

Application for Hosting EACTAIC Adult Cardiothoracic and Vascular Anaesthesia Fellowship Programme

1. Fellowship Information	Basic Fellowship in Cardiothoracic and Vascular Anaesthesia			
	Advanced Fellowship in Cardiothoracic and Vascular Anaesthesia			
2. Institution Name	Department of Anaesthesia, University Hospital Basel			
Address	Spitalstr. 21			
Country	Switzerland	City	4031 Basel	
3. CEO / Chair Name	First name	Luzius	Last name	Steiner
	Email	luzius.steiner@usb.ch		
4. Programme Director(s)	First name	Joachim	Last name	Erb
Board Certification(s)	Anaesthesiology			
EACTAIC membership	Yes	If yes, membership's number	EACTA: 865	
Email	joachim.erb@usb.ch		Phone	
Mailing Address	Department of Anesthesiology, University Hospital Basel			
	Street	Spitalstr. 21		
	Country	Switzerland	Region	
	Zip code	4052		
4. Programme Director(s)	First name	Tobias Jan	Last name	Steiner
Board Certification(s)	Anaesthesiology			
EACTAIC membership	Yes	If yes, membership's number	EACTA: 102032	
Email	tobiasjan.steiner@usb.ch		Phone	
Mailing Address	Department of Anesthesiology, University Hospital Basel			
	Street	Spitalstr. 21		
	Country	Switzerland	Region	
	Zip code	4052		

Will the Programme director devote sufficient time to provide substantial leadership to the programme and supervision for the fellows?

Yes

Will the Programme director review the fellows' clinical experience logs at least quarterly and verify completeness and accuracy?

Yes

Does the national/international regulatory authority(s) recognize the institutional CTVA Fellowship Programme?

No

If yes, please explain

Completion of the programme will be acknowledged by the Department of Anaesthesia and Intensive Care at the host centre in junction with European Association of Cardiothoracic Anaesthesiology and Intensive Care (EACTAIC) Candidate's requirements

Yes

5. Candidate's requirements

The candidates must be board certified or board eligible according to European residency programme standards

Yes

Language requirements

B2

Comments

German, language skills at a B2 level

Specific requirements towards the attending fellow

Candidate must be in possession of a national registration that allows to work as a medical practitioner in Switzerland (BAG). This registration and any working visa requirements (if needed) must be obtained by the attendee at own expense before the candidate will be permitted to provide patient care. A valid ALS provider course certificate is obligatory for all medical practitioners working at Basel University Hospital. Candidates should have a deep interest in cardiothoracic and vascular anaesthesia and the motivation, willingness and potential to study in parallel to their clinical commitments. They are expected to be resilient in the busy theatre environment.

6. General Programme Information

Aims, goals and objectives of the Fellowship Programme

Each Fellow is supervised one-to-one by a mentor (Fellowship Director, faculty member or supervising consultant) during the first 4 months of the basic fellowship. After this period, the mentoring is gradually adapted to the needs and abilities of the fellow. During the basic fellowship, the mentor is always present in the operating theatre. During the advanced fellowship, supervision is gradually relaxed, but a mentor is always defined and present in the clinic during daytime operations and always available as a backup during on-call services.

Preferred Duration

* Of note, the training period should not be interrupted by frequent and/or prolonged periods of secondment to other divisions / departments.

Preferred Programme Training	Start	July	1	End	June	30
Number of Positions Per Year	1	Type of fellowship training available		Clinical / Clinical Research		

If clinical, will the fellows be allowed to work with the patients under supervision

Yes

Comments: During the first year, the candidate works under direct supervision. During the second year, the candidate is expected to have acquired sufficient skills to work under indirect supervision, with an experienced staff member always in the OR area. From that time on, the candidate participates in on-call duties during the night and at weekends. In that case a faculty member will be on-call for back-up and consultation.

Offered Advanced Training

Yes

Name	EACTAIC member	Certification in Cardiothoracic and Vascular Anaesthesia	Additional Qualifications	Email address	Contact address
Markus Maurer	yes	yes	European Echo Cert	markus.maurer@usb.ch	
Tobias Jan Steiner	yes	yes	European Echo Cert	tobiasjan.steiner@usb.ch	
Corinne D'Antico	yes	yes	European Echo Cert	corinne.dantico@usb.ch	
Jonas Quit	yes	yes	European Echo Cert	jonas.quit@usb.ch	
Daniel Bolliger	Yes	Long lasting clinical experience		daniel.bolliger@usb.ch	

Publications lists of the faculty's members in PubMed

Attached list of publications

8. Resources

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

Resources	Yes / No	Days in week	Number
Total cardiothoracic and vascular ward beds	Yes	7	70
Number of ICU beds dedicated to CTV patients	Yes	7	16
Is there an emergency department in which cardiothoracic patients are managed 24 hours a day?	Yes	7	
An adequately designed and equipped post-anaesthesia care unit for cardiothoracic patients located	Yes	7	
Is there monitoring and advanced life support equipment representative of current levels of technology?	Yes	7	
Hybrid Operating Rooms	Yes	7	2
Cardiac Operating Rooms	Yes	7	2
Thoracic Operating Rooms	Yes	7	1
Vascular Operating Rooms	Yes	7	2
Catheterisation Labs	Yes	7	2
Electrophysiology Labs	Yes	7	2
Pulmonology Labs	Yes	7	
Interventional Vascular Suits	Yes	7	2
Separate CVICU Facility	No		
Animal Laboratory for research purposes	Yes	5	
Outpatient Clinic for perioperative evaluation of patients undergoing cardiothoracic and vascular	Yes	5	
24-hours acute pain service available for patients undergoing cardiac, thoracic and vascular procedures	Yes	7	

