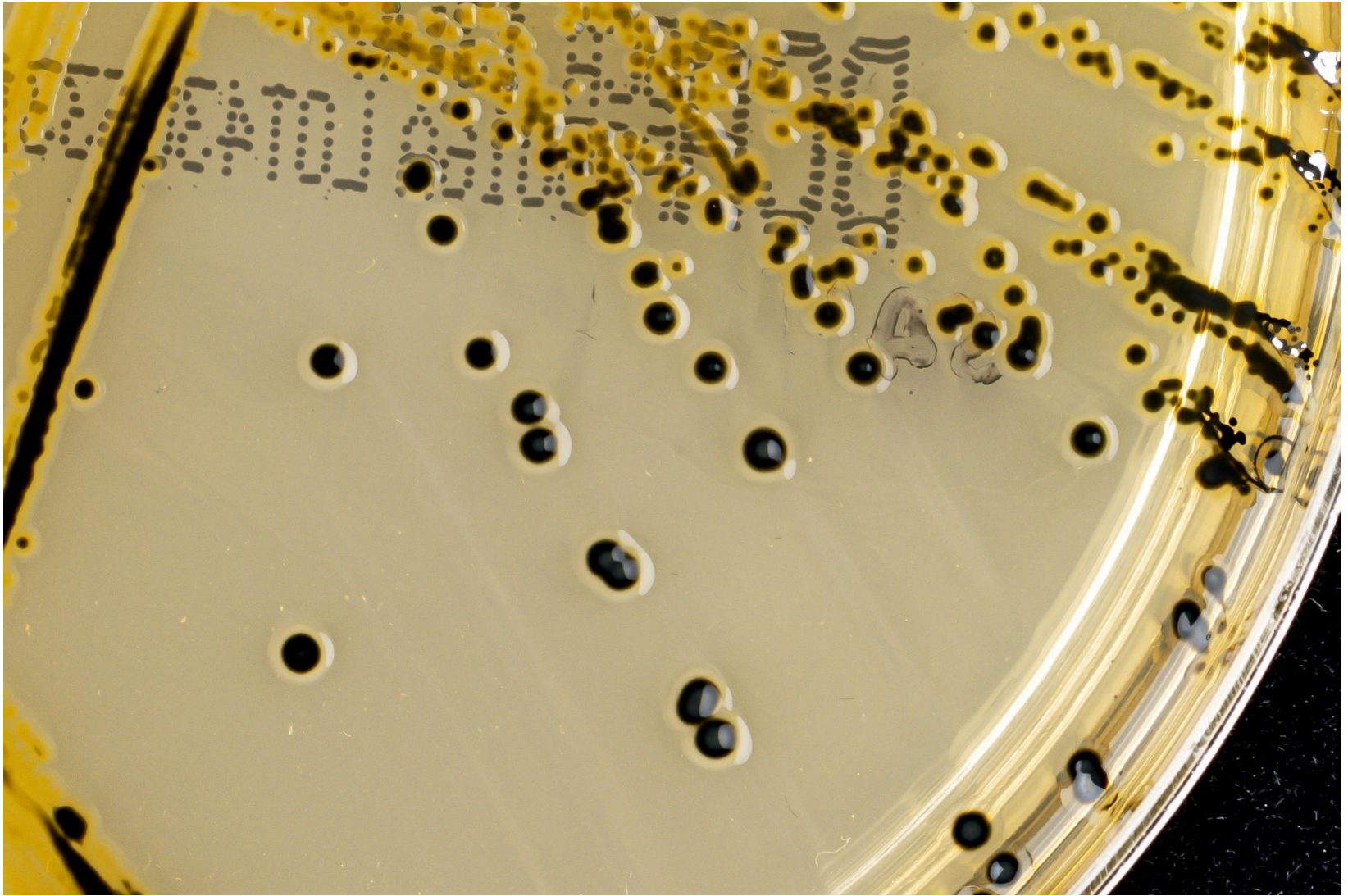
26. *Proteus mirabilis*



27. *Salmonella* Enteritidis

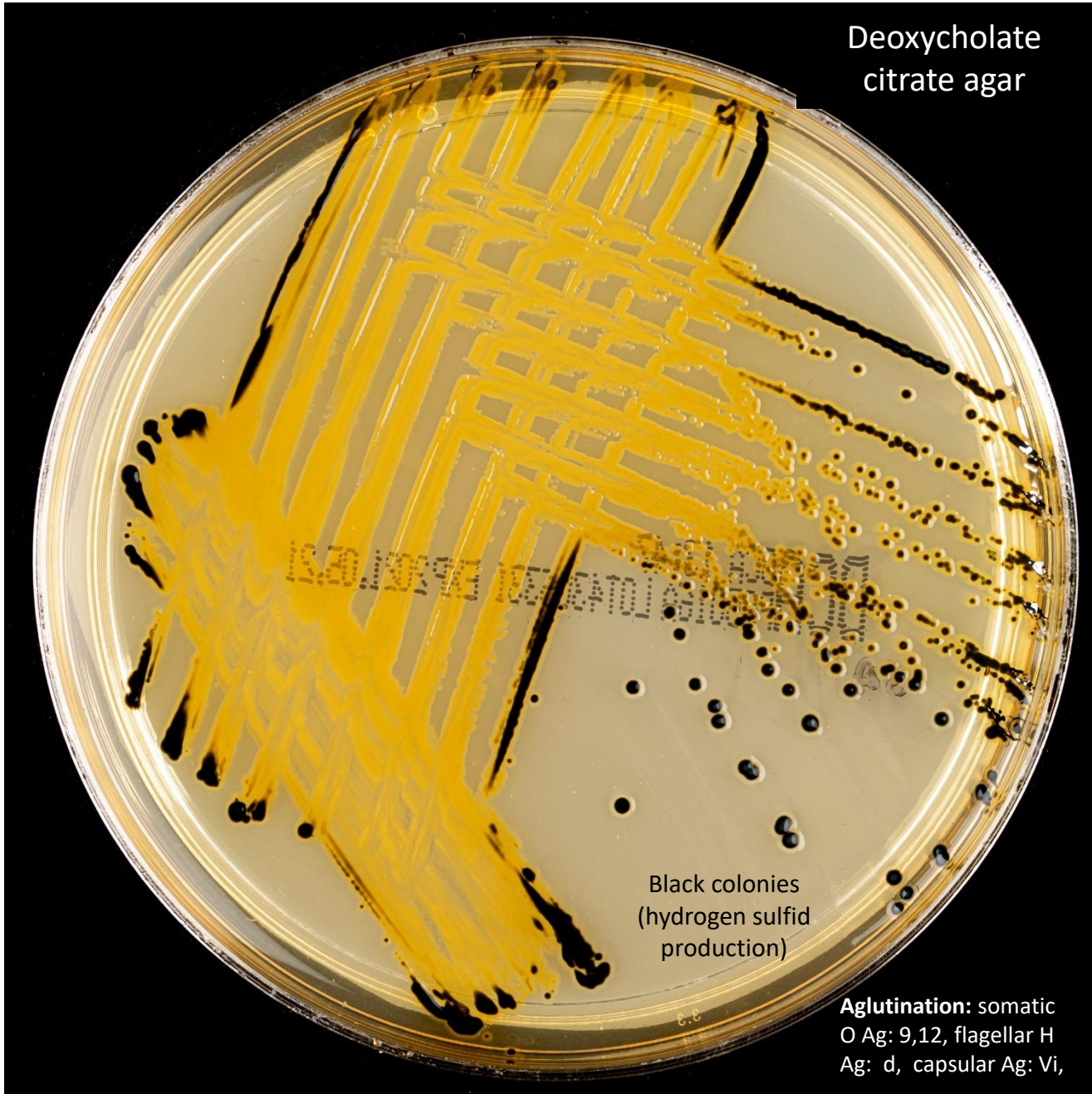


27. *Salmonella* Enteritidis



