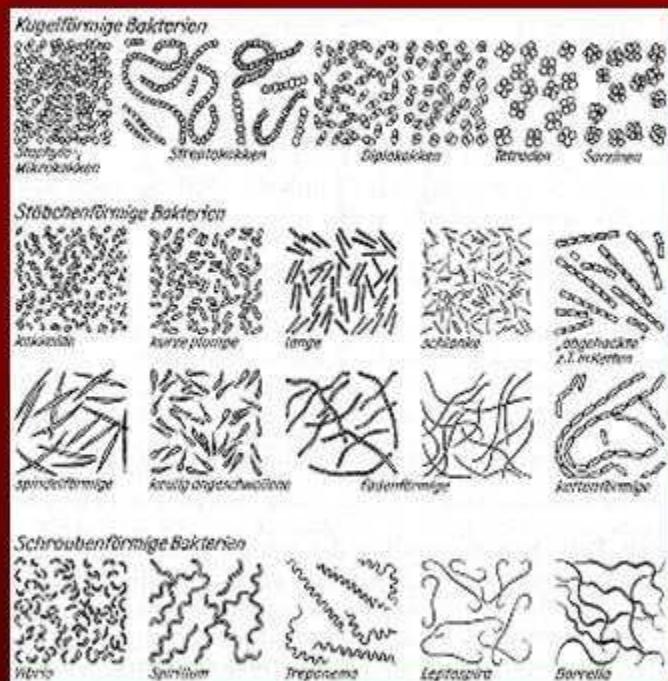
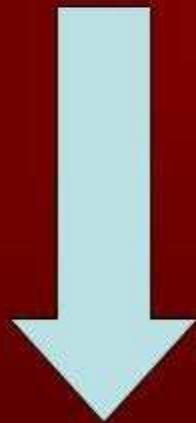
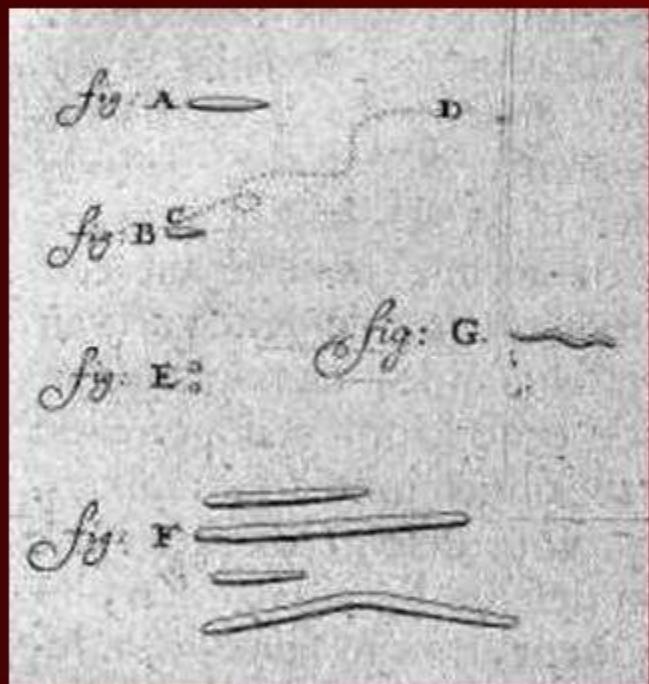
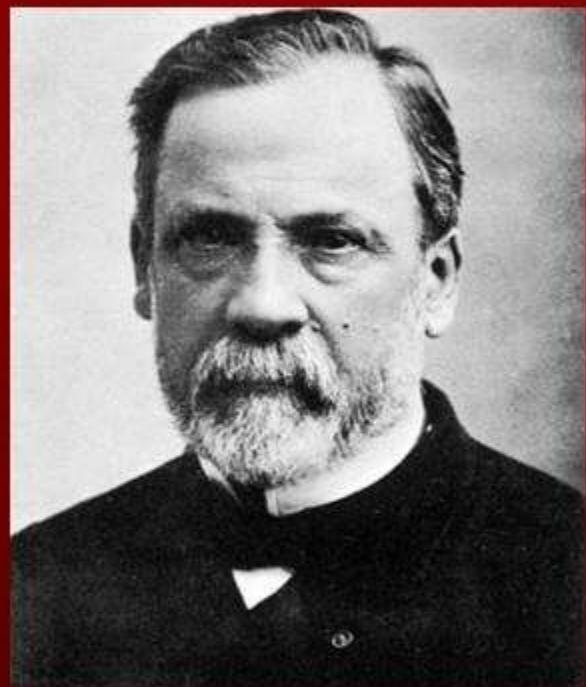
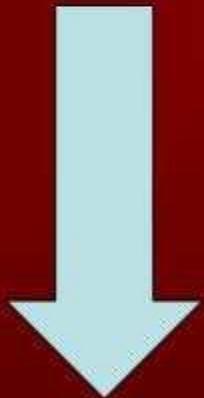
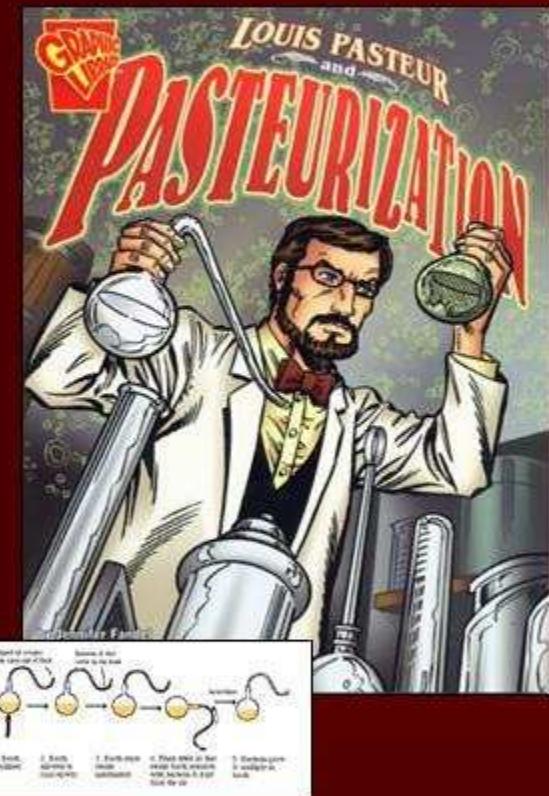


# Anno 1683



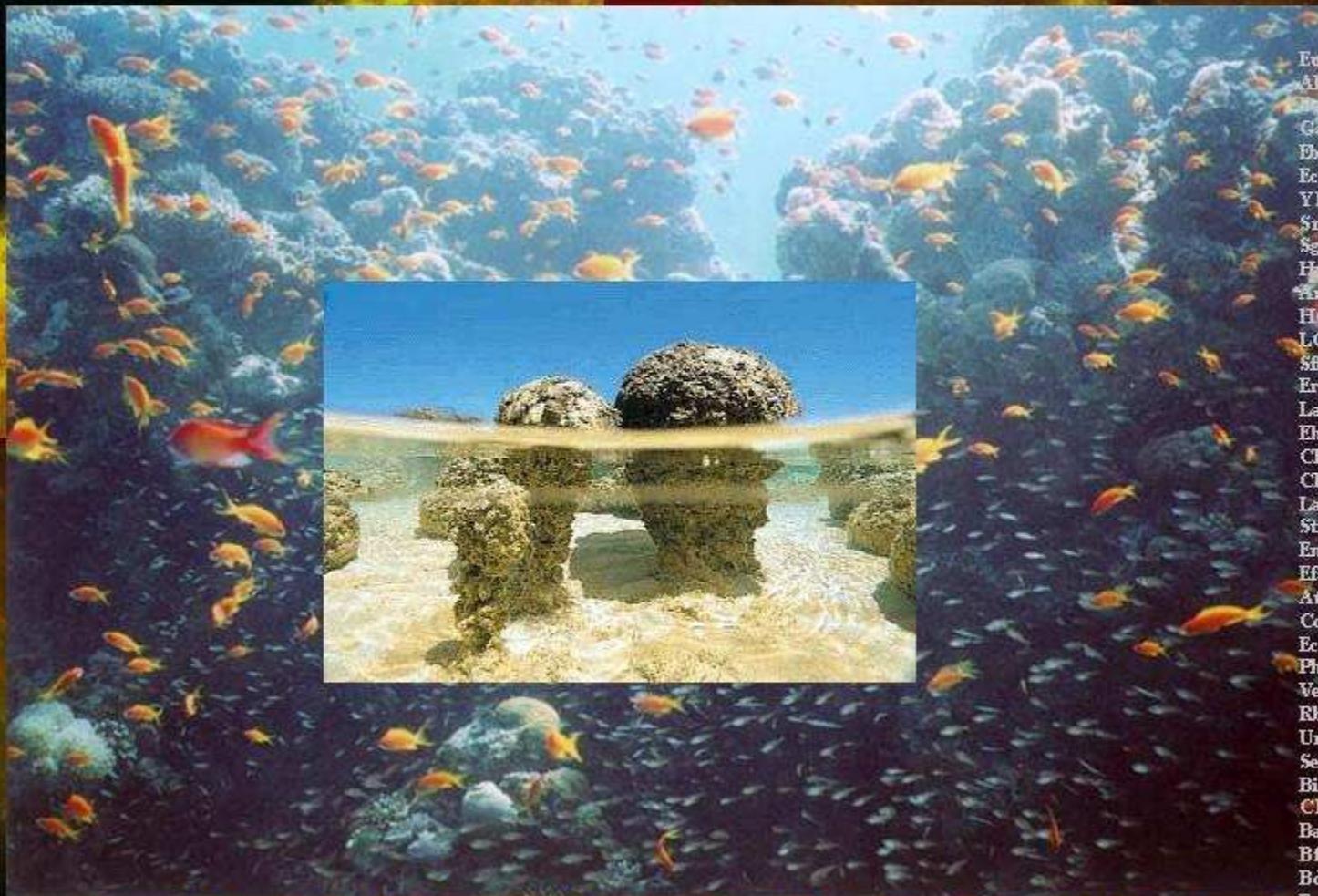
## Archeogenese Hypothese

# Anno 1864



## определение возбудителя

# FISH mukosale Biofilme



r-RNA komplimentären Sonden

Eub338  
Alph  
Betap2a  
Gam42a  
Dac  
Ec1531  
Yl6s-69  
Srb385  
Sgd  
Hav-1  
Par1430  
HGC  
LGC  
Sb  
Erec  
Lach  
Ehal  
Chis150  
Chit35  
Lab158  
Stre93  
Enc131  
Efaec  
Ato291  
Com53  
Ecy1  
Phasco  
Vell  
Ebro, Rba  
UroA, UroB  
Ser1410  
Bifl64  
CF319a  
Bac303  
Bfra602  
Bdis656  
Fprau  
Dss658  
Arch915

