

ESF-REFLECTION Scientific meeting EANS Doctoral Summerschool July 2-13, Leuven, Belgium

1. SUMMARY

The 2012 edition of the European Academy of Nursing Science (EANS) summer school for doctoral students in nursing sciences was hosted by the Centre for Health Services and Nursing Research, Katholieke Universiteit Leuven from 2 to 13 July. A total of 104 students participated in the summer school, with 35, 36 and 33 students in the first, second, and third year respectively. First year students attended the summer school for ten days or 60 hours of study (2-13 July), while second and third year students attended the summer school for five days or 30 hours of study (9-13 July).

The summer school programme is based on the UK MRC model but has been further developed by the faculty responsible for the program. First year students are made familiar with the implementation and feasibility/pilot stage of the MRC model. First, they must be able to demonstrate a critical understanding of the key concepts in the complex interventions research process in nursing, including the role of the existing evidence base, theory and modeling. Second, they must demonstrate a critical awareness of the role of a pilot study in addressing the main uncertainties that have been identified when developing complex interventions. Second year students take teaching sessions on the evaluation stage of the MRC model. They must demonstrate a critical awareness of the important outcome, process and economic considerations when designing and conducting full-scale evaluations of complex interventions and nursing activities. Finally, in their third year, students must demonstrate a critical awareness of behavioral change strategies for getting evidence into practice and of the importance of surveillance and long-term monitoring to identify unexpected or rare effects, and the persistence of original study outcomes. This corresponds to the implementation stage of the MRC model.

These stages require students to strongly develop their collaborative and presentations skills. As such, the EANS summer school for doctoral students is perceived as an intense learning experience.

Like previous EANS summer schools, students evaluated the event very positive on all aspects of organization and teaching. Unique to this year's summer school was the integration with a summer conference (11-12 July), which additionally attracted many EANS scholars and fellows. The interaction with these distinguished nursing researchers provided excellent learning and networking opportunities for the students. These activities as such were rated excellent by the students, who also regarded the intellectual challenge, the general relevance and interest of the summer school very highly.

The ESF funding was used to provide lunches and coffee breaks free of charge for all participants throughout the summer school. Students also received from the organizers either a bike or a bus pass during their stay. Their accommodation was partly subsidized (50%). Teachers had their full accommodation paid. All participants had to pay their own travel expenses. Social activities were free of charge, except for the gala dinner (€50), and paid for by additional funding obtained from various companies and organizations in the city of Leuven.

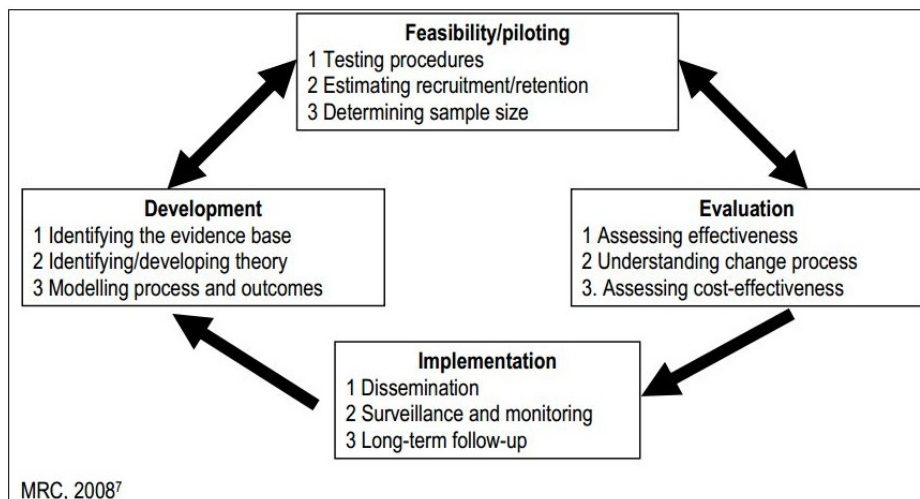
We can conclude that overall the summer school was a great success. Organizing this event took quite some effort from the organization committee of the Katholieke Universiteit Leuven but it is well worth the efforts to have attained such good student evaluations. The research-intensive and internationally oriented nature of the university provided excellent circumstances for this summer school. Next year's summer school will be hosted by the Radboud University Nijmegen.

