

# Statistical Analysis of Method Comparison Studies

Center for Clinical Research, Haukeland University Hospital, Bergen

<http://BendixCarstensen.com/MethComp/Courses/Bergen.2014/>

## Program

Wednesday 19 March 2014

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10:30 – 11:55	<b>Lecture 1:</b> Welcome and introduction. Simple comparisons of measurement methods. Introduction to computing.
11:15 – 11:30	<b>Morning Tea</b>
11:30 – 12:00	<b>Practical 1:</b> Limits of agreement, Bland-Altman-plots: <ul style="list-style-type: none"><li>• Milk</li><li>• Plasma volume.</li></ul>
12:00 – 12:30	<b>Lecture 2:</b> Linear bias between methods. Variable SD.
12:30 – 13:15	<b>Lunch</b>
13:15 – 14:00	<b>Lecture 3:</b> Replicate measurements — exchangeable or linked? Allocation of sources of variation.
14:00 – 15:00	<b>Practical 2:</b> Data with replicate measurements by each method: <ul style="list-style-type: none"><li>• Fat.</li><li>• Systolic blood pressure.</li></ul>
15:00 – 15:30	Coffee break
15:30 – 15:50	<b>Lecture 4:</b> Repeatability, reproducibility Coefficient of variation
15:50 – 16:20	<b>Lecture 5:</b> A general model for method comparisons. Linear relationship between methods.
16:30 – 18:00	<b>Practical 3:</b> <ul style="list-style-type: none"><li>• Oximetry data.</li></ul>

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## Thursday 20 March 2014

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09:00 – 09:30 Recap of Wednesday.

09:30 – 10:15 **Lecture 6:**  
Converting between methods.  
Variance components.  
Transformations.

10:15 – 10:30 Coffee break

10:30 – 11:45 **Practical 4:**  
• Oximetry data — transformation.  
• Analyzing your own data...?

11:45 – 12:00 Summary and closure.

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