



## Antimicrobial compounds to inhibit foodborne pathogens and spoilage microorganisms

Lecturer: Dr. Randy W. Worobo (Cornell University, USA)

### Course description:

Bacteriocins are ribosomally synthesized antimicrobial peptides or proteins that are produced by a plethora of bacteria. These antimicrobial compounds are currently used in the food, health, and veterinary medicine fields. The most extensively studied bacteriocins are from Lactic Acid Bacteria due to their Generally Recognized As Safe (GRAS) status. More recently, bacteriocins from *Bacillus* spp. have been investigated and have revealed unique genetic and chemical characteristics. In particular, *B. thuringiensis* SF361, an isolate from US honey, has been shown to produce a novel bacteriocin Thurincin H and an antifungal compound. The unique genetic and chemical characteristics of this producer bacterium will be discussed.

### Syllabus of the lecture:

1. Bacteriocin background
2. Lactic Acid Bacteria and their bacteriocins
3. *Bacillus thuringiensis* antimicrobial compounds and their associated genetics and chemical characterization

TERMINY WYKŁADÓW			
Data	Dzień tygodnia	Godzina	Sala
7 kwiecień 2014	Poniedziałek	12.00-15.00	LUWR (Chemia A)
8 kwiecień 2014	Wtorek	12.00-15.00	LUWR (Chemia A)
9 kwiecień 2014	Środa	12.00-15.00	LUWR (Chemia A)
10 kwiecień 2014	Czwartek	12.00-15.00	LUWR (Chemia A)
11 kwiecień 2014	Piątek	12.00-15.00	LUWR (Chemia A)