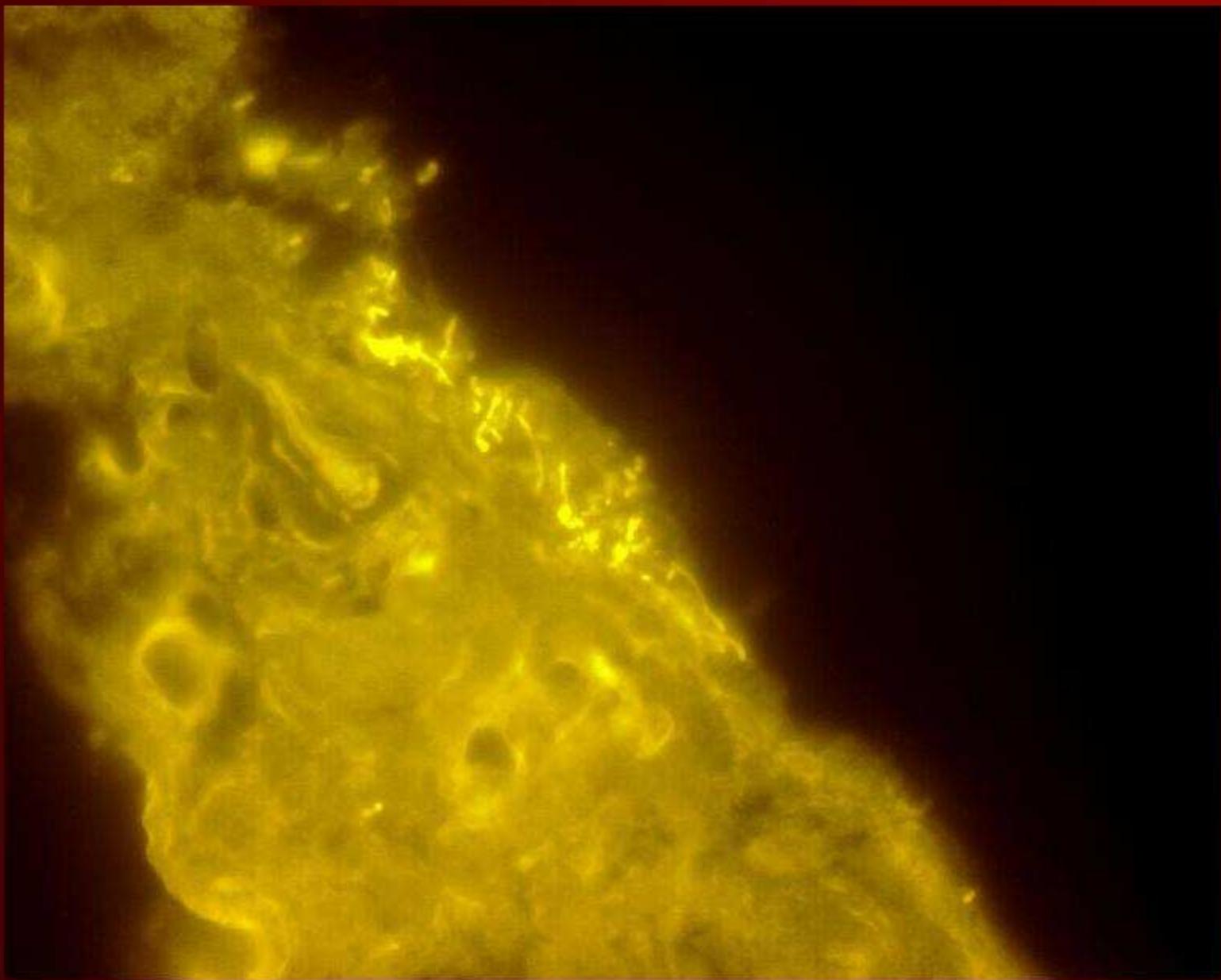
# тиpичные ошибки

**неправильная  
фиксация  
( Dapi stain)**

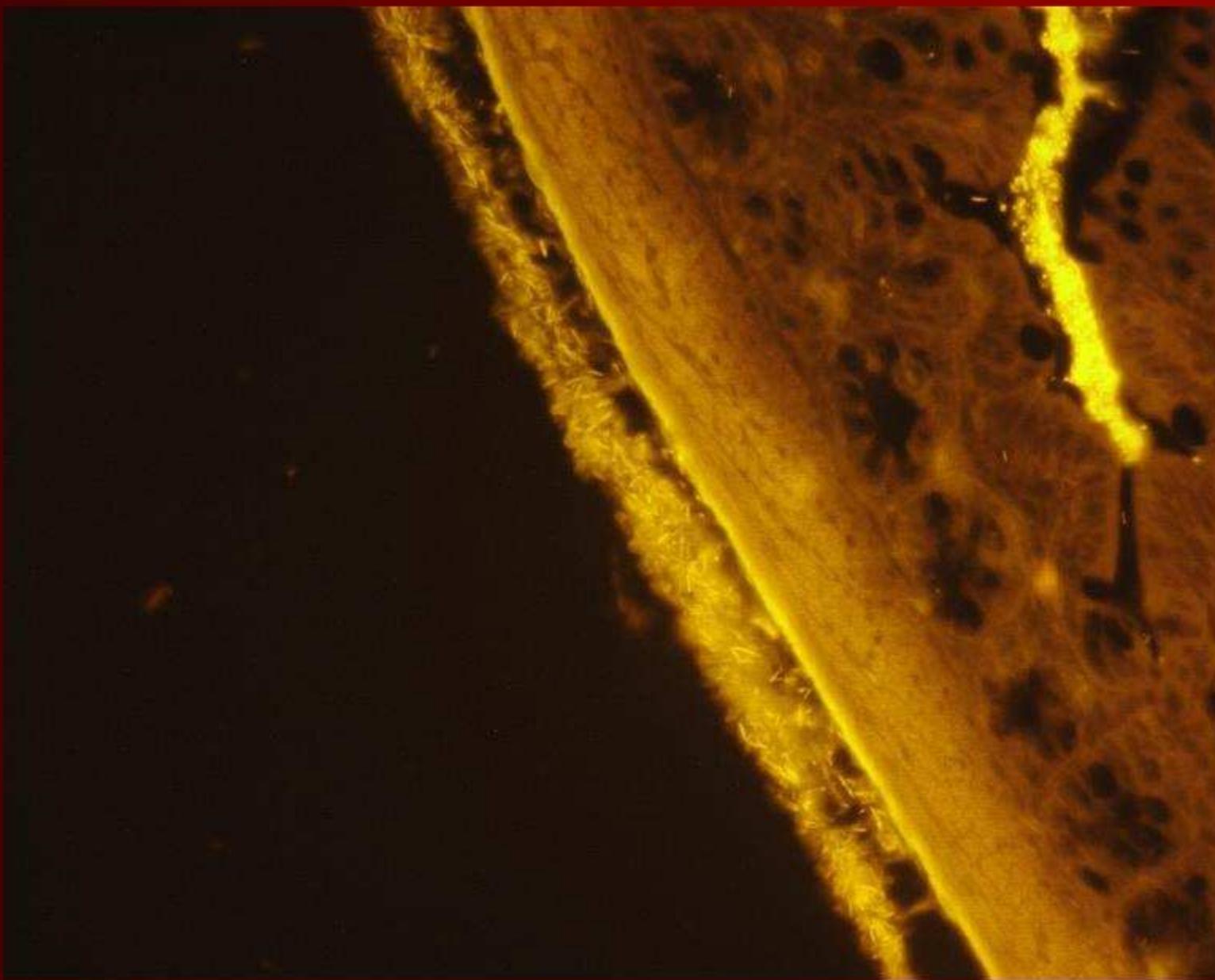


**Carnoy      Formalin**

биопсии  
из того же  
места

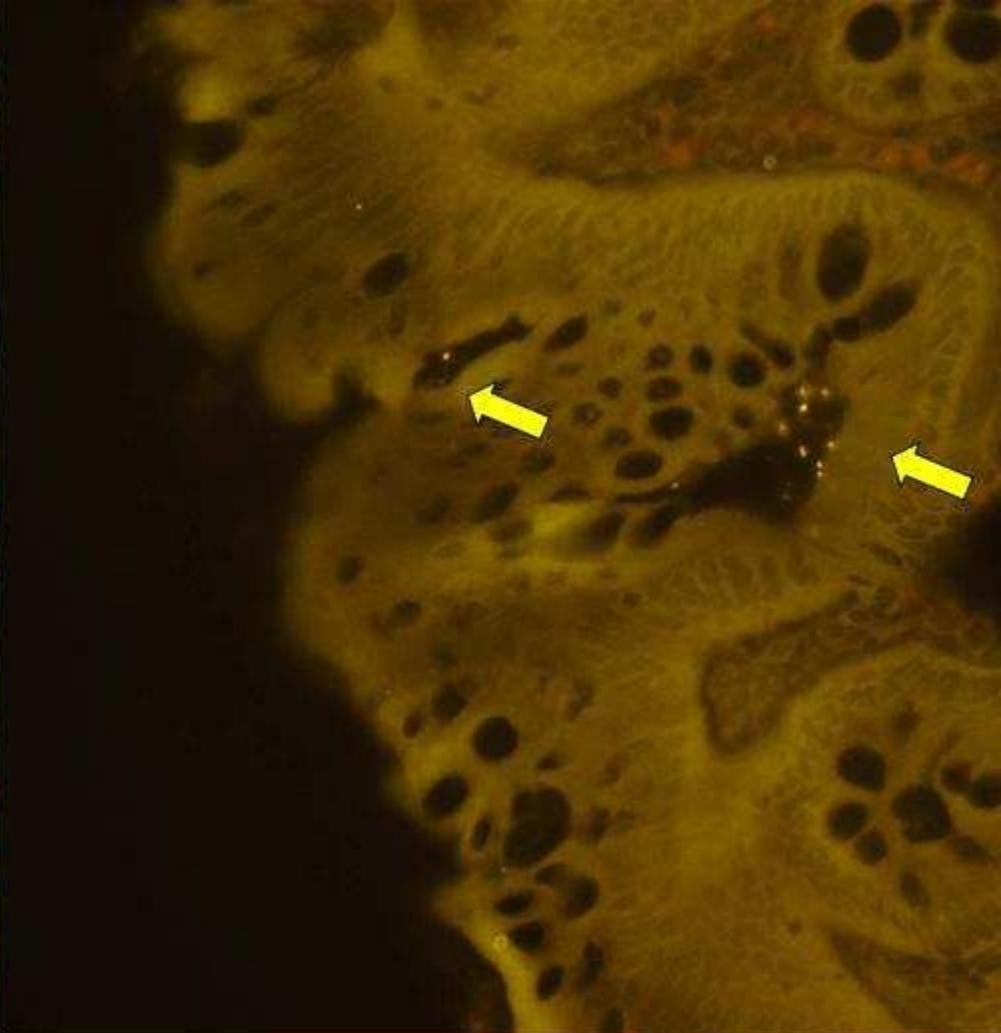
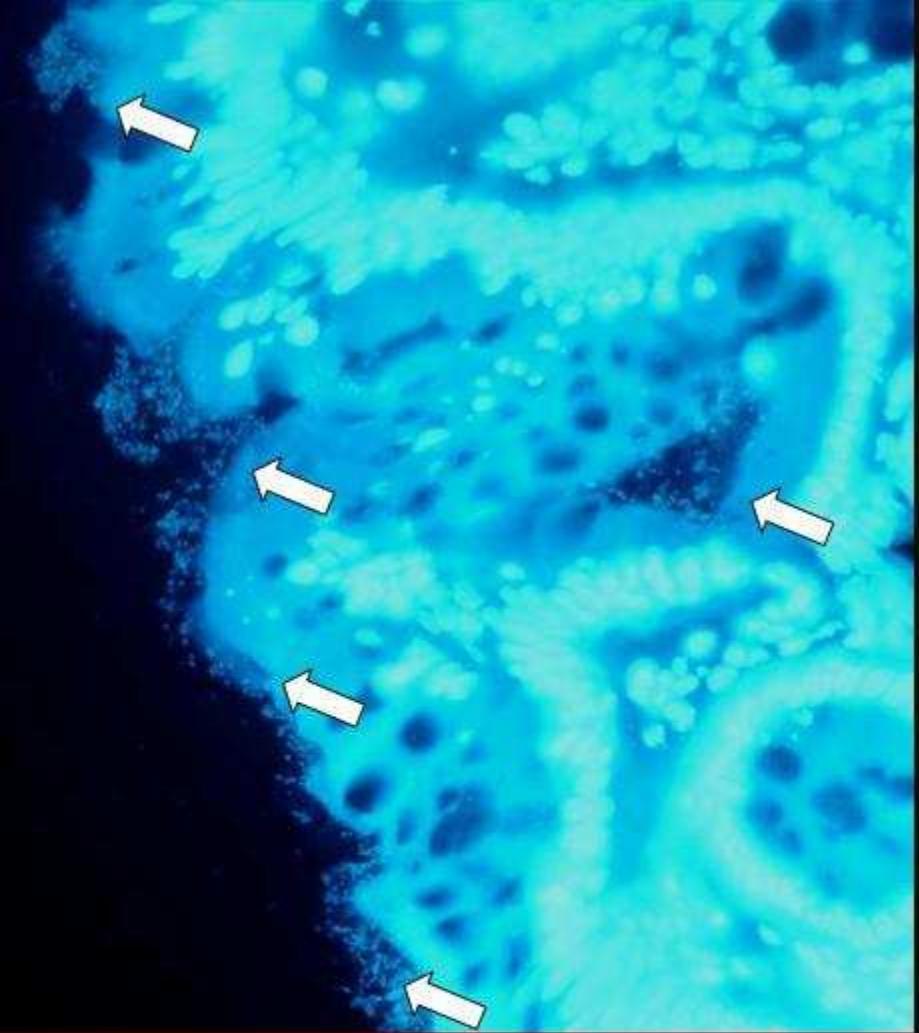


контаминация внутренней части биопсии

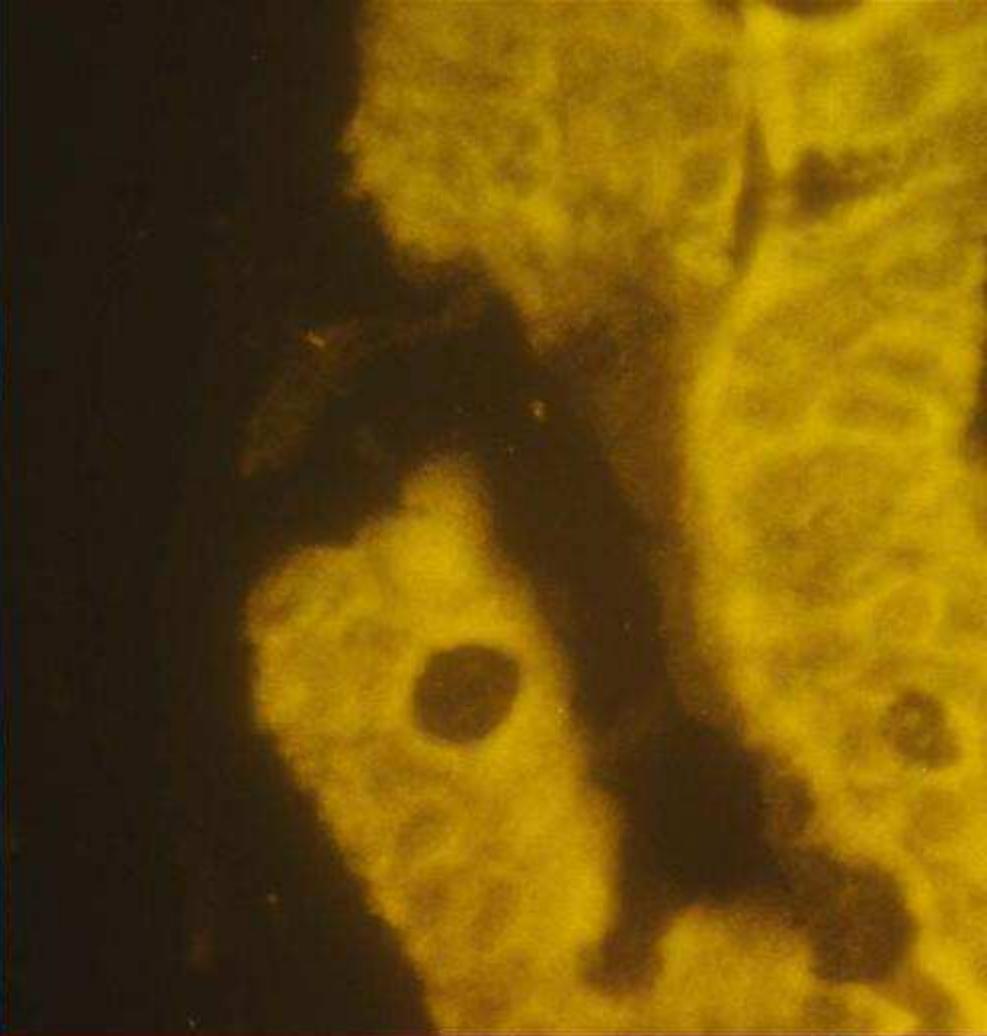
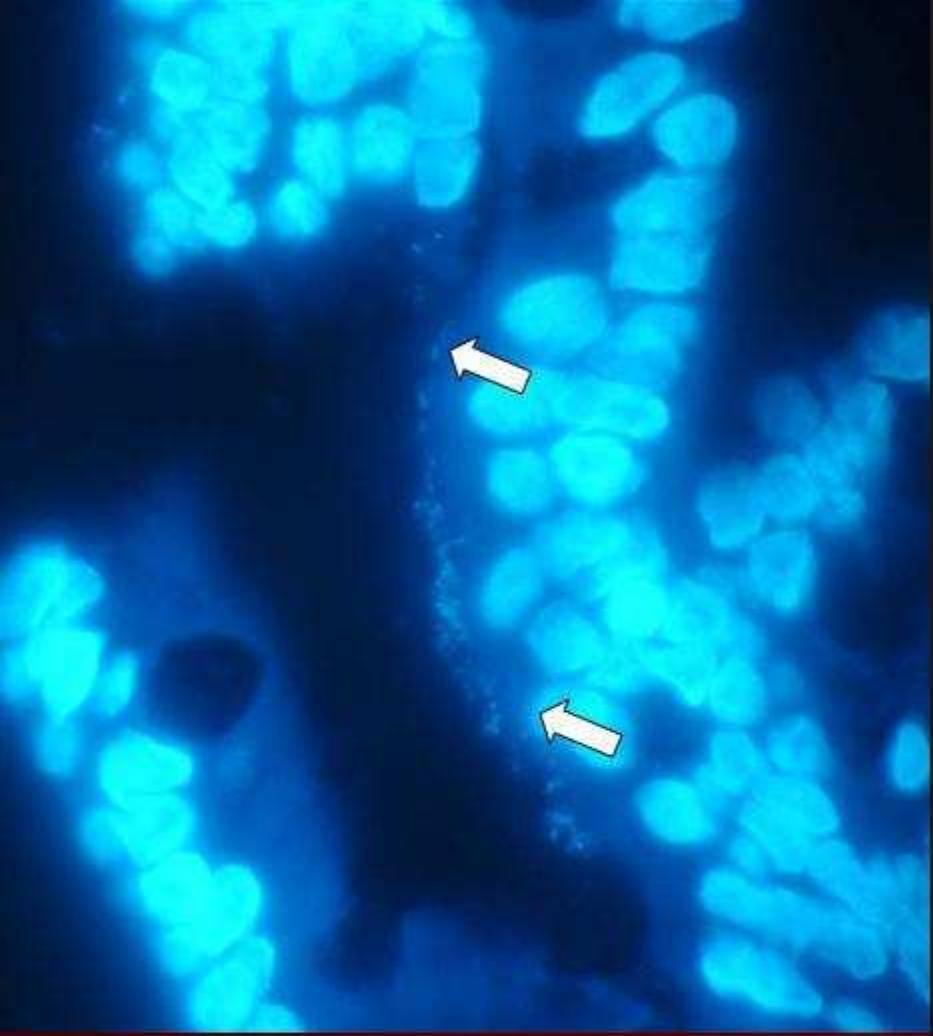