2. DESCRIPTION OF THE SCIENTIFIC CONTENT OF AND DISCUSSION AT THE EVENT

Background of the EANS doctoral students' summer school: REFLECTION

The summer school has been in place since 1998 and continuously developed to meet the needs of evidence based nursing care methods in health care. The organizer throughout the years has been the European Academy of Nursing Science (EANS) and the activities have taken place at different universities throughout Europe. EANS is an independently organized body composed of individual members who have made significant contributions to the advancement of nursing science in Europe through scholarship and research. It has been in existence since 1997. Each year about 100 doctoral students from across Europe gather at any European University and teachers are recruited among EANS Fellows as well as from the host university. In addition there is a scholars meeting open for EANS scholars or those having completed the three year's summer school. The summer school has previously attracted a four year grant from Marie Curie 2006-09 and by that it was also possible to recruit doctoral students from Eastern Europe as well as from the countries that have less opportunity to provide a doctoral degree in nursing at their universities. Students were reimbursed for travelling and costs of living. In 2010 a new program was implemented inspired by the debate about research that can inform practice, the guest editorial of the then president of EANS challenging the current designs in nursing research (Hallberg, 2009) and the MRC report on Developing and Evaluating Complex Interventions; New Guidance (MRC, 2008).

Figure 1. MRC framework on Developing and Evaluating Complex Interventions (MRC, 2008)



From 2011 the secretary of EANS has been successful as main applicant in obtaining a five year grant from ESF that partially covers the cost of the summer school. The grant (REFLECTION) is to build up an interdisciplinary European Faculty network of researchers. Countries contributing to the grant are Belgium, Finland, Germany, Norway, Slovakia, Sweden, Switzerland and United Kingdom.

The aim of the REFLECTION doctoral students' summer school is to build strong research applying the concept of complex interventions in health care and mixed methods design. The host university contributes with teachers from other disciplines to obtain an interdisciplinary perspective and understanding among students and scholars. The purpose of EANS is to sustain a forum of European nurse scientists, Fellows and Scholars, to develop and promote knowledge in nursing science and to recognize research and scholarly achievement in the pursuit of excellence. It provides a forum for established and developing nurse researchers to meet, network and develop a European perspective to their work. Thus the doctoral students' summer school now based on the REFLECTION program financed through a grant from ESF with the support of the programme already built up by EANS is aiming at moving the frontier of research in nursing forward towards research carrying stronger evidence to be implemented in health care.

Aims and outline of the Summer School Program and Scholars Program

The Summer School was established to encourage nursing students undertaking a PhD study to add a European dimension to their research and to receive advanced research training from a broader perspective than that of the doctoral training their home university provides. The EANS Summer School for Doctoral Studies Program is made up of a three year program, as students progress in their studies. After having participated in the three year program they can apply to become a scholar to further developing their research skills. The overarching aims are to;

- equip the new generation of early stage European nursing researchers with knowledge and expertise in advanced translational complex interventions research methods;
- enable these researchers to design, plan and implement programmatic, mixed methods and complex interventions research in health care;
- create a multi-state, common European learning environment for doctoral nursing students;
- enhance the opportunities for doctoral students to study, work and undertake research in other European countries.

REFLECTION is leading the drive to equip the next generation of researchers into nursing with knowledge and skills in complex interventions research methods which the current generation has not had access to (MRC, 2010). In 2012 the summer school continued the new curriculum based on the ideas above which were implemented in the summer school in 2011. Our intention is to ensure that researching complex interventions using a mixed research methods design will become the norm in research into nursing. The complexity of nursing will be recognized explicitly in research programs which will become increasingly multi-state, multi-disciplinary and programmatic. The Doctoral Students Summer School is open to nurses on doctoral programs with a Bachelor and/or Master degree according to the entry requirements of their home university. New students commence the course each year, starting in year 1 and progress through the program. On completion of the 3-year program, participants are awarded, over and above their degree from their own university, a certificate which details the European dimension of their work. Most universities having students participating in the summer school give doctoral students credits for their successful participation in the program.

The program is a coherent series of linked summer schools. Participants remain in the same group throughout the three years and are able to make significant and lasting collaborative relationships with other participants. Teachers and year group leaders work closely together to ensure the

program remains coherent across the three years that participants attend the schools, with each course remaining consistent with programs offered in previous years. Whilst the organization of each summer school is the responsibility of the specific university designated to run the school, an organizing committee consisting of the previous year's and upcoming organizer together with representatives of the REFLECTION steering committee ensures that the schools offer high quality content of academic activities consistent with the curriculum available and continuously critically reviewed and developed. During the first year summer school participants attend for ten days. During the second and third schools of their program, participants attend five day courses. Each year 35 new students are recruited for the first year. Consequently, those participating in year 2010, in the first and second years continued their participation for the second and third years meaning that altogether at most 105 students participate.

