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Programme

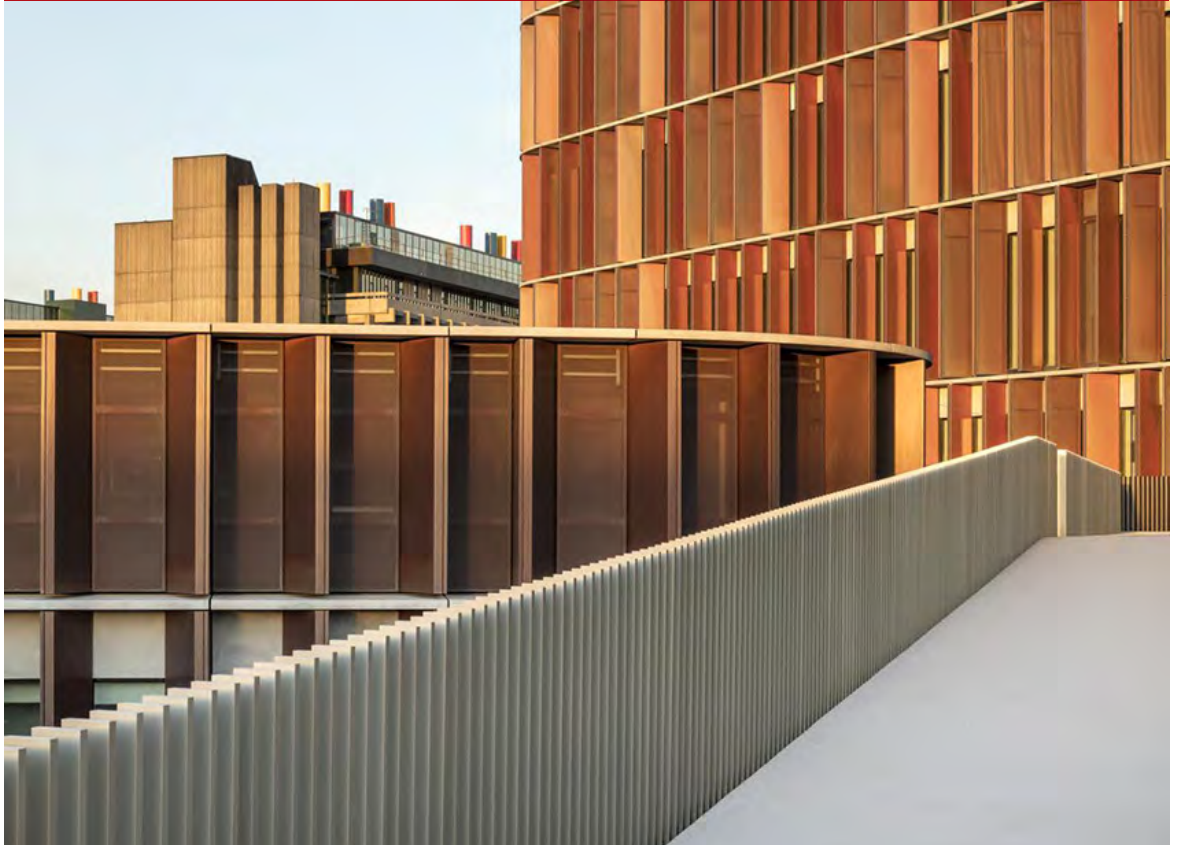
International Symposium on

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P283	Prevalence of enterotoxigenic Staphylococcus aureus in cow, goat and sheep cheese in Poland	Jolanta Rola	Weronika Korpysa-Dzirba Jolanta Rola Anna Czubkowska
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P286	Diffusion and environmental persistence of pathogenic Staphylococcus capitis isolates Inside a neonatal ICU	Marine Butin	Marine Butin Yann Dumont Patricia Martins Simões Aurane Raphard Jean-Charles Picaud Frédéric Laurent

Poster Abstracts

[P280] BIOCIDES SUSCEPTIBILITY IN STAPHYLOCOCCUS EPIDERMIDIS CAUSING INFECTION IN PETS

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Aim: To characterize biocide susceptibility of *Staphylococcus epidermidis* isolates causing infection in pets and evaluate proposed biocide epidemiological cut-off (tentative ECOFF) values.

Methods: The study comprised a collection of 17 *S. epidermidis* isolates collected from several infection sources in cats and dogs from 2001 to 2016. Susceptibility to benzalkonium chloride (BAC), cetrimide, chlorhexidine digluconate, tetraphenylphosphonium bromide (TPP), triclosan (TCL) and ethidium bromide (EtBr) was evaluated by microdilution MIC determination. The efflux pump genes *qacA/B*, *qacG*, *qacJ* and *smr*, associated with biocide resistance, and the triclosan resistance gene *sh-fabI* were screened by PCR.

Results: The MIC distributions for all biocides and EtBr were analyzed against the tentative ECOFF values proposed for these compounds (see other poster by Costa et al, ISSSI 2018). Non-wild-type (NWT) populations were detected towards BAC (6/17), TPP (8/17) and TCL (4/17) and EtBr (9/17). The NWT populations towards BAC, TPP and EtBr were associated with the presence of either *qacA* or *smr* plasmid-encoded genes, whereas the TCL NWT population was linked to *sh-fabI* carriage. One isolate carrying the *smr* gene was only detected taking into consideration the proposed EtBr ECOFF.

Conclusion: This study illustrates the frequently reduced susceptibility towards relevant biocides of *S. epidermidis* infecting pets. It also supports the tentative ECOFF values suggested for BAC, TPP and TCL, as criteria to detect *S. epidermidis* harboring biocide resistance genes. The establishment of such criteria would enable early detection of *S. epidermidis* isolates with a non-wild-type phenotype and improve therapeutics in veterinary medicine.