контаминация перitoneума

- влияние лечения
- Functional biases

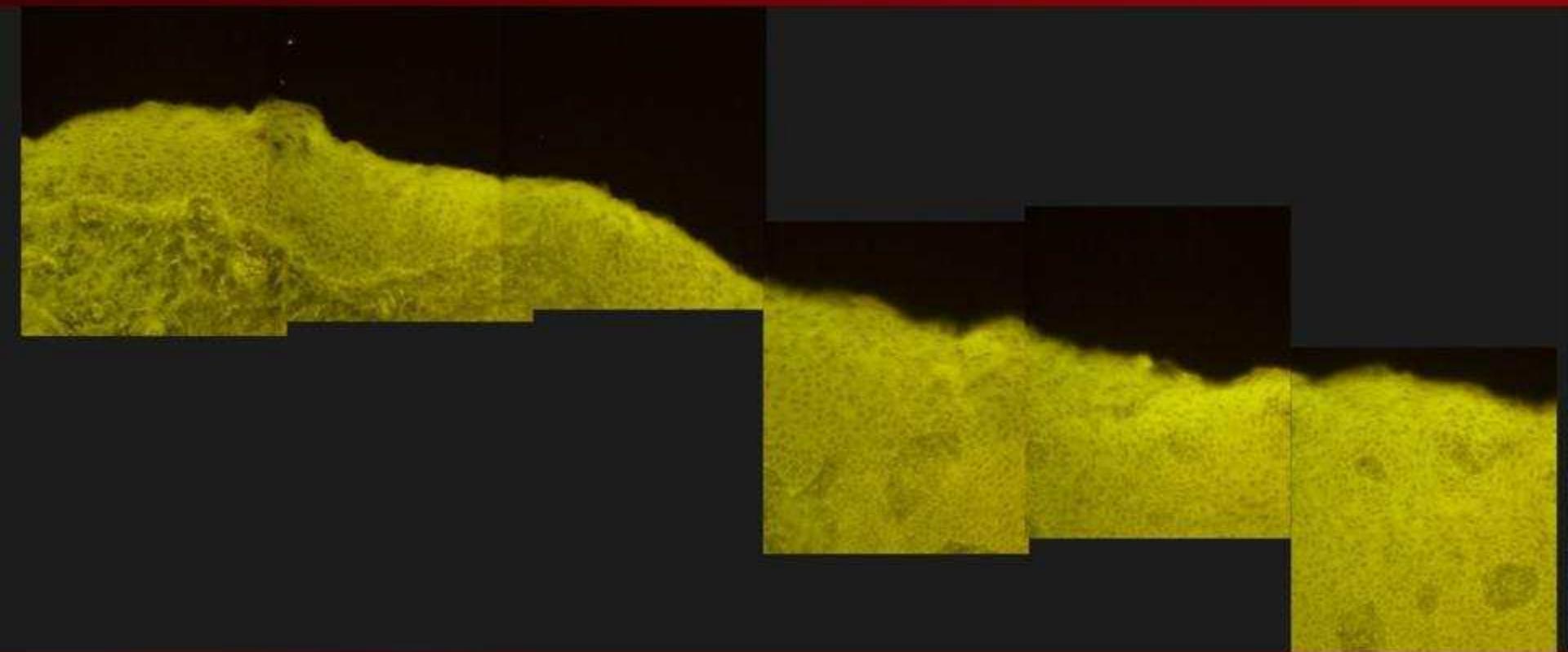


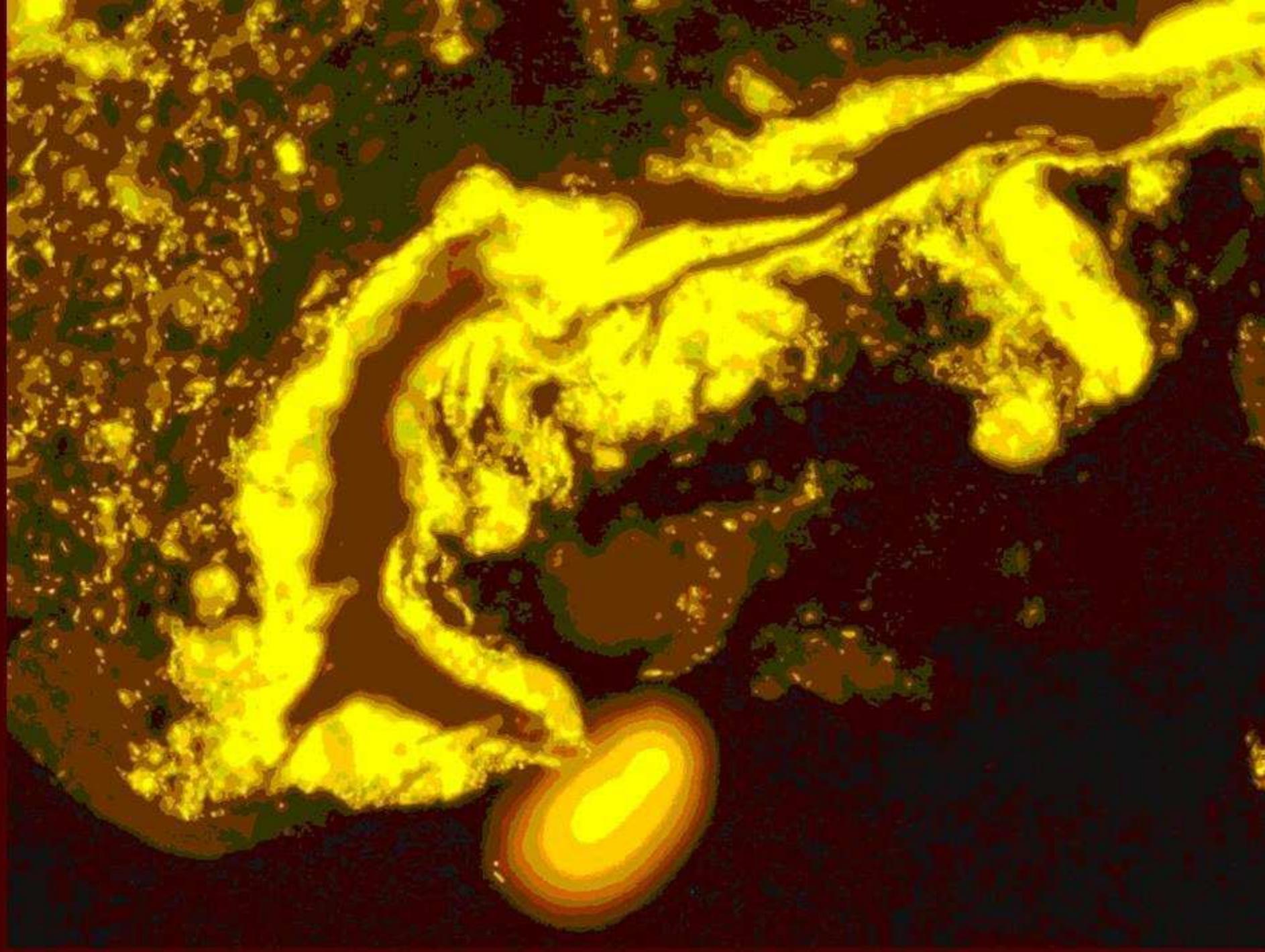
Sigma, 5-ASA

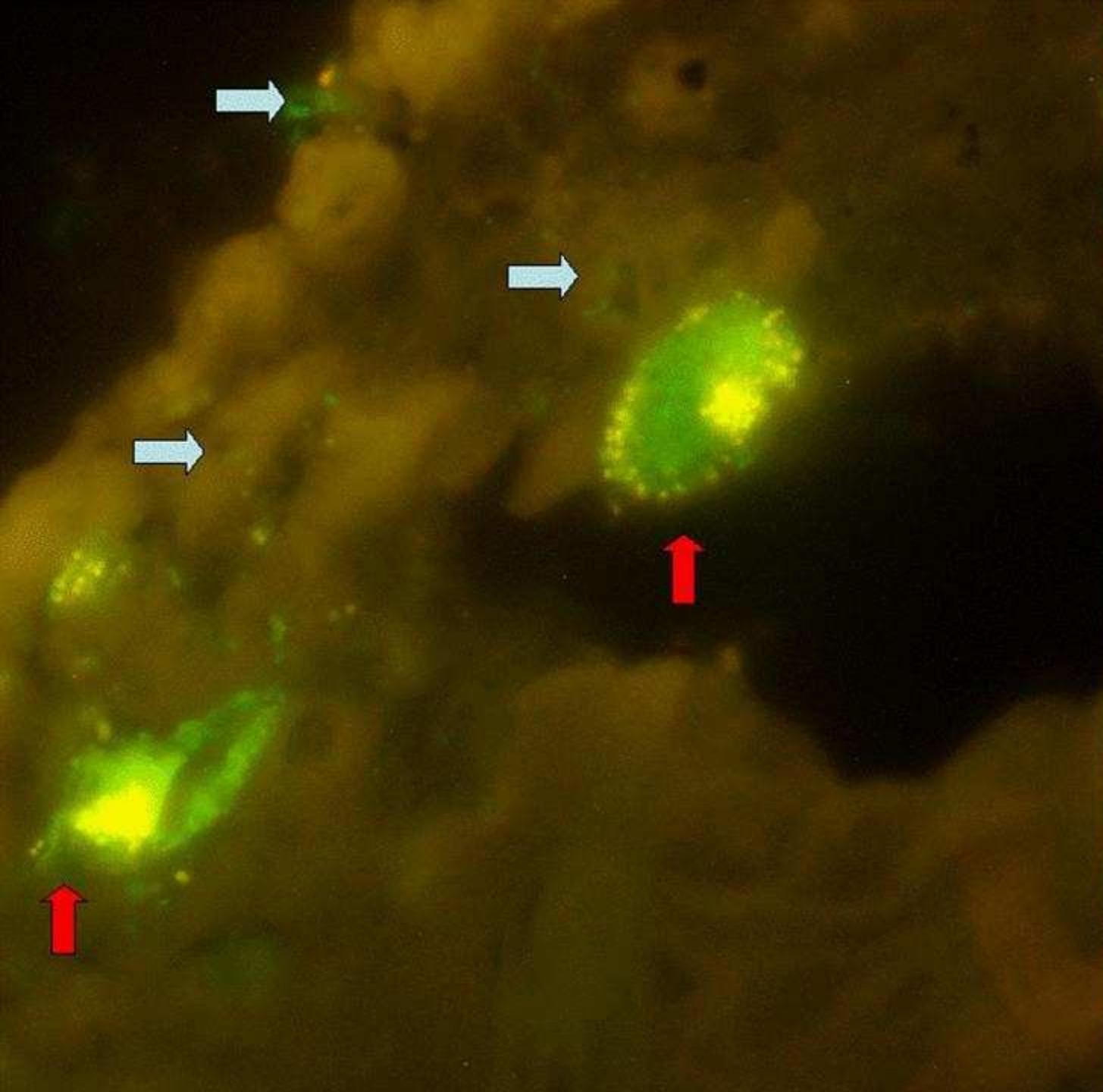


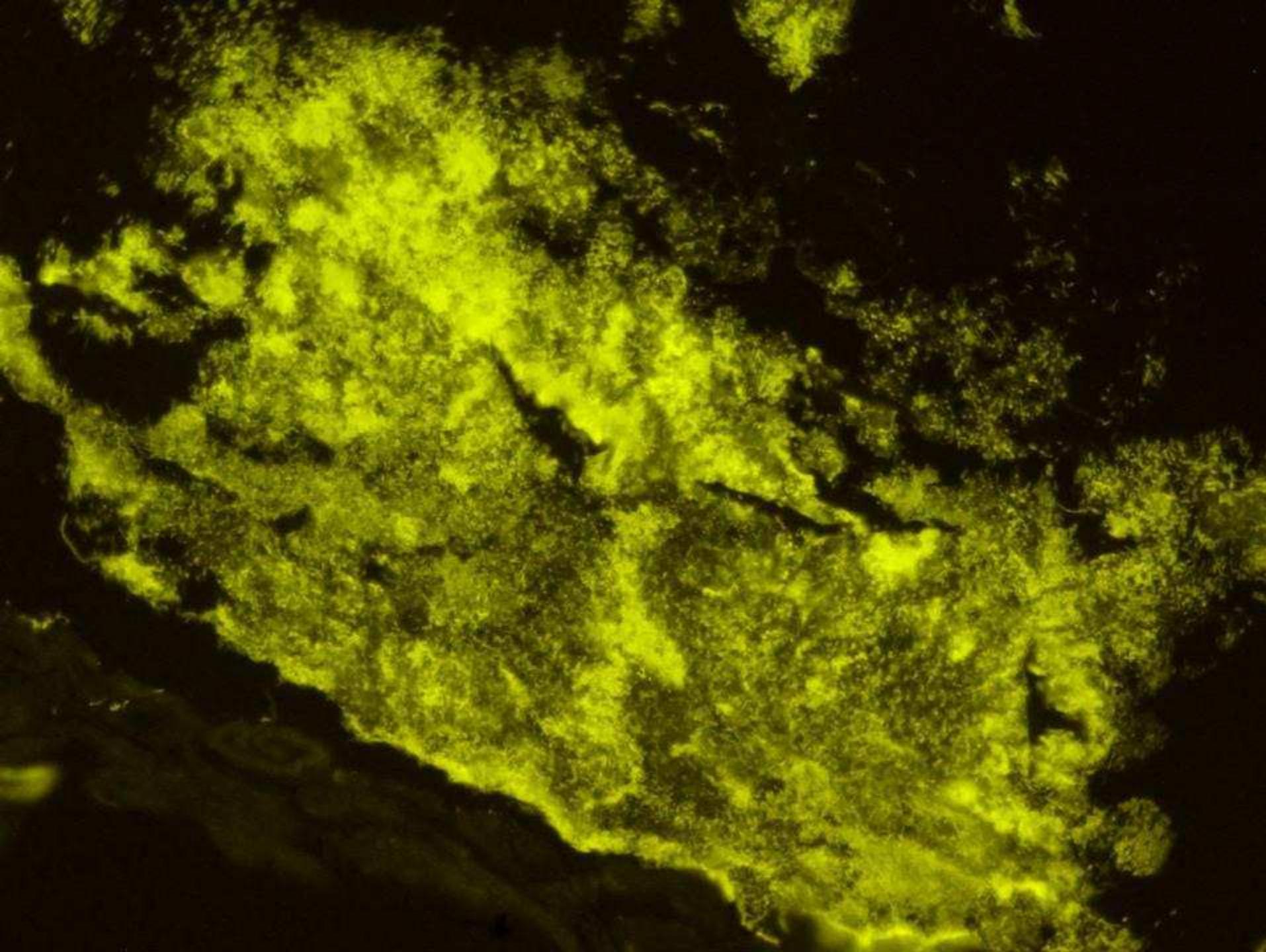
