



Polymikrobielle “Stromatolithe”
im Salzsee von Australien

FISH Analyse des mukosalen Biofilm



Eub338
Alf1b
Beta42a
Gam42a
Ebac
Ec1531
Y16s-69
Srb385
Sgd
Hpy-1
Arc1430
HGC
LGC
Sfb
Erec
Lach
Ehal
Chis150
Clit135
Lab158
Stre493
Enc131
Efaec
Ato291
Cor653
Ecy1
Phasco
Veil
Rbro, Rfla
UroA, UroB
Ser1410
Bif164
CF319a
Bac303
Bfra602
Bdis656
Fprau
Dss658
Arch915

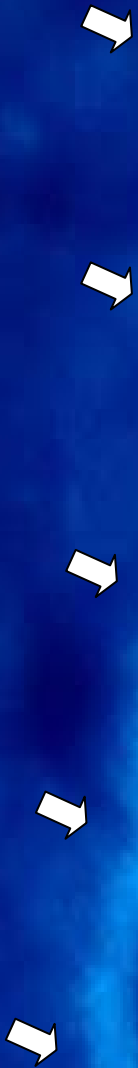
mit r-RNA komplementären Sonden

**Der Biofilm
verschwindet
nach Fixierung
mit Formalin**

**(Dapi)
markiert die
Nukleinsäuren
blau**

Carnoy Formalin

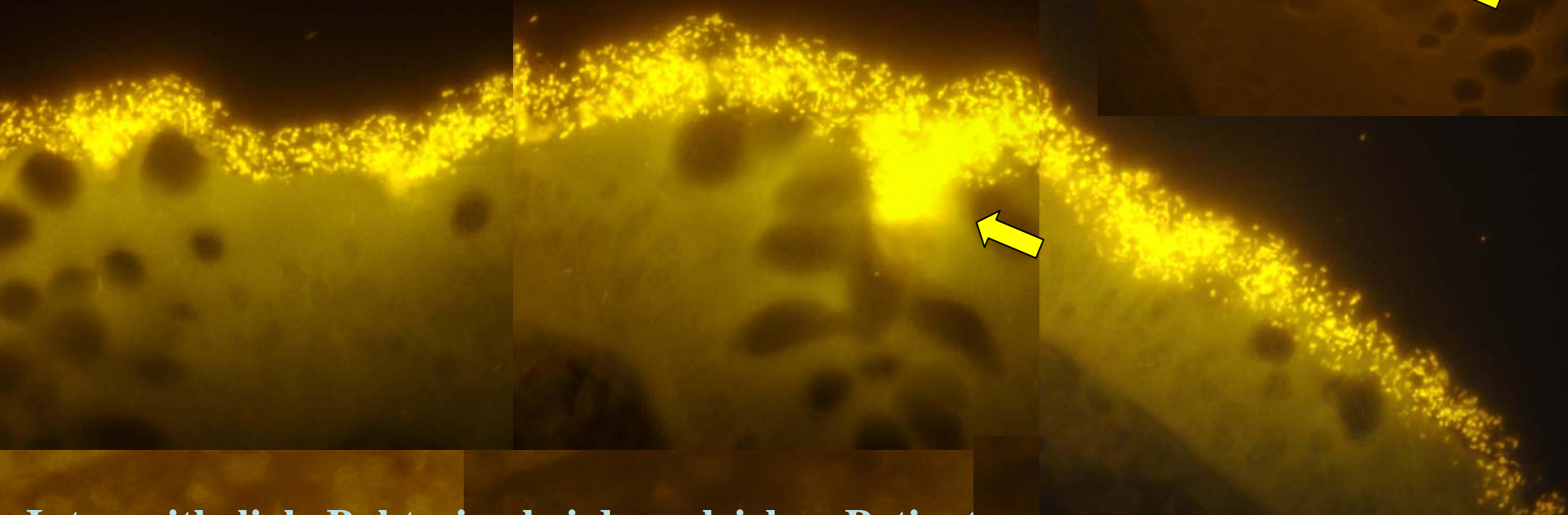
Der gleiche Patient
und die gleiche
Lokalisation,
M. Crohn