Fourth years and scholars hold a program of their own in conjunction with the summer school to further develop the networks established during the intensive summer school program and to support their career development as senior researchers and contributors to the advancement of nursing science in Europe. Their program is a four day program and it is a continuation of the summer school but organized by scholars themselves. Teachers in the scholars program are those available in the doctoral program and in addition they can invite others, normally from the host university.

The first, second and third years summer school program

The three summer school programs follow the MRC model tightly with the addition of multi method research. This means that the first years ten days are committed to the development stage and the feasibility and pilot stages of the MRC framework. The second year program is committed to the evaluation stage, the third year to the implementation stage. Throughout the three years a stepwise presentation and evaluation of their PhD thesis is carried out in different ways, using the traditional academic ways to present thesis. Some lectures are common for all three year participants and for scholars. This year, the organizers and representatives of the REFLECTION steering committee opted to integrate a summer conference into the summer school. Summer school students attended this summer conference, that included stimulating seminars and workshops. Sir Iain Chalmers, one of the founders of the Cochrane Collaboration and coordinator of the James Lind Initiative presented the keynote address at the conference. The final keynote was a combined retrospective and prospective view from the past and new Presidents of EANS, Ingalill Rahm Hallberg and David A Richards. Second and third year students actively participated by organizing a debate and a poster session respectively. The summer school debate is an event in which the second year participants prepare a debate on a debatable topic of significance for nursing research. This year's topic was on the quality of nursing care against the quality of the qualifications. Students had to prepare and publicly defend arguments pro and contra the believe that negative public perceptions of nursing care have arisen as a consequence of educating nurses to an advanced practice level that takes them away from the bedside and basic care to the detriment of patient experience. Third year students had to demonstrated skills in making presentations via poster and lecture-based media to audiences of peers and senior researchers.

The year one program the first week focused on the development stage of researching complex interventions and as such it focused on identifying the evidence base, identifying and developing theory for the intervention and the evaluation of its impact as well as relating process to outcomes

and modeling of an intervention study. Unique to the EANS summer school is the inclusion of identifying the knowledge base addressing traditional systematic reviews, meta-synthesis and systematic mixed methods reviews. Thereby the inclusion of the variety of scientific knowledge to build the theory or model for the intervention and evaluation of it is recognized. Mean scores for these sessions varied from 3.8/5 (session about systematic mixed studies reviews) to 4.7/5 (session about theory). In addition, during the first week students have to do presentations of the health care systems in their respective countries. A interactive mode to do this has been tested and found very effective (mean score 4.1/5). Presentations of their PhDs are made with the pedagogical mode for this activity found effective (mean score 4.3/5). The second week of the first year focused on feasibility and in doing so lectures on testing procedures addressing clinical uncertainty, acceptability and feasibility, addressing uncertainty in recruitment and retention is discussed. The second week in addition addressed setting up mixed methods design and determining sample size for intervention studies, for surveys and for qualitative studies. Mean scores on these sessions all exceeded 4/5. Thus in summary the first year of the doctoral student's summer school provided the development and feasibility and pilot stage of researching complex interventions. Time and space for discussion, questions and working in groups were provided throughout although seemingly students often would like even more contribution from the senior academics providing the teaching.

The year two program concerned the evaluation stage of researching complex interventions and that included assessing effectiveness in relation to the expected primary outcome variable, understanding the change process and thus exploring what is commonly addressed as the black box of interventions effectiveness, and in addition assessing cost effectiveness. The latter aspect is from a health care perspective extremely important since new methods before being implemented in health care need to be weighed against the cost and effectiveness and other methods, perhaps already in place. In addition as mentioned earlier the students of the second year had to prepare the summer the school debate (mean score of 4.5/5). Involving students of the other year groups is a key target for next year's summer school, seeing that for two years in a row first and third year students rated this activity somewhat lower compared to their other activities. Second year participants also had to do a small group presentation of the development of their PhDs; called 'My PhD a health check' (mean score of 4.0/5). Last year students indicated they expected more comments on their work and in particular from the academics. This year, there was a long session in which the group leaders (all distinguished professors in nursing science) gave detailed feedback to the students. Students evaluated the other sessions as excellent: assessing effectiveness (4.3/5), understanding change process (4.3/5), cost effectiveness (4.5/5). Thus in addition to following up on their PhD developments the second year program addressed the evaluation stage of researching complex intervention.