28. *Salmonella* Typhi

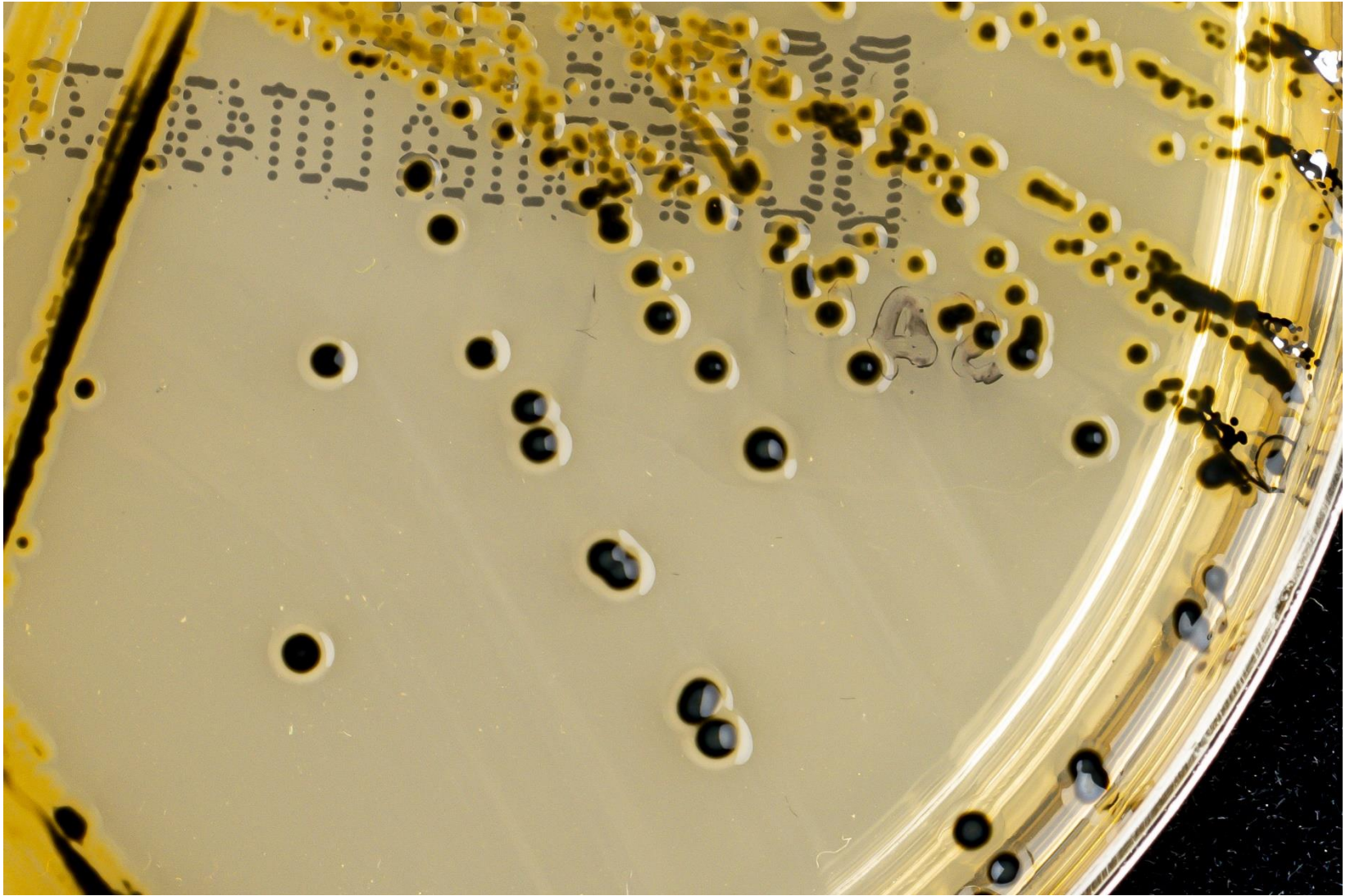
Deoxycholate
citrate agar



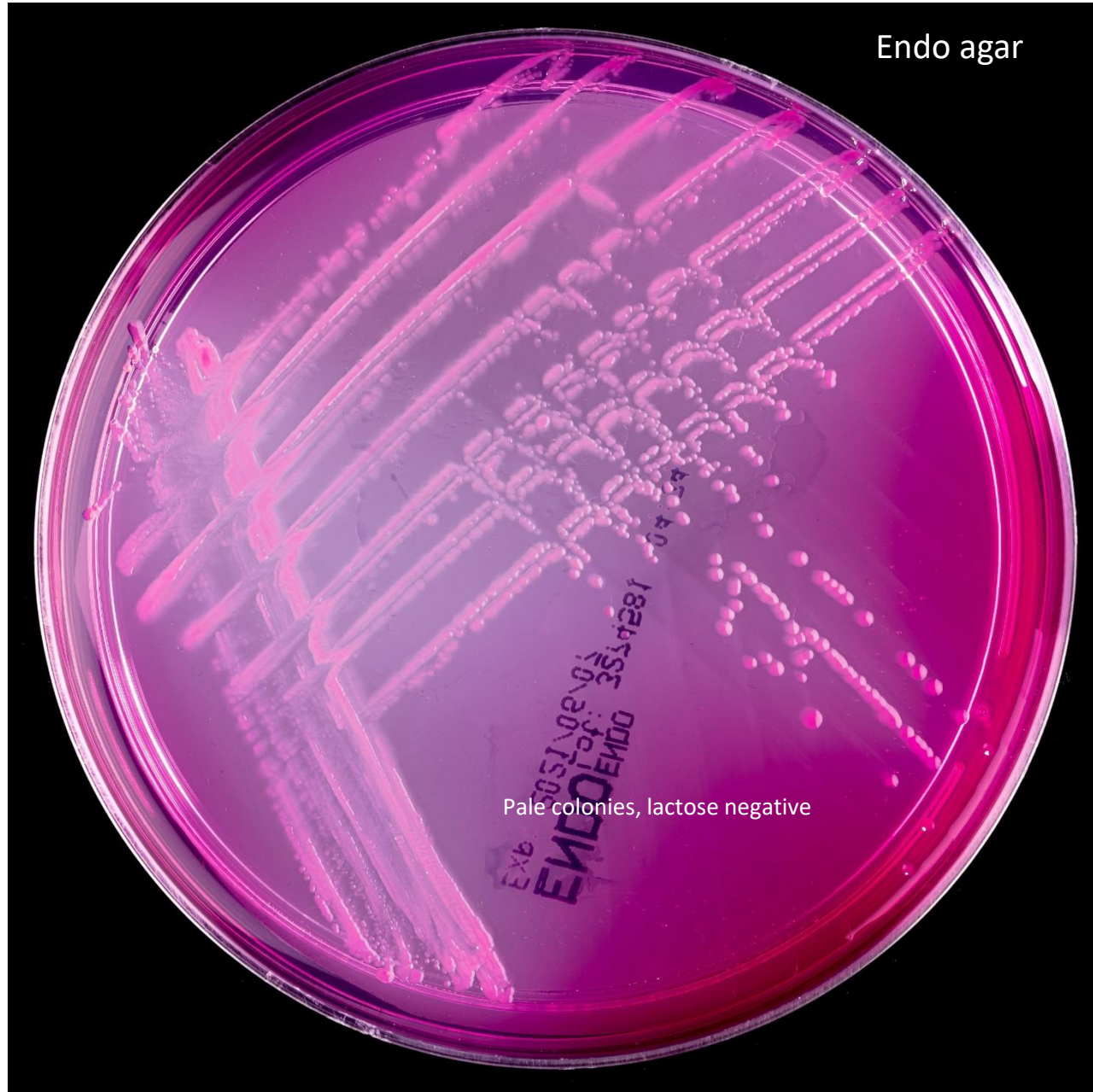
Black colonies
(hydrogen sulfid
production)