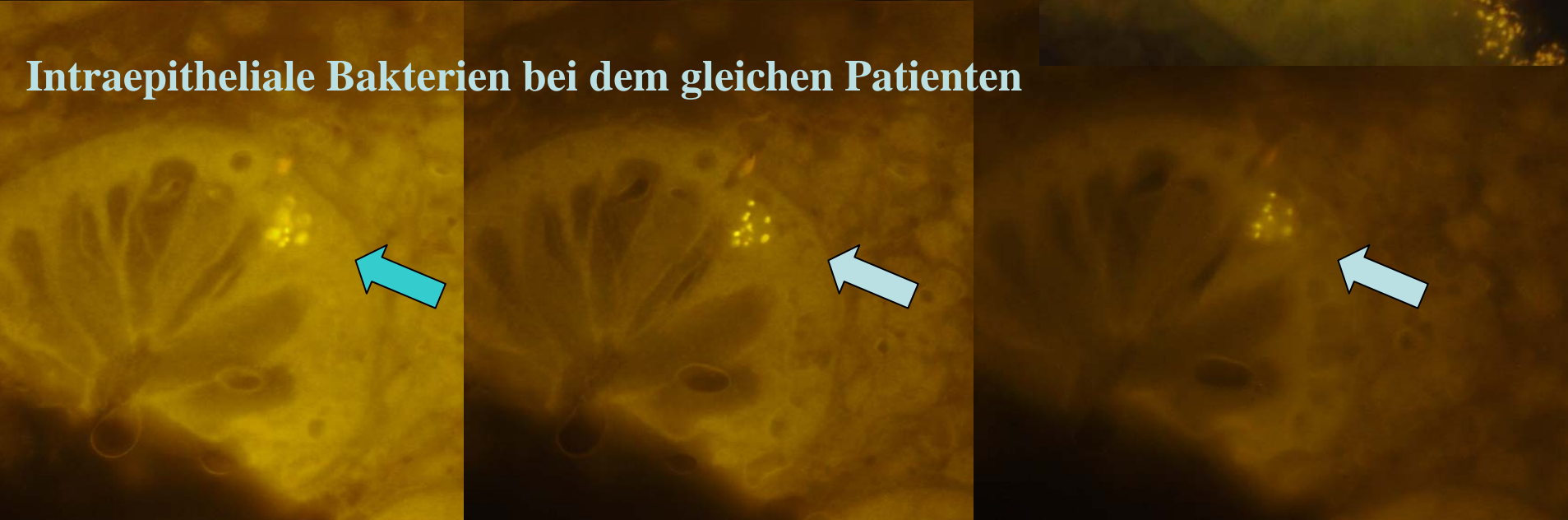
**gesunde
Dickdarm-Wand**

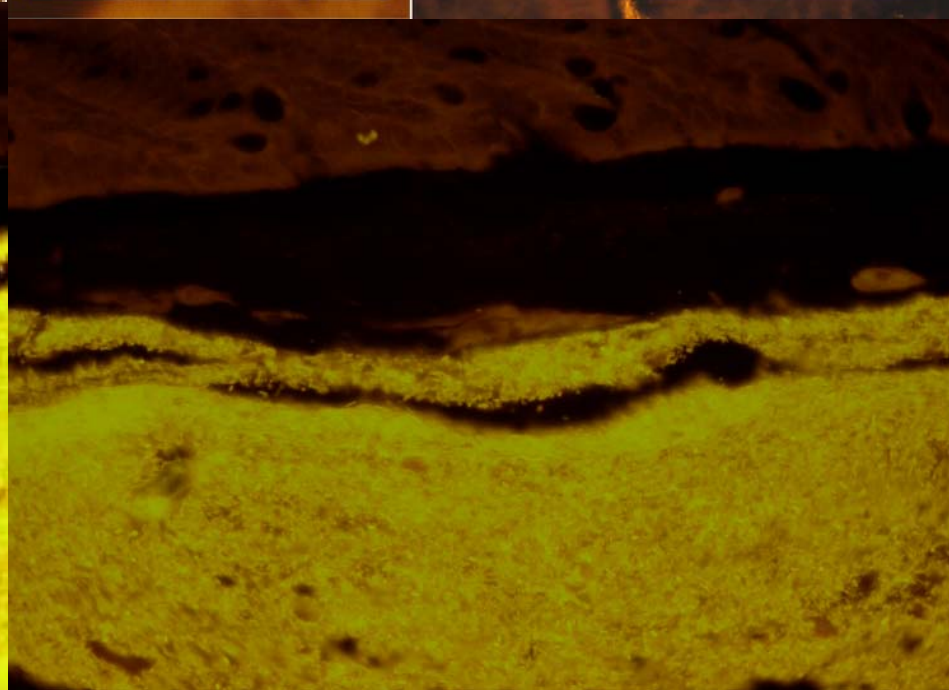
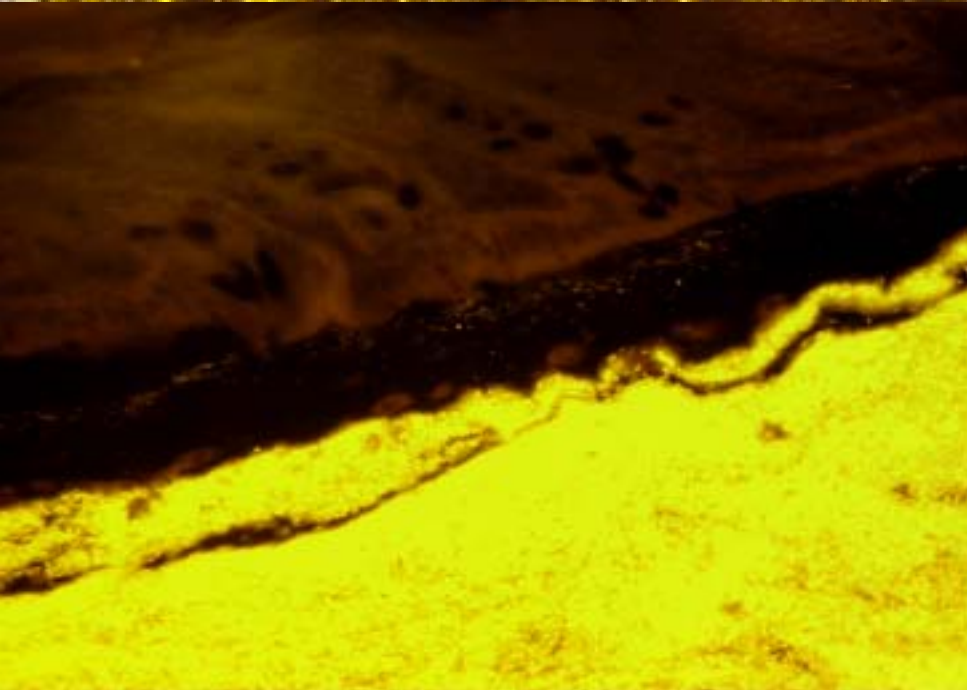
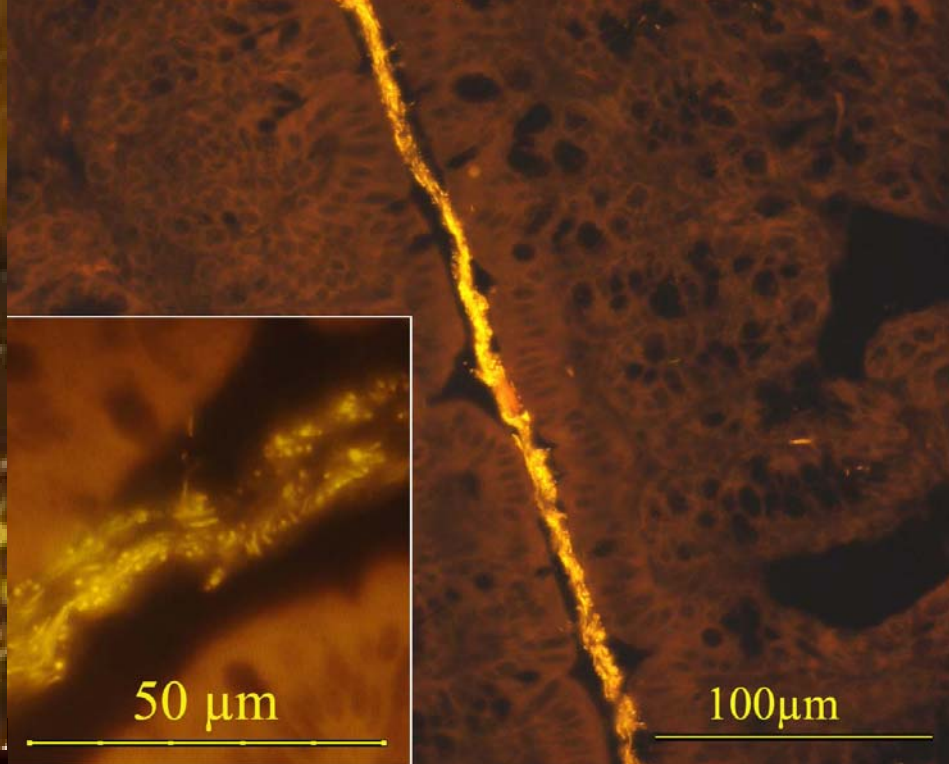
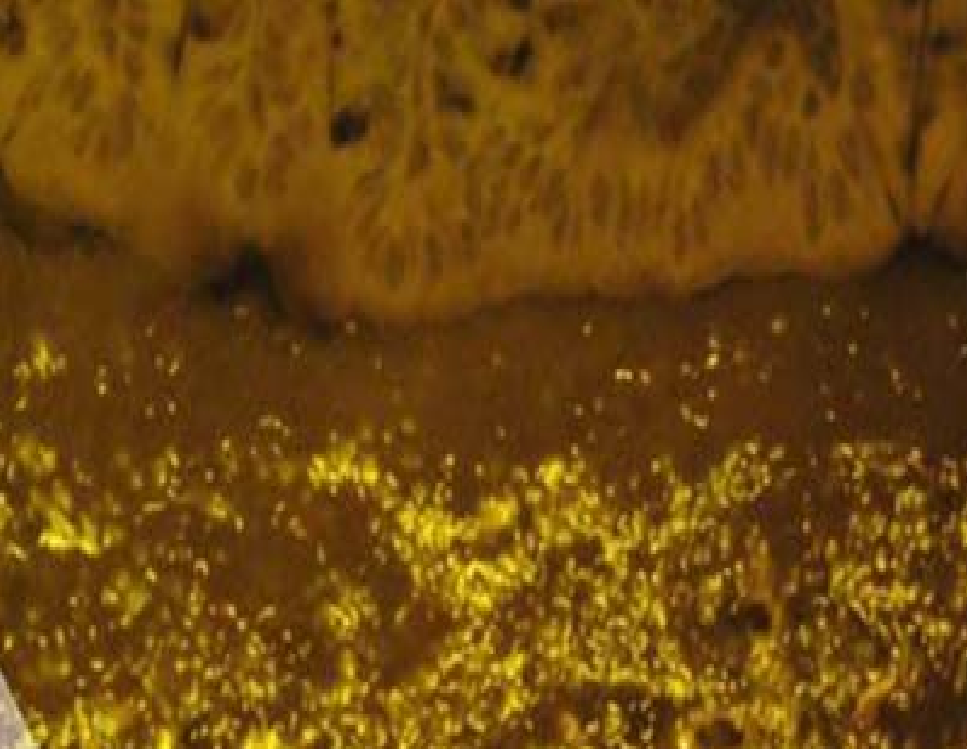


Dichter *Bacteroides fragilis* Biofilm bedeckt die Mukosaoberfläche, Patient mit M. Crohn