ascending colon A  
antibiotics 2hours previous to colonoscopy

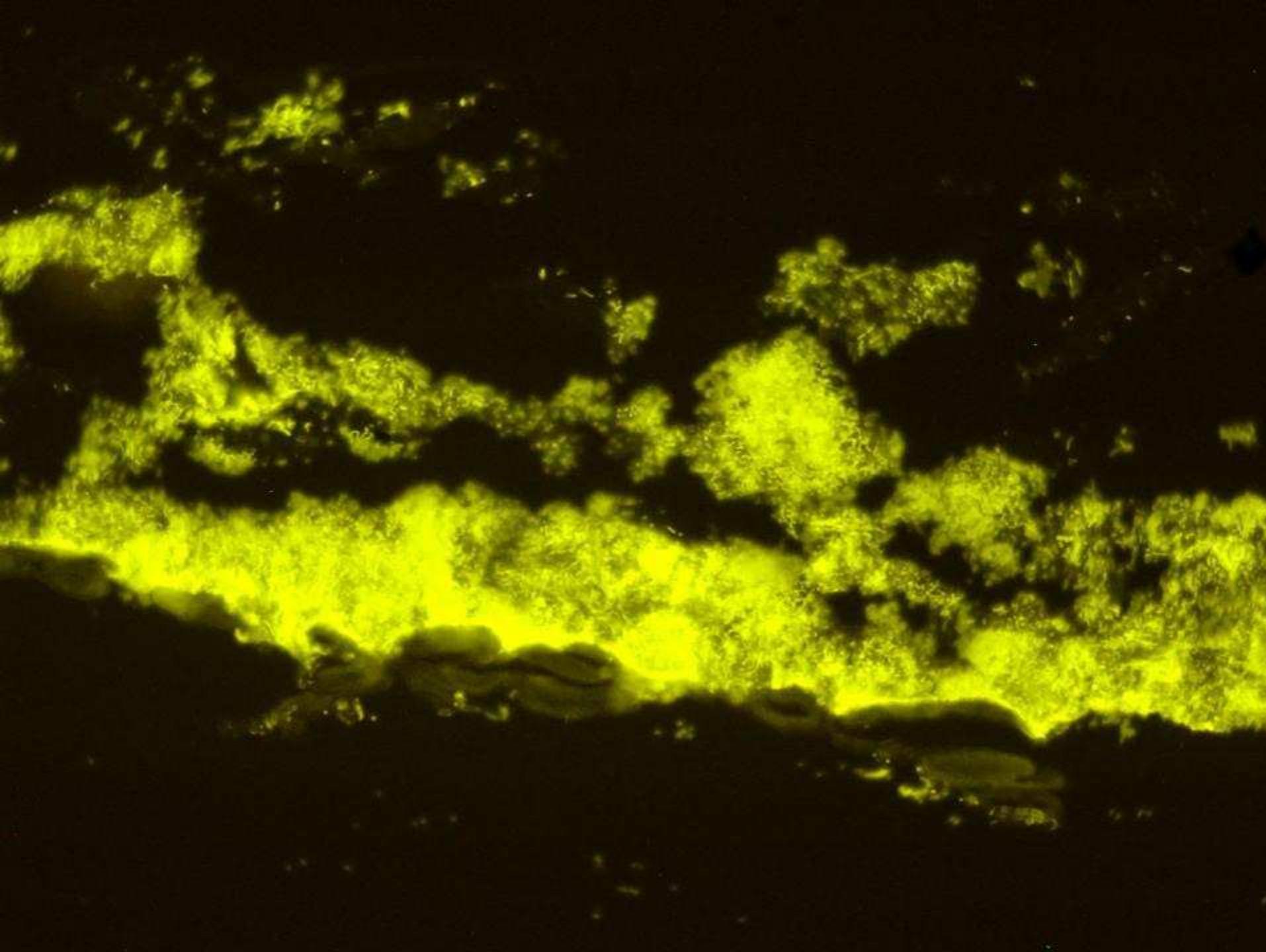
рот



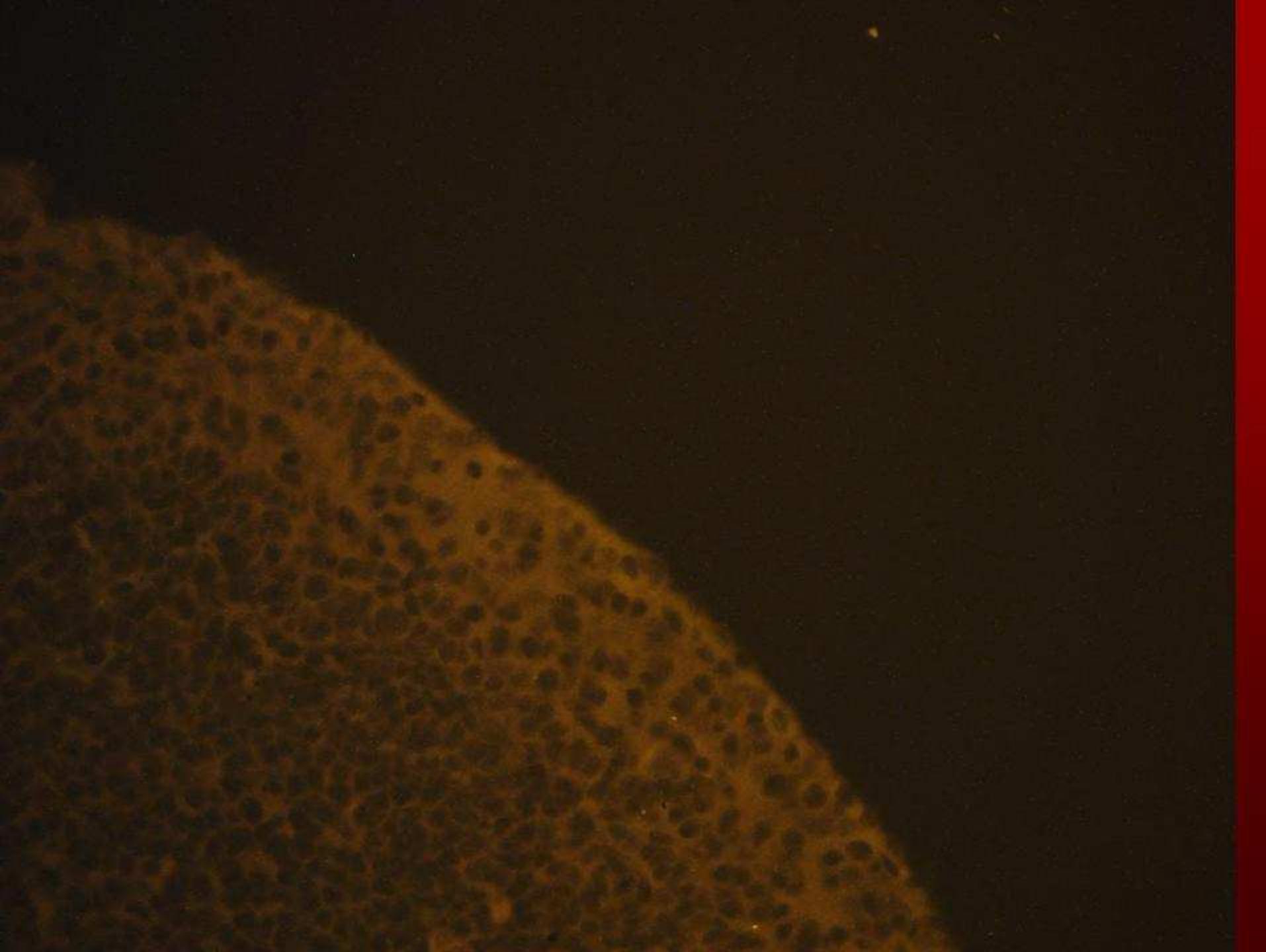








**ТОНЗИЛЛЫ**





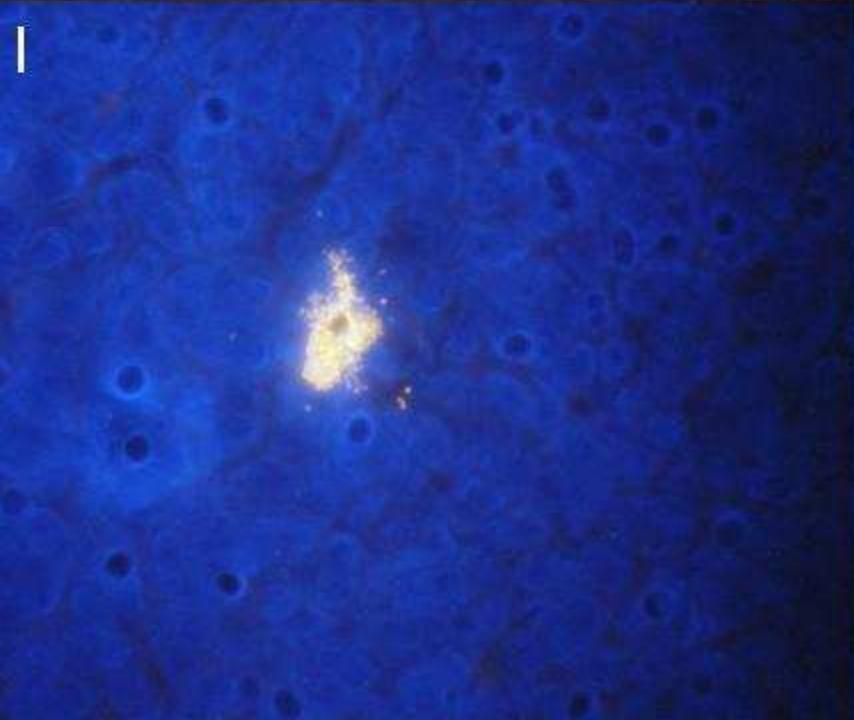
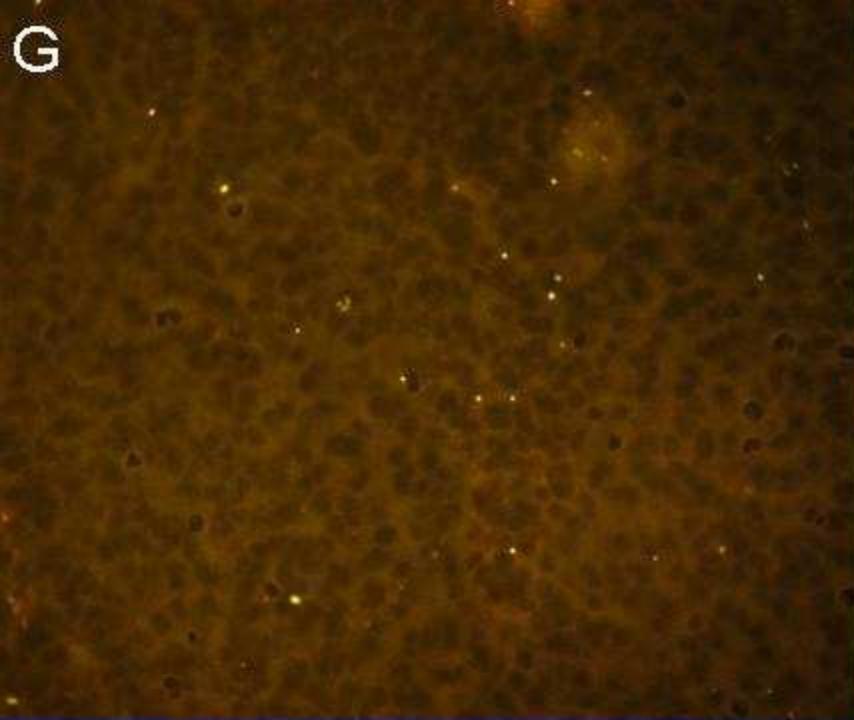
F