Agglutination: somatic
O Ag: 9,12, flagellar H
Ag: d, capsular Ag: Vi,

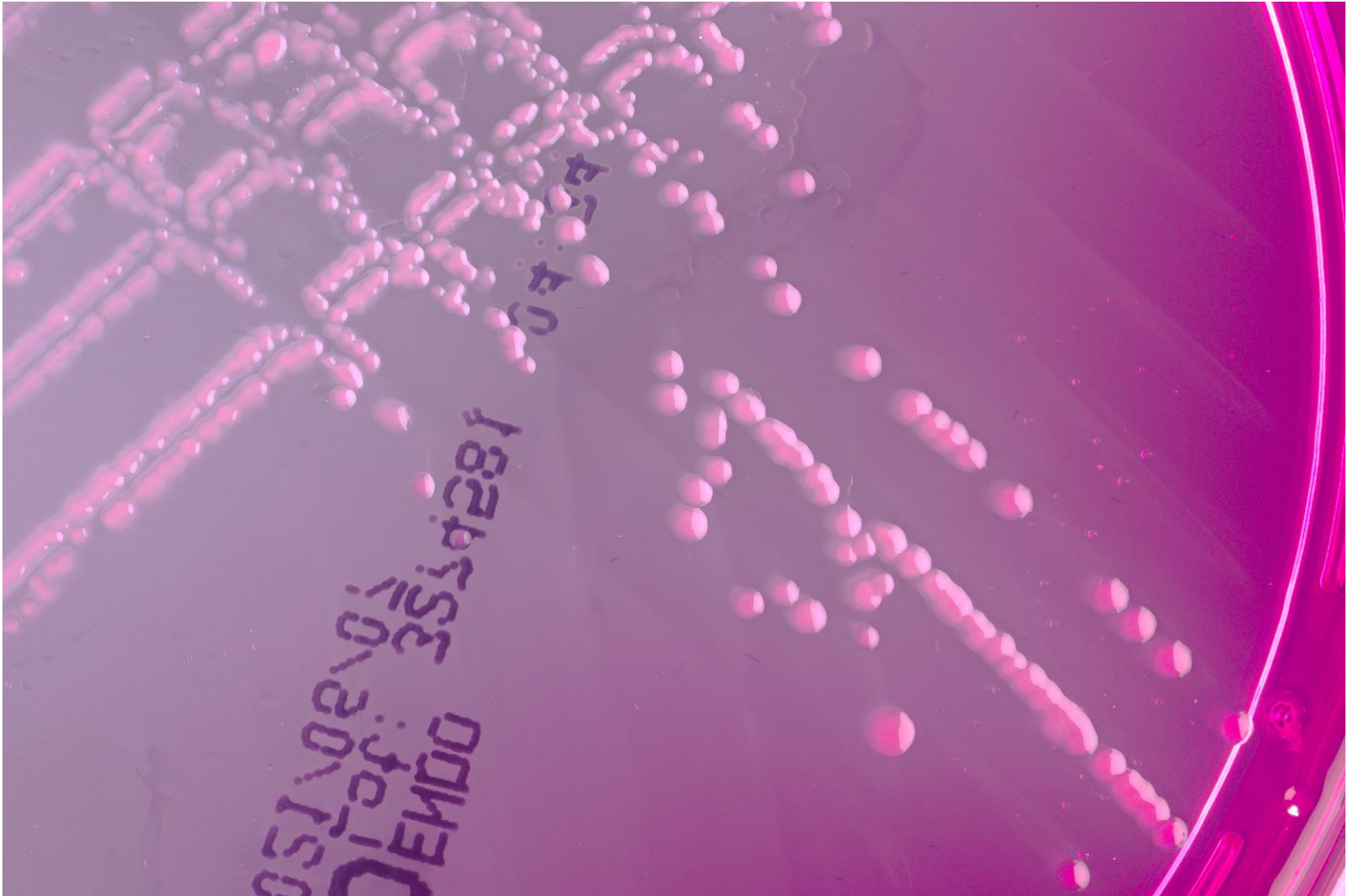
28. *Salmonella* Typhi



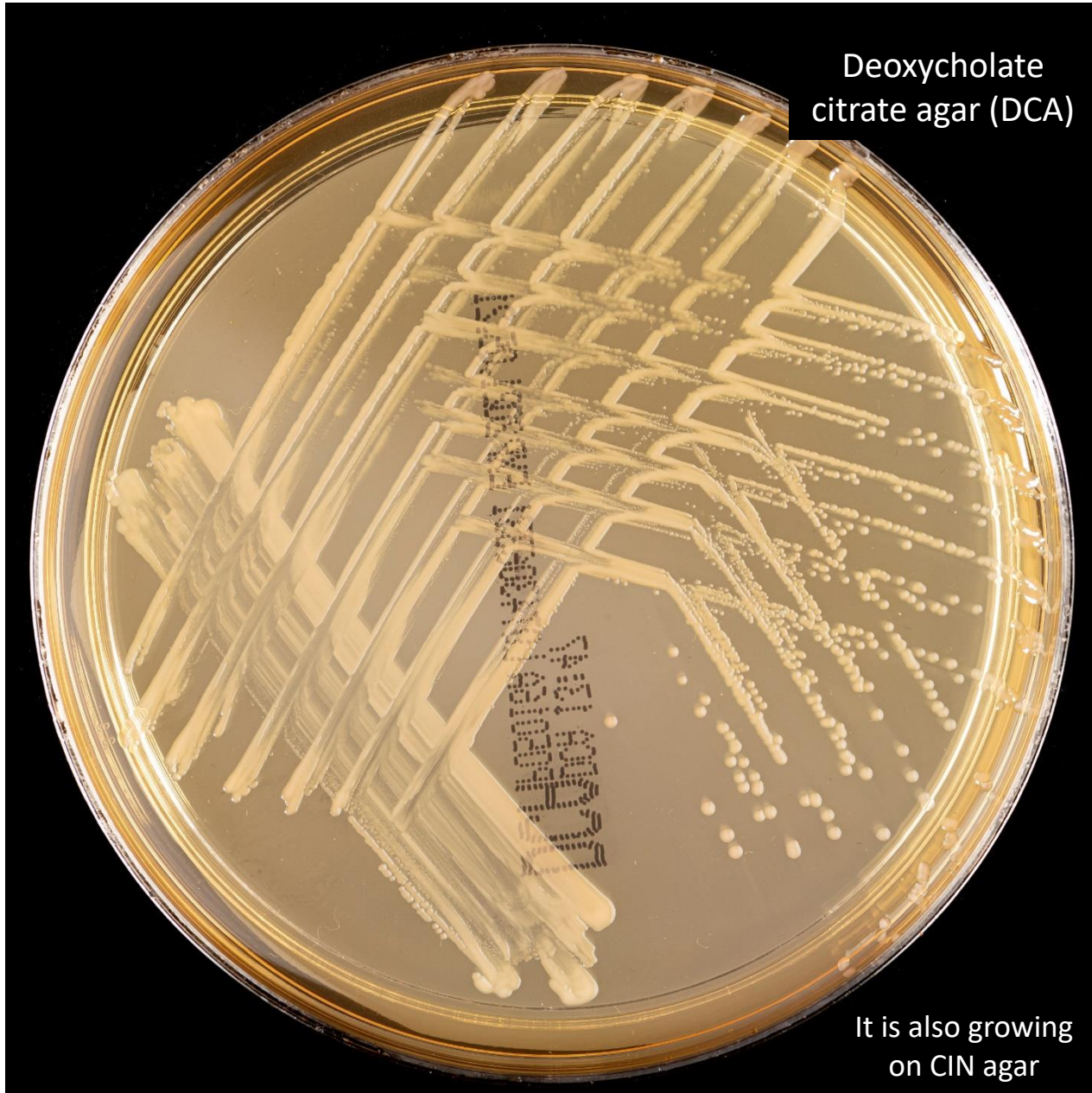