Meeting Rooms	Yes	7	
Classrooms with visual and other educational aids	Yes	5	4
Study areas for fellows	Yes	7	4
Office space for faculty members and fellows	Yes	7	4
Diagnostic facilities	Yes	7	
Therapeutic facilities	Yes	7	
24-hour laboratory services available in the hospital	Yes	7	
Cardiac stress testing	Yes	5	
Cardiopulmonary scanning procedures	Yes	7	
Pulmonary function testing	Yes	5	
Computers and IT support	Yes	7	
Appropriate on-call facilities for men and women	Yes	7	

9. Clinical Skills and Responsibilities

Will your Programme offer a 12-24 months of fellowship education in fundamental clinical skills of medicine relevant to the practice of CTVA?

Yes

If yes, for each rotation or experience below, specify the duration (in months, four weeks = one month) during the 12-24 months of education in fundamental clinical skills.

Caring for inpatients in	Number of performed produces/year	
Cardiac Surgery using CPB	446	
Cardiac Surgery without CPB	66	
Minimally-Invasive Cardiac Procedures	56	
Interventional Cardiac Catheterization (e.g. TAVI, Mitraclip, TICI, PFO/ASD closure)	306	
Electrophysiology Lab (e.g. mapping, ablation, pacemakers, ICDs)	1413	
Robotic Cardiac Surgery	-	
Heart, Lung, and Heart/Lung Transplants	-	
ECLS, ECMO, VAD Procedures	12	
Echocardiography Lab	1400	
Thoracoscopic Surgery	213	
Pulmonary Resection	191	
Esophageal Surgery	2	
Tracheo-Bronchial Surgery	20	
Interventional Pulmonology Procedures	100	
Major Vascular Procedures	205	
Interventional vascular procedures	98	
Neurological monitoring during major vascular surgery	50	
Acute and chronic pain management services	>1000	
Basic or Advanced Research	performed	
Rotations in	Number of performed produces/basic rotations	Number of performed produces/advanced rotations
Cardiac anaesthesia	150-200	50-100 (3-6 months)
Thoracic anaesthesia	25-50	25-50 (3 months)
Anaesthesia for major supra-inguinal vascular procedures	50-75	50-75 (3 months)
Trans-esophageal and trans-thoracic echocardiography	150-200	50-100 (3 months)
Medical or surgical Critical Care Rotation	4 weeks	3 months
Inpatient or outpatient cardiology	facultative	facultative
Inpatient or outpatient pulmonary medicine	facultative	facultative
Extracorporeal perfusion technology (CPB, ECMO, Nova-Lung)	2 weeks	20
Paediatric cardiothoracic anaesthesia	not offered	not offered
Basic Research	facultative	facultative
Clinical Research	facultative	facultative

Will all fellows entering the CTVA Programme complete each of the fundamental clinical skills of requirements?

If no, explain

Yes

In the clinical anaesthesia setting, including nights and weekends, will faculty members at any time direct perioperative CTVA care, involving fellows, for more than two anaesthetizing locations simultaneously?

If Yes, describe

Clinical Responsibility

Responsibility of the fellow will be to provide safe and effective patient care at an academic level according to institutional standard operating procedures. Furthermore, the fellow has to practice according to local hygiene standards, respect the entire personal and abide to institutional policies regarding codes of conduct.

List any other rotations (along with their duration, in months) offered in the Programme to augment fellows' learning.

Facultative rotations to cardiology, pulmonary medicine or other can be arranged at fellows preference.

Will advanced subspecialty rotations reflect increased responsibility and learning opportunities?

Yes

Maximum Time in Non-Clinical Activities

3 months

To ensure maximum clinical exposure, we decided to limit the duration of non-clinical activities to 3 months. Should the fellow bring convincing arguments for a longer non-clinical-activity (e.g. a larger research project), an extension of this period can be discussed as long as the clinical training is sufficient.

10. Financial Statement

An employment contract will be signed with the candidate

Yes

Accommodation options are provided

No

Transportation/travel options are provided

No

Monthly Salary

Amount

about 6000

Currency

CHF

after taxes and social deductions

This opportunity is not funded by the centre

No

Source of financial support for the candidate:

Host centre (monthly salary)

Others

11. Educational and Academic Programme

Didactic Sessions	Yes
Will faculty members' attendance be monitored?	Yes
Will fellows' attendance be monitored?	Yes
Will attendance be mandatory for faculty members?	Yes
Will attendance be mandatory for fellows?	Yes
Who of the following will provide content at conferences? Check all that apply.	Yes
Anaesthesiology faculty members from this department	Yes
Anaesthesiology faculty members from other sites	Yes
Non-anaesthesiologists from the primary clinical site	Yes
Non-anaesthesiologists from the participating sites	Yes
Visiting faculty members	Yes
Drug/industry representatives	No
Fellows	Yes
Others (specify): Click here to enter text.	