H



G

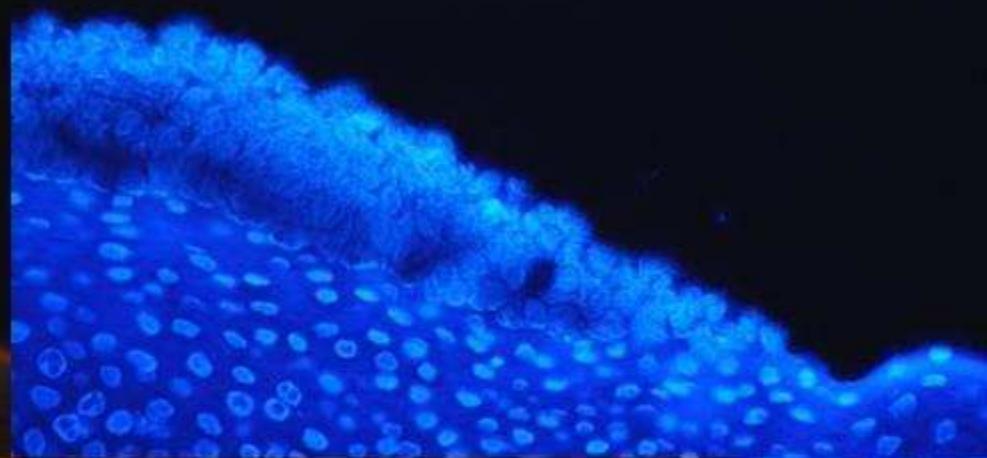
I



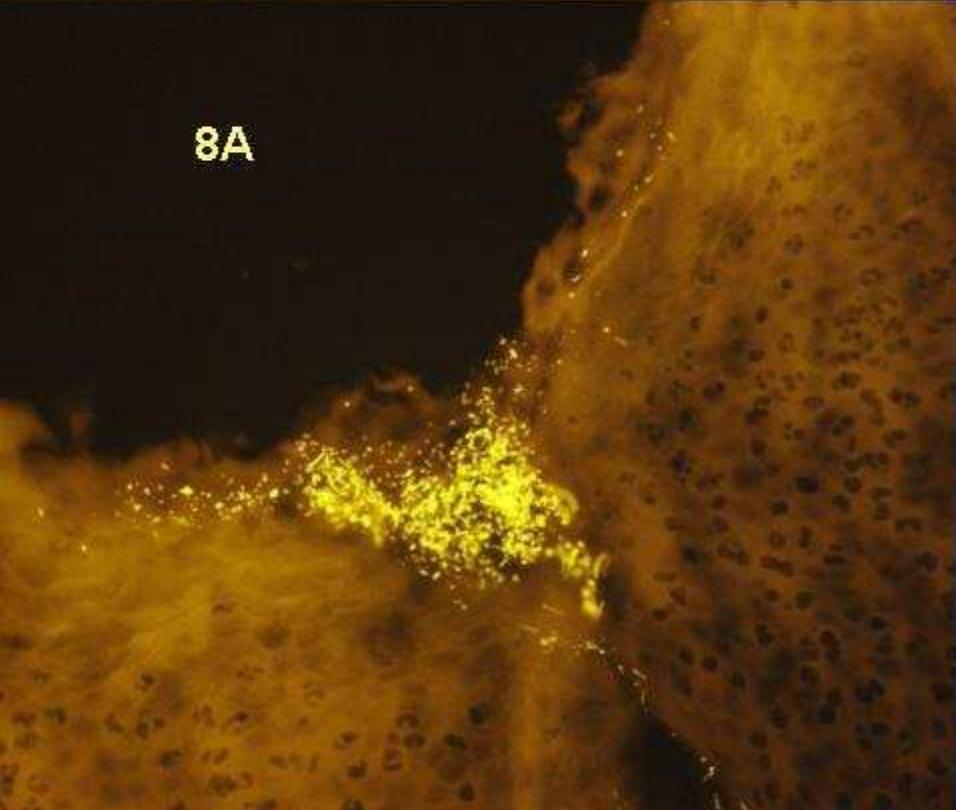
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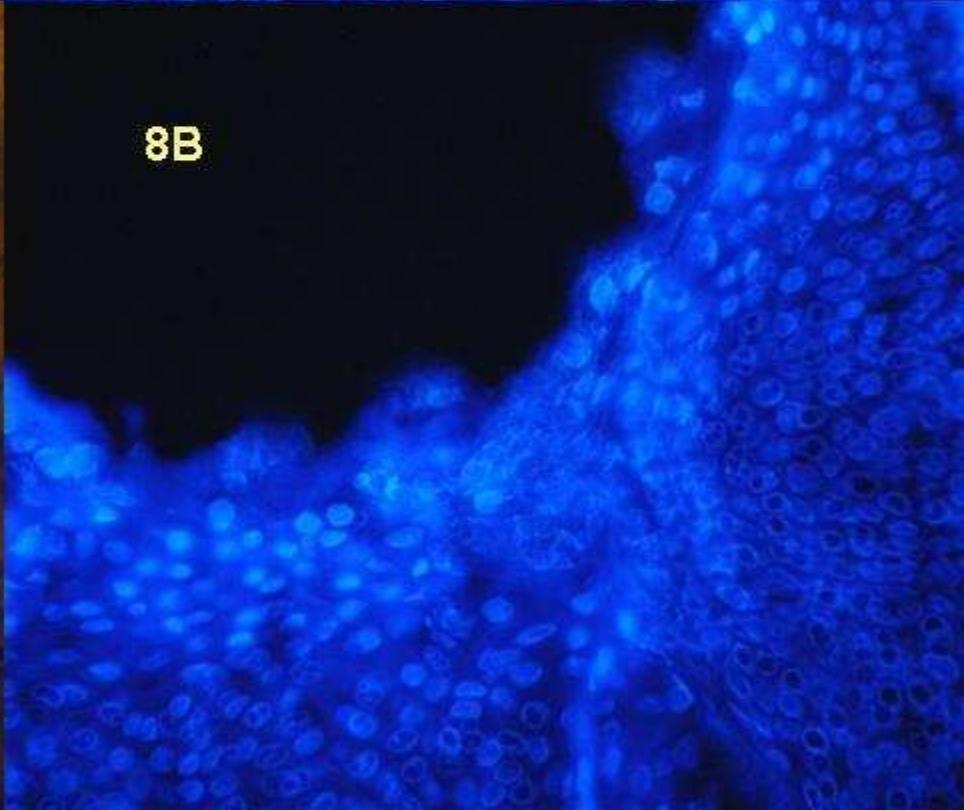
**7B**