The content of the year three program focused on dissemination, surveillance and monitoring and long-term follow up. The dissemination addressed different aspects of quality of reporting and effective implementation (mean score of 4.5), barriers and facilitators (mean score of 4.6), change of use strategies (mean score of 4.4). Also it addressed developing quality indicators (mean score of 4.4/5), use of audits and routine data sources as well as implementation research (mean score of 4.3/5). The poster session mentioned above was again much better evaluated than the year before (4.5/5). One possible reason is the integration with the summer conference, which draws more attention to this assignment. This also gave third year students the opportunity to connect with scholars and fellows.

References

Hallberg, IR. (2009). Moving nursing research forward towards a stronger impact on health care practice? *International Journal of Nursing Studies*, 46(4);407-412.

Medical Research Council. (2008). *Developing and evaluating complex interventions: new guidance*. London: MRC.

3. ASSESSMENT OF THE RESULTS AND IMPACT OF THE EVENT ON THE FUTURE DIRECTION OF THE FIELD

Assessment of the activities in the REFLECTION summer school was done covering evaluation of the organizational and teaching aspects. The results of the latter will be fed back to all teachers. The scale for evaluation ranged from 1 (poor) to 5 (excellent) and a mean was calculated with regard to each activity. The response rates were 98% (n=34), 89% (n=32), and 60% (n=20) for first, second, and third year students respectively.

Organizational features of the EANS summer school were evaluated as excellent by all three years: pre-meeting communication and information (mean score range from 4.3 to 4.6), the registration and welcome (mean score range from 4.6 to 4.8), the social events and the gala dinner (mean score range from 4.4 to 4.8), and the information available on the website (mean score range from 4.3 to 4.6).

Also the quality of the teaching and other academic activities were highly regarded. Tables 1 and 2 displays these results.

Table 1. Evaluation of the quality of the REFLECTION summer school: overall ratings

	Year 1 (n=34)	Year 2 (n=32)	Year 3 (n=20)
Overall quality of teaching sessions	4.4	4.4	4.2
The balance between different teaching methods	4.1	3.9	4.1
Adequacy of opportunities for networking	4.6	3.9	4.2
The amount of participant commitment required	4.4	4.1	4.4
General relevance and interest of the summer school	4.9	4.5	4.6
General relevance and interest of the conference	4.2	4.3	4.4

Table 2. Evaluation of the quality of the REFLECTION summer school: rating of the sessions

	Year 1 (n=34)	Year 2 (n=32)	Year 3 (n=20)
Developmental stage			
Introductory session about the MRC complex intervention framework?	4.5	-	-
Session about Systematic Reviews?	4.6	-	-
Session about Meta Synthesis?	4.5	-	-
Session about Systematic Mixed Studies Reviews?	3.8	-	-

Session about Theory	4.7	-	-
Sessions about modelling, process of outcome?	4.4	-	-
Session about Working in Europe	4.4	-	-
Feasibility and piloting stage			
Session about Addressing Clinical uncertainty?	4.3	-	-
Session about Addressing Acceptability and Feasibility	4.1	-	-
Session about Mixed Methods Research?	4.1	-	-
Session about Uncertainty in recruitment/retention?	4.2	-	-
Session about Sample size considerations for intervention studies?	4.2	-	-
Session about Sample size considerations for qualitative studies?	4.1	-	-
Evaluation stage			
Session about Assessing Effectiveness?	-	4.3	-
Session about Understanding Change Process?	-	4.3	-
Session about Assessing Cost Effectiveness?	-	4.5	-
Implementation stage			
Session about Quality of Reporting & Effective Dissemination?	-	-	4.5
Session about Barriers & Facilitators for Implementation?	-	-	4.6
Session about Effective Implementation & Use of Change Strategies?	-	-	4.4

Thus the comments were overall very positive. Students were happy with the slight decrease in group activities (as mentioned in last year's report) and the increased (individual) focus on the progress of their PhD. Many second and third year students between them organized a social event the evening before the start of the summer school to as an additional moment to follow up their PhD with their peers. They also engage in doing so between summer schools using various social media.

Looking at last year's aims for this summer school, we feel we have succeeded in:

- improving the session about assessing cost effectiveness (year 2) with a detailed discussion on recent papers and a group exercise. The session had the highest mark of all sessions in the second year.
- improving the poster session by opening up this session to a wide audience of EANS students, scholars and fellows during the two-day conference (last year, students felt that their posters should have been rated by others than peers and also they wanted poster sessions to be spread over more days).