What will be the frequency of the following educational topics in the programme's schedule?

	Weekly	Bi-weekly	Monthly	Quarterly	Semi-annually	Annually	Fellows attendance would be monitored
Critical care appraisal of the literature (i.e., journal club)	Yes	No	No	No	No	No	Yes
Quality improvement (M&M, QA)	No	No	Yes	No	No	No	Yes
Board review (e.g., oral exams, keywords)		No	Yes	No	Yes	No	Yes
Grand rounds	Yes	No	No	No	No	No	Yes
Other (specify) Click here to enter text.							

Lectures (45 minutes each) three times a week on various topics related to anaesthesia (emergency medicine, pain medicine, intensive care medicine, etc.).

Daily discussion and planning of the next day's cases.

Formal Course Work Available in	Our department has its own simulation facility which is used for the general training of the residents. Fellows are explicitly invited to participate in these simulations. In addition, we have a daily accessible TTE/TOE simulator which is used for the training of the Fellows.	
Extra-Institutional Educational Conference Support:	Attendance at 2 conferences per year	
	Yes	
The Opportunity for Exchange with other training facilities	A one-month rotation in a clinic of the fellow's choice, as long as it has an EACTAC certified fellowship programme. Established clinics so far: University Hospital Bern, Heart Center Leipzig, Heart and Diabetes Center Bad Oeynhausen, Heart Center Dresden	

In the Previous 5 Years, Fellows were 1st or 2nd Author On:		
Abstracts	Peer-Reviewed Journal Articles	13
Book Chapters	Other Publications	
Dedicated Research Time		

In the Previous Year, Fellows present an oral or poster presentation in a national or international meeting

Yes

Technical Skills	Settings/ Activities	Assessment Method(s)
1. I. General patient assessment and risk estimation		
Perform a preoperative assessment including clinical examination and interpretation of relevant diagnostic findings. <i>Presentation of a patient during the daily meeting and summarizing the essential findings. Activity.</i>	SOP, literature, lectures, self-studies, on-site training in the OR	Clinical assessment, direct observation of procedural skills, structured evaluation and feedback.
1. II. Anesthesia - Clinical part		
Providing anaesthesia care for patients undergoing cardiac surgery, securing of the airway using conventional laryngoscopy, video assisted laryngoscopy or fiberoptic, obtaining access to the venous and	SOP, literature, lectures, self-studies, on-site training in the OR	Clinical assessment, direct observation of procedural skills, structured evaluation and feedback.
1. II. Postoperative Care / ICU - Clinical part		
Carry out a comprehensive hand-over to the intensive care team, to be actively involved in the postoperative care of patients in the intensive care unit - performing transtracheal echo in unstable patients.	SOP, literature, lectures, self-studies, on-site training in the ICU	Clinical assessment, direct observation of procedural skills, structured evaluation and feedback.
1. II. Echocardiography - Clinical part Placement of TOE probe, complete and comprehensive TOE assessment, obtaining necessary measurements and writing of a conclusive TOE report, 3D echo and use of computer based tools to interpret right ventricular 3D volumes.	3D echo simulator, TOE under direct observation	Clinical assessment, direct observation of procedural skills, structured evaluation and feedback.
1. VIII. Extracorporeal perfusion management		
Providing anaesthesia care for patients undergoing cardiac surgery with and without extracorporeal circulation.	SOP, literature, lectures, self-studies, on-site training in the OR	Clinical assessment, structured evaluation and feedback, direct supervision

Medical Knowledge

Fellows are encouraged to actively participate in the weekly training seminars. They are also encouraged to present their own research results at national and international congresses. For this purpose, the fellows are given appropriate time off. The evaluation takes place in a personal conversation with the programme director.