29. *Shigella dysenteriae*



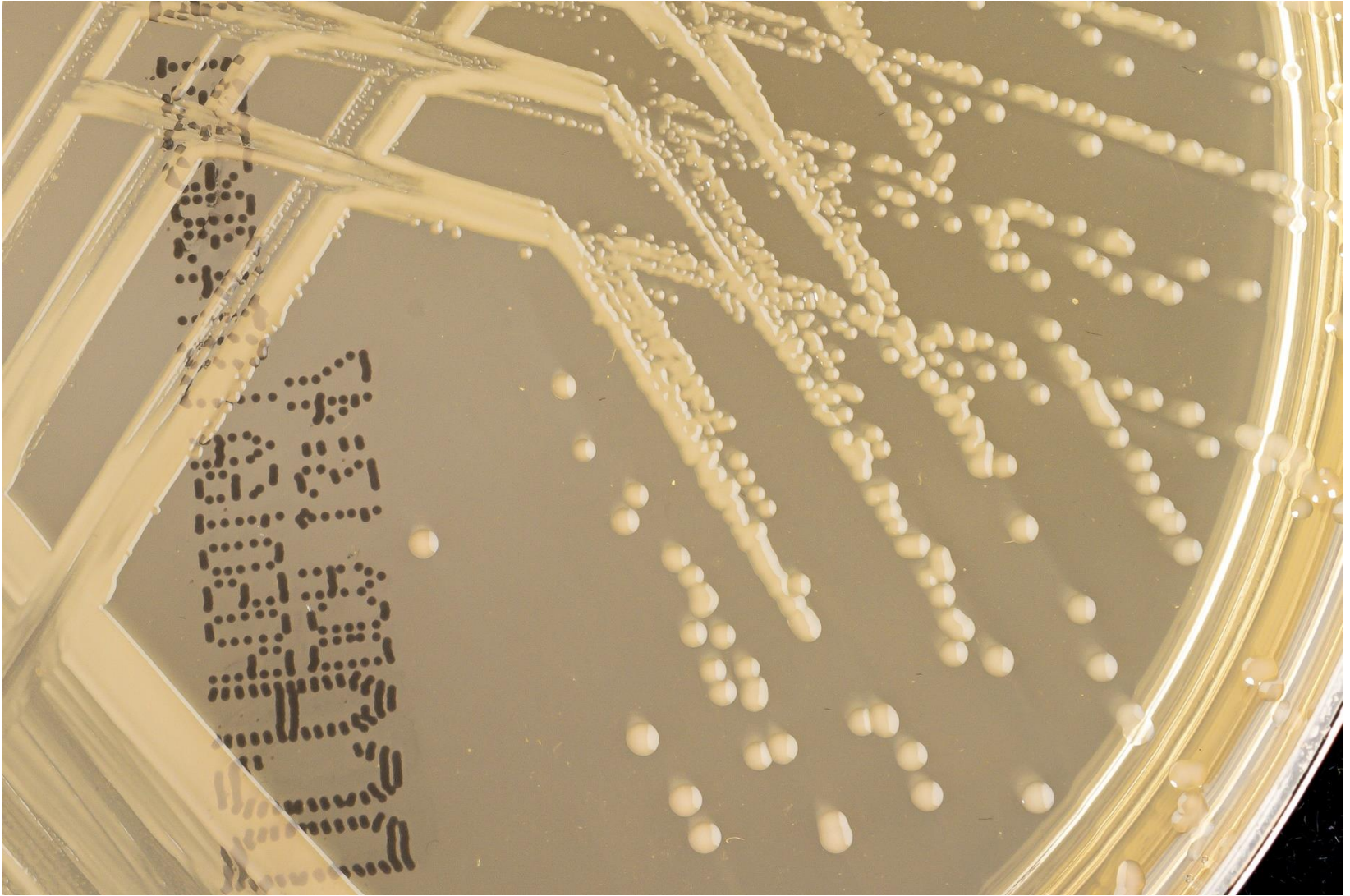
29. *Shigella dysenteriae*



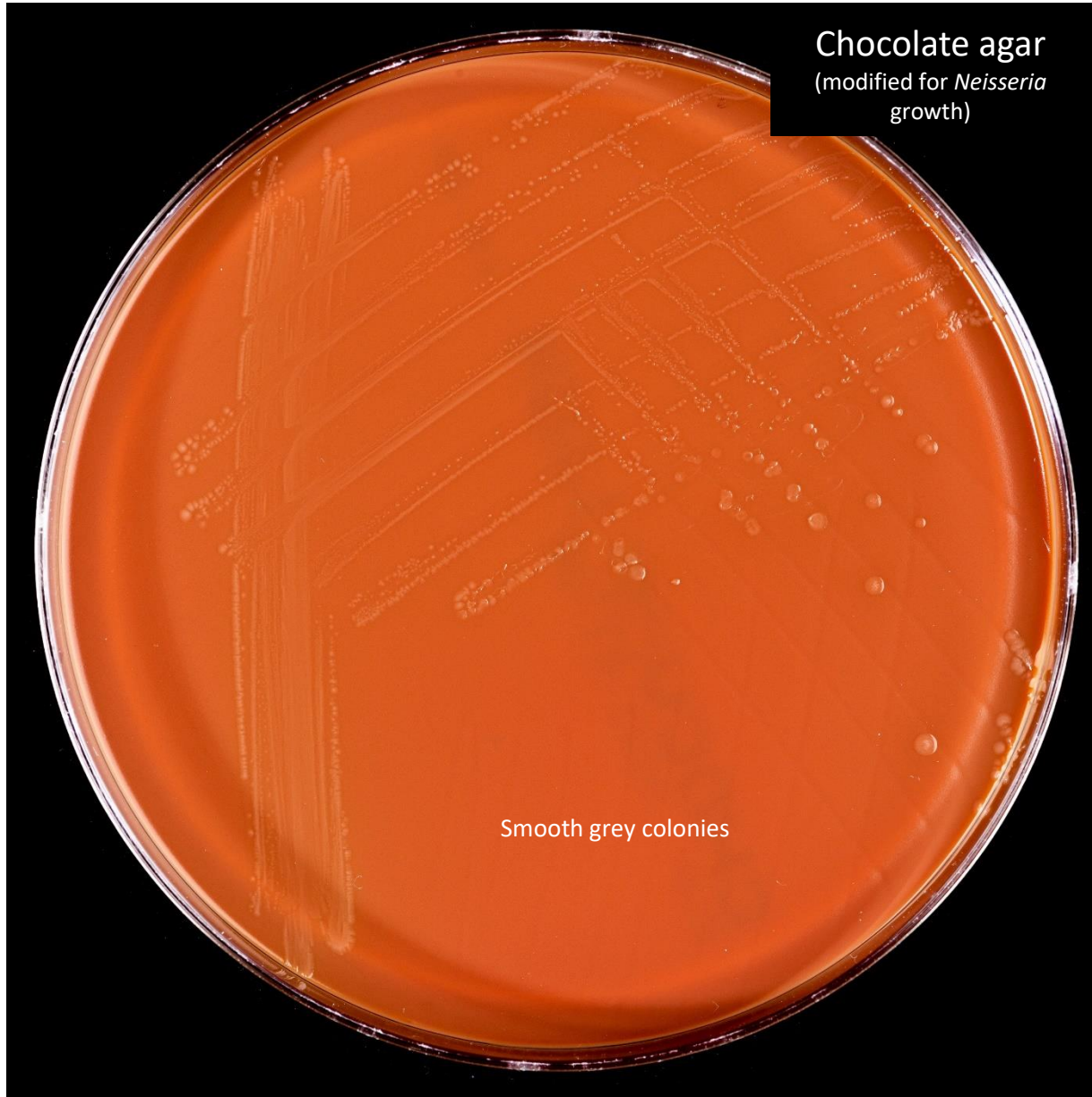
30. *Yersinia enterocolitica*