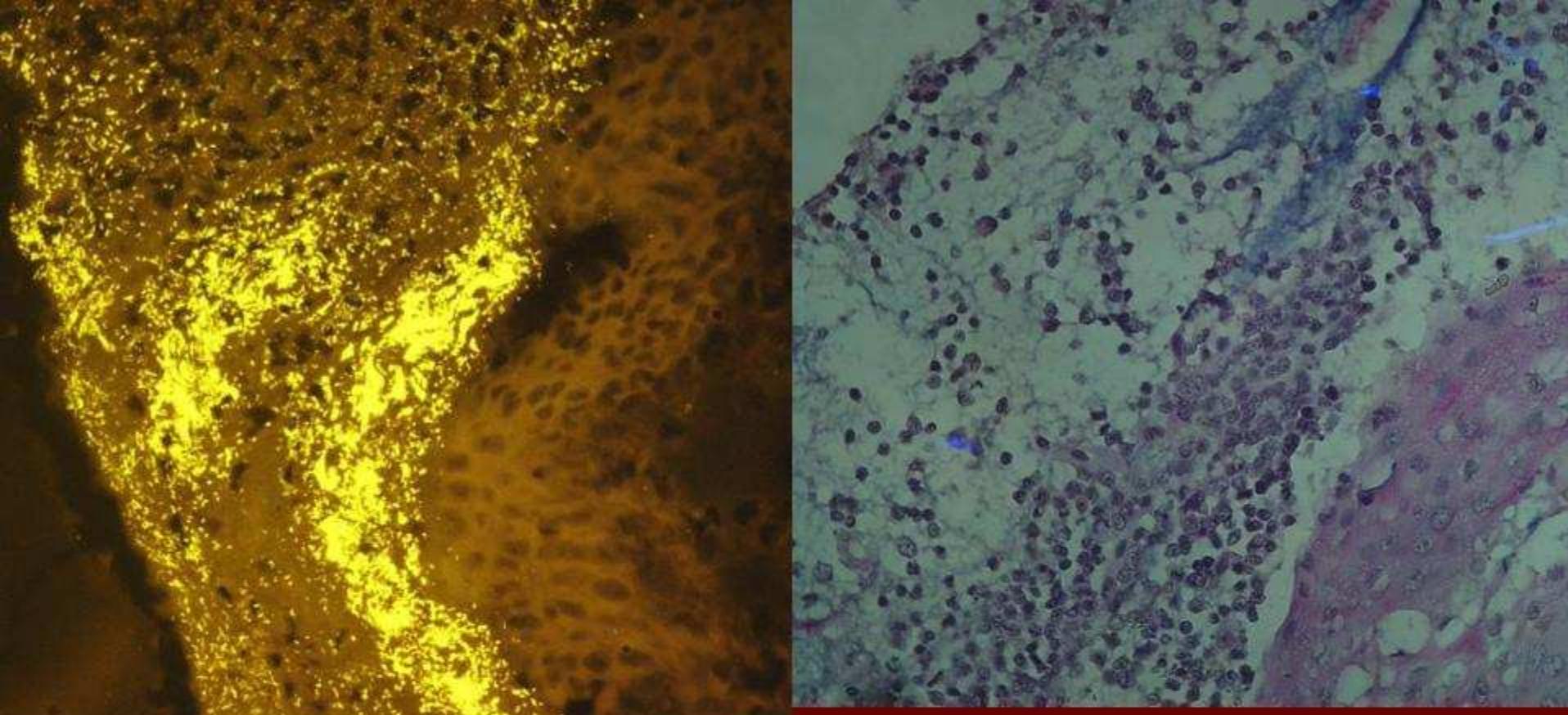


**8A**

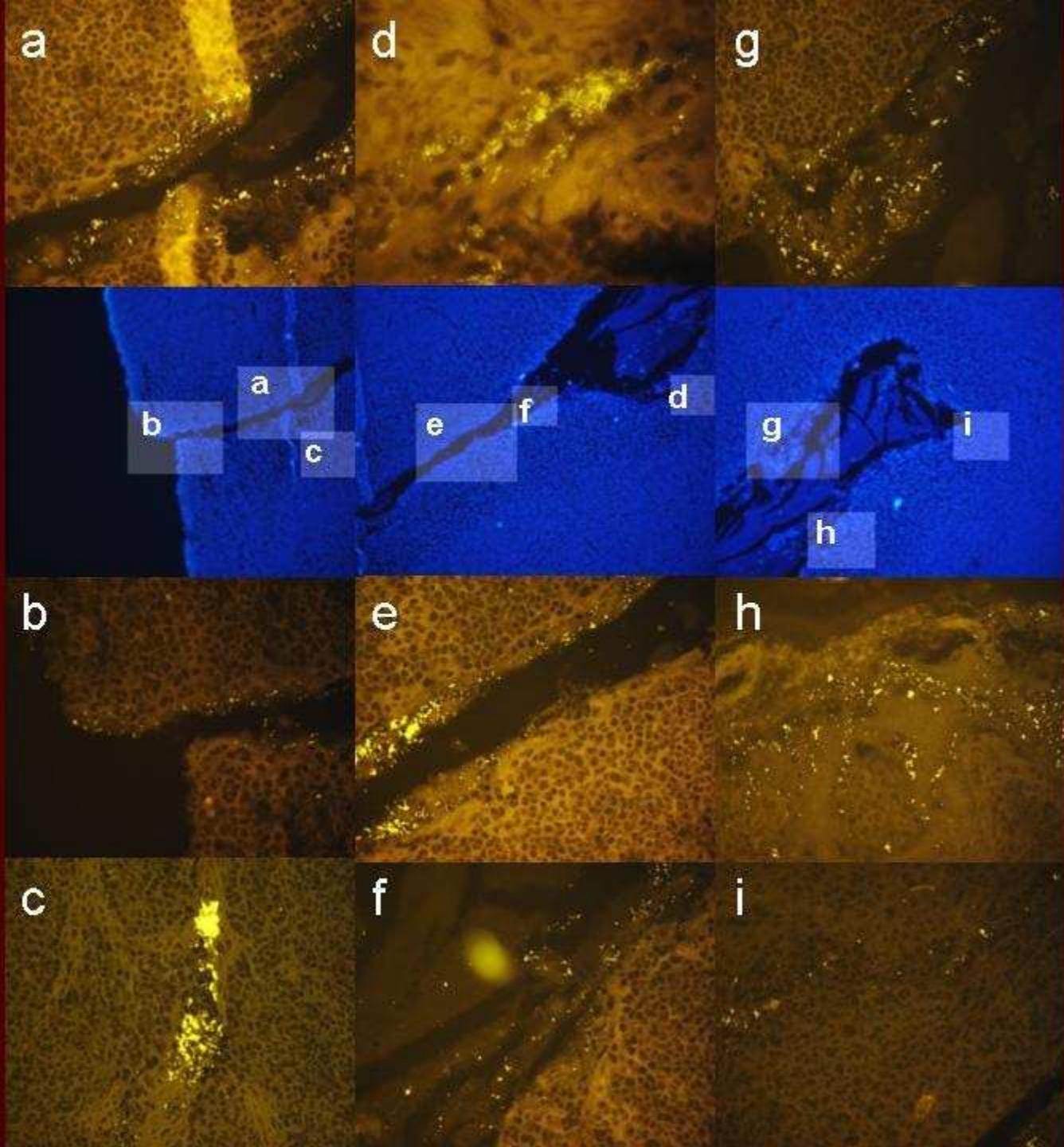


**8B**

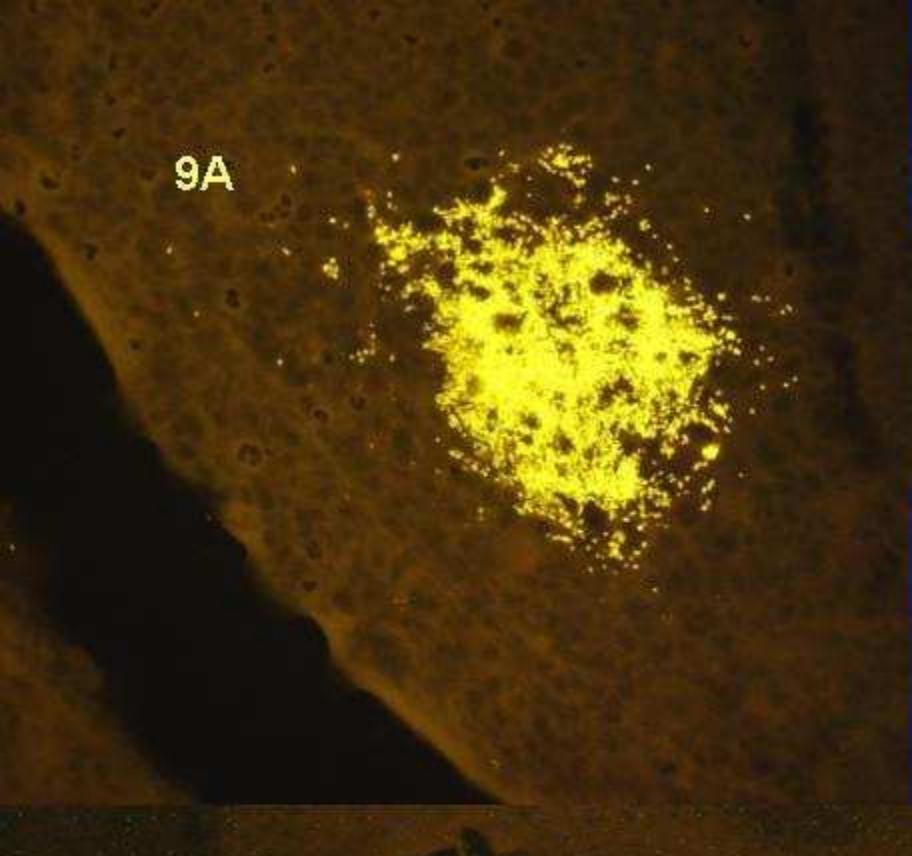




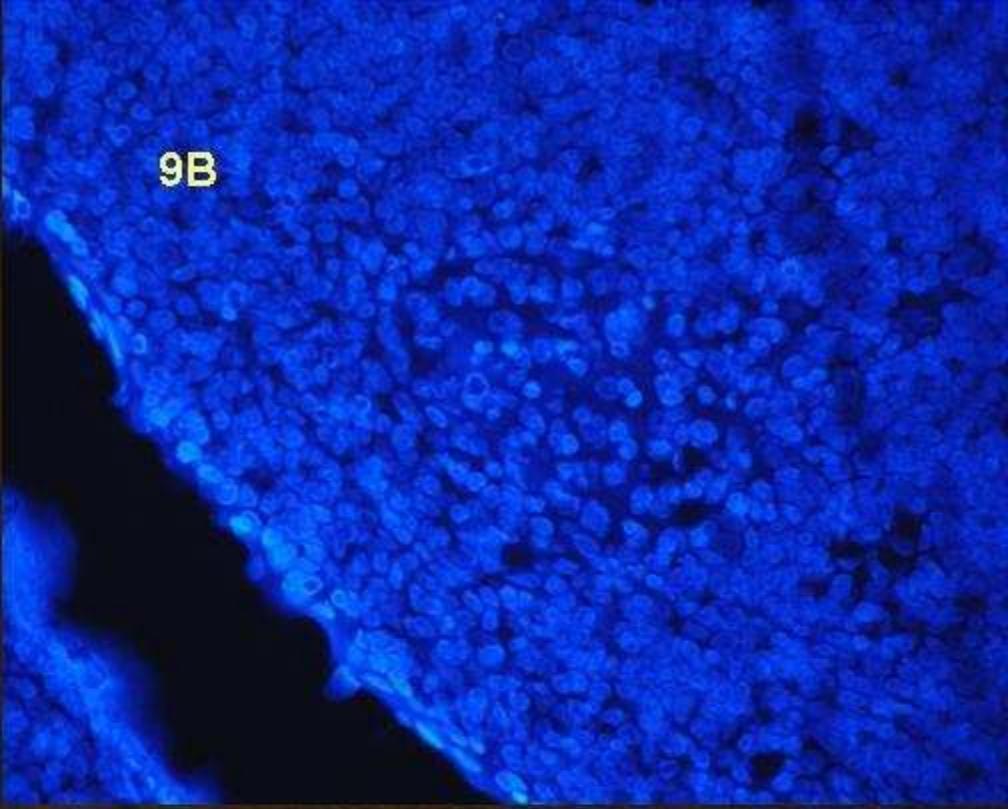
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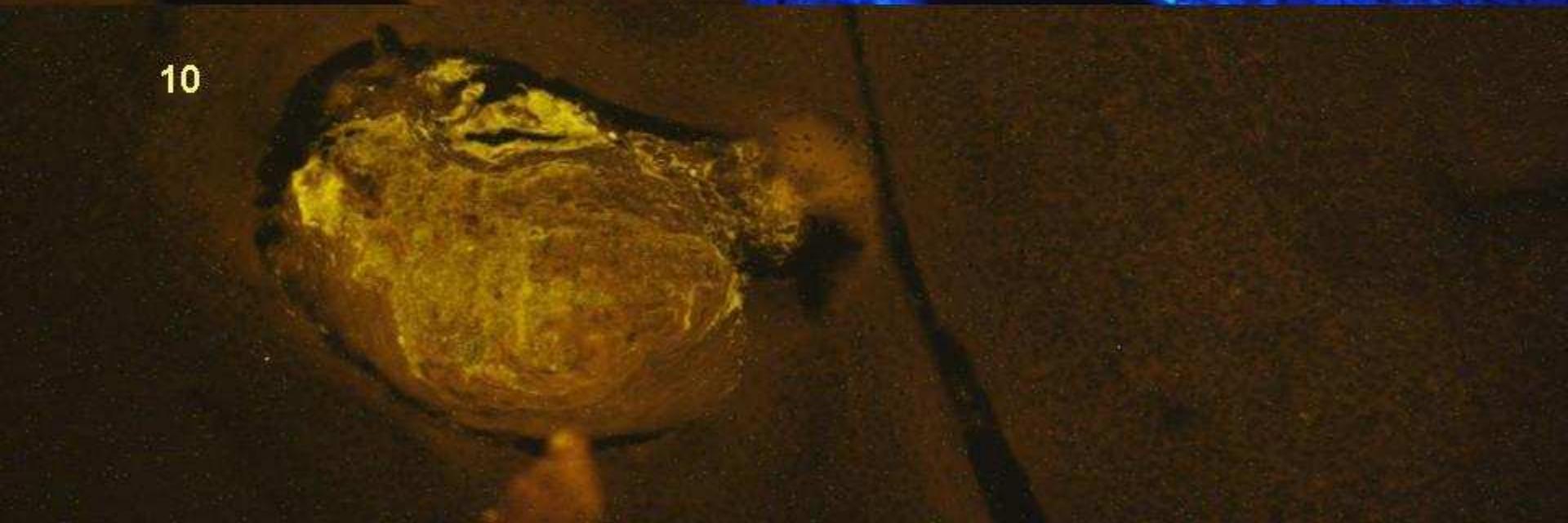
9A



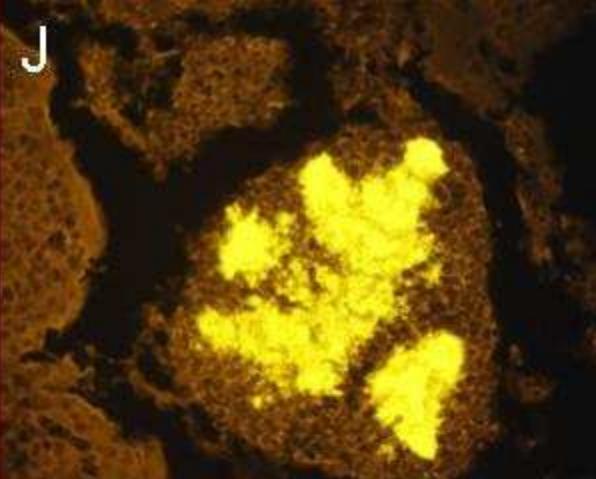
9B



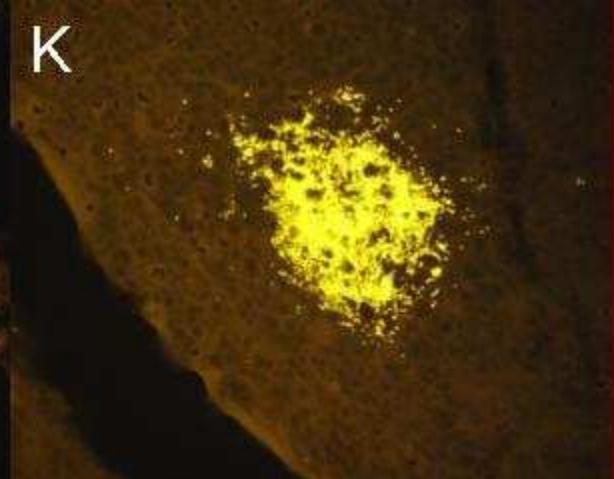
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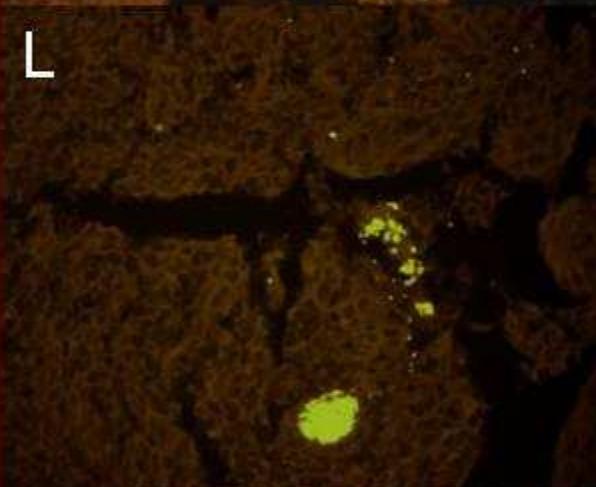
J



K



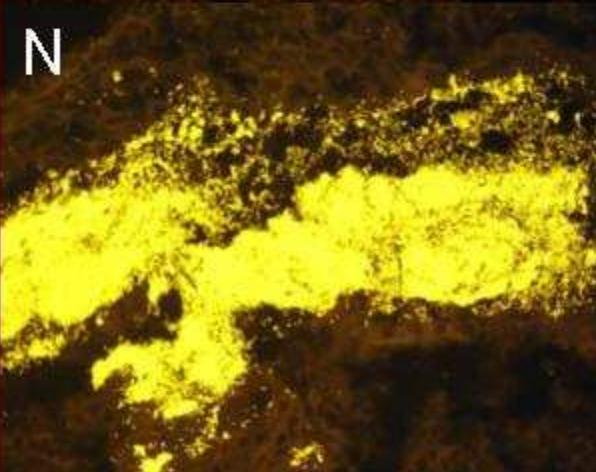
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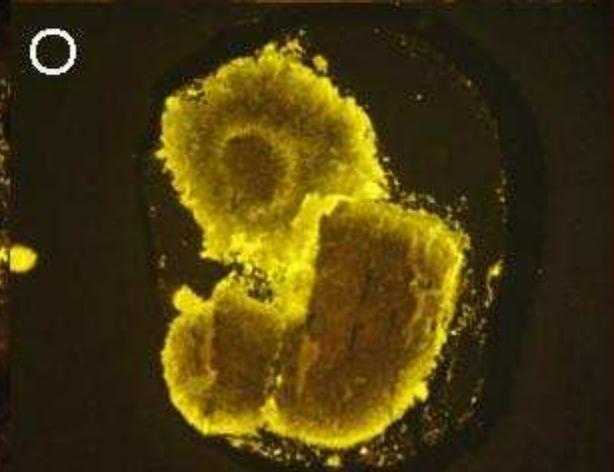
M

