# **Evaluation of PhD course HUIMM905: Inflammation – Root of All Things Evil (Spring 2017)**

### **Background:**

The evaluation was performed as a written evaluation.

Six participants handed in a written evaluation. The program and the evaluation form are listed in the appendix.

### **Results from the written evaluation**

Question A, B and E were graded from 1 to 6 with 6 being the best (very bad, bad, OK, good, very good, excellent). The average is presented. Questions C and D are given 'as is' and question F was comments.

### A. What is your general impression of the course?

Three graded 'good', one graded 'very good', and two graded 'excellent'.

Mean: 4.8

### B. How much did you learn at the course?

Three graded 'some', one graded 'much', one 'very much', and one 'a lot'.

Mean: 4

## C. Have your expectations been fulfilled with regard to the description of the course?

Four graded 'relevant', two graded 'very relevant'

# D. What do you think about the demands of the course in relation to the credited study points?

Four graded 'appropriate', one 'too little / too easy', one didn't answer

### E. How were the relevant topics communicated?

One graded 'OK', one graded between 'OK' and 'good', one graded 'good', one graded 'very good' and two graded 'excellent'

Mean: 4.6

### **F. Comments/suggestions:**

Participant A: Start at 9:00, lunch at 11:30-12:00

Participant B: Very comfortable atmosphere, nice and friendly

Participant C: The talks were very specific and mostly addressed to people with medical background – which sometimes made it hard to follow. More small breaks between talks (5 min) would be nice. Talks not longer than 20-25 min if possible. Try to make it more interactive.

Participant D: More small breaks in between and shorter talks will help to keep your attention/listening to the speaker.

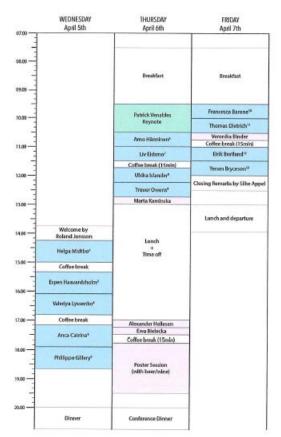
Participant E: The talks were sometimes too long, it was hard to follow everything without a medical background. Maybe more small breaks to keep your mind and attention to the talks.

### **Appendix**

## 1) The program







#### Keynote Speaker: Patrick Venables " How to cure autoimmune disease"

- The Bearing of Inflammation on Cardiovascular Diseases; Present Knowledge and Future Challanges", University of Bergen, Norway
- 2. "Modern Treatment Strategies in RA", Oslo University, Norway
- 3. "Diabetes Pathogenesis Dne Disease Many Faces", University of Bergen, Norway
- "Novel insights in early seropositive RA: from triggering to targeting", Karolinska Institute, Sweden
- S. \*Carbamylation of Proteins: a Non-enzymatic Protein Modification Involved In Ageing and Chronic Diseases, University of Reims Champagne-Ardenne, France
- 6. "Gut Immune System in Type 1 Diabetes", University of Turku, Finland
- 7. "Resident T cells dictate the inflammatory landscape in the skir!", Karolinska Institute, Sweden
- 8. "Inhibition of inflammation and osteoporosis by estrogens", University of Gothenburg, Sweden
- 9. "Neuroinflammation", University of Southern Denmark, Denmark
- From pathogenesis to rew clinical targets in Sjögren's syndrome", Birmingham University, UK
- 11. "All is in The Root", Birmingham University, UK
- "Innate and adaptive immunity in Addison's disease, a prototypical autoimmune disorder", University of Bergen, Norway
- 13. "SAMD9L: At the nexus of viral immunity, inflammation, and cancer" ,Karolinska Institute and University of Bergen, Norway

### 2) The evaluation form

### **Evaluation of the course**

# Inflammation – Root of All Things Evil (Advanced course in Immunology) – HUIMM905

Spring 2017

We would greatly appreciate your feedback so we can improve the course.

A. What is your general impression of the course?

B. How much did you learn at the course?

```
very little --- little --- some --- much --- very much --- a lot
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What do you think about the scientific content of the course?

C. Have your expectations been fulfilled with regard to the description of the course?