Area of Knowledge	Settings/ Activities	Assessment Method(s)
1. Basic Training		
1.1. General patient assessment and risk estimation (Level A)		
Physiology of the heart, the circulatory system and the respiratory system. Basic knowledge of embryological development of cardiac, thoracic and vascular structures.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Pre-operative invasive and non-invasive assessment of cardiac diseases and interpretation of results including electrocardiogram (ECG), chest X-ray, echo-cardiography, cardiac stress testing, coronary angiography, cardiac magnetic resonance imaging (cMRI), and computer tomography (CT).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Pre-operative pulmonary evaluation and interpretation of the results, including arterial blood gas and acid-base analysis, pulmonary function tests, oximetry and thoracic imaging.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Patient information and informed consent including medico-legal aspects, appraisal of discernment and consent capacity.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of risk and outcome assessment and relevant scoring systems (e.g., EuroSCORE).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning
1. II. Anesthesia management – cardiac surgery (Level A)		
Knowledge of anesthetic agents and their effects on cardiac function and in patients with cardiac diseases.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of intraoperative pharmacology and relevant medication, including positive inotropes, chronotropes, vasoconstrictors, vasodilators, and anti-arrhythmic agents.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of patient blood management, including specific diagnostic tools, application of relevant medication and blood products.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of basic hemodynamic monitoring and relevant techniques, such as arterial pressure measurement, central venous pressure.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of relevant neuromonitoring techniques (e.g., processed electro-encephalography (pEEG), near-infrared sonography (NIRS), somato-sensibile evoked potentials (SSEP), motor evoked potentials)	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of conventional cardiopulmonary bypass techniques. Principles of myocardial preservation.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning
Basic principles of common procedures in cardiac surgery, such as coronary artery bypass grafting (CABG).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
1. III. Anesthesia management – thoracic surgery (Level A)		
Principles of pulmonary evaluation as described previously, and basic knowledge in the interpretation of results from pulmonary function tests, lung perfusion testing and CT.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Knowledge of the bronchial anatomy.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Knowledge about relevant anesthetic agents and their effects in patients with lung diseases.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning
Principles of intraoperative pharmacology and relevant medication, including bronchodilators and steroids.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Basic principles of common procedures in thoracic surgery (mediastinoscopy, video-assisted thoracoscopic surgery (VATS), open lung resection, pneumonectomy).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Basic principles of endoscopic pulmonary procedures, such as bronchial stenting and endoscopic lung volume reduction (ELVR).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
1. IV. Anesthesia management – major vascular surgery (Level A)		

Knowledge of peri-operative management for vascular patients undergoing vascular interventions, including anesthetic choices, perioperative monitoring, and risk identification.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Basic principles of the peri-operative management of lumbar drainage for aortic interventional procedures.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Basic principles of spinal cord protection during surgical and interventional aortic procedures.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Basic principles of neuromonitoring.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
1. V. Post-operative care/ Critical care (Level A)		
Scoring systems in the ICU (e.g. the Sequential Organ Failure Assessment (SOFA), the Simplified Acute Physiology Score (SAPS), the Confusion Assessment Method (CAM)-ICU).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Etiology, pathophysiology, diagnosis and treatment plans / bundles according to international standards for specific critical conditions in cardiothoracic and vascular surgery patients.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Circulatory failure (heart failure, shock, cardiorespiratory arrest, cardiac arrhythmias, ischemic heart disease, pulmonary embolism, bleeding complications, vasoplegia).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Anaphylaxis.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Respiratory failure, including adult respiratory distress syndrome (ARDS), pulmonary edema, pneumothorax, pneumonia.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Acute kidney injury and failure.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Gastrointestinal failure, peritonitis, pancreatitis, liver failure, non-occlusive mesenteric ischemia (NOMI).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Neurological failure (delirium and coma, cerebral ischemia and bleeding).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Airway and chest injuries.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Aortic injuries.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Infectious diseases (systemic inflammatory response syndrome (SIRS) and sepsis, including sepsis bundle strategy).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Coagulation disorders (disseminated intravascular coagulopathy (DIC), heparin resistance, heparin-induced thrombocytopenia).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Equipment and apparatus (equipment design, physics, standards, limitations; e.g. non-invasive and invasive postoperative ventilation, continuous renal replacement therapy devices, non-invasive and invasive hemodynamic monitoring).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Indication, contraindication, drug selection, complications: sedation, anesthesia, analgesia, neuromuscular relaxation, nutrition.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Multimodal and pre-emptive analgesia concepts.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Weaning and extubation criteria.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Transfer and discharge criteria.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Indications for and application of extracorporeal circulation in intensive care patients for cardiac and / or respiratory support (e.g., ECMO).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
1. VI. Basic peri-operative echocardiography (Level A)		
Principles of basic theory of peri-operative cardiac echocardiography according to the European Association of Cardiovascular Imaging (EACVI) / EACTAC process of certification for TEE.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
1. VII. Anesthesia management – interventional procedures in cardiology (Level A)		
Basic principles of common procedures in interventional cardiology, such as coronary angiography, ablation, transcatheter aortic valve replacement (TAVR), and mitral / tricuspid clipping with relevant procedural sedation guidelines from the European Board of Anaesthesiology (EBA) / European Society of Anaesthesiology (ESA).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Monitoring and capnography use according to the safety recommendations from EBA.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
1. VIII. Extracorporeal perfusion management (Level A)		
Basic principles of extracorporeal perfusion.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Types of extracorporeal circuits, e.g., cardiopulmonary bypass (CPB), extracorporeal membrane oxygenation (ECMO).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Types, composition and mechanisms of cardioplegic solutions.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Cardioprotective measures.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Safety recommendations for extracorporeal circulation from the European Board of Cardiovascular Perfusion (EBCP).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
2. Advanced training		
2. I. Anesthesia management – cardiac surgery (Level A)		
Principles of advanced hemodynamic monitoring and relevant techniques, such as use of the pulmonary artery catheter, continuous cardiac output monitoring and measurement.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of modified cardiopulmonary bypass (minimized CPB, left-heart CPB) and the off-pump revascularization technique.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of advanced procedures in cardiac surgery and clinical management of affected patients	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles and state of the art of mechanical support including intra-aortic balloon pumps, and extracorporeal membrane oxygenation.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Current state of temporary and long-term mechanical circulatory support (ventricular assist devices, total artificial hearts).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of use of inhaled pulmonary vasodilators (nitric oxide (NO), prostaglandins).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of fast-track surgery.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
2.II. Anesthesia management – thoracic surgery (Level A)		
Principles of common procedures in thoracic surgery (open and thoracoscopic lung resections, robotic lung resection, lung volume reduction surgery, mediastinoscopy, pneumonectomy).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of diagnostic and interventional bronchoscopic surgery (lung volume reduction, bronchopulmonary lavage; endoscopic, rigid fiber optic and laser resection; bronchial stenting and resection).	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Principles of peri-operative management of esophageal surgery for varices, neoplastic, colon interposition, foreign body, stricture, and tracheoesophageal fistula.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews

2. III. Anesthesia management – major vascular surgery (Level A)		
Knowledge of perioperative management of TEVAR and EVAR.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Knowledge of the principles of perioperative management of lumbar drainage for aortic intravascular procedures.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Excellent knowledge of the principles of spinal cord protection during surgical and interventional aortic procedures.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Excellent knowledge of the principles of cerebral function monitoring.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
2. IV. Post-operative management/ Critical care (Level A)		
Knowledge of cardiac and thoracic physiology.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Postoperative cardiac critical care, including analgesia, sedation and ventilation.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
Postoperative care and analgesia after thoracic surgery.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
An understanding of the management of cardiac pacing modes.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
An understanding of extracorporeal membrane oxygenation and other devices used for mechanical circulatory support.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
2. VII. Advanced perioperative echocardiography (Level A)		
Advanced level of knowledge in peri-operative cardiac echocardiography according to the EACVI/ EACTAC process of certification guidelines.	Clinical teaching rounds, lectures, conferences, self-studies, case-discussions.	Clinical assessment, structured evaluation and feedback, direct supervision, daily case planning and reviews
2. VIII. Heart and/or lung transplantation (Level A)		
Understanding of the physiology and clinical presentations of end-stage heart and lung disease and surgical options for their management.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of the principles of heart transplantation and clinical management of affected patients.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Knowledge of current limitations of organ transplantation and efforts to increase the suitable donor pool.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of the multidisciplinary nature of patient evaluation and listing for transplantation.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Knowledge of the principles of donor optimization, management and allograft retrieval.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Knowledge of the principles of ex-vivo heart and lung perfusion.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of the physiology of the denervated organ.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of the surgical conduct of heart transplantation and knowledge of intra-operative and immediate postoperative care, including stability of induction, ventilation, oxygenation, hemodynamic support, and allograft and noncardiac organ protection.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of primary graft dysfunction and indications for mechanical circulatory support.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of the surgical options for lung transplantation, including minimally invasive lung transplantation and various intraoperative extracorporeal support mechanisms.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Knowledge of intra-operative and immediate postoperative care, including protective ventilation, oxygen delivery, hemodynamic support, indications for inhaled NO and other pulmonary vasodilators, allograft and non-pulmonary organ protection.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Knowledge of the principles of primary lung dysfunction and conservative and extracorporeal treatment options, including indications for and techniques of ECMO.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of immunosuppressive regimens and the role of postoperative infections and sepsis.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
2. IX. Research module (Level A)		
Principles of clinical trials, including design, end points, inclusion / exclusion criteria, reporting requirements.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of Good Clinical Practice (GCP) requirements for clinical research involving patients.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding of European and specific national ethics frameworks, including research ethics	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Principles of sample size and study power determinations and basic statistical evaluation	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Principles of patient and data confidentiality agreements.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Understanding tools for data collection, analysis and reporting.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Principal international basic science priorities in the field of cardiac anesthesia.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Ethics and practicalities of biological sample collection, storage and biobanking	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.
Principles and ethics of scientific publishing.	Lectures, conferences, self-studies, case-discussions.	Structured evaluation and feedback.

12. Assessment

The Programme Director will evaluate each fellow every 3 months as per EACTAIC regulations

Yes

https://www.eacta.org/~/media/Files/EACTA_Training_Manual_Evaluation_2014_2020.pdf

Assessment tools

360-degree evaluations

Yes

Clinical skills evaluations

Yes

Personal reports from the faculty

Yes

Self-assessment by Fellow

Yes

Learning goals for the next three months

Yes

Feedback from Fellows

Yes

A logbook will be available

Yes

Reports of Evaluation will be available

Yes

The Programme Director will give an appraisal for each fellow every 3 months

Yes

The faculty and trainee should agree a joint evaluation both fellow's progress and the training programme, and devise a plan for addressing any perceived difficulties or deficiencies.

Yes

Training programmes should encourage fellows to provide a written confidential evaluation of the programme.

Yes

The centre will be able to maintain a register of those fellows who have entered and successfully completed a training programme in order to continue its accreditation as a training centre

Yes

Periodic evaluation of patient care (quality assurance) is mandatory. Subspecialty trainees in cardiac, thoracic, and vascular anesthesia will be involved in continuing quality improvement and risk management.