30. *Yersinia enterocolitica*



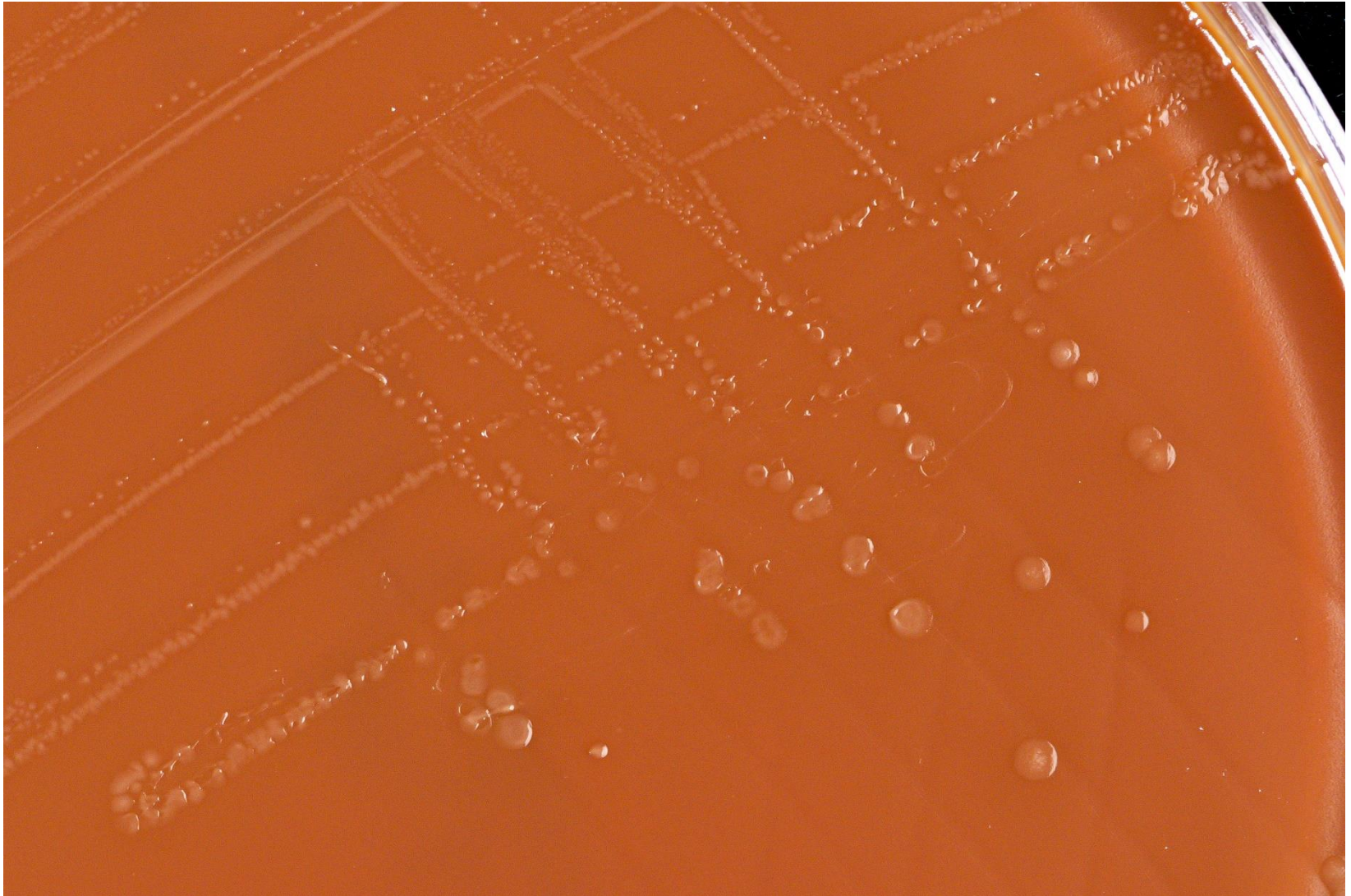
31. *Neisseria meningitidis*



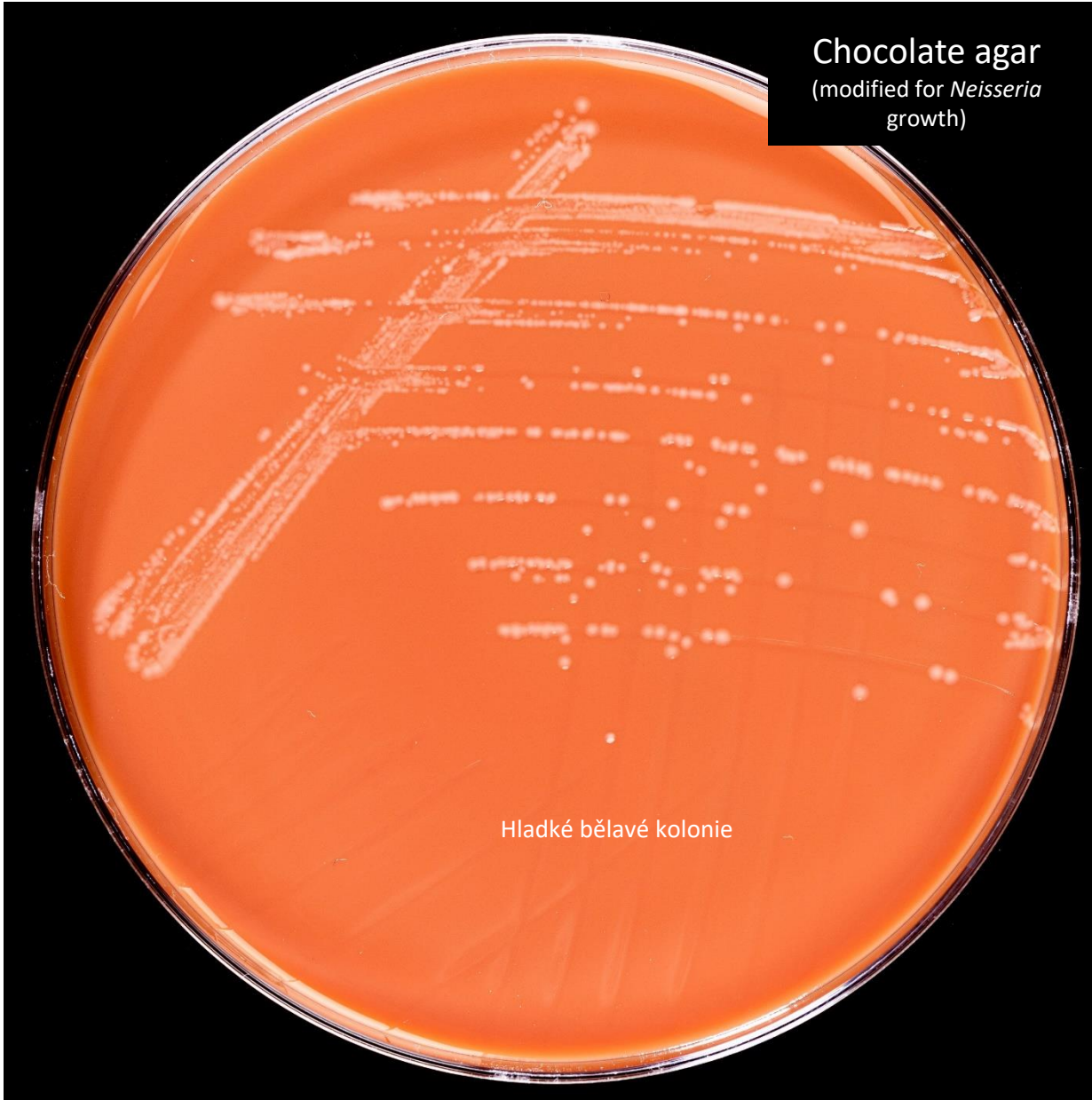
Chocolate agar
(modified for *Neisseria*
growth)