```
irrelevant --- relevant --- very relevant
```

D. What do you think about the demands of the course in relation to the credited study points?

too much / too difficult --- appropriate --- too little / too easy

How was the teaching?

E. How were the relevant topics communicated?

**F. Comments/suggestions:** (use backside if necessary)

# **Evaluation of student course HUIMM906/306 Spring 2017** Background:

Due to many applications, twelve students were selected from the applicants (9 for HUIMM306, 3 for HUIMM906): two PhD fellows, 9 master students and 1 medical student of the research line (forskerlinje). The background was biomedicine (8), molecular biology (1), odontology (2) and medicine (1). The course was an intensive course over 14 days starting Monday May 29. The course was from 8 in the morning until 16 in the afternoon. The course was organized by Silke Appel with help from Richard Davies, Veronika Binder, Kjerstin Jacobsen and Marianne Eidsheim. Karl A. Brokstad had the practical training for one method and Marc Niere had one theoretical lecture.

The plan for the course is given in the appendix. The methods that were included in the course were sterile technique/ cell isolation, cell culture, protein lysis and protein determination, SDS-PAGE and Western blotting, ELISA, PCR and immunofluorescence staining.

The evaluation was performed as a written evaluation.

Nine participants handed in a written evaluation. The questions are listed in the appendix.

One participant following HUIMM906 failed due to incomplete report, all others passed.

### **Results from the written evaluation**

Question A, B, E, F and G were graded from 1 to 6 with 6 being the best (very bad, bad, OK, good, very good, excellent). The average is presented. Question C and D as given 'as is' and question H was comments.

### A. What is your general impression of the course?

One graded 'excellent', one graded 'very good to excellent', six graded 'very good', one graded 'ok'.

Mean: 4.9

#### B. How much did you learn at the course?

Four graded 'very much', three graded 'much', two graded 'some'.

Mean: 4.2

# C. Have your expectations been fulfilled with regard to the description of the course?

One graded 'very relevant', eight graded 'relevant'.

# D. What do you think about the demands of the course in relation to the credited study points?

Eight graded 'appropriate', one graded 'too much'. – We got 5 points

# E. What do you think about the scientific knowledge/background of the lecturers and supervisors?

Three graded 'excellent', five graded 'very good', one graded 'ok'.

Mean: 4.6

### F. How were the relevant topics communicated?

One graded 'excellent', seven graded 'very good', one graded 'ok'.

Mean: 4.9

### G. How did you like the protocols?

Two graded 'excellent, three graded 'very good', three graded 'good', one graded 'ok'.

Mean: 4.7

### **H. Comments/suggestions:**

Student A: The first days were a bit too messy and hectic. Thanks for the cake! And thanks for letting me be part of this course. A very well chosen set of methods, good tips for further planning of experiments

Student B: Really good and will come in handy in my master project. The teaching was good, could ask all kind of questions and all of them got answered. All information needed was provided in the protocols. If the course will have a 12 people capacity it should be organized to be less time consuming, e.g. a lot of unneccesary waiting.

## Appendix

## 1) Timetable





## HUIMM906/306 29.5.-12.6.2017

Date	Time	Task	Supervisor	
Monday	10:00-10:30	General Introduction	Richard	
29.5.	10:45-11:30	Introduction Buffy coat/monocytes,		
BBB 9A109bP	11:45-12:30	Protocols #1, #2, #3 (PBMC		
		isolation+stimulation, Protein	Richard/Kjerstin	
		concentration)		
	13:30-16:00	Calculation/preparation of buffers/BSA		
		standards		
Tuesday	9:00-14:00	Buffy, isolation of PBMC and	Silke/Kjerstin/	
30.5.	monocytes – 1 Falcon each, 1 plate (6		Richard	
BBB 9A109bP		wells) per group		
	14:30	add LPS to half of the cells		
	15:00-16:00	lyse cells in 2 of 3 wells of each		
		population		
Wednesday	9:00-10:30	BCA assay, Direct Detect	Silke	
31.5.	10:30-11:30	Introduction SDS-PAGE and WB	Marc	
BBB 9A109bP	12:00-13:00	Protocols #4, #5 (SDS-PAGE and WB)	Silke	
	13:30	Harvest remaining supernatants (~24h)	Silke/Kjerstin	
	14:00-16:00	Prepare gels for WB	Silke/Kjerstin/	
			Veronika	
Thursday	9:00-10:00	load gels	Kjerstin/Richard/	
1.6.	10:00-11:30	gel run	Veronika	
BBB 9A109bP	12:00-13:00	transfer		
	13:00-13:30	Ponceau staining		
	14:00-15:00	blocking		
	15:00-16:00	divide membrane, phosphospecific and		
		total 4°C ON		

Date	Time	Task	Supervisor	
Friday	9:00-9:30	continue WB: washing	Veronika/ Silke	
2.6.	9:30-10:30	2nd Ab - Introduction PCR/qPCR		
Conference	10:30-12:30	Washing and detection WB		
room BBB	13:00-15:00	Protocol #6 (PCR/qPCR)	Silke	
KF109F				
Tuesday 6.6.	9:00-12:00	PCR/qPCR	Silke/Kjerstin	
BBB 9A109bP	12:00-14:00	Introduction/Protocol # 7	Silke	
		(Immunostaining), coverslip coating		
	14:00-15:00	seed cells for immunostaining	Kjerstin/Silke	
	15:00-16:00	Analyze PCR/qPCR	Silke	
Wednesday	9:00-12:00	Immunostaining (fix+stain)	Kjerstin	
7.6.	13:00-15:00	Introduction ELISA, Protocol #8	Silke	
BBB 9A109bP		(ELISA), coat plates	Marianne	
	15:00-16:00	Seminar report writing	Richard	
Thursday	8:00-16:00	ELISA	Marianne/Silke	
8.6.		in incubation steps: Immunostaining	Karl	
BBB 9A109bP		(analyze)		
Friday	9:00-11:00	Preparation Result presentation	Silke/Richard	
9.6.	11:00-12:00	Introduction flow cytometry	Richard	
BBB 9A109bP	13:00-16:00	Preparation Results presentations	Silke/Richard	
Monday	9:00-16:00	Results presentations+discussion	Veronika/Silke/	
12.6.		Summary/Conclusion	Richard/	
BBB 9A109bP				

2) The evaluation form

### **Evaluation of the course**

### Molecular and cellular methods in immunology – HUIMM906/306

We would greatly appreciate your feedback so we can improve the course.

A. What is your general impression of the course?

B. How much did you learn at the course?

What do you think about the scientific content of the course?

C. Have your expectations been fulfilled with regard to the description of the course?

D. What do you think about the demands of the course in relation to the credited study points?