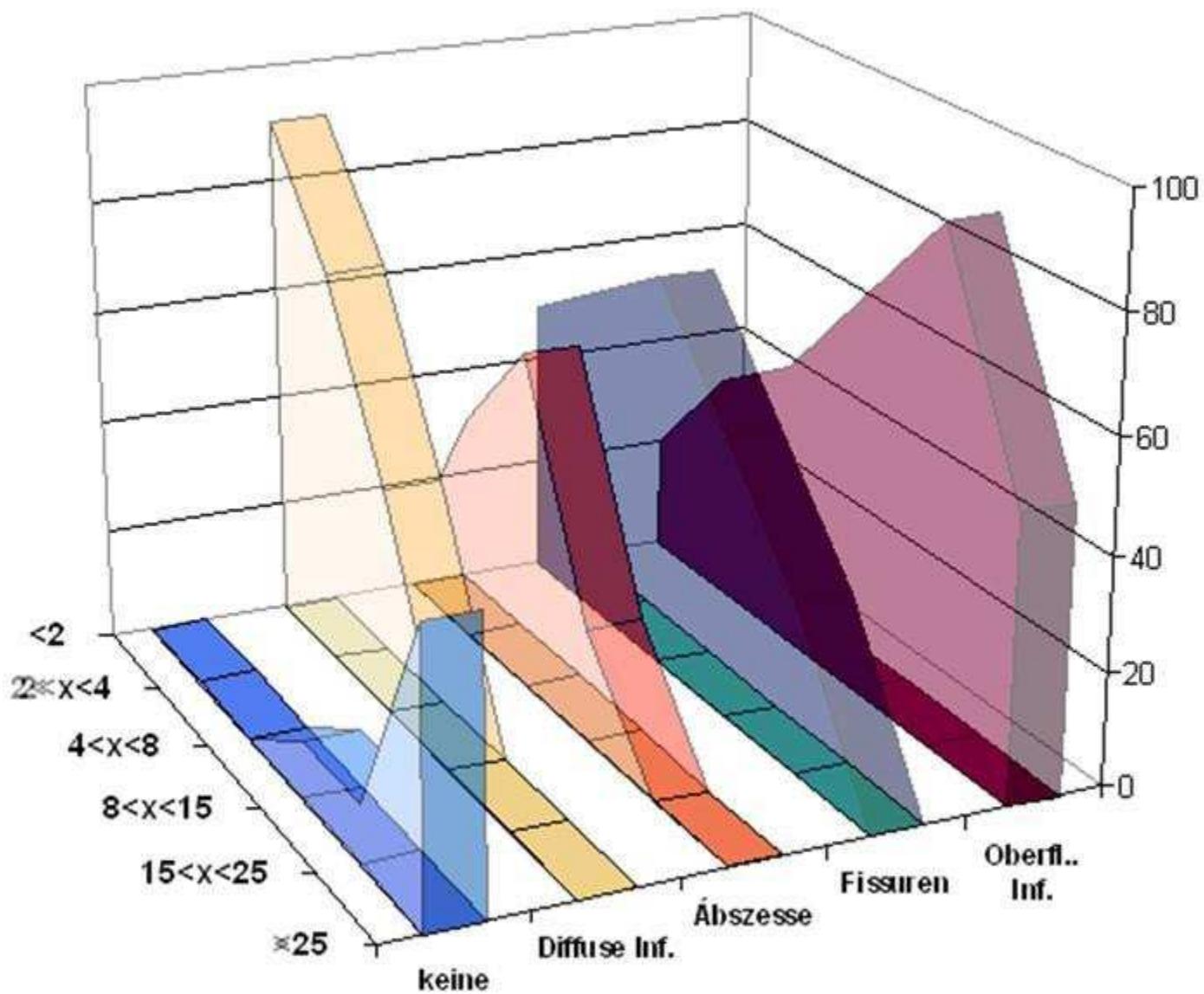


N



O





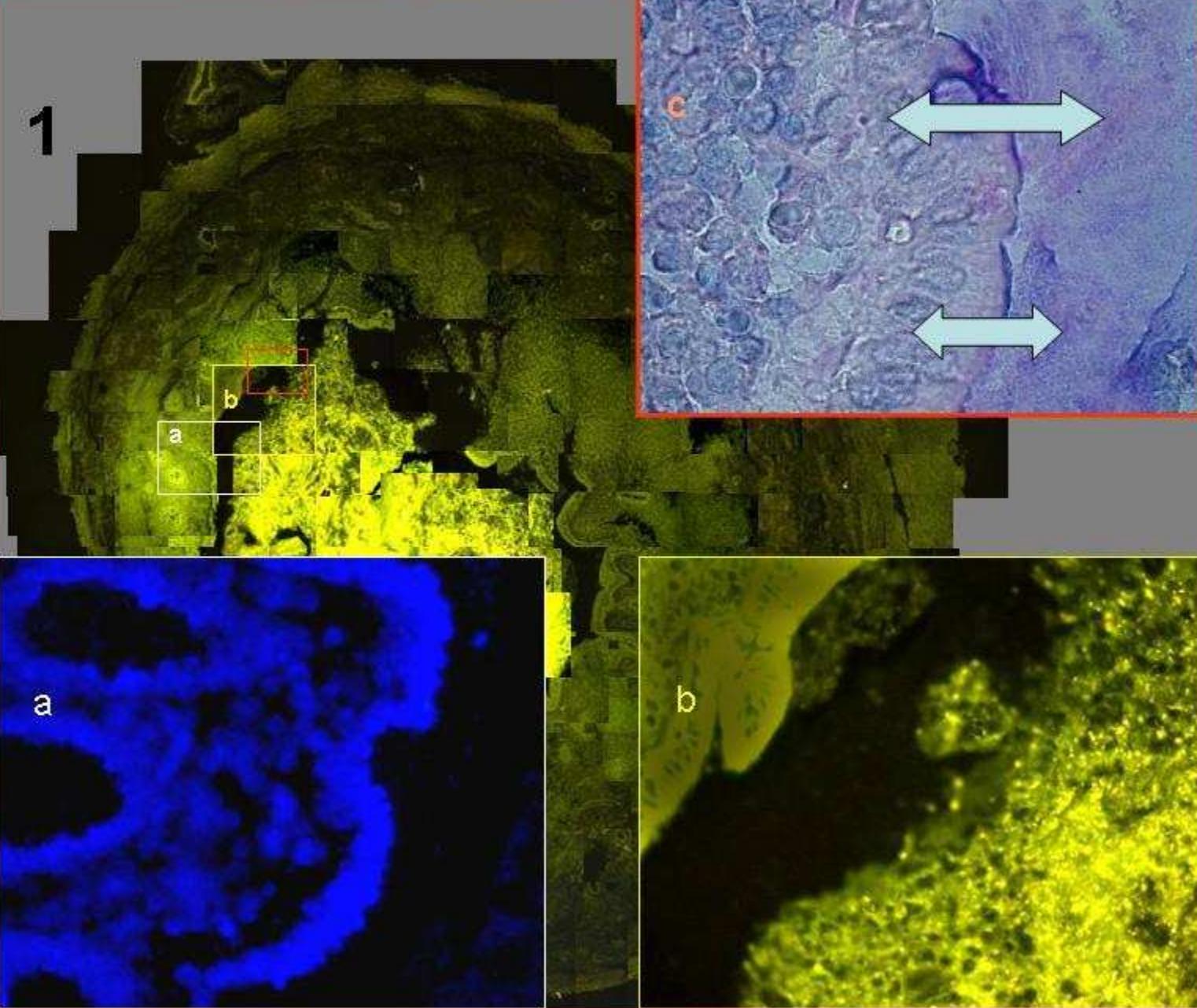
## Occurrence of different bacterial groups within local tonsillar lesions such as fissures and diffuse infiltrates

	%	Diffuse Infiltration*	%
Superficial Infiltration and Fissures*			
<i>Fusobacteria</i> spp. (Fuso)	36	<i>Firmicutes</i> (LGC)	74
<i>Pseudomonas</i> (Ps, Pseaer A, Pseaer B)	34	<i>Streptococcus</i> (Strc493)	74
<i>Beta-Proteobacteria</i> inclusive. <i>Neisseria</i> (Bet42a)	33	<i>Haemophilus influenzae</i> (Haeinf)	66
<i>Burkholderia</i> (Burcep, Burkho)	30	<i>Actinobacteria</i> (HGC)	50
<i>Lactobacillus</i> and <i>Enterococcus</i> (Lab)	24	<i>Bacteroides/Prevotella</i>	39
<i>Veillonella</i> group inclusive <i>Veillonella parvula</i> (Veil,Vepa)	23	(Bac303)	
<i>Clostridium coccoides</i> – <i>E. rectale</i> (Erec)	20	<i>Cytophaga-Flavobacteria</i> (CF319)	34
<i>Staphylococcus aureus</i> (Staaur)	11	<i>Streptococcus pyogenes</i>	11
<i>Prevotella intermedia</i> (Prin)	10	(Strpyo)	
<i>Ruminococcus bromii</i> , <i>R. flavefaciens</i> (Rbro, Rfla)	7	<i>Atopobium</i> and others	6
<i>Coriobacterium</i> group (Cor653)	6	(Ato291)	
<i>Listeria,Brochothrix</i> (Lis637,1255)	4		