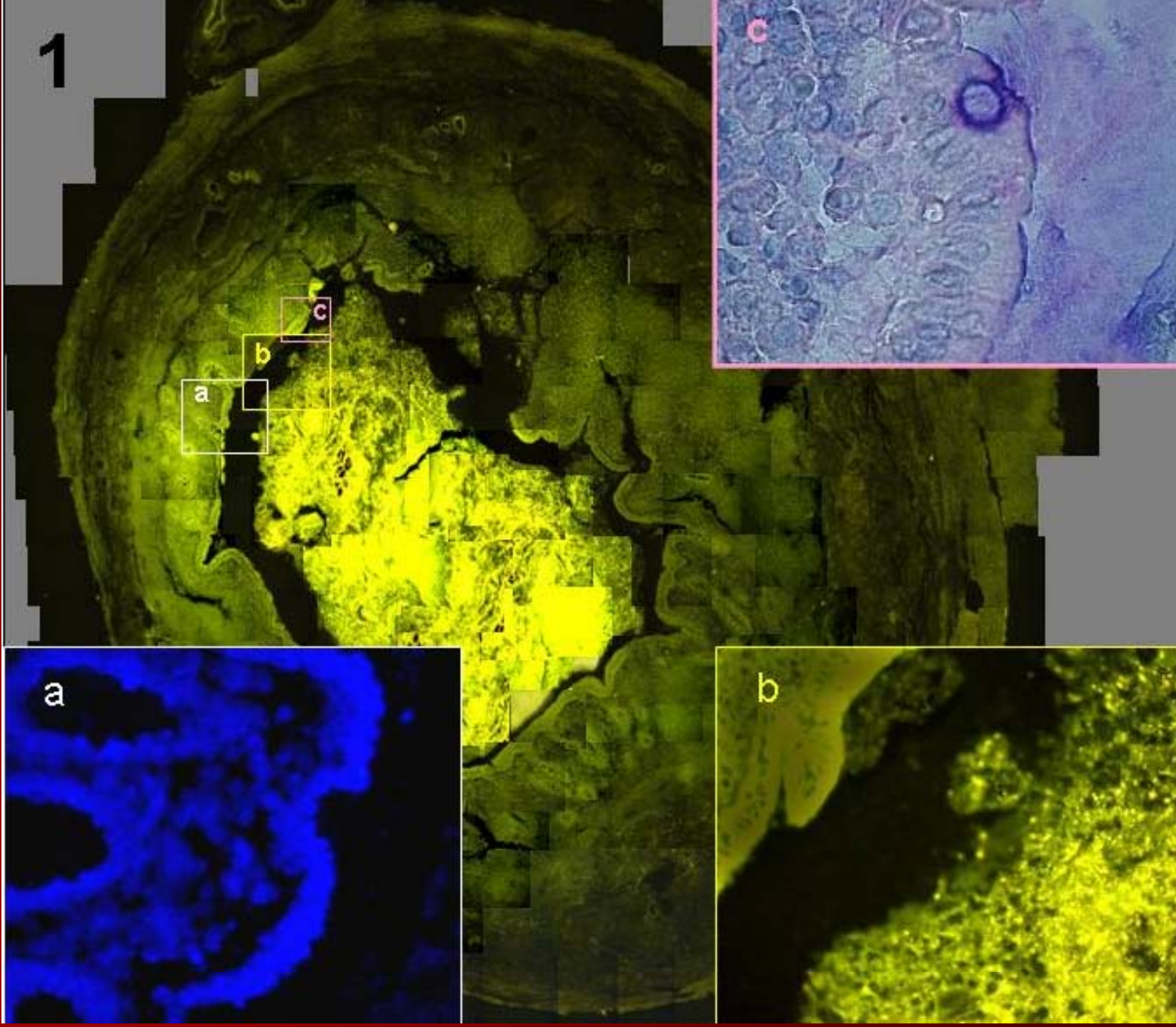


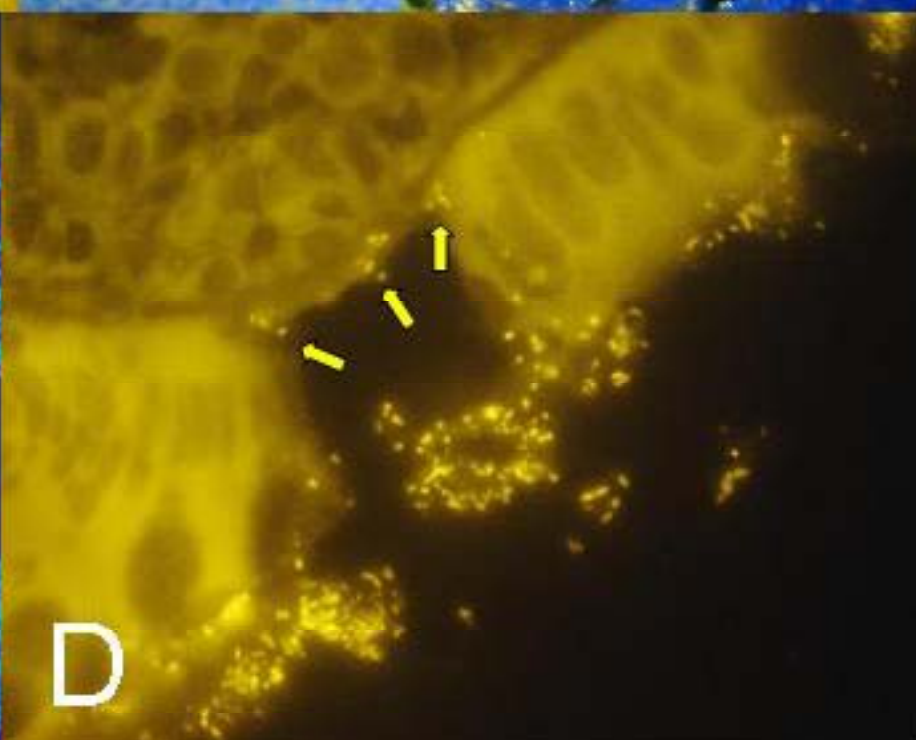
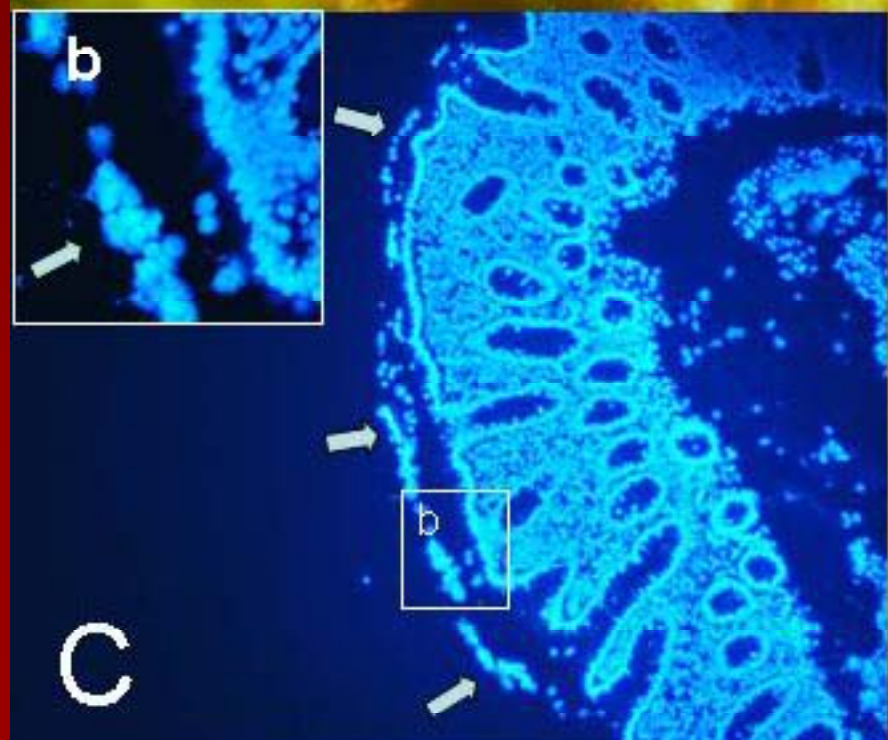
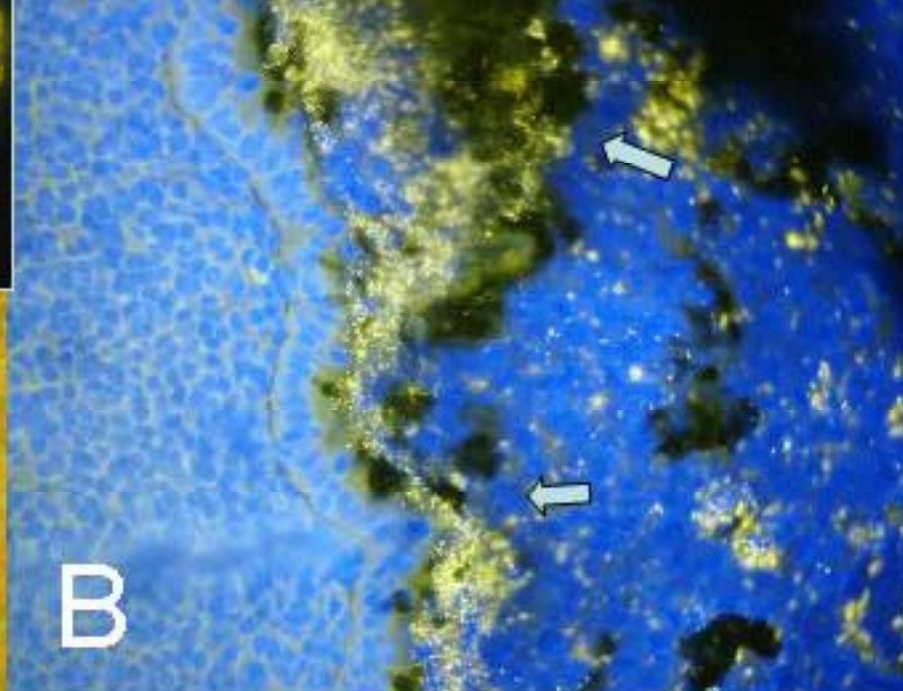
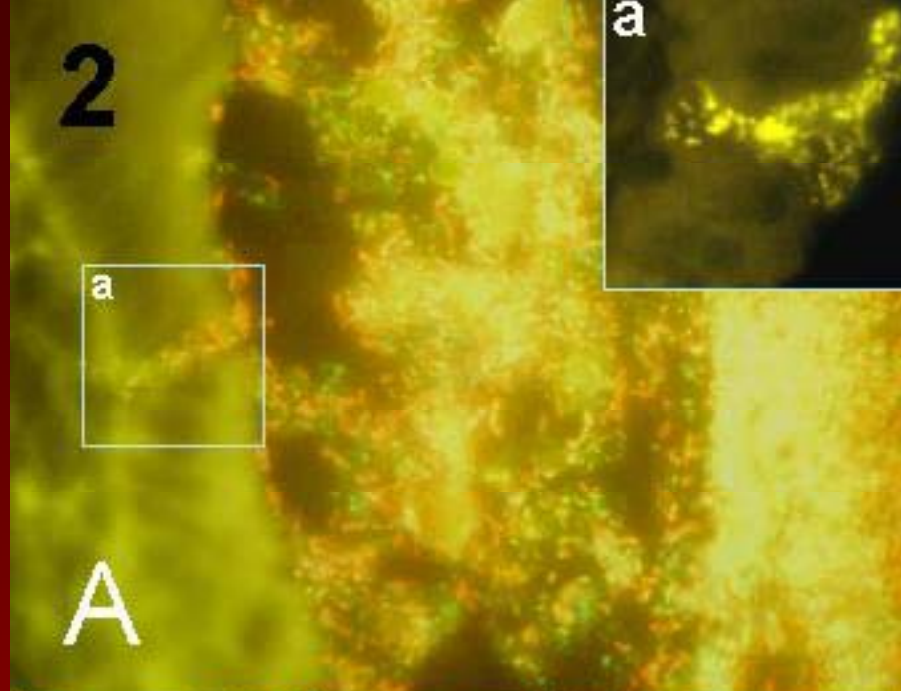
Intraepitheliale Bakterien bei dem gleichen Patienten