Smooth grey colonies

31. *Neisseria meningitidis*



32. *Neisseria gonorrhoeae*



Chocolate agar
(modified for *Neisseria*
growth)

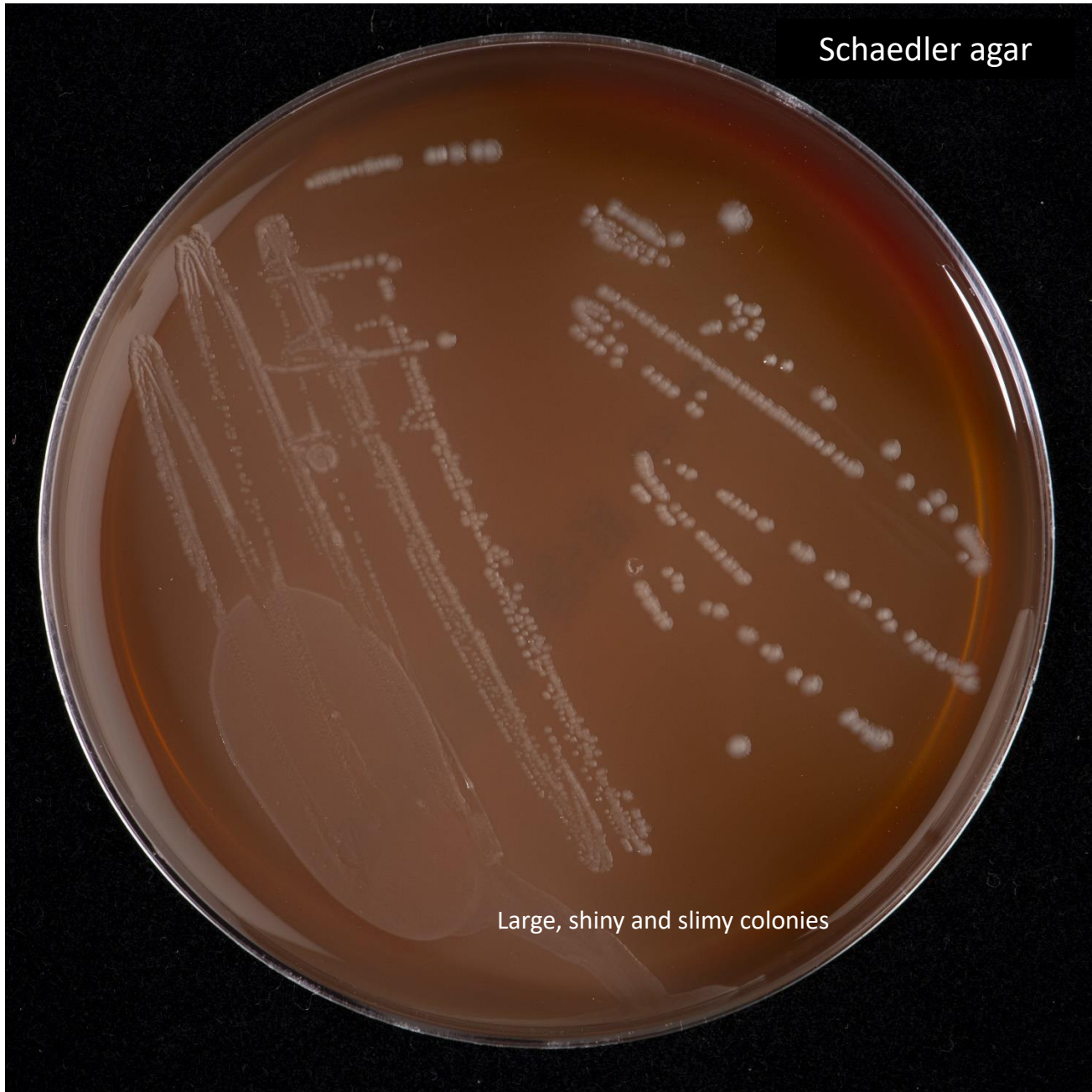
Hladké bělavé kolonie

32. *Neisseria gonorrhoeae*



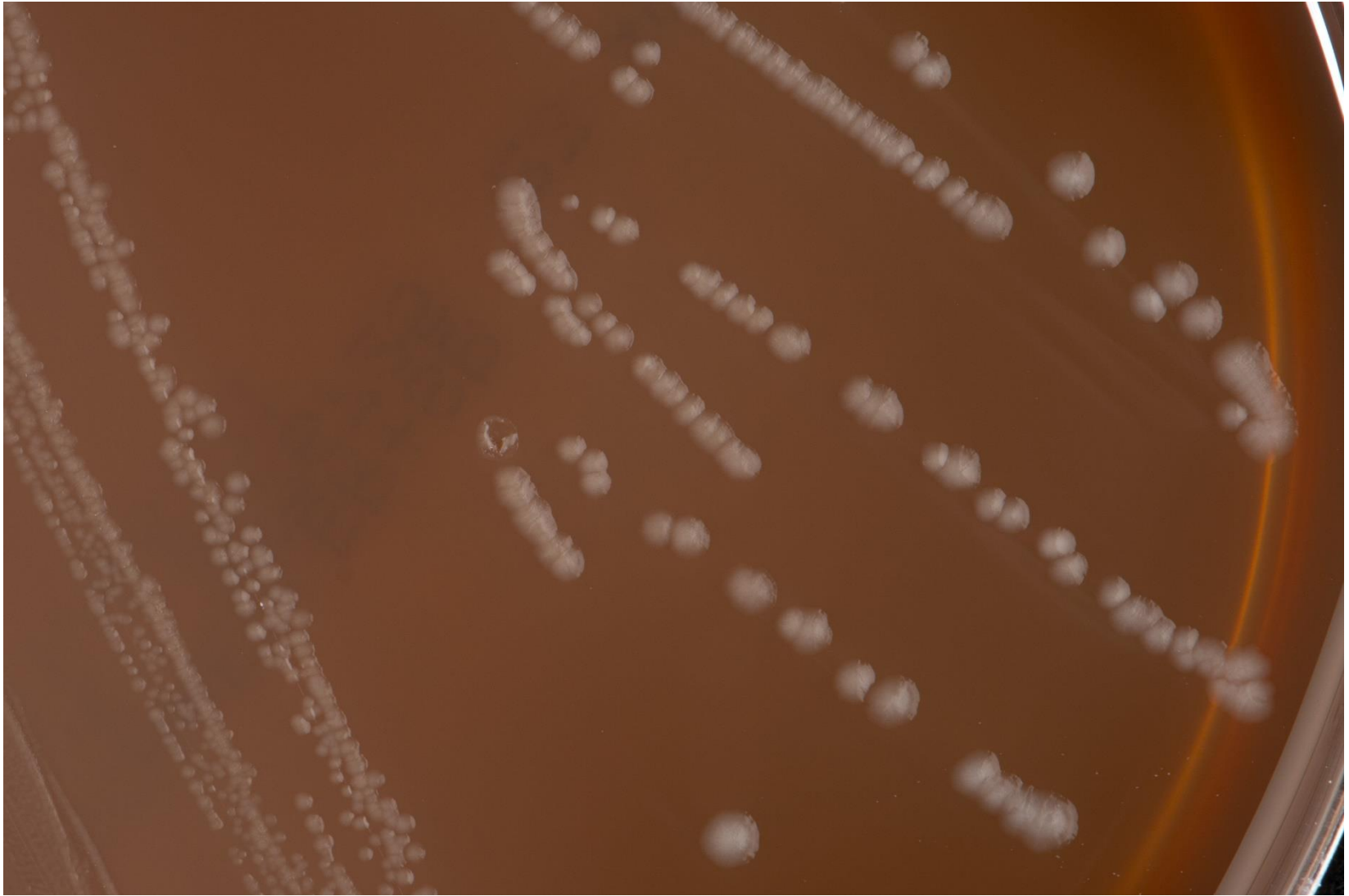
33. *Bacteroides fragilis*

Schaedler agar



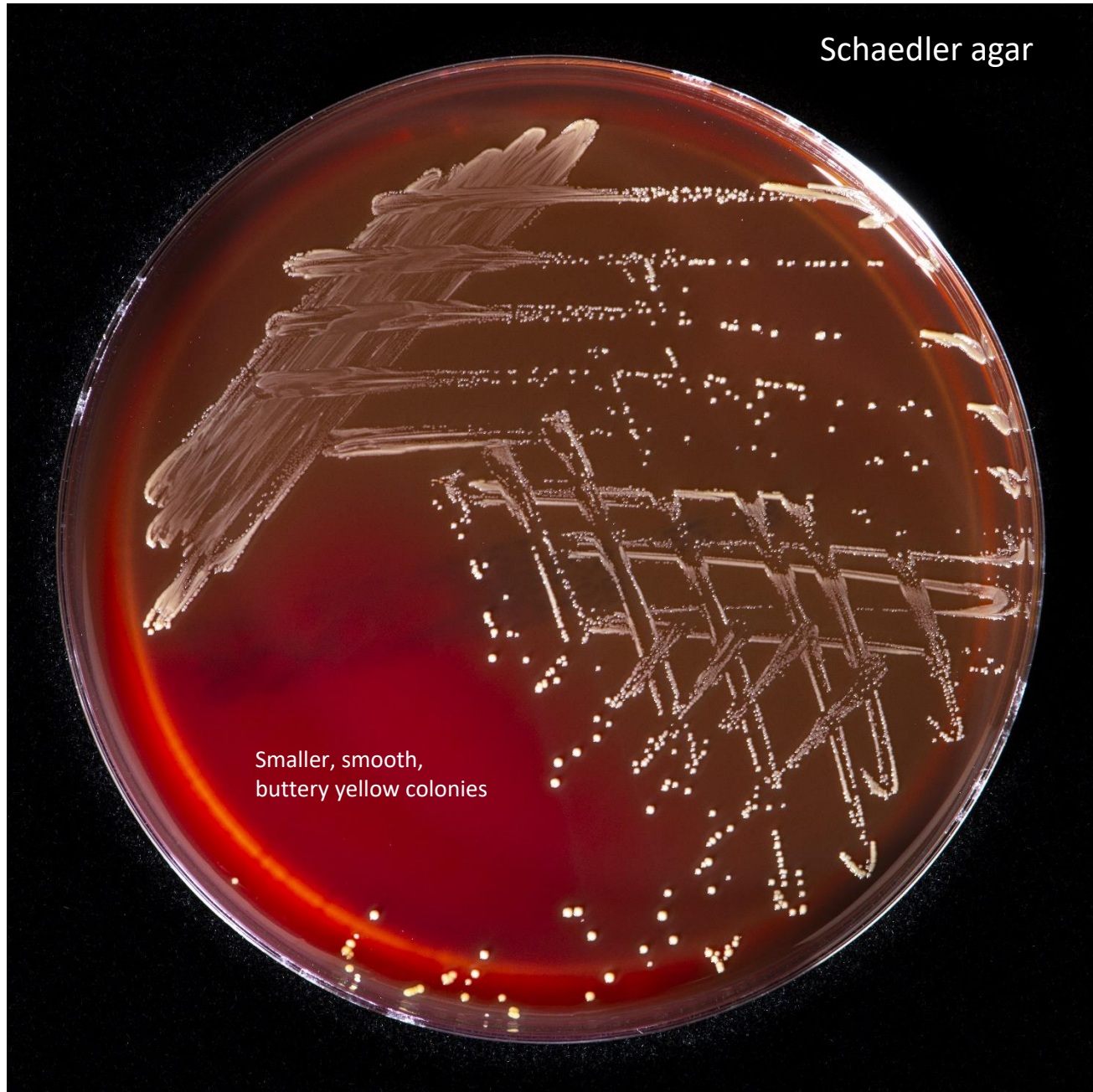
