

MICROBIOLOGIE, INFECTIOLOGIE ET IMMUNOLOGIE

Université 
de Montréal

CONFÉRENCE

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Canary in a coal mine: using biofilms to find new antibiotics

Most bacteria live in surface associated communities called biofilms which provides them with protection from disinfectants and antibiotics. Many infections are biofilm-associated and difficult to resolve, and this issue is only worsening with recent increases in antibiotic resistance among pathogens. Thus, there is considerable interest in identifying anti-biofilm compounds that could be used alone or in conjunction with antibiotics to treat such infections.

While searching for biofilm inhibitors, we paradoxically identified small molecule stimulators of biofilm formation. Follow up studies of such molecules revealed that they have antimicrobial activity at higher concentrations. We show that at sub-inhibitory concentrations, most antibiotics stimulate biofilm formation in a dose-dependent manner. I will describe how we exploit this phenotype to identify new antibiotic activities among collections of synthetic and natural products.

**Jeudi 19 octobre à 11h30
Pavillon Claire-McNicoll, salle Z-200**

Invité par Dre France Daigle
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