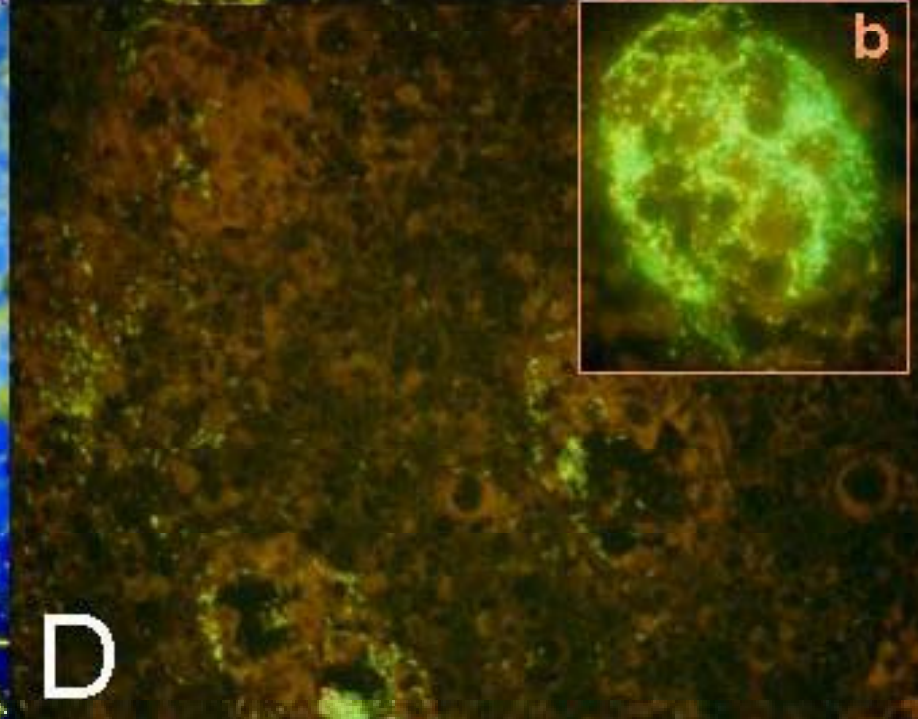
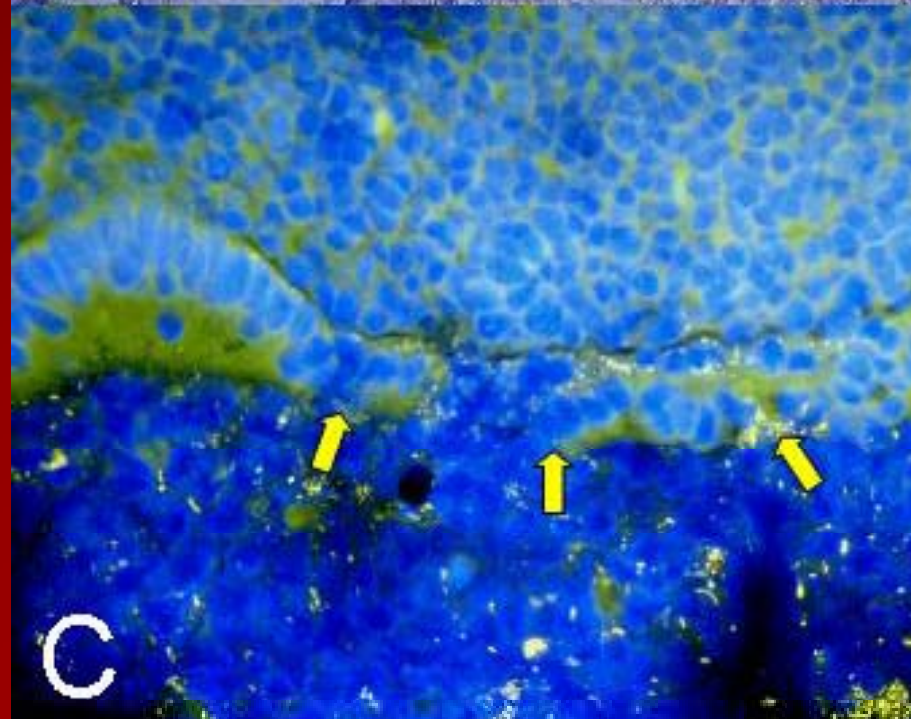
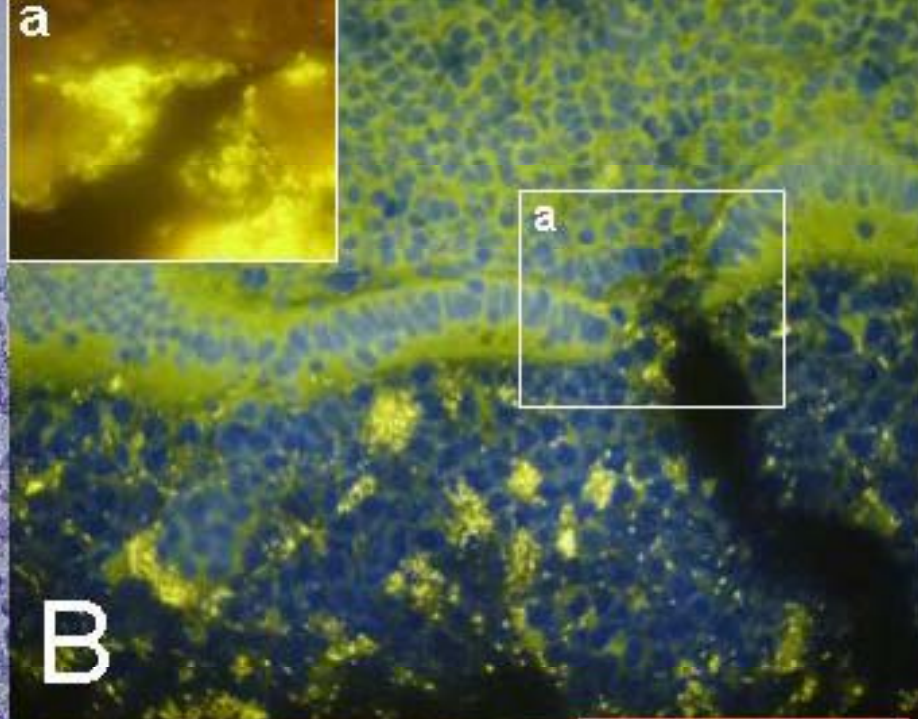
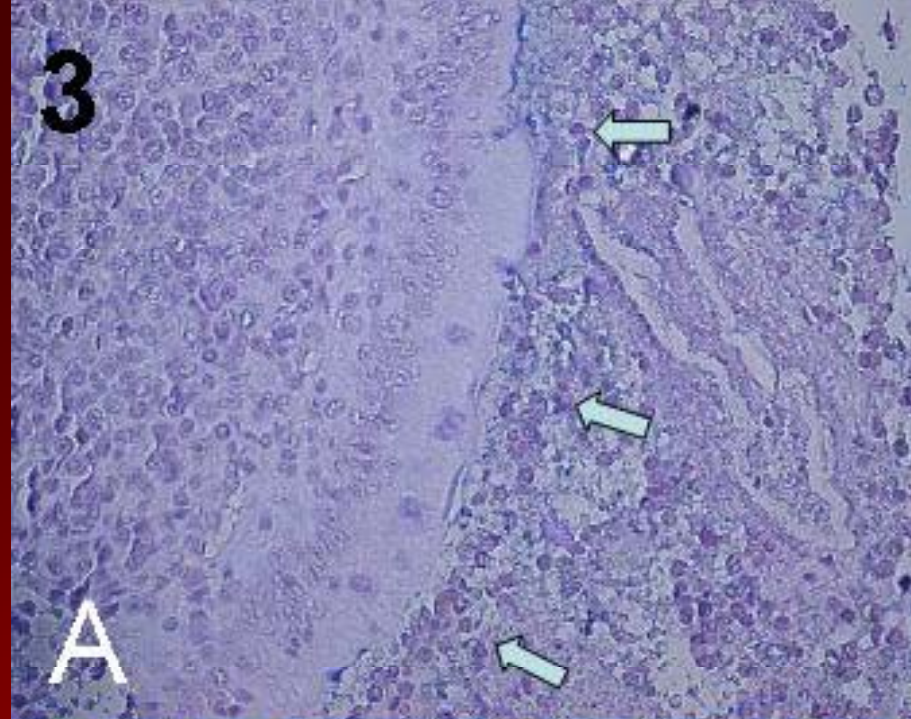




