



UniSR

Università Vita-Salute
San Raffaele

II LEVEL MASTER

INTERVENTIONAL ELECTROPHYSIOLOGY– COMPLEX VENTRICULAR ARRHYTHMIAS

STUDY PLAN

During the **first semester**, the participants, who have already been required to independently interpret the intracavitary signals and independently perform the electrophysiology procedures in the left sections (i.e. atrial fibrillation and tachycardia), will complete their preparation by carrying out first person complex studies (patients with right/left outflow tract extrasystole, stable monomorphic reentrant ventricular arrhythmias such as post-infarction, dysplasia, myocarditis) and discussing case reporting with one of the supervising physicians. The Master participant will be involved in the follow up of the patient to verify the remote result and the relationships with the clinicians from which the patient has been referred. Part of the interventional activity will also be the examination reporting and the definition of the subsequent therapeutic orientation, agreed with the electrophysiologist in charge and explained to the patient.

In the **second semester**, the completion of mapping procedures of complex arrhythmias with supervision of the final result is expected. In some cases it will be possible to perform catheter ablation when circulatory stability is ensured.

Furthermore, the Department of Arrhythmology organizes annually, in collaboration with other internationally renowned centers, **Joint Interventional Meetings**, including international congresses, educational and training courses lasting two/three days on a monthly basis, including lessons, debates, theoretical-practical sessions.

The **Journal Club Meetings** will instead be held bi-weekly, presenting the most recent scientific acquisitions of the literature on topics of current interest in electrophysiology. The organization will be entrusted to two senior members of staff. To foster the ability to work independently, the preparation of each topic is entrusted to a master student, with supervision of the selected material and lines of exposure by one of the two staff members.



UniSR

Università Vita-Salute
San Raffaele

Discussion of clinical cases and laboratory activities >>> The various cases to be treated on that day are discussed and illustrated. This allows you to clarify the specific therapeutic programs that you intend to implement. 8 hours a week for 40 weeks.

Staff meetings and competency meetings >>> Held every 2 weeks and last 1 hour. Topics include: presentation of new interventional techniques; presentation of new controlled clinical trials; review of cases of interest in the previous days or to be scheduled, re-evaluating or deciding on the individualized therapeutic approach. Once a month, one of these meetings is also open to nursing and technical staff for the discussion of complications that occurred in the previous month during the activity in rooms and the operating methods to avoid their recurrence and treat them more effectively. Departmental meetings >>> They are held monthly for 1 hour before the start of clinical activity and are organized on a rotational basis by the Interventional Cardiology, Clinical Cardiology, Cardiac Surgery, Arrhythmology Services. New diagnostic and therapeutic techniques are presented at the meetings, reviewing cases with an interdisciplinary approach, and proposing new diagnostic and therapeutic protocols for the revision of the guidelines.

Theoretical-practical courses and activities		
TEACHINGS	ECTS	HOURS
1. Management e inquadramento clinico del paziente aritmologico / Management and clinical classification of the arrhythmological patient	1	25
2. Approccio elettrofisiologico al paziente con aritmie atriali / Electrophysiological approach to the patient with atrial arrhythmias	1	25
3. I materiali, gli strumenti, e i sistemi di mappaggio endocavitari nel panorama elettrofisiologico / Materials, tools, and endocavitary mapping systems in the electrophysiological panorama	1	25
4. Il trattamento dell'extrasistolia ventricolare / Treatment of ventricular extrasystoles	1	25
5. Il trattamento delle aritmie ventricolari nella cardiopatia ischemica / Treatment of ventricular arrhythmias in ischemic heart disease	1	25
6. Il trattamento delle aritmie ventricolari nelle dilatative non ischemiche / Treatment of ventricular arrhythmias in non-ischemic dilators	1	25
7. Il trattamento delle aritmie ventricolari nella displasia aritmogena nel ventricolo destro / Treatment of ventricular arrhythmias in arrhythmogenic dysplasia in the right ventricle	1	25
8. Il trattamento delle aritmie ventricolari nelle altre cardiomiopatie / Treatment of ventricular arrhythmias in other cardiomyopathies	2	50
9. La tecnica della puntura epicardica / The epicardial puncture technique	2	50



UniSR

Università Vita-Salute
San Raffaele

10. Come evitare complicanze durante il mappaggio e l'ablazione transcatetere delle aritmie ventricolari complesse / How to avoid complications during catheter mapping and ablation of complex ventricular arrhythmias	2	50
11. Le strategie per diversi scenari di tachicardia ventricolare / The strategies for different ventricular tachycardia scenarios	2	50
12. Il ruolo dell'imaging nel contesto dell'ablazione transcatetere delle tachicardie ventricolari / The role of imaging in the context of catheter ablation of ventricular tachycardias	2	50
13. Quando optare per il supporto ECMO / When to opt for ECMO support	1	25
14. Management del paziente dopo ablazione transcatetere di TV / Patient management after catheter ablation of TV	2	50
15. Joint Interventional Meeting	1	25
16. Journal Club Meeting	2	50
Clinical training activities		
TEACHINGS	ECTS	HOURS
Traineeship	375	15
Case discussions, laboratory	100	4
Staff meetings and competencies meetings	100	4
Departmental meetings	100	4
Final dissertation		
TEACHINGS	ECTS	HOURS
Research and preparation of an experimental thesis	250	10