There are two main objectives for future summer schools:

- To increase the attention to each individual student's PhD, as students expect some sort of (formal) evaluation of their PhD.
- To streamline the transition from the three year summer school to the fourth year/scholars.

We can conclude that overall the summer school was a great success. Organizing this event took quite some effort from the organization committee of the Katholieke Universiteit Leuven but it is well worth the efforts to have attained such good student evaluations. The research-intensive and internationally oriented nature of the university provided excellent circumstances for this summer school. Next year's summer school will be hosted by the Radboud University Nijmegen.

Year 1 Week 1 – 2012

1 Developing stage ‘Certainty’

- 1.1. Identifying the evidence base
- 1.2. Identifying/developing theory
- 1.3. Process and outcome

Subject responsibility; Professor David Richards

Group Leaders; Professor David Richards, Associate Professor/Reader Gunilla Borglin, Professor Walter Sermeus

Students host; Cathy Lodewijckx & Deborah Hilderson

Lecture rooms: HP6

	Monday 2nd of July	Tuesday 3rd of July	Wednesday 4th of July	Thursday 5th of July	Friday 6th of July
8.30 – 9.00	<i>Registration</i>	<i>Arrival in classroom and preparation for day</i>	<i>Arrival in classroom and preparation for day</i>	<i>Arrival in classroom and preparation for day</i>	<i>Arrival in classroom and preparation for day</i>
9.00 – 10.30	Welcoming faculty & participants Language, climate, networking etc (Auditorium BMW1)	<u>Presentation 2</u> My PhD: Making a Start x 6	<u>Presentation 2</u> My PhD: Making a Start x 6	<u>Presentation 2</u> My PhD: Making a Start x 6	<u>Presentation 1</u> Our Health Care Systems x 6
10.30 – 11.00	Break	Break	Break	Break	Break
11.00 – 12.30	Introduction to the MRC complex interventions research framework <i>David Richards</i>	1.1. Establishing Known Certainties for Complex Interventions <i>David Richards & Gunilla Borglin</i>	Identifying the evidence base: meta synthesis <i>Ingalill Rahm Hallberg</i>	1.2. Identifying/developing theory and knowledge <i>Philip Moons</i>	1.3. Relating Process to Outcomes including modelling <i>Walter Sermeus</i>
12.30 – 13.30	Lunch	Lunch	Lunch	Lunch	Lunch
13.30 – 15.00	Introduction to MRC complex intervention framework continued <i>David Richards</i>	1.1. Systematic reviews of complex interventions <i>David Richards</i>	1.1 Identifying the evidence base: mixed methods reviews <i>Gunilla Borglin</i>	<u>Presentation 2</u> My PhD: Making a Start x 6	1.3. Relating Process to Outcomes including modelling <i>Walter Sermeus</i>
15.00 – 15.30	Break	Break	Break	Break	Break
15.30 – 17.00	Introduction to: <u>Presentation 1:</u> Our Health Care Systems (divide into groups; 3 hrs in total) <u>Presentation 2:</u> My PhD: Making a Start (determining order of presentation; 9 hr in total)	<u>Presentation 2</u> My PhD: Making a Start x 6	<u>Presentation 2</u> My PhD: Making a Start x 6	Student choice i.e. prepare for Our Health Care Systems or leave early for European Networking	
SOCIAL	GET TOGETHER 17.00				

Year 1 Week 2 – 2012

2 Feasibility/Pilot Stage 'Uncertainty'

2.1. Testing procedures

2.2. Recruitment/retention

2.3. Determining sample size

Subject responsibility; Associate Professor Gunilla Borglin

Group Leaders; Dr. Sascha Köpke and Professor Philip Moons

Students host; Cathy Lodewijckx & Deborah Hilderson

Lecture rooms: HP6

Date/time	Monday 9th of July	Tuesday 10th of July	Wednesday 11th of July	Thursday 12th of July	Friday 13th of July
8.30 – 9.00	<i>Arrival in classroom and preparation for day</i>	<i>Arrival in classroom and preparation for day</i>			
9.00 – 10.30	Welcoming Faculty & students (Auditorium BMW1) 9.30 Working in Europe <i>Walter Sermeus</i>	2.2. Addressing uncertainty in recruitment/retention <i>Sascha Köpke</i>			Late Start
10.30 – 11.00	Break	Break			Coffee
11.00 – 12.30	Mixed Method Design <i>Gunilla Borglin & David Richards</i>	2.3. Determining samples size considerations for intervention studies and surveys <i>Peter Griffiths</i>	EANS Summer Conference 2012	EANS Summer Conference 2012	Reflections Evaluation & Goodbye <i>Group Lead</i>
12.30 – 13.30	Lunch	Lunch			Lunch
13.30 – 15.00	2.1. Testing procedures: addressing clinical uncertainty <i>David Richards</i>	2.3. Determining sample size considerations for qualitative studies <i>Ingalill Rahm Hallberg</i>			
15.00 – 15.30	Break	Break			
15.30 – 17.00	2.1. Testing procedures: addressing acceptability and feasibility <i>David Richards</i>	Student choice i.e. prepare Reflection session or leave early for European Networking			
SOCIAL	GET TOGETHER 19.00			GALA DINNER	

