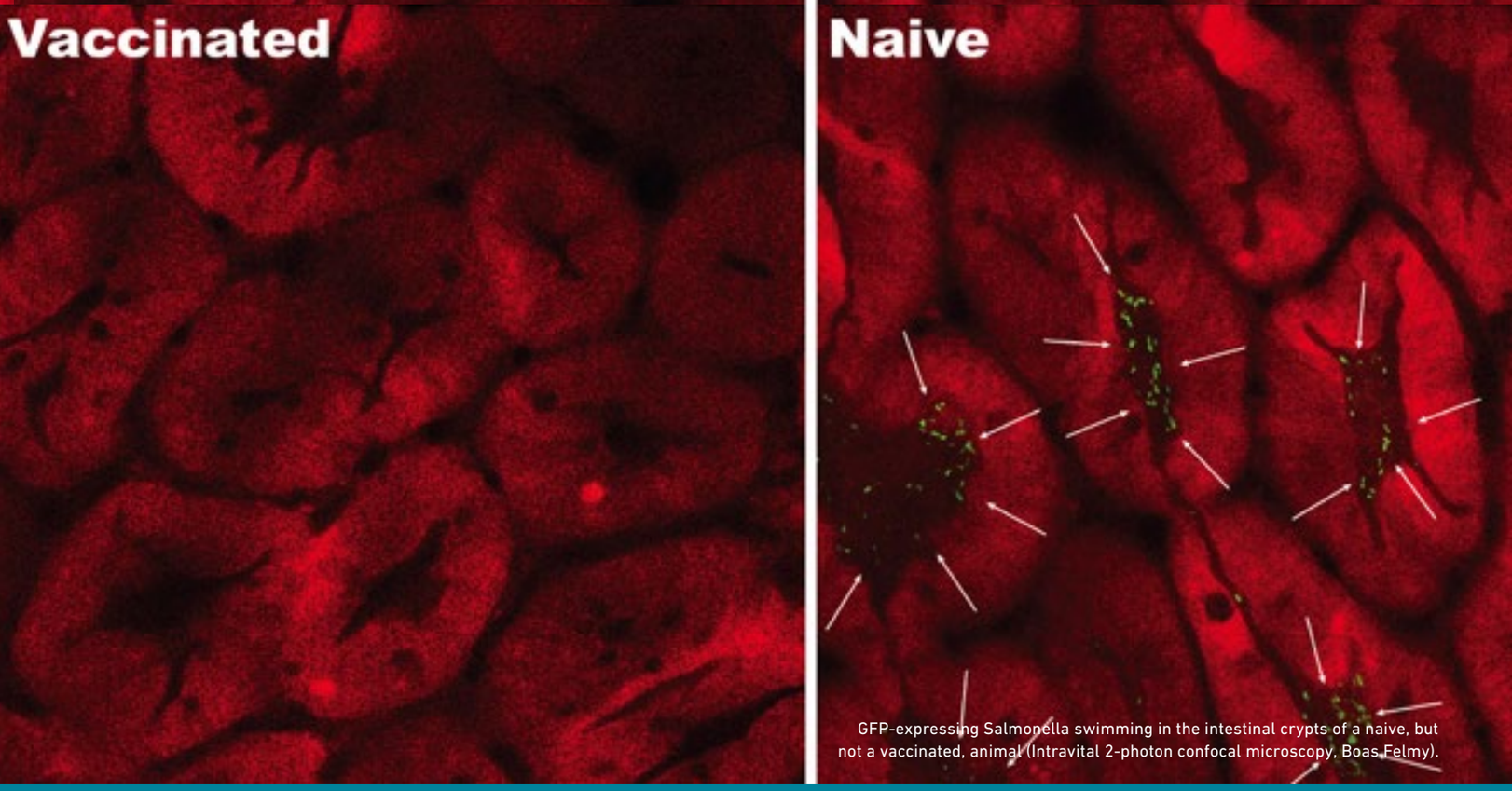

GFP-expressing Salmonella swimming in the intestinal crypts of a naive, but not a vaccinated, animal (Intravital 2-photon confocal microscopy, Boas Felmy).

MUSCOSAL IMMUNOLOGY

Aiming to understand the underlying mechanisms controlling interactions among the immune system, microbiota, host- and microbial metabolism and diet.

Research Areas

- Mucosal vaccine development for livestock;
- Direct elimination of antibiotic resistance;
- Host-microbiota cross-talk and gnotobiology;
- Mucosal immunology.

Regions

France, Germany, Switzerland, USA, and global.

Partners

Agrovet-Strickhof; UZH Animal Hospital, Department of Swine Medicine; University of Bern; Sorbonne University, Paris; and University of Illinois.

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Contribution to the WFSC

The Laboratory for Mucosal Immunology carries out cutting edge research on crosstalk between diet, intestinal bacteria, and the host immune system. They then apply this knowledge in the development of cost-effective mucosal vaccines, targeting common animal pathogens and pathobionts. This approach not only decreases the requirement for antibiotic application in farm animal rearing, but could also drive extinction of antibiotic resistance carriage in animal herds.

Prof. Emma Wetter Slack