Large, shiny and slimy colonies

33. *Bacteroides fragilis*



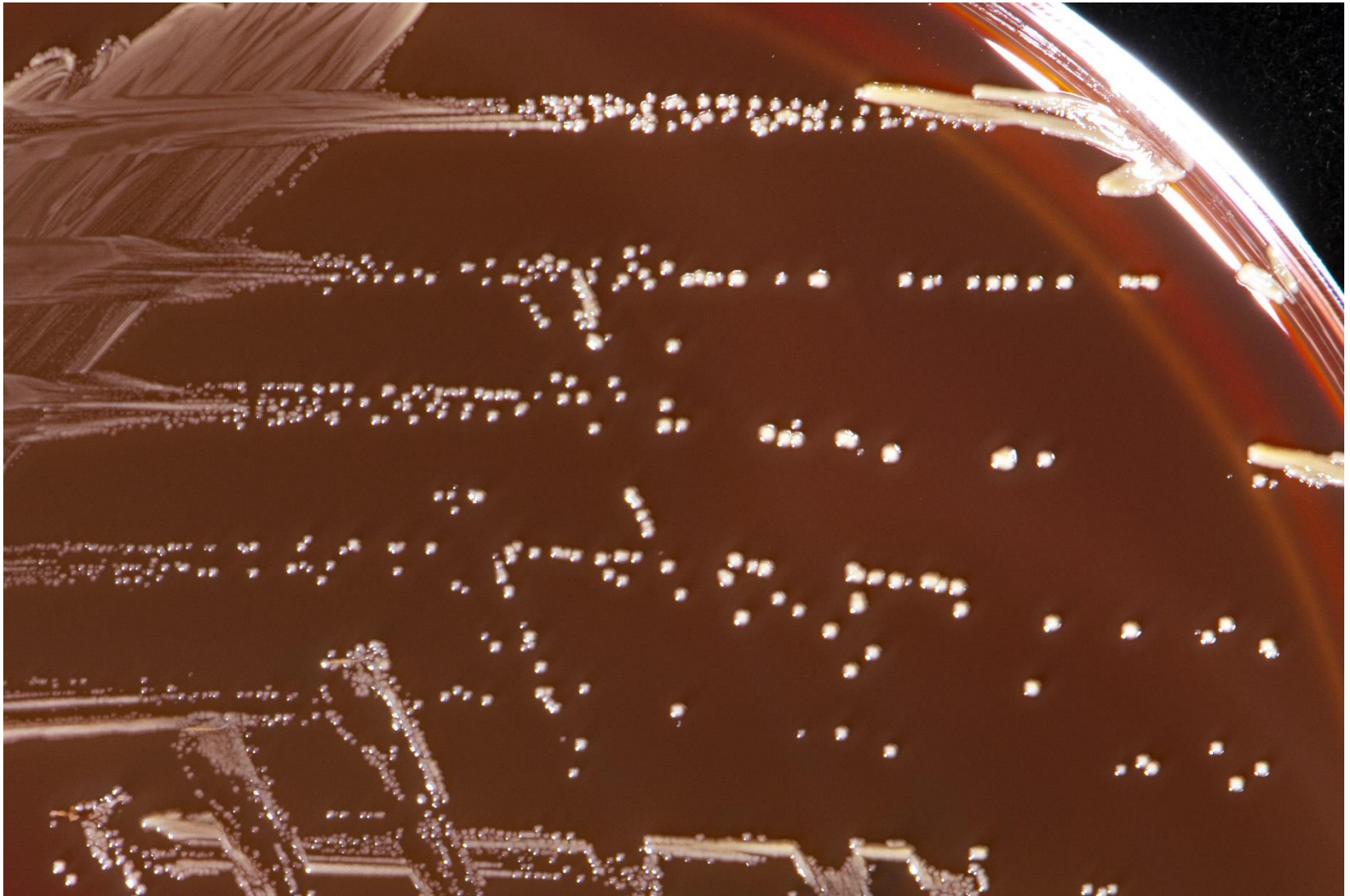
34. *Fusobacterium nucleatum*

Schaedler agar

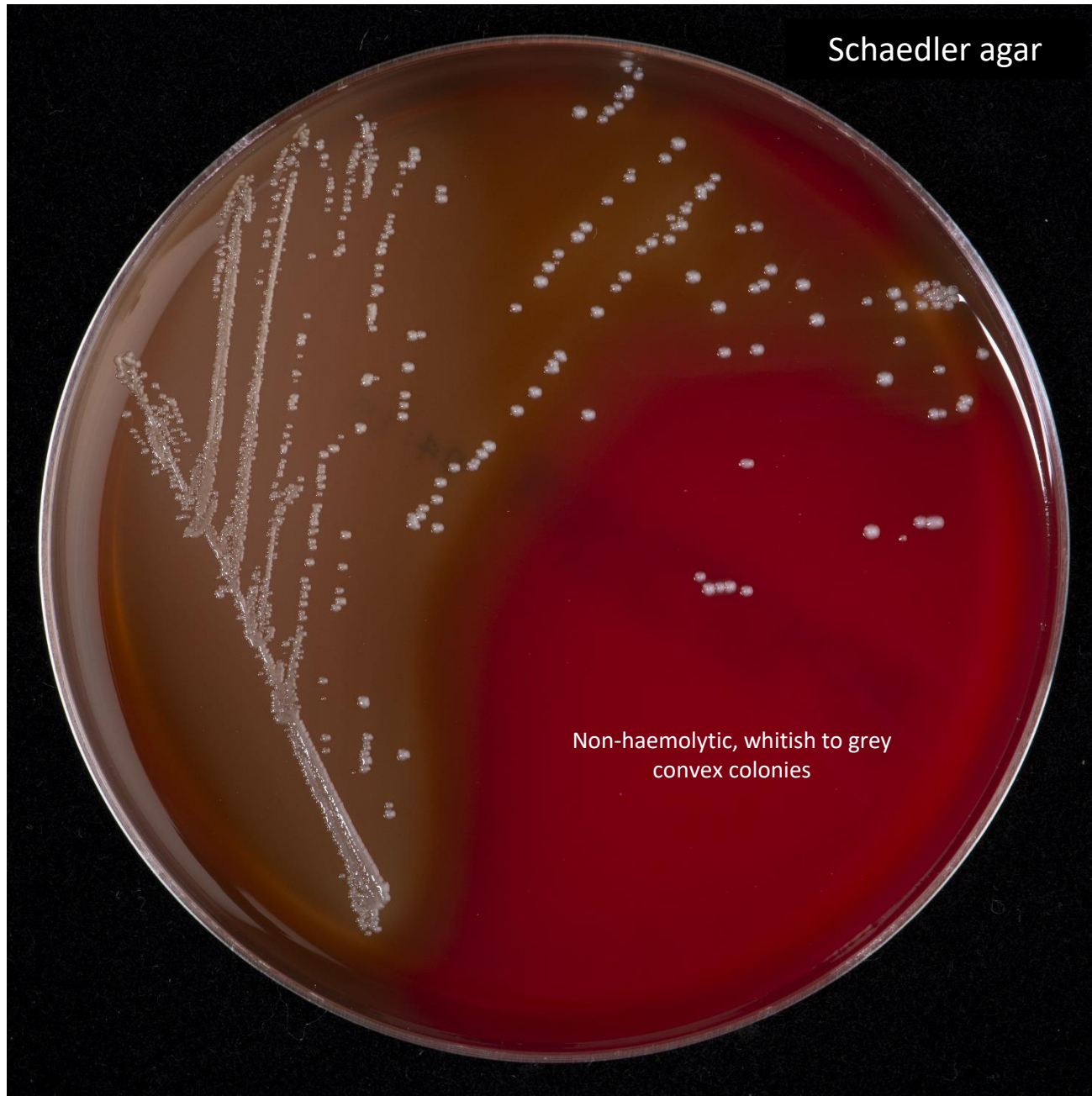


Smaller, smooth,
buttery yellow colonies

34. *Fusobacterium nucleatum*



35. *Prevotella* sp.



35. *Prevotella* sp.



40. *Candida albicans*

