



**How to make your research  
more relevant, feasible and publishable**

## General Information

### **EUROSPINE, the Spine Society of Europe**

c/o Pfister Treuhand AG

Bankstrasse 4, 8610 Uster-Zurich, Switzerland

W: [www.eurospine.org](http://www.eurospine.org)

### **Chair of Research Council and Course Director**

Carmen Vleggeert-Lankamp

E: [education@eurospine.org](mailto:education@eurospine.org)

### **Director of Education and Research**

Julie-Lyn Noël

E: [noel@eurospine.org](mailto:noel@eurospine.org)

### **Education and Research Manager**

Angelika Salmen

E: [salmen@eurospine.org](mailto:salmen@eurospine.org)

### **Course Faculty**

Emin Aghayev\*, Switzerland

Benjamin Blondel, France

Marco Campello, USA

Yann-Philippe Charles, France

Wolfgang Hitzl\*, Austria

Aria Nouri, UK

Miranda van Hooff, The Netherlands

Carmen Vleggeert-Lankamp, The Netherlands

\*E-learning faculty

## Research Course Overview

May – June 2024	13 June 2024	27-28 June 2024	10 July 2024
Part 1 – E-learning	Part 2 – Introduction online session	Part 3 – In-person live session	Part 4 – Final evaluation online session
<ul style="list-style-type: none"> <li>Enrolment of participants to the EUROSPINE Learning Management System (LMS) by the Education team</li> <li>Self-paced completion of the e-learning component by participants</li> <li>Assessment: MCQs that must be passed with a minimum of 70% + CME evaluation</li> <li>Mode of study: online/distance learning through the LMS</li> <li><u>NO physical presence required</u></li> </ul>	<ul style="list-style-type: none"> <li>Introduction online session to the course</li> <li>Meet and greet with faculty and participants</li> <li>Meet group members</li> <li>First breakout workshop</li> <li>Mode of study: <u>online live via Zoom</u></li> <li><u>Live online participation required</u></li> </ul>	<ul style="list-style-type: none"> <li>Live sessions take place at <u>IRCAD</u> in Strasbourg, France</li> <li>Live sessions include recap lectures, workshops and group work</li> <li>Participants arrange their own travel / accommodations to take part in the course</li> <li>Mode of study: <u>active in-person participation</u></li> <li><u>Physical presence required</u></li> </ul>	<ul style="list-style-type: none"> <li>Final evaluation: Group presentation of developed research protocol</li> <li>Q and A regarding the protocols</li> <li>Faculty judge the protocol presentations</li> <li>Assessment: CME evaluation after completion of part 2+3</li> <li>Mode of study: <u>online live via Zoom</u></li> <li><u>Live online participation required</u></li> </ul>

## Quick Facts

<b>DATES &amp; TIMES</b>	<p><b><u>Virtual live session: Introduction</u></b> 13 June 2024 (18:00-19:30 CEST)</p> <p><b><u>Live session</u></b> 27 June 2024 (08:30-17:30 CEST) 28 June 2024 (08:30-12:30 CEST)</p> <p><b><u>Virtual live session: Final evaluation</u></b> 10 July 2024 (18:00-19:30 CEST)</p>
<b>LIVE VENUE</b>	IRCAD, 1 Place de l'Hôpital, 67000 Strasbourg, FRANCE
<b>MAX. ATTENDEES</b>	24 delegates
<b>REGISTRATON FEES</b>	EUROSPINE Member: €800 Non-member: €1000
<b>CME CREDITS</b>	EACCME accreditation is currently pending.
<b>LANGUAGE</b>	English

<b>DRESS CODE</b>	Smart casual
<b>E-LEARNING</b>	A computer (Mac/PC) or tablet (Android/Mac) and stable internet connection are required to access the e-learning content.  In preparation for the live session, a mandatory and self-paced e-learning component will be available from 1 April 2024 on the EUROSPINE Learning Management System (LMS). This component must be completed before the first live session.
<b>COURSE COMPLETION</b>	The course is only deemed as complete when participants have met <b>ALL</b> of the following conditions: <ul style="list-style-type: none"> <li>• Passed the e-learning with at least 70% <b>AND</b></li> <li>• Attended the introduction live session <b>AND</b></li> <li>• Attended the in-person live session <b>AND</b></li> <li>• Attended the final evaluation live session <b>AND</b></li> <li>• Submitted the course evaluations for the e-learning and the live sessions component</li> </ul>
<b>TARGET AUDIENCE</b>	The course is open to all professionals interested in gaining a basic understanding of clinical research. This course will provide an overview of the methodology used to conduct clinical research. The purpose of the course is to provide clinicians with the fundamental concepts and tools to design clinical studies.
<b>IMPORTANT (!)</b>	<ul style="list-style-type: none"> <li>• Completion of e-learning module is mandatory</li> <li>• Attendance of the live session and virtual live sessions is mandatory</li> </ul>

## PART 1 – E-Learning Programme

(available from 15 May 2024)

Time/Duration	Topic	Faculty
<b>Introduction</b>		
00:30	What is a research protocol?	Carmen Vleggeert-Lankamp
00:20	What is a good clinically relevant research question? How to develop a research question and hypothesis?	Marco Campello
00:20	Knowledge check questions	
<b>Methodological concepts</b>		
00:20	General methodological concepts and choosing the appropriate design	Carmen Vleggeert-Lankamp
00:20	Outcome domains	Marco Campello
00:20	Basic statistical concepts	Wolfgang Hitzl
<b>Population selection, study conduct, RCT and cohort study design</b>		
00:20	Planning the population and data collection, power analysis	Wolfgang Hitzl
00:20	Designing an RCT	Carmen Vleggeert-Lankamp

