

## Application for Hosting EACTA Exchange Training Programme in Critical Care Medicine

<b>Institution's Name</b>	Centre Hospitalier Universitaire de Montpellier		
<b>Address</b>	371 avenue du Doyen Gaston Giraud		
<b>Department</b>	Anesthesiology and CCM	<b>Website</b>	www.chu-montpellier.fr
<b>City</b>	Montpellier	<b>ZIP code/Postal code</b>	34295
<b>Country</b>	FRANCE	<b>Phone</b>	+33467335958
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## Programme Supervisor

<b>Name / Surname</b>	Dr Gaudard Philippe
<b>Board Certification(s)</b>	M.D.
<b>Title/Affiliation</b>	Chief section of Intensive Care Unit

## Published Researches in PubMed

- Léopold V, et al. Epinephrine and short-term survival in cardiogenic shock: an individual data meta-analysis of 2583 patients. *Intensive Care Med.* 2018 Jun;44(6):847-856.
- Gaudard P, et al. New Modalities for the Administration of Inhaled Nitric Oxide in Intensive Care Units After Cardiac Surgery or for Neonatal Indications: A Prospective Observational Study. *Anesth Analg.* 2018 Apr;126(4):1234-1240.
- Gaudard P, et al. Circulatory support with ECMO and/or Impella for hemodynamic compromise during myocardial infarction. *ASAIO J.* 2017 Dec 11. doi: 10.1097/ MAT.0000000000000704.
- Zeroual N, et al. ScvO2 changes after red-blood-cell transfusion for anaemia in cardiothoracic and vascular ICU patients: an observational study. *Vox Sang.* 2017 Oct 29. doi: 10.1111/vox.12610.
- Gaudard P, et al. Effect of Impella During Venous-Arterial Extracorporeal Membrane Oxygenation on Pulmonary Artery Flow as Assessed by End-Tidal Carbon Dioxide. *ASAIO J.* 2017 Sep 25. doi: 10.1097/MAT.0000000000000662.
- Colson PH, et al. Terlipressin, a vasoactive prodrug recommended in hepatorenal syndrome, is an agonist of human V1, V2 and V1B receptors: Implications for its safety profile. *Pharmacol Res.* 2016; 113(Pt A):257-264.
- Gaudard P, Colson PH, et al. Active Bleeding after Cardiac Surgery: A Prospective Observational Multicenter Study. *PLoS One.* 2016 Sep 2;11(9):e0162396.
- Gaudard P, et al. Management and outcome of patients supported with Impella 5.0 for refractory cardiogenic shock. *Crit Care.* 2015 Oct 9; 19:363.
- Machado S, Gaudard P, et al. A refractory cardiac arrest induced by Amanita Proxima poisoning successfully treated by percutaneous extracorporeal life support. *Minerva Anesthesiol* 2014;11 :1248-9.

EACTA/ESA/other societies membership EACTA: Chair of ICU subspecialty committee, member of RC

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Will the Programme director devote sufficient time to provide substantial leadership to the programme and supervision for the fellows?  Yes  No

Language requirements: English or French

## Specific legal or other requirements of an attending trainee:

Anaesthesiology or intensive care specialist (or resident?)

<b>Preferred Duration</b>	<input type="checkbox"/> 1 week	<input type="checkbox"/> 2 weeks	<input type="checkbox"/> 3 weeks	<input checked="" type="checkbox"/> 4 weeks	<input type="checkbox"/> others	Please, describe
<b>Preferred Months</b>	<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> June

	<input type="checkbox"/> July <input type="checkbox"/> August <input type="checkbox"/> September <input checked="" type="checkbox"/> October <input checked="" type="checkbox"/> November <input checked="" type="checkbox"/> December
<b>Preferred Seniority Level</b>	<input checked="" type="checkbox"/> Junior <input checked="" type="checkbox"/> Experienced <input type="checkbox"/> Very Experienced
<b>Number of Positions Per Year</b>	9

**Financial Statement**

**Accommodation is provided**  Yes     No

**Transportation/travel options are provided**  Yes     No

This opportunity is not funded by the centre  Yes     No

**Source of financial support for the candidate:**

- Host centre  
 Candidate 's centre  
 Scholarship  
 Educational grant  
 Award  
 Candidate's own expenses  
 Others

Please, describe

**Aims, goals and objectives of the Exchange Training Programme**

To acquire some clinical and technical skills in perioperative management of cardiac, vascular and high risk thoracic surgery. To observe management of patients in cardiogenic shock with all technics of circulatory support in a regional reference center.