Sabouraud agar



Large whitish colonies; acidic odour

40. *Candida krusei*

Sabouraud agar



Large whitish colonies; acidic odour

41. *Cryptococcus neoformans*

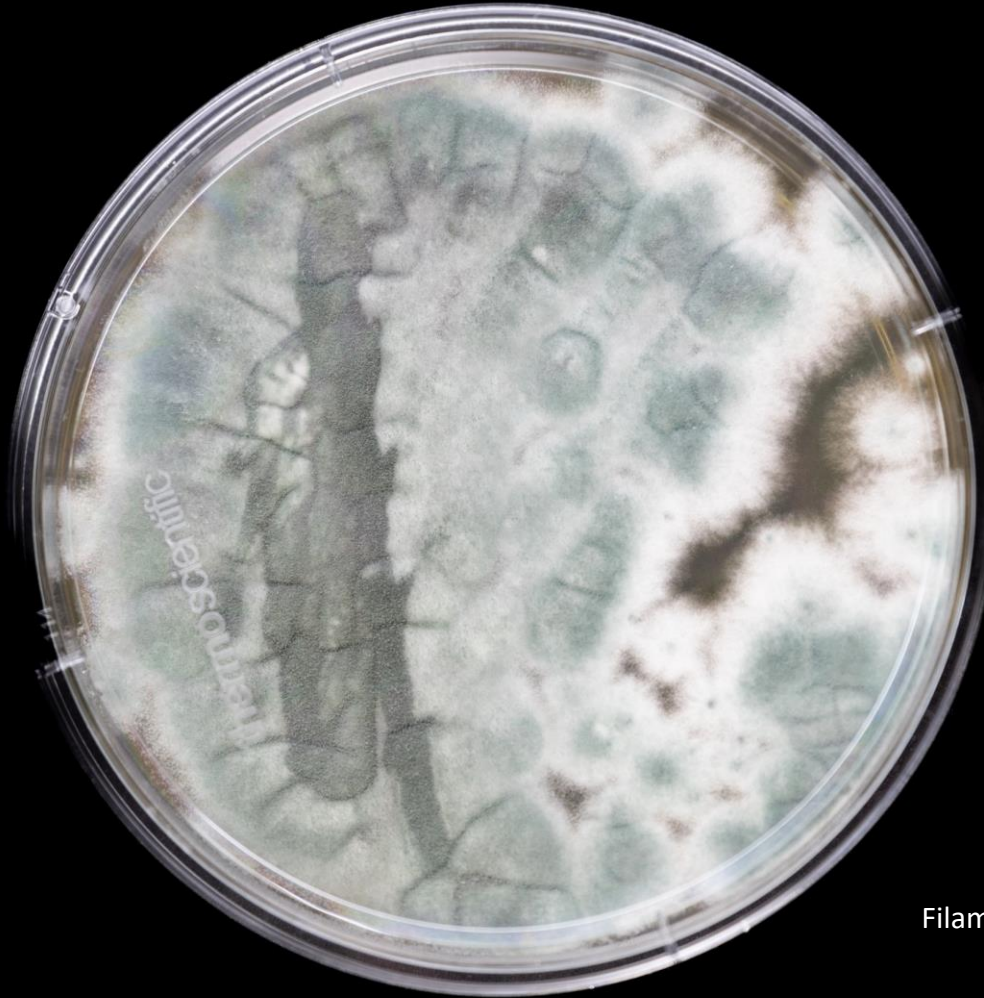
Sabouraud agar



Large whitish colonies; acidic odour colonies

44. *Aspergillus fumigatus*

Sabouraud agar



Filamentous growth