```
too much / too difficult --- appropriate --- too little / too easy
```

How was the teaching?

E. What do you think about the scientific knowledge/background of the lecturers and supervisors?

F. How were the relevant topics communicated?

G. How did you like the protocols?

**H. Comments/suggestions:** (use backside if necessary)

### **COURSE REPORT**

Course code: INTH321A/INTH921 Course title: Experimental epidemiology  Course coordinator: Thorkild Tylleskär  Approved in: Programme Committee for Global Health Date: December 2017  INTRODUCTION  Learning outcomes: On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:  Experimental epidemiology  Salik General competence:  The student is able to critical in defect distals. explains the principles defined adjustment for repeated measurement of outcomes in the surface in the following learning and conduct of clinical and field trials in societation and field trials in societation and field trials in societation and socie									
INTRODUCTION  Learning outcomes: On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:    Rhowledge	,					: Spring	-		al Public Health
Learning outcomes:  On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:    Knowledge	Course coordinator: Thorkild Tylleskär								
On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:    Rhowledge	INTRODUCTION				, , , , , , , , , , , , , , , , , , ,				
The student :  - demonstrates understanding of the principles of clinical and field trials; - explains the principles behind adjustment for repeated measurement of outcomes in the same individuals  - explains the principles behind adjustment for repeated measurement of outcomes in the same individuals  - explains the principles including those reflected in Article 6 of the Treaty on the European Union, in the Charter of Fundamental Rights of the European Union and the Council of Europas Convention on Human Rights and Biomedicine - assess and select relevant designs for clinical/field trials.  - for both individually and community-randomized trials identify interaction (in trials with stratified as well as un-stratified randomization) identify and adjust for any confounding effect (mainly relevant for trials with limited sample size).  - STATISTICS INTH321A:  - The student is able to: - contribute to the planning and conduct of clinical field trials in accordance with the EU Directive 2001/20/EC on Good Clinical and field trials in accordance with the EU Directive 2001/20/EC on Good Clinical field trials in accordance with the EU Directive 2001/20/EC on Good Clinical field trials in accordance with the EU Directive 2001/20/EC on Good Clinical field trials in accordance with the EU Directive 2001/20/EC on Good Clinical field trials distributed in accordance with the EU Directive 2001/20/EC on Good Clinical field trials and the Council of Europas Convention on Human Rights and Biomedicine - access sand select relevant designs for clinical/field trials.  - The student is able to: - critically interaction Good clinical/field trials The student is able to: - critically interpret published results from clinical/field trials write a competitive research grant proposal for funding of a clinical/field trial.  - The student is able to: - critically interpret published for clinical field trials and the Council of Clinical field trials and the Council of Clinical field trials.  - The student is able to: - critically i	On completion of the course the student should have the fo	llowing learning o			ed in terms of knowle	edge, skills		· · · · · · · · · · · · · · · · · · ·	
- demonstrates understanding of the principles of cilinical and field trials, - explains the principles behind adjustment for repeated measurement of outcomes in the same individuals  - contribute to the planning and conduct of cilinical and field trials in accordance with the EU Directive 2001/20/EC on Good Clinical Practice and the highest ethical principles, including those reflected in Article 6 of the Treaty on the European Union, in the Charter of Fundamental Rights of the European Union, in the Charter of Fundamental Rights of Europa's Convention on Human Rights and Biomedicine - assess and select relevant designs for clinical/field trials, for both individually and community-randomized trials, conduct: sample size estimations, random allocation and bilinding/masking - analyze clinical and field trial data-sets, also from community-randomized trials identify interaction (in trials with stratified as well as un-stratified randomization) identify and adjust for any confounding effect (mainly relevant for trials with limited sample size).  STATISTICS INTH321A:  Number of students: 6  Number of students completing the course: 6  Grade distribution - A: 0 B: 3 C: 3 D: 0 E: 0 F: 0  F: 0  F: 0  Fig. 1.  Fall:	Knowledge		Skills	S			General competence		