**Clinical interests**

Our center experiences each year about 750 cardiac surgery with CPB, 20 heart transplantations, 10 to 15 LVAD implantations, 80 VA-ECMO (ECLS), 10 VV-ECMO, 15 Impella. We take care of surgical patients (high risk surgeries, postoperative complications) and medical patients (mainly cardiogenic shock) in a 14 beds ICU and 8 beds High-dependency Unit or Post-Anesthesia Care Unit

**Lab interests**

Not applicable

**Publications in PubMed**

- Book chapter: Severe acute bleeding after cardiac surgery. P Gaudard, P Colson. In Anesthésie-Réanimation en chirurgie cardiaque. JL Fellahi. 2<sup>e</sup> Edition. Arnette (391-401)
- Book chapter: Non-cardiac anaesthesia for patients with heart assist device. P Gaudard. In JEPU 2018 (121-129)
- Hypertension and Anesthesia: What's New? Colson P, Gaudard P. J Hypertens Manag 2016; 2:013
- Disease-specific scoring or generic scoring in ICU? Gaudard P, Colson P. J Thorac Dis. 2016; 8(7):1414-6

**Resources**

Check if each of the following is available at your centre.

Resource	Yes	Number	Working days per week
Number of working days per week.			7
Total dedicated ICU beds for cardiac, thoracic, and vascular surgery.		14	7
Total dedicated PACU beds for cardiac, thoracic, and vascular surgery.		8	7
Post-anaesthesia care unit for cardiac, thoracic, and vascular surgery.	<input checked="" type="checkbox"/>	8	7
Monitoring and advanced life support equipment.	<input checked="" type="checkbox"/>	6 ECMO 3 Impella	7
Interventional ICU facility.	<input checked="" type="checkbox"/>		7
24-hours ICU service available for patients undergoing cardiac, thoracic, and vascular surgery.	<input checked="" type="checkbox"/>		7
Meeting Rooms.	<input checked="" type="checkbox"/>	1	7

Resource	Yes	Number	Working days per week
Classrooms with visual and other educational aids.		1	5
Study areas for trainees.	<input checked="" type="checkbox"/>	1	7
Office space for faculty members and trainees.	<input checked="" type="checkbox"/>	1	7
Diagnostic facilities.	<input checked="" type="checkbox"/>		7
Therapeutic facilities.	<input checked="" type="checkbox"/>		7
24-hour laboratory services available in the hospital.	<input type="checkbox"/>		7

### Clinical Training

Number of cases in the CVICU / week  $\geq 10$  procedures

1 – 7 days	20-25 / Week
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### Academic Education

#### Patient Care

Competency Area	Settings/Activities
Following the standards for patient care and established guidelines and procedures for patient safety, error reduction, and improved patient outcomes.	YES
Patient evaluation and optimisation of clinical status in the ICM settings.	YES
Interpretation of cardiovascular, respiratory, coagulation and neuromonitoring data.	YES (Swan Ganz, PICCO, TEG, NIRS)
Pharmacological and mechanical circulatory support.	YES (Levosimendan, ECLS, Impella, Centrimag)
Pharmacological and respiratory support.	YES (iNO, VV-ECMO)
Renal replacement therapy.	YES (CRT with heparin or citrate)
Peri-operative critical care, including ventilatory support and peri-operative pain management.	YES

### Medical Knowledge

Indicate the activity(ies) (lectures, conferences, journal clubs, clinical teaching rounds, etc.) in which trainees will demonstrate knowledge in each of the following areas. Also indicate the method(s) used to assess competence.

Area of Knowledge	Settings/Activities
How cardiothoracic diseases affect the administration of life support to adult cardiothoracic patients.	Daily medical meeting about ongoing patients.
Pathophysiology, pharmacology, and clinical management of patients with cardiac disease, to include cardiomyopathy, heart failure, cardiac tamponade, ischaemic heart disease, acquired and congenital valvular heart disease, congenital heart disease, electrophysiologic disturbances, and neoplastic and infectious cardiac diseases.	Daily medical meeting about ongoing patients. Weekly lectures or journal club sessions. Monthly multidisciplinary meeting. Echocardiography teaching and simulation sessions.
Pharmacokinetics and pharmacodynamics of medications prescribed for management of haemodynamic instability.	Daily medical meeting about ongoing patients.
Pharmacokinetics and pharmacodynamics of inotropic, chronotropic, vasoconstricting, and vasodilating medications.	Daily medical meeting about ongoing patients.
Circulatory assist devices, to include intra-aortic balloon pumps, left and right ventricular assist devices, and extracorporeal membrane oxygenation (ECMO).	Daily medical meeting about ongoing patients. Simulation sessions.
Post-anaesthetic critical care of adult cardiothoracic surgical patients.	Daily medical meeting about ongoing patients.
Peri-operative ventilator management, to include intra-operative anaesthetic s, and critical care unit ventilators and techniques.	Daily medical meeting about ongoing patients.
Quality assurance/ improvement.	Daily medical meeting about ongoing patients.
Ethical and legal issues, and practice management (e.g. care of end of life).	Daily medical meeting about ongoing patients. Ethical issues with nurses

### Evaluation of Trainees

- The Programme Supervisor will give an appraisal for each fellow following the observership.  Yes  No
- The centre will be able to maintain a register of those fellows who have entered and successfully completed a training programme.  Yes  No

### Other Comments:

Mobil unit for circulatory support and hotline 24/24 for VV-ECMO or VA-ECMO demands from other hospitals in the area.

To be completed by the Head of department or the authorised deputy.

Please fill in all required fields and send to [eacta@aimgroup.eu](mailto:eacta@aimgroup.eu)

**Submit**