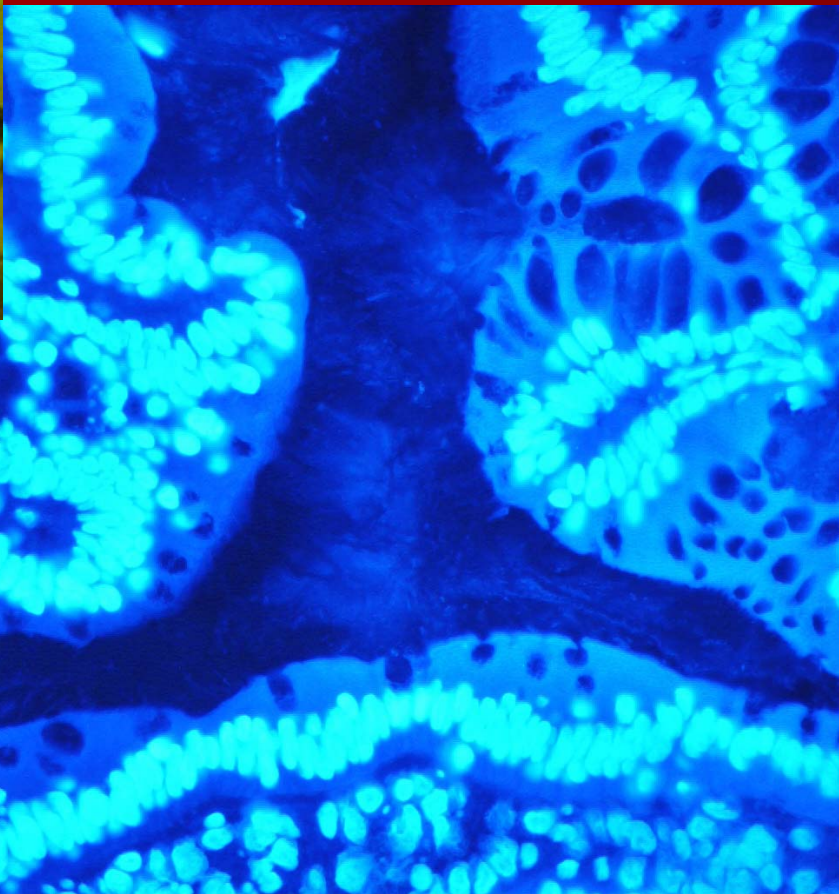
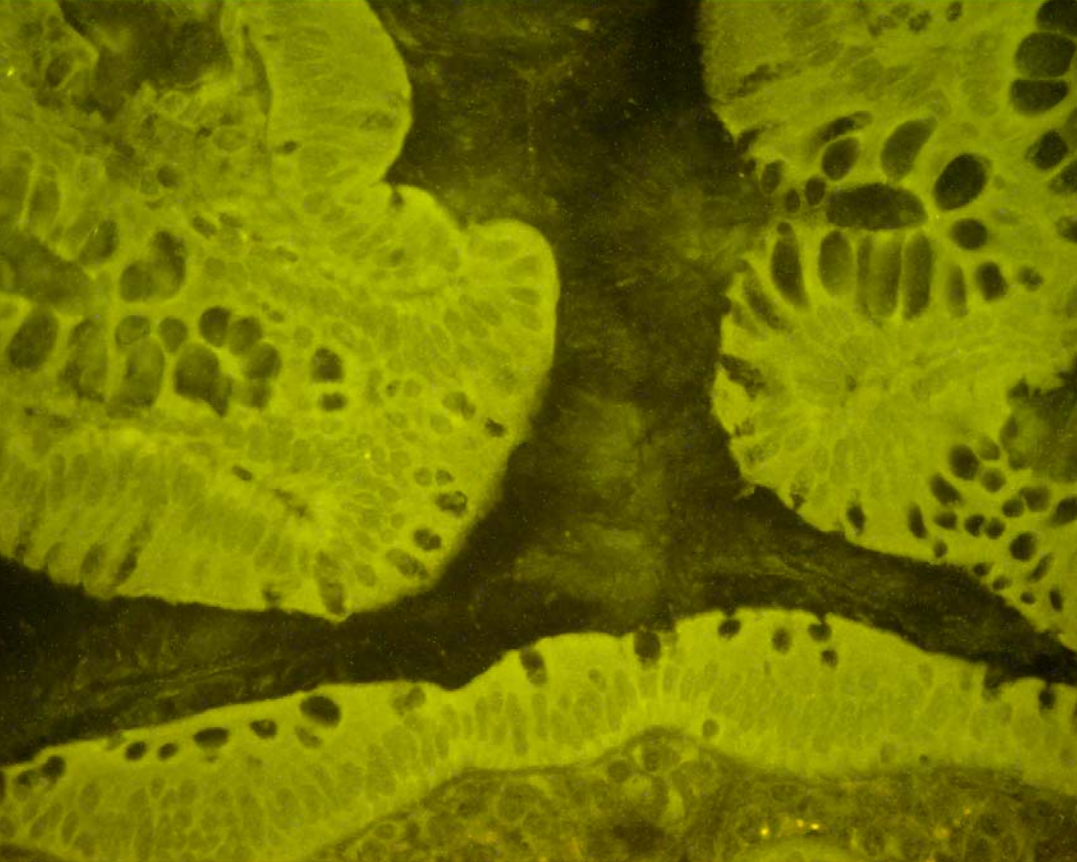
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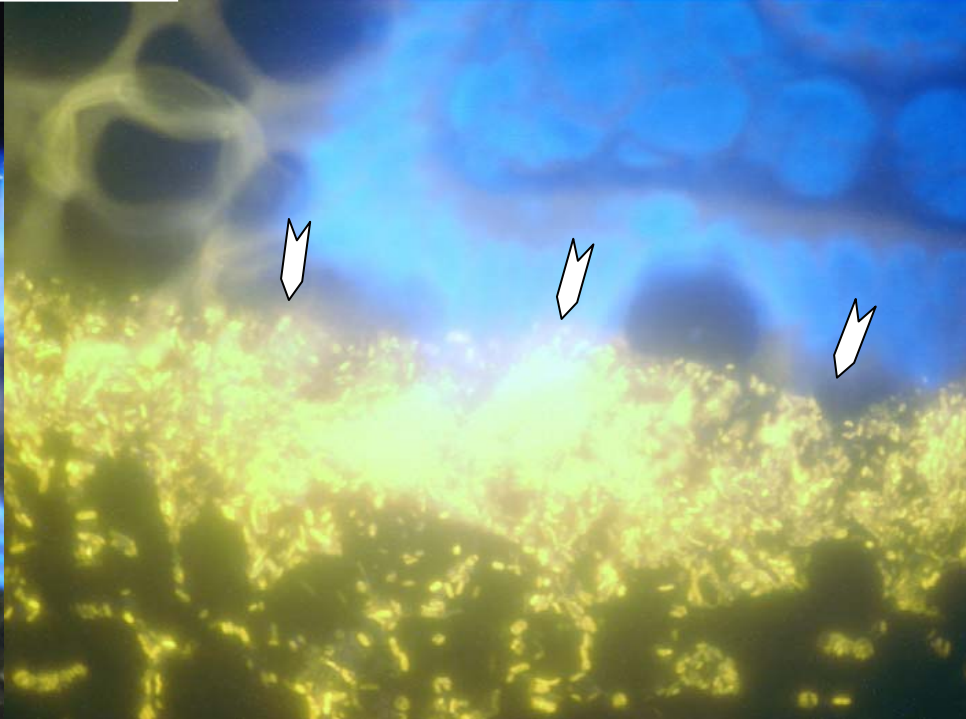