Year 2 - 2012

3 Evaluation Stage 3.1. Assessing effectiveness 4hr (now: 3 h) 3.2. Understanding change process 3hr 3.3. Assessing cost effectiveness 1.5hr					
<i>Subject responsibility; Professor Gabriele Meyer</i> <i>Group leaders; Dr. Sivera Berben + Professor Koen Milisen</i> <i>Students host; Luk Bruyneel & Kristel De Vliegheer</i> <i>Lecture rooms: HP2</i>					
Date/time	Monday 9 th of July	Tuesday 10 th of July	Wednesday 11 th of July	Thursday 12 th of July	Friday 13 th of July
8.30 – 9.00	<i>Arrival in classroom and preparation for day</i>	<i>Arrival in classroom and preparation for day</i>	EANS Summer Conference 2012	EANS Summer Conference 2012	<i>Arrival in classroom and preparation for day</i>
9.00 – 10.30	Welcoming Faculty & students (Auditorium BMW1) 3.1. Assessing effectiveness <i>Jan Hamers</i>	My PhD: a Health Check: preparation in groups			My PhD: a Health Check: Presentation x 3
10.30 – 11.00	Break	Break			Break
11.00 – 12.30	3.1 Assessing effectiveness continued <i>Jan Hamers</i>	3.3. Understanding change processes <i>Sascha Köpke</i>			My PhD: a Health Check: Presentation x 3
12.30 – 13.30	Lunch	Lunch			Lunch
13.30 – 15.00	3.2. Understanding change processes <i>Sascha Köpke</i>	3.3. Assessing cost effectiveness <i>Gabriele Meyer</i>			Evaluation & Goodbye
15.00 – 15.30	Break	Break			
15.30 – 17.00	The EANS Summer School debate: planning	My PhD: a Health Check: preparation in groups			
SOCIAL	GET TOGETHER				GALA DINNER

Year 3 – 2012

4. Implementation stage <i>Subject responsibility; Professor Theo van Achterberg</i> <i>Group leaders; Professor Adelaida Zabalegui + Dr. Kris Vanhaecht</i> <i>Students host; Mieke Deschodt & Elke Detroyer</i> <i>Lecture rooms: HP5</i>					
Date/time	Monday 9 th of July	Tuesday 10 th of July	Wednesday 11 th of July	Thursday 12 th of July	Friday 13 th of July
8.30 – 9.00	<i>Arrival in classroom and preparation for day</i>	<i>Arrival in classroom and preparation for day</i>	EANS Summer Conference 2012	EANS Summer Conference 2012	<i>Arrival in classroom and preparation for day</i>
9.00 – 10.30	Welcoming Faculty & students (Auditorium BMW1)	Surveillance & monitoring: Developing quality indicators workshop <i>Theo van Achterberg</i>			Presenting a proposal for implementation research <i>Karina Lovell Foundation for Healthcare Improvement Research Jury</i>
10.30 – 11.00	Break	Break			Break
11.00 – 12.30	Dissemination: Quality of reporting and effective dissemination <i>Gabriele Meyer</i>	Long-term follow-up: Use of audits & routine data sources <i>Koen Van den Heede</i>			After the EANS summer school <i>Scholars Committee</i>
12.30 – 13.30	Lunch	Lunch			Lunch
13.30 – 15.00	Dissemination: Barriers & facilitators for implementation <i>Betsie van Gaal</i>	Implementation research <i>Lisette Schoonhoven</i>			Evaluation & Goodbye
15.00 – 15.30	Break	Break			
15.30 – 17.00	Dissemination: Effective implementation & use of change strategies <i>Theo van Achterberg</i>	Preparing an implementation research proposal <i>Theo van Achterberg & Lisette Schoonhoven</i>			
SOCIAL	GET TOGETHER			GALA DINNER	