00:20	Designing a cohort study	Aria Nouri
00:20	Knowledge check questions	
<b>Data analysis, sample size, publishing research and registries</b>		
00:20	Planning the analysis, overview of statistical methods	Miranda van Hooff
00:20	Planning the sample size, how to deal with missing data	Miranda van Hooff
00:20	Publishing your research	Philippe Charles
00:20	Registries	Emin Aghayev
00:20	Knowledge check questions	

## PART 2 – Introduction – Virtual Live Session

<b>13 June 2024 18:00 – 19:30 CEST</b>		
18:00 - 18:15	Introduction to the course	Carmen Vleggeert-Lankamp
18:15 - 18:25	Get to know your group (4 groups of 6?)	Breakout session 1
18:25 - 18:45	Recap lecture on the research protocol, theories and the research question	Carmen Vleggeert-Lankamp
18:45 - 19:15	Workshop: formulate a research question	Breakout session 2
19:15 - 19:25	Feedback on workshop: RCT and cohort should be both represented	All faculty (minimum of 4)
19:25 – 19:30	Wrap up and what to expect on the inperson live sessions	Carmen Vleggeert-Lankamp
<b>END OF SESSION</b>		

## PART 3 – In-person Live Session Programme

<b>DAY 1: 27 June 2024, Thursday 8:30 – 17:30 CEST</b>		
<b>Time</b>	<b>Activity</b>	<b>Faculty</b>
8:15 – 8:30	Registration and Coffee	All
8:30 – 8:45	Introduction to the sessions	Carmen Vleggeert-Lankamp
8:45 – 9:00	Recap lecture on study design	Marco Campello
9:00 – 10:00	Workshop: choose your study design, start protocol set up	Breakout session 1
10:00 – 10:30	<b>Coffee break</b>	
10:30 – 10:45	Recap lecture on RCTs	Carmen Vleggeert-Lankamp
10:45 – 11:00	Recap lecture on outcome domain	Marco Campello
11:00 – 12:00	Workshop: design your study	Breakout session 2

12:00 – 13:00	<b>Lunch Break</b>	
13:00 – 13:15	Recap lecture on cohort study	Aria Nouri
13:15 – 13:30	Questions of the group	All
13:30 – 14:30	Workshop: planning your study	Breakout session 3
14:30 – 15:00	<b>Coffee break</b>	
15:00 – 15:15	Recap lecture on statistics	Miranda van Hooff
15:15 – 16:15	Workshop: focus group	Breakout session 4
16:15 – 17:15	Plenary: Feedback on workshops, feasibility	All faculty and participants
17:15 – 17:30	Wrap up for the day and what to expect for Day 2	Carmen Vleggeert-Lankamp
<b>END OF SESSION</b>		

<b>DAY 2: 28 June 2024, Thursday</b>		
<b>8:30 – 12:30 CEST</b>		
<b>Time</b>	<b>Activity</b>	<b>Faculty</b>
8:15 – 8:30	Coffee	All
8:30 – 8:45	Recap lecture on planning the analysis and sample size	Miranda van Hooff
8:45 – 10:15	Workshop: continue planning your study	Breakout session 5
10:15 – 10:30	<b>Coffee break</b>	
10:30 – 11:15	Workshop: continue planning your study, sample size and completing your protocol	Breakout session 6
11:15 – 11:45	Plenary: Feedback on workshops	All faculty and participants
11:45 – 12:15	Doing and publishing your research – roundtable discussion	All faculty
12:15 – 12:30	Next steps and wrap up of inperson sessions	Carmen Vleggeert-Lankamp
<b>END OF SESSION</b>		

## PART 4 - Virtual Live Session

### Final Evaluation: Presentation of Protocols

<b>10 July 2024</b>		
<b>18:00 – 19:30 CEST</b>		
18:00 - 18:15	Introduction to the final evaluation	Carmen Vleggeert - Lankamp
18:15 - 19:15	Group presentations	All faculty and participants
19:15 – 19:30	Conclusion	Carmen Vleggeert - Lankamp
<b>END OF COURSE</b>		

## Learning Outcomes – Course

At the end of the course, attendees will be able to:

1. Develop a research question and formulate a hypothesis
  - What is the problem to be solved?
  - How do I select a conceptual model?
  - How do I develop a research hypothesis?
  - What is the best study design to answer my question?
2. Apply basic methodological steps involved in clinical research
  - How do I select my study sample?
  - What outcome measures do I use?
  - How long do I follow my population?
  - When and how often do I measure these variables?
  - How do I collect the data? The need to select valid and reliable methods of data collection.
  - What potential biases may compromise the validity of my study? How do I prevent these biases?
3. Develop a study protocol
  - Is my study feasible?
  - How do I make it feasible?
  - What are the clinical issues I have to deal with?
  - With whom do I have to collaborate?
  - What are the elements of a statistical analysis?
  - How many participants do I need in my study?
4. Discuss the basic principles of qualitative research
  - When do I use it?
  - What is the added value to clinical research?
5. Contribute clinical experience to evidence-based decision making in spinal care
  - Why it is important to standardize data collection in clinical practice?
  - What are the roles of registries?
6. Understand the process of research publishing