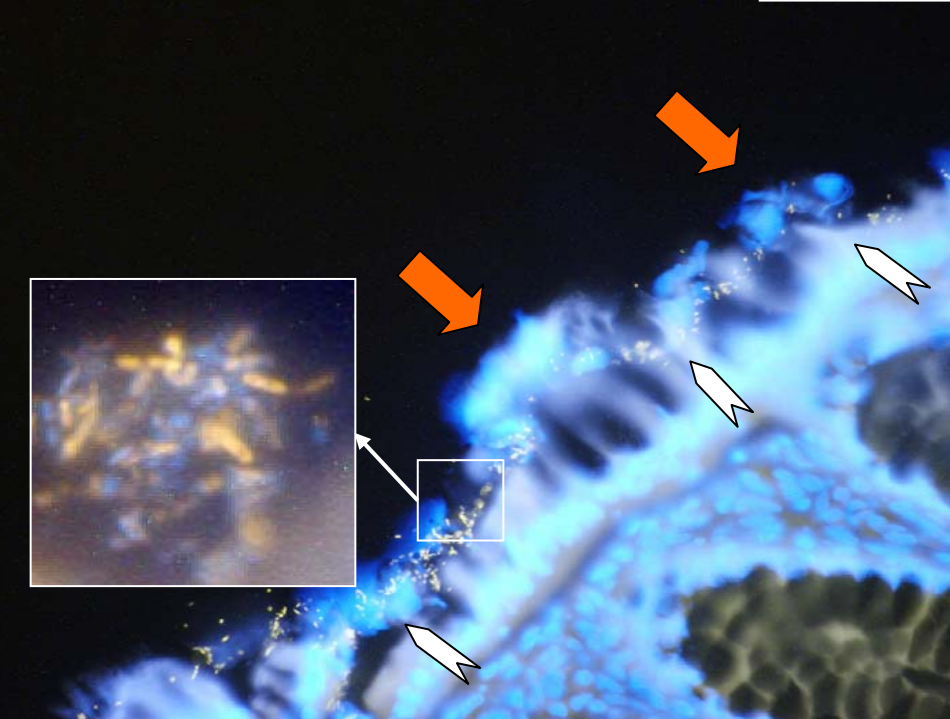
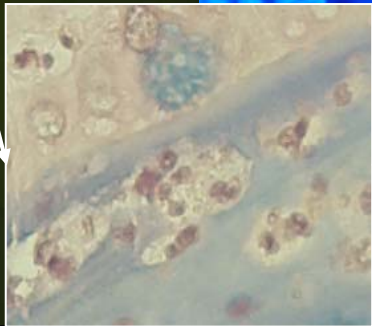
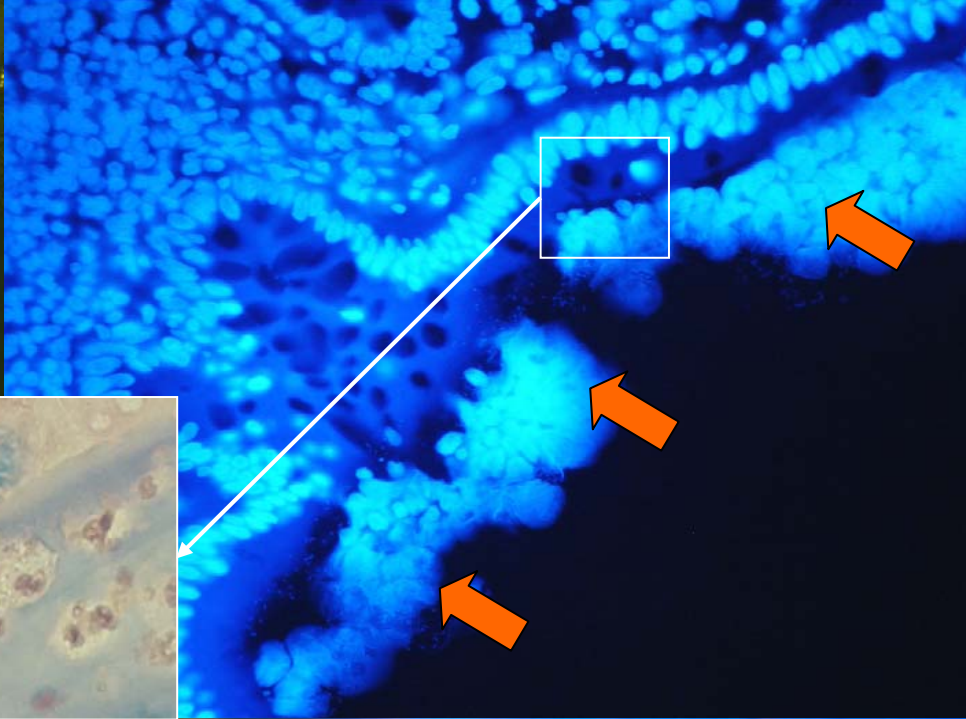
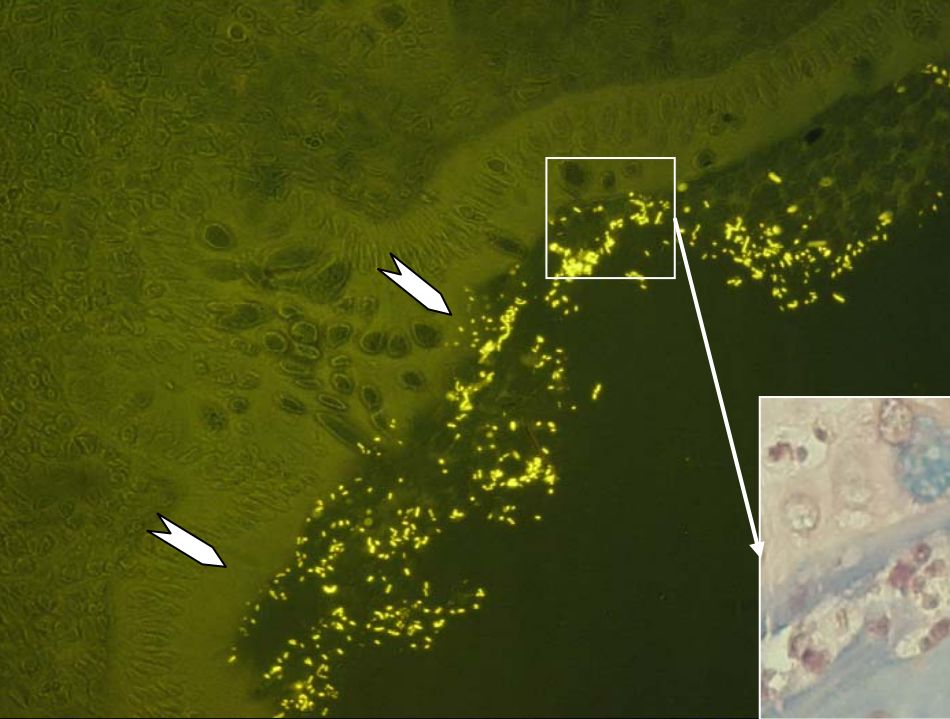