Yes

13. Practice-based Learning and Improvement

1. Briefly describe the main learning activities regarding non-clinical skills and their assessment during the fellowship

Theoretical work on all topics of cardiac, thoracic and vascular anesthesia based on a predefined list of literature. The topics are regularly reviewed during the daily case discussion and during clinical work. Weekly journal club during which current scientific work is discussed. Active par

2. Briefly describe one planned learning activity in which fellows engage to: identify strengths, deficiencies, and limits in their knowledge and expertise (self-reflection and self-assessment); set learning and improvement goals; and identify and perform appropriate learning activities to achieve self-identified goals (life-long learning).

According to the training levels, clinical tasks will be assigned to the fellow. The assessment includes the planning phase, clinical performance and case review. After the clinical task, self-evaluation and external evaluation will be discussed and strengths, deficiencies and limits discussed and transformed into future learning goals. Frequency: quarterly

3. Briefly describe one planned quality improvement activity or project that will allow the fellows to demonstrate an ability to analyse, improve and change practice or patient care. Describe planning, implementation, evaluation and provisions of faculty support and supervision that will guide this process.

Areas and topics for improvement are regularly discussed in faculty rounds. The fellow gets the opportunity to select such a topic at own preference and develop an improvement plan with the support of the faculty. Appropriate time allowance will be given.

4. Briefly describe how fellows will receive and incorporate formative evaluation feedback into daily practice

Daily supervision during the cases guarantees daily feedback on knowledge, performance, and attitude and allow the fellow to incorporate this evaluation immediately into the next daily practice.

5. Briefly describe one example of a learning activity in which fellows engage to develop the skills needed to use information technology to locate, appraise, and assimilate evidence from scientific studies and apply it to their patients' health problems. The description should include:

Fellow take part in weekly journal clubs and case discussion either as presenters or as participants and thereby acquire the skills in using information technology applying current scientific information to actual patient cases. More extensive presentations should be given at least once a year.

6. Briefly describe how fellows will participate in the education of patients, families, students, fellows, and other health professionals.

The fellow will participate at the preop anesthesia clinic and informs the patient and families about the anesthesia and the complication. The fellow takes part in the teaching of residents, students and nurses.

14. Interpersonal and Communication Skills

1. Briefly describe one learning activity in which fellows demonstrate competence in communicating effectively with patients and families across a broad range of socioeconomic and cultural backgrounds, and with physicians, other health professionals, and health-related agencies.

The fellow will get the opportunity to run the pre-anesthetic clinic with a supervising staff member on call, and thus learn to communicate with patients of all ages, socioeconomic range and cultural backgrounds.

2. Briefly describe one learning activity in which fellows demonstrate their skills and habits to work effectively as members or leaders of a health care team or other professional group. In the example, identify the members of the team, responsibilities of the team members, and how team members communicate to accomplish responsibilities.

The fellow will be part of the anesthesia team, which has to provide safe anesthesia for the patient, and over time, he'll be the leader of an anesthesia team of 2-3 people. The candidate will be introduced to the system of pre- and postoperative check procedures and the postoperative team-debriefing process.

4. Briefly describe how fellows will be provided with opportunities to maintain comprehensive, timely, and legible medical records, if applicable

The candidate will get a comprehensive introduction to the electronic patient records system. The performance on the recording is constantly monitored by the supervisor.

5. Briefly describe how fellows will maintain a comprehensive anaesthesia record for each patient, including evidence of pre- and post-operative anaesthesia assessment, an ongoing reflection of the drugs administered, the monitoring employed, the techniques used, the physiologic variations observed, the therapy provided as required, and the fluids administered.

The fellow accomplishes the preoperative anesthesia assessment record, which will be discussed at the conference. Intraoperative record, the electronic anesthesia records and TEE examination. The performance on the recording is constantly monitored by the supervisor.

6. Briefly describe how fellows will create and sustain a therapeutic relationship with patients, engage in active listening, provide information using appropriate language, ask clear questions, provide an opportunity for comments and questions, and demonstrate sensitivity and responsiveness to cultural differences, including awareness of their own and their patients' cultural perspectives.

The fellow will get the opportunity for postop. visits with a supervising staff member on call, and thus learn to communicate with patients of all ages, socioeconomic range and cultural backgrounds.

15. Professionalism

Briefly describe the learning activity(ies), other than lecture, by which fellows demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles, including: compassion, integrity, and respect for others; responsiveness to patient needs that supersedes self-interest; respect for patient privacy and autonomy; accountability to patients, society, and the profession; and sensitivity and responsiveness to a diverse patient population, including to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation

The candidate will stepwise become responsible for the whole process in accompanying a patient through the perioperative process. During this process she or he will be continuously indirectly or directly supervised by an experienced member of the staff or his mentor.

15. Systems-based Practice

1. Describe the learning activity(ies) through which fellows achieve competence in the elements of systems-based practice: working effectively in various health care delivery settings and systems, coordinating patient care within the health care system; incorporating considerations of cost-containment and risk-benefit analysis in patient care; advocating for quality patient care and optimal patient care systems; and working in inter-professional teams to enhance patient safety and care quality

The candidate will get the opportunity to participate incidentally at heart team meetings (daily meetings between cardiologist and cardiothoracic surgeon). These meetings are intended to find the optimal treatment for the patients presented to the team.