Number of students: 6  Number of students completing the course: 6  Grade distribution - A: 0 B: 3 C: 3 D: 0 E: 0 F: 0  >:  Pass: Fail:	The student:  - demonstrates understanding of the principles of clinical and field trials,  - explains the principles behind adjustment for repeated measurement of outcomes in the			The student is able to:  - contribute to the planning and conduct of clinical and field trails in accordance with the EU Directive 2001/20/EC on Good Clinical Practice and the highest ethical principles, including those reflected in Article 6 of the Treaty on the European Union, in the Charter of Fundamental Rights of the European Union and the Council of Europa's Convention on Human Rights and Biomedicine  - assess and select relevant designs for clinical/field trials, - for both individually and community-randomized trials, conduct: sample size estimations, random allocation and blinding/masking  - analyze clinical and field trial data-sets, also from community-randomized trials - identify interaction (in trials with stratified as well as un-stratified randomization) - identify and adjust for any confounding effect (mainly relevant for trials with limited			ritically interpret publish linical/field trials rrite a competitive resea	published results from research grant proposal	
Grade distribution - A: 0 B: 3 C: 3 D: 0 E: 0 F: 0 >: Fail:	STATISTICS INTH321A:								
>: Pass: Fail:	Number of students: 6			1	Number of students	s completi	ng the	course: 6	
Pass: Fail:		A: 0	В	: 3	C: 3	D:	0	E: 0	F: 0
	Or ->:	Pass:				Fai	l:		
STATISTICS INTH921:	STATISTICS INTH921:								
Number of students: 15 Number of students completing the course: 15	Number of students: 15 Number				Number of students	s completi	ng the	course: 15	
Grade distribution - A: 2 B: 8 C: 5 D: 0 E: 0 F: 0 >: Or ->:	>:	A: 2	В	: 8	C: 5	D:	0	E: 0	F: 0

#### SUMMARY OF THE STUDENT EVALUATION:

#### 2017 Course evaluation INTH321A & 921

First, we ask you to put in your overall rating of various aspects of the course (by circling the relevant score/rating where 1 means Poor and 5 means Excellent or 1=not useful, 5=very useful).

		Mean	Low	High
1. Relevance of the course (all in all)	4.65	3	5	
2. Quality of the teaching (all in all)	4.30	2	5	
3. Quality of lectures		4.10	2	5
4. How would you rate the usefulness of MittUiB? 4.79	4	5		
5. How did you find the daily assignments?	4.50	3	5	
6. How did you find the height measurement assignments? 4.05	3	5		
7. How did you find the group assignments (article and protocol)?		4.45	2	5
8. How was the recommended literature?	4.21	2	5	
9. Course management/administration	4.25	3	5	
10. How well did the course fulfil your expectations?	4.20	2	5	
11. Your overall evaluation of the course	4.35	3	5	

In the next section we ask you to provide us with suggestions on how we can improve the different aspects of the course.

- 12. How can we improve the relevance of the course?
  - By adding more challenging daily assignments
  - Too much focused on clinical trials, it should include other types of randomised trials
  - If possible increase the duration, especially lab hours
  - Make the students read the book or some literature before the course. Esp. if you're not into statistics yet.
  - It is already very relevant but if the students have some datasets of their own they'll benefit on the go as far as their data analysis is concerned.
  - To focus on advance statistical analysis, cluster randomised trial analysis
  - Include community trials as well in a sufficient manner. The course almost depended on clinical trials while most students are not clinicians.
  - The course should give weights to assumptions to be taken rather than a presentation of many items broken down into pieces.
  - Add examples, lectures on community interventions.
  - It is better to include public health problems
  - Improve the content/revise the content
- 13. How can we improve the teaching?
  - Invite guests who have the competency on the course
  - Include seminars on some topics to be presented by students
  - Make participatory lectures rather than more of presentations
  - Go into randomization techniques and study designs in more detail
  - Some of the things were not clear in the slides
  - For me it was an excellent way of teaching