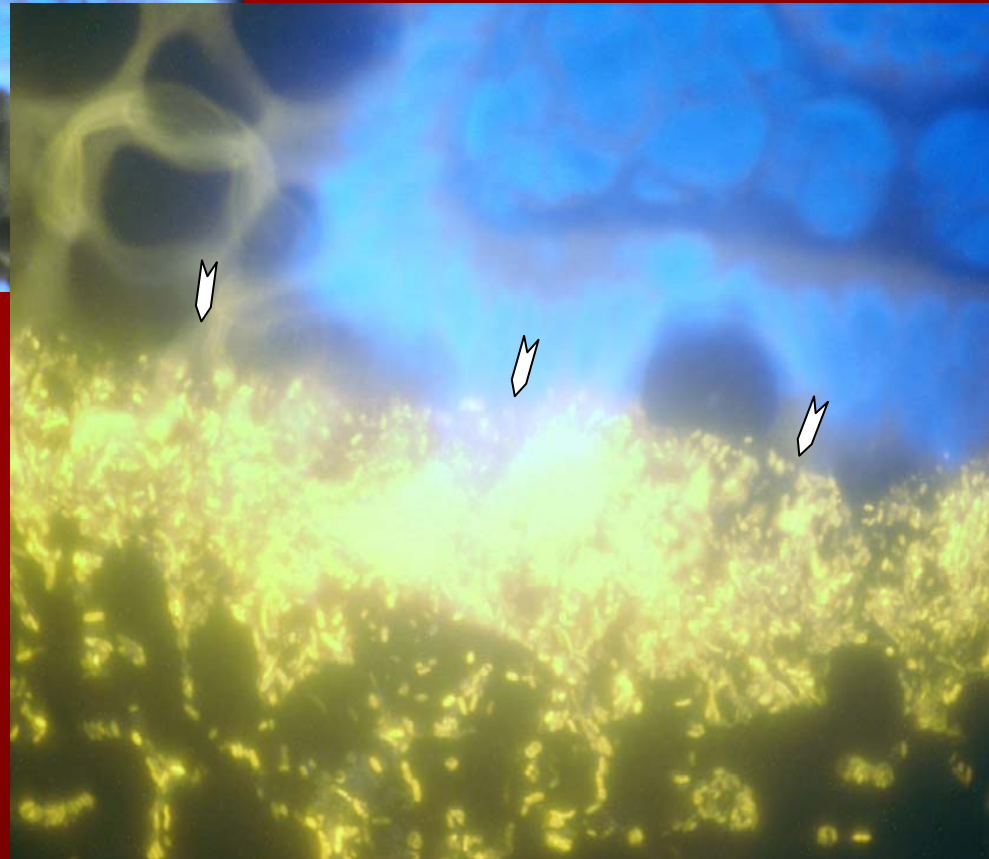
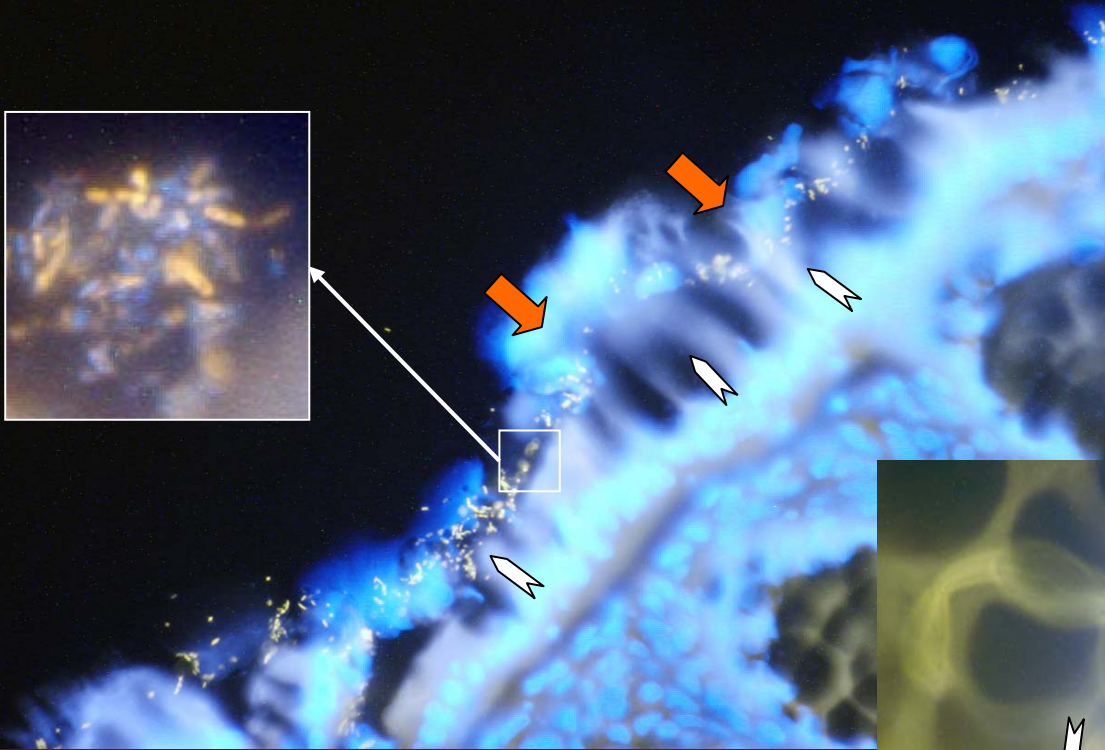
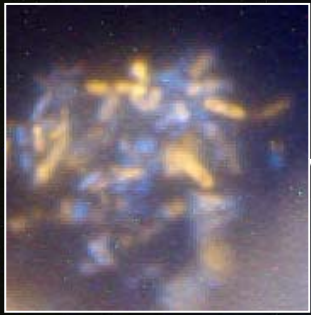