16. EACTAIC Site Visit (for 1-day)

Dates proposed for the visit (at least 3) or or
I hereby accept the regulations of the Hospital Visiting especially to take in charge the travel costs and the hotel accommodation of the 2 reviewers on the most reasonable base

Other comments

Yes

To be completed by the Head of department or the authorised deputy.
Please fill in all required fields and send to eactaic@almgroup.eu and EACTAIC Education Chair

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European Association of
Cardiothoracic Anaesthesiology
and Intensive Care

Checklist for Hosting EACTAIC Adult Cardiothoracic Anaesthesia Fellowship Programme

Institution Name University Hospital Basel

Address Spitalstrasse 21
4031 Basel

Preferred Duration 12 months for basic training year 12 months for advanced training year

Type of fellowship programme offered:

- Cardiothoracic and Vascular Anaesthesia
- Cardiovascular Anaesthesia
- Cardiothoracic Anaesthesia
- Cardiac Anaesthesia only
- Thoracic and Vascular Anaesthesia

Type of fellowship training available:

- Clinical only
- Clinical / Basic Research
- Clinical / Clinical Research
- Basic Research only
- Clinical Research only

Legal statement

The applying trainee should be either a licensed anaesthesiologist or have a completed training certificate in anaesthesia. Yes No

Working hours directives will be respected according to the prevailing national law. Yes No

The head of the department approves the programme of the hosting centre. Yes No

An agreement between the CEO or an authorized representative of the institution and Programme Director at the host centres for the EACTAIC Fellowship Training Programmes to free the former to have a dedicated minimum of 10% of weekly working time for training the trainees in the Fellowship Training Programmes is submitted to EACTAIC. Yes No

The programme directors, faculty members and trainees would maintain a good standing EACTAIC membership. Yes No

Declaration of financial sources

The financial support of the EACTAIC Fellowship will be regulated by an individual agreement between the hosting centre and the fellow. Yes No

The hosting centre declares the financial sources policy. Yes No

EACTAIC will divide the hosting centres into two categories as follows; **Category (A):** The hosting centres which can offer monthly salary payments and **Category (B):** The hosting centres which cannot provide salary payments; instead, the candidates may be supported by an educational grant, scholarship, or are self-sponsoring, etc.

Preferred Fellowship Category: Category A Category B



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The candidates can choose between the hosting centres in the two categories. Yes No

A signed consensus between the hosting centre and trainee regarding both parties' financial arrangement and responsibilities will be delivered to EACTAIC. Yes No

An employment contract will be signed with the candidate Yes No

Accommodation options are provided Yes No

Transportation/travel options are provided Yes No

Monthly Salary: Amount Currency

The centre does not fund this opportunity Yes No

Source of financial support for the candidate:

- Host centre (monthly salary)
- Candidate's centre
- Scholarship
- Educational grant
- Award
- Candidate's expenses
- Others

Please, describe

Click here to enter text.

Programme Training and facilities of the host centre

1. The fellow should be authorized to provide direct patient care during their training programme under the supervision of the programme director and faculty members, "i.e., hands-on practice."	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Uninterrupted training for 12 months for the "basic" training programme.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Uninterrupted training for 12 months for the "advanced" training programme.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. At least two faculty members should be involved.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Evaluation of the fellows should be done every four months or end of each advanced rotation module.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Every four months, a complete evaluation report should be submitted to the EACTAIC Education Chair. [https://www.eactaic.org/wp-content/uploads/2020/11/EACTA-Three-Monthly-Evaluation_09.11.2020.pdf]	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. A portfolio/logbook will be performed monthly and signed by the programme director	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
8. The programme director and a minimum of two faculty members declare in writing that they will dedicate sufficient time (i.e., minimum 10% of working time) to attend to their responsibilities. <div style="border: 1px solid #ccc; padding: 2px; display: inline-block; margin-top: 5px;">10</div> hours per week	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9. At least one of the faculty is transesophageal echocardiography (TOE) certified (e.g., EACVI-EACTAIC joint accreditation, Association of Cardiothoracic Anaesthesia and Critical Care (ACTACC) or National Board of Echocardiography (NBE)).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10. The hosting centre has:	
10.1. Available intensive care unit (ICU) of postoperative anaesthesia care unit (PACU) for cardiac, thoracic and vascular patients.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.2. Designed and equipped post-anaesthesia care unit (PACU), high-dependency unit (HDU), or an ICU incorporating a PACU.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.3. Available emergency room (ER) 24 hrs. a day (24/7).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.4. Operating rooms (ORs) to be adequately equipped for cardiac, thoracic and vascular procedures (advanced haemodynamic monitoring, TOE, neuromonitoring, coagulation monitoring, blood-saving (salvage) devices).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.5. Available an outpatient Clinic for perioperative evaluation of patients undergoing cardiac, thoracic, and vascular procedures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No



