



Training and research in *Listeria monocytogenes* adaptation through proteomic and transcriptome deep sequencing analysis

## Workshop 2

09-11 October 2017

Dyrlaagevej 88, 1870 Frederiksberg, Copenhagen, Denmark

### Programme

#### Monday, 9<sup>th</sup>

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<b>08:00 am</b>	<i>Bus departure 8:12 Norrepørt station (15E)</i>
09:00-1:00 pm	Visit of company ChrHansen, R&D department <ul style="list-style-type: none"><li>• the importance and use of science</li><li>• discovery of microbial strains for new business</li><li>• microbial concepts for bioprotection and less food waste</li><li>• use of analytical methods and big data on microbes (trials in an e-lab, global phage monitoring program)</li></ul>
	<i>Lunch</i>
	Questions and answers: life of a PhD in microbiology in ChrHansen
1:15 pm	Bus/train back to UCPH
2:45 pm	Cold stress response mechanisms in <i>Listeria monocytogenes</i>
3:30 pm	WGS in Listeria outbreak investigation
4:15 pm	<i>coffee break</i>
4:15 pm	Group discussion of the topics of the day
<b>5:00 pm</b>	End of the day*

\* Optional: joint dinner (<https://www.paludan-cafe.dk>)

#### Tuesday, 10<sup>th</sup>

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<b>9:00 am</b>	System biology part I: can the bacterium be considered as a system?
10:00 am	System biology part II: modelling transcription and translation in bacteria
<i>11:00 am</i>	<i>coffee break</i>
11:30 am	Model vs Data: parameter estimation: <i>Bacillus subtilis</i> as an example
<i>12:30 pm</i>	<i>Lunch pizza</i>



- 1:30 pm      Model vs Data: advanced analysis of absolute protein quantification
- 2:00 pm      Modelling the bacterial cell as a system: the resource allocation as a simple principle
- 3:30 pm      *coffee break*
- 4:00 pm      Practice: resource allocation predication as a predictive tool (Matlab)
- 5:00 pm      End of the day

### Wednesday, 11<sup>th</sup>

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- 9:00 am      *Listeria monocytogenes* growth and survival, discussion of pitfalls
- 09:45 am      *coffee break*
- 10:00 am      Interactive session-modelling of the ESRs data
- 12:00 pm      *Lunch (sandwiches)*
- 1:30          End of the workshop\*

\* Optional: meet outside the building to follow the locals to the auditorium where the annual meeting takes place