  - Everyone was excellent as professor in the course. Should it be possible to move some PhD students in the subsequent teachings so that they don't forget what they learnt and apply the knowledge as they prepare for their defence, etc.

  - Maybe you can make it more interactive, some of the lectures were like reading from slides
  - I will suggest that some (few) parts of the course presented by a student (group of students) just to practice.
  - Reduce number/frequency of home assignments
  - Give students more articles to read for each concept taught in class
  - The overall teaching was very good
  - Teaching was good, but for videotaping a mic should be provided for questions from the class. It could not be heard.
- 14. How can we improve the administration?
  - Very nice!!
  - Nice
  - Good
  - Administration was very supportive and very helpful.
  - How the exam will take place
- 15. How can we improve the overall learning experience?
  - The afternoon lab sessions could be improved
  - Time management, especially the afternoon sessions
  - However, MittUiB at times had locked exams
  - If few things are given for students to prepare and present Question lectures and more time for study
  - PhDs should be mandated to teach this when they get back to their countries

- Again make it more participatory
- Work in practical exercises and give more time for that

#### 16. How can we improve the use of group and daily assignments?

- Good
- It is ok but try to assign individuals to group based on their research experiences and the like
- In some home assignments, I perceived there may be some misunderstanding and only little flexibility in the way answers were interpreted and grade
- Give feedback on most common mistakes
- Readings were too much and almost impossible to do on top of the assignments and full days lectures
- Good
- The daily assignment is good, very good even but consider time
- Some group members once they know that the assignment will not add anything on the final exam they don't participate effectively in the group assignments. So don't tell whether it will contribute or not
- Group and daily assignments were very good and well organised
- Group work was very time consuming and also challenging due to language issues. Perhaps one group work or presentation earlier could be good.

#### 17. What do you think should be changed/removed/added in order to make a better course/programme?

- Instead of going through the Stata commands (which could be read) I would find it more useful to go through the interpretation of the results
- I think all the elements of the course are very relevant
- Add other types of trials that may not be related to clinical aspects
- Extend the course to 4 weeks
- More emphasis on the interpretation and meaning of some statistical outputs, even by assignments
- Add statistics more
- Answers of Stata exercises should be uploaded on the MittUiB
- Minimise lecturing too much of broken pieces and concentrate on scientific bases and reasoning so that participants understand more of concepts
- Most of lectures were focused on clinical trials but for who any going to do community intervention?
- Pharma cut/remove
- Avoid repetitions

#### 18. Other comments?

- I am really happy with the course and I have got a lot
- Course arrangement should be modified, especially course material, ppt. It is not well organised and not in order of relevance
- I consider the course was overall very good. It encourages students to develop analytical skills, and abilities to critically appraise RCTs, as well as main principles to design with high quality standards, randomised clinical trials
- Some techno problems with MittUiB
- Making exams open book might help to focus on concepts rather than memorizing
- Course was very useful. Overdose for those without prior trial experience
- The admission purpose was not clear to me

### 19. Anyone you would like to give extra praise to? Motivate!

- I think Pro Thorkild was exceptionally motivating and clear in his lectures. I enjoyed them immensely.
- All facilitators
- All lecturers => EXCELLENT!
- Excellent team. All of you are amazing.
- The course coordinator! Really was good!
- To course coordinator and all staff who teach experimental epidemiology
- Everybody was excellent in their teaching and sharing their experience!
- Height exercise, peanut butter exercise were very nice it made it easier
- All the software exercises were very exciting also
- I appreciate Prof Thorkild for presenting most practical aspects