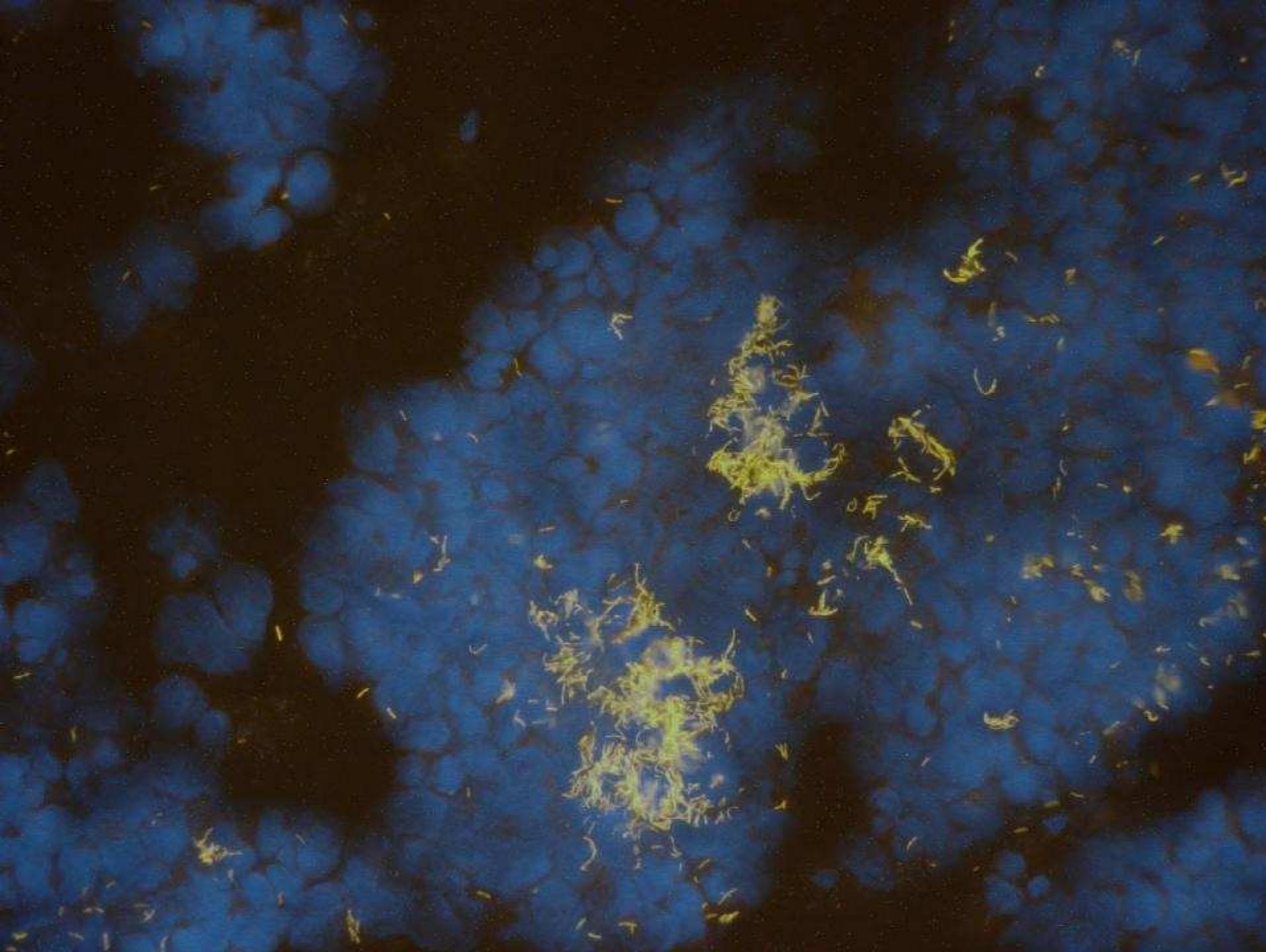
аппендицит



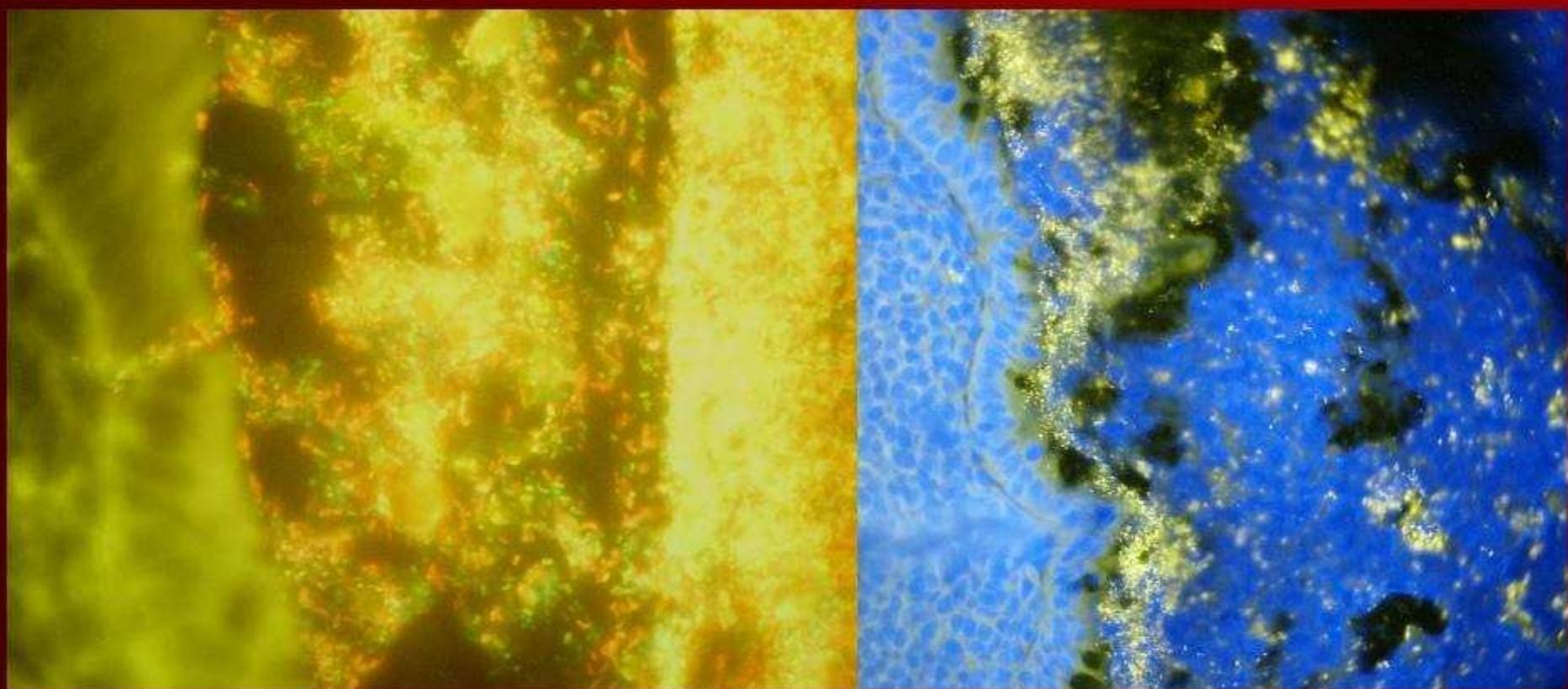
1



EU5358 (most Bacteria)  
AC4652/AC423A (*Acremoniobacter*)  
AC4AC (*Achromobacter aculeatus* ssp *commissus*)  
AERO1244 (*Aeromonadaceae*)  
Alg-476 (*Alcaligenes faecalis*)  
ARC1430 (*Arcobacter*)  
Atb291 (*Abiotrofus clister*)  
Bac303 (most *Bacillaceae*)  
Bur13b (*Burkholderia mallei*)  
BM64 (*Mitobacteriaceae*)  
CM150 (*Clostridium histolyticum*)  
CIT136 (*Clostridium butyricum* group)  
CLD81022 (*Clostridium butyricum*)  
Cract1 (*Clostridium* sp.)  
CST440 (*Clostridium stercorarium*)  
DS5658 (*Desulfovibrionaceae*)  
DSW887 (*Desulfovibrionales*)  
Eba1190 (*Enterobacteriaceae*)  
Ebar1231 (*Escherichia* *barkeri*)  
Ebm1462 (*Escherichium biforme*)  
Eco1122 (*Escherichium coli* *biovar*)  
Eoy1461 (*Escherichium cylindrophilus*)  
Eoy1466 (*Escherichium cylindrophilus*)  
Edo1183 (*Escherichium dolichum*)  
Eka579 (*Escherichium hadarum*)  
Eki1194 (*Escherichium fennicum*)  
Eli1433 (*Escherichium illiosum*)  
Emo184 (*Escherichium moniliforme*)  
Eue166 (*Escherichium verneilli*)  
Eoy1381 (*Escherichium cylindrophilus*)  
Eka1469 (*Escherichium hawaii*)  
ENC (*Enterococcus*)  
Eric482 (*Escherichium rectale*, *Clostridium coccoides* group)  
FUSO (*Fusobacterium* spp.)  
Fico (*Fusobacterium necrophorum*)  
Finc (*Fusobacterium nucleatum*)  
Fpiral (*Peptocillibacter prausnitzii*)  
Hpy-1 (*Helicobacter pylori*)  
Lab158 (*Lactobacillus*)  
Lac1511 (*Lachnospira multipara*)  
Myo651 (*Mycobacterium*)  
Pae997 (*Pseudomonas* spp.)  
Placo0141 (*Plaococciobacterium faecium*)  
PRR2 (*Streptobacillus breve*)  
Rho130 (*Clostridium sporosphaeroides*, *Ruminococcus bromii*, *Clostridium leptum*)  
Por (*Burkholderia* spp.)  
Pde1654 (*Prevotella dentinophila*)  
PIM649 (*Prevotella intermedia*)  
Pig1657 (*Prevotella nigrescens*)  
POG1 (*Porphyromonas gingivalis*)  
PP1 (*Pseudomonas* spp.)  
PP156a (*Pseudomonas putida*, *P. mendocina*)  
PP1646 (*Pseudomonas* spp.)  
PRIN (*Prevotella intermedia*)  
Pro01264 (*Ruminococcus productus*)  
Rita29 (*Ruminococcus albus*)  
Saga (*Sphaerotilus galactiae*)  
Sat (*Sphaerotilus aureus*)  
Ski (*Brachyspira*)  
Sp (*Streptococcus pneumoniae*)  
Spy (*Streptococcus pyogenes*)  
SRB3850b (*Desulfovibrionales*)  
Str161 (*Streptophomonas maltophilia*)  
Str (*Streptococcus* spp.)  
Str493 (not *Streptococcus* spp.)  
SUBU1231 (*Burkholderia* spp.)  
STEBA1126 (some members of the *Stenotillicoccus* lineage)  
Sur1428 (some *Desulfovibrionales*)  
Urob63a/Urob63b (*Ruminococcus obearum*-like)  
Vel1223 (*Vellonella* spp.)  
VEPA (*Vellonella parvata*)  
VIB572a (*Gentis Vibrio*)





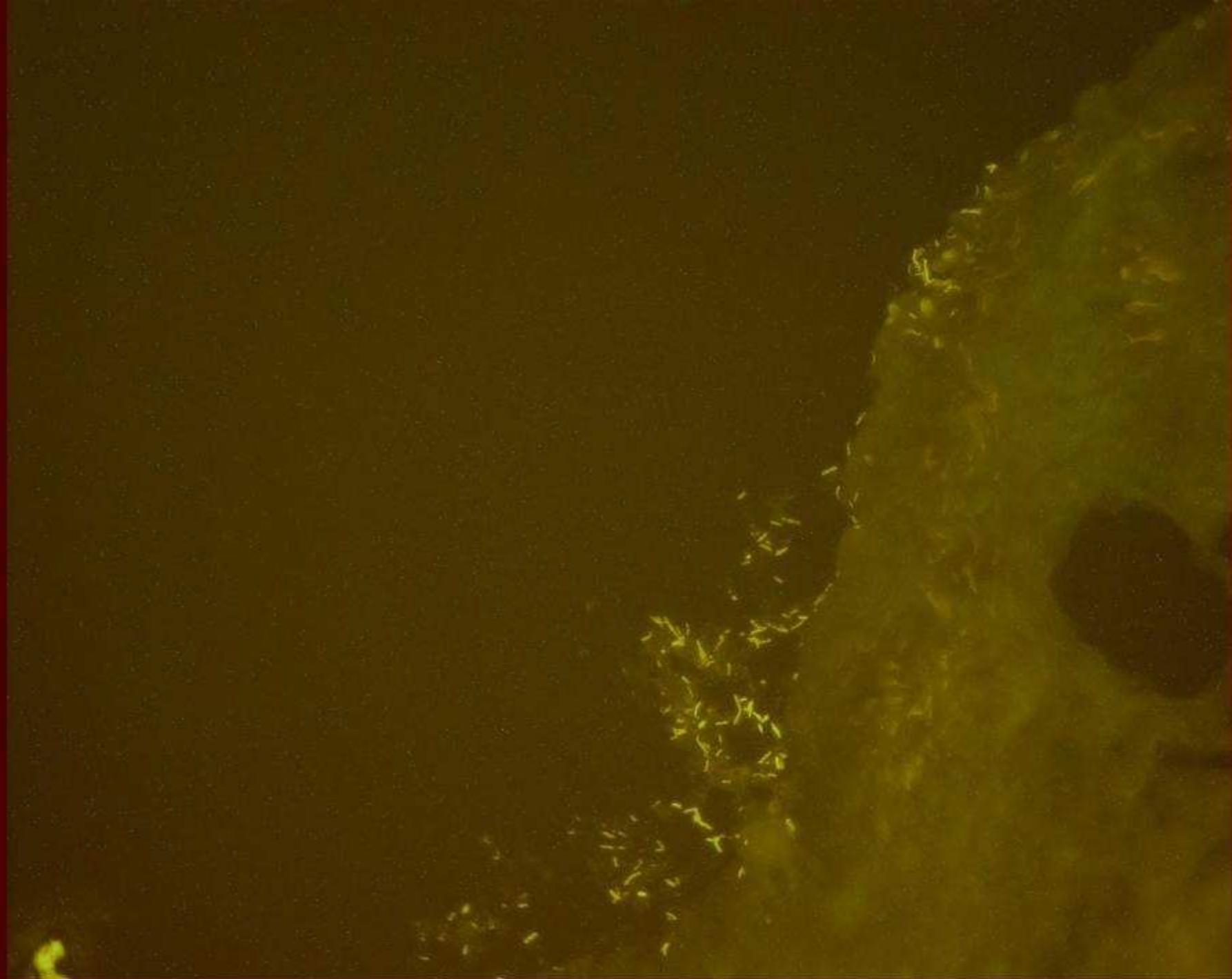


2

a<sub>1</sub>

a<sub>2</sub>

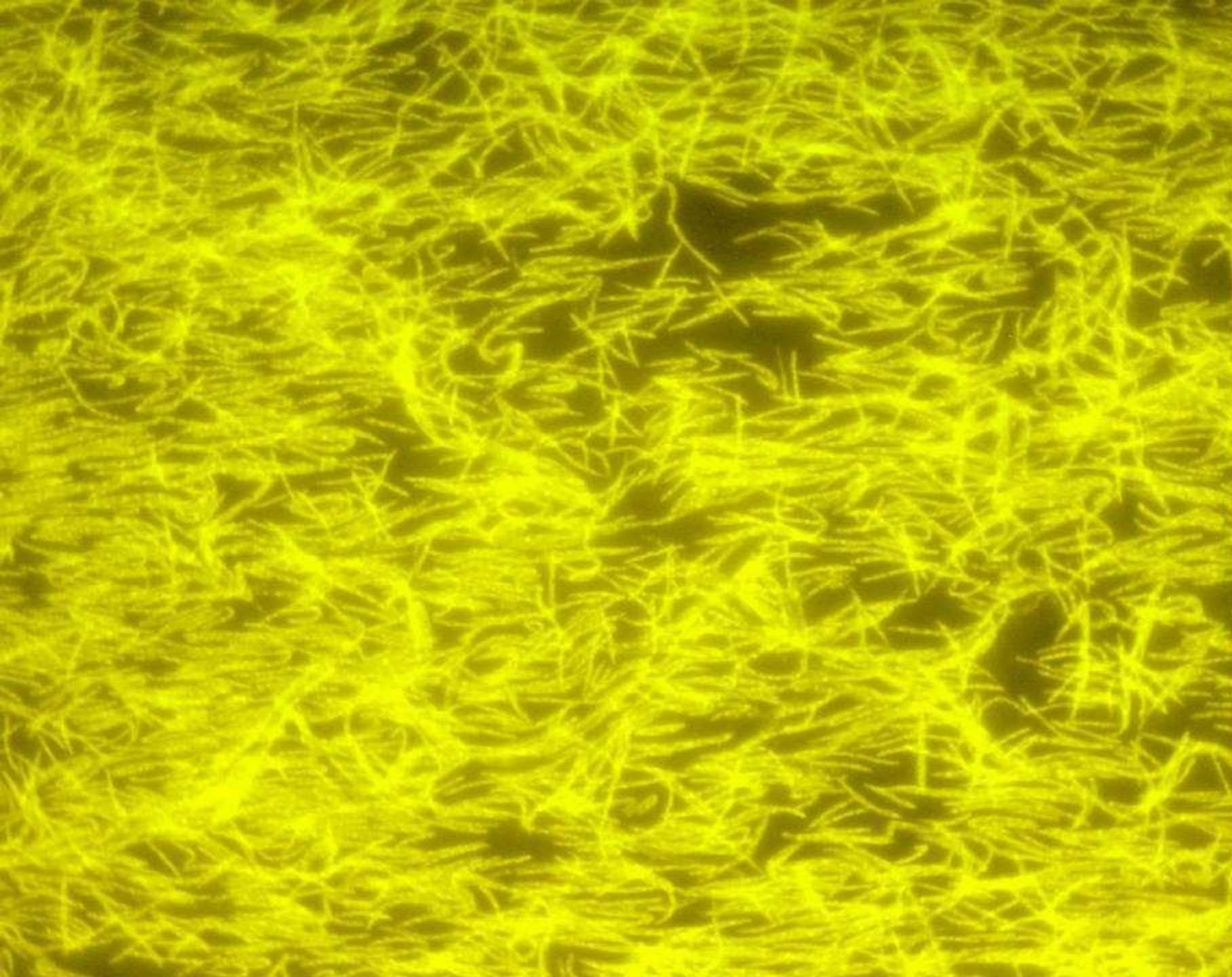
a<sub>3</sub>



**Table 3. Occurrence and composition of microbiota in patients with acute appendicitis and controls**The bold marked values differ significant ( $P< 0.01-0.001$ ) from the values of other investigated groups.

na not applicable

	mean (maximal) percent of bacterial population composed by specific bacterial groups $\pm$ SD				
	No appendicitis N=18	Catarrhal appendicitis N= 25	Suppurative appendicitis N=27	Cecal biopsy N=400	Fecal cylinder N=400
<b>Fusobacterium nucleatum</b>	na	11 $\pm$ 17* (50%)	24 $\pm$ 29* (90%)	na	na
<b>Ebac</b>	3.9 $\pm$ 8	8 $\pm$ 16	5 $\pm$ 8		
<b>Bac+Fprau+Erec</b>	87 $\pm$ 11	63 $\pm$ 30	51 $\pm$ 29	90 $\pm$ 11	70 $\pm$ 18
	<b>Occurrence Fusobacteria (Fnuc/Frec/other) in mucus and within intramural lesions</b>				
<b>Lumen</b>	5%	44%	52%	0.5%	2%
<b>Infiltration of Fusobacteria in epithelial cells</b>	5%	40%	29%	0	
<b>Submucosal infiltration of Fusobacteria</b>	0	36%	56%	0	



# **Kriterien polymikrobieller Infektionen**

**Isolation und Identifikation von Bakteriengruppen in untypischen für ihrer Verbreitung Lokalisationen.**

**Assoziation bestimmter Bakteriengruppen mit charakteristischen morphologischen Läsionen**

**Auffinden der Erreger sowie charakteristischer morphologischer Veränderungen in der Infektionskette.**

**Praktischer Nutzen für die Diagnostik und Therapie.**