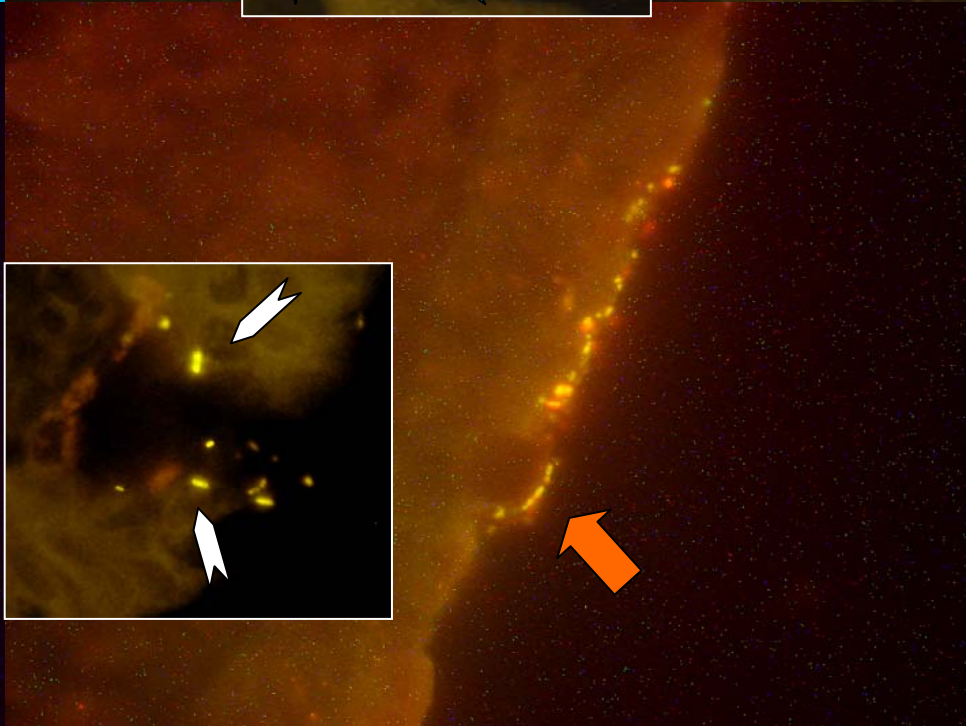
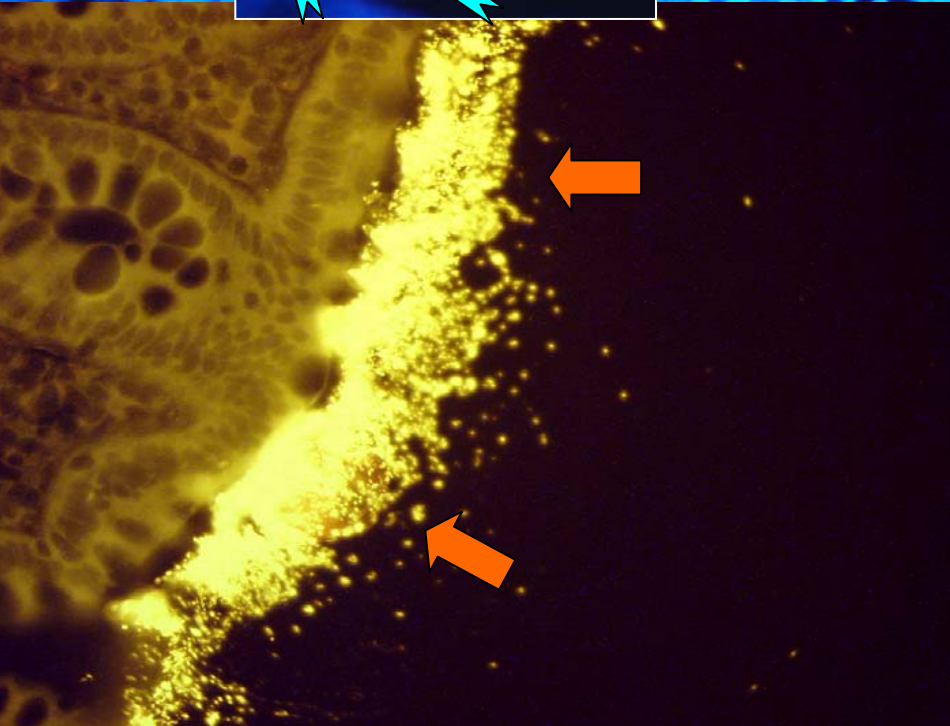
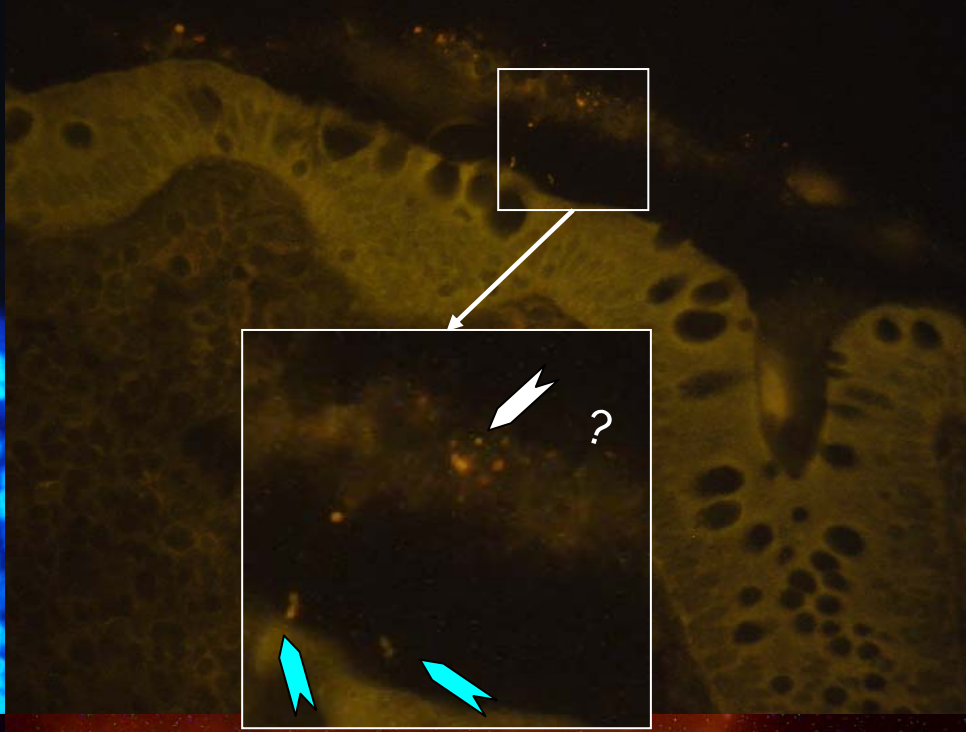
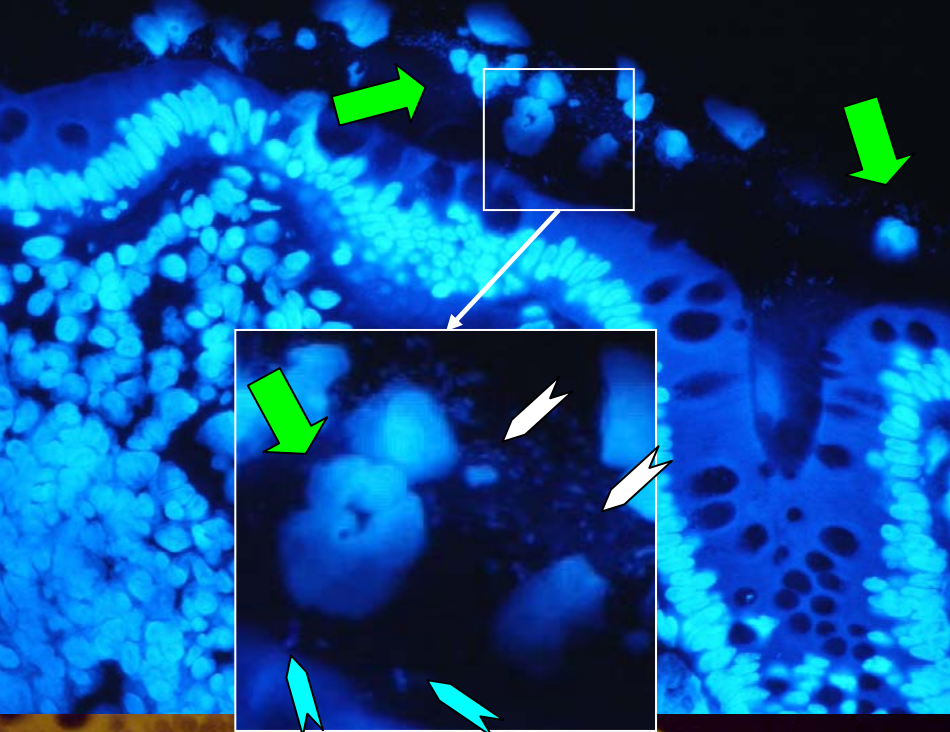
	Azathioprin (N=20)	Azathioprin 5-ASA (N=20)	5-ASA (N=20)	Keine zeitweise Steroide (N=20)	Kontrollen (N=20)
Konzentration mukosaler Bakterien x10¹⁰/ml ± SD	10.9 B 0.013 C 0.009 D 0.024 E <0.001	0.77 C ns D ns (0.20) E <0.001	0.18 D 0.017 E <0.001	1.49 E <0.001	0.015
Anzahl der Leukozyten im Mukus je 1 mm Der Mukosa	0.89 B <0.001 C 0.01 D 0.03 E <0.001	7.2 C ns D ns E <0.001	10.23 D ns E <0.001	9.4 E <0.001	0.048
Ansprechrate für FISH in %	79 B 0.003 C <0.001 D <0.001 E <0.001	58 C <0.001 D ns E <0.002	34 D 0.02 E <0.001	53 E <0.001	80.8







	Tag 1	Tag 7-14	1-4 Woche	12-18 W	26-36 W	Keine Antib
	N=20	N=20	N=20	N=20	N=20	N=20
Konzentration mukosaler Bakterien	0.003±0.005* II ns III-VI p<0.001	0.001±0.01* III-VI p<0.001	13.2±4.3 IV-VI p<0.001	5.8±2 V-VI p< 0.001	1.1±0.8 VI p 0.07	0.5±0.7
Ansprech rate für FISH(%)	<1 II ns III-VI p<0.001	<5	64	47	52	58



Bilder zum Vortrag

- **www.charite.de/arbmk1**