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10.6. 24-hours acute pain service available for patients undergoing different cardiac, thoracic, and vascular procedures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.7. Available Meeting Rooms	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.8. Available classrooms with visual and other educational aids	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.9. Available study areas for fellows	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10. The volume of cases and training in the followings;	
10.10.1. A minimum of 100 cardiac cases using cardiopulmonary bypass (CPB) during the basic training year will be available per fellow per year.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="text" value="Click here to enter text"/>
10.10.2. 30% of the cases are non-coronary artery bypass grafts (CABG).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="text" value="Click here to enter text"/>
10.10.3. An "optional" 3-to-6-month advanced cardiac anaesthesia training module will be available for each fellow if the centre offers the advanced training year.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="text" value="Click here to enter text"/>
10.10.4. A programme director should personally perform a minimum of 100 cardiac anaesthesia cases per annum.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.5. Training in thoracic anaesthesia (A minimum of 25 cases per fellow or 1.5 months during the basic training year and an "optional" 3-to-6-month advanced training module if the centre offers the advanced training year).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.6. Training in supra-inguinal vascular anaesthesia. (A minimum of 25 cases or one month per fellow during the basic training year and an "optional" 3-to-6-month advanced training module if the centre offers the advanced training year).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.7. Training in interventional vascular (TEVAR, EVAR) and neuromonitoring.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.8. Accessibility for training in a dedicated intensive care unit (ICU) or postoperative anaesthesia care unit (PACU) for caring of cardiac, thoracic and vascular patients for one month during the "basic" training year and an "optional" 3-to-6-month advanced training module if the centre offers the advanced training year.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.9. Training in anaesthesia for interventional catheterization laboratory procedures for two weeks during the "basic" training year and longer if the centre offers an advanced training module in cardiac anaesthesia.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.10. Training in electrophysiology study (EPS) procedures (pacemakers, implanted cardioverter/defibrillator (ICDs), mapping, ablations, etc.).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.11. Training in the Extracorporeal perfusion technology with a perfusionist in the management of patients who have mechanical support in situ, e.g., intra-aortic balloon pump (IABP), extracorporeal membrane oxygenation (ECMO) and ventricular assist device (VAD) for two weeks during the basic training year.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.12. Training in the Echocardiography Lab mainly on transthoracic echocardiography for two weeks during the basic training year.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.13. Basic training in TOE will be available.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.14. Advanced training in TOE will be available.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.15. Accessibility for training on the basic and/or clinical research	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10.10.16. These requirements will be applied to all new fellows	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Decision Approve Reject
Conditions Yes No

If yes, please define

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Please fill in all required fields and send them to eactaic@aimgroup.eu and EACTAIC Education Chair

Anaesthesiology

Clinic for Anaesthesia, Intermediate Care,
Prehospital Emergency Medicine and Pain Therapy

Prof. Mohamed R. El-Tahan
EACTAIC Education Chair

Professor and Chairman, Anaesthesiology
Medical Head, Department of Acute Medicine
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Basel, 24 October 2023

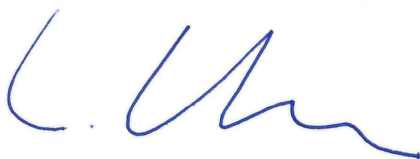
Dear Professor El-Tahan,

I fully support the request of our EACTAIC CTVA fellowship directors Dr. Joachim Erb and Dr. Jan Steiner for re-accreditation of our department at the University Hospital of Basel as a Center for the Basic and Advanced Fellowship in Cardiothoracic and Vascular Anesthesia of EACTAIC.

We would be proud to continue to pass on our knowledge to the next generation and are committed to the guidelines of the EACTAIC Fellowship.

I hereby confirm that the hospital management and the Clinic of Anesthesia have agreed that the fellowship director and co-director can devote at least 10 percent of their working time to the fellowship program.

Yours sincerely



Prof. Luzius A. Steiner, MD, PhD
Professor and Chairman Anaesthesiology

Anästhesiologie

Klinik für Anästhesie, Intermediate Care,
Präklinische Notfall- und Schmerzmedizin

Prof. Mohamed R. El Tahan

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Basel, 23.10.2023

Dear Mohamed,

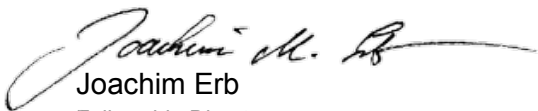
we would like to request the EACTAIC training committee to reaccredit the University Hospital Basel as a center for the Basic and Advanced Fellowship in Cardiothoracic and Vascular Anesthesia of EACTAIC.

Our hospital has been a center for the EACTAIC Fellowship for more than 10 years and we have successfully trained 8 fellows during this time, all of whom are pursuing fulfilling careers in cardiothoracic and vascular anesthesia.

We would be proud to continue to pass on our knowledge to the next generation and are committed to the guidelines of the EACTAIC Fellowship.

We also confirm that the hospital management and the Department of Anesthesia have agreed that the fellowship director and co-director can devote at least 10% of their working time to the fellowship program.

Yours sincerely



Joachim Erb
Fellowship Director



Jan Steiner
Fellowship Co-Director



EACTAIC Adult Cardiac Anaesthesia Fellowship Programme

Clinic for Anaesthesiology, Intermediate Care, Prehospital Emergency Medicine and Pain Therapy, University Hospital Basel, Basel, Switzerland

	Monday	Tuesday	Wednesday	Thursday	Friday
OR 1	All types of cardiac surgery semi-elective cases admitted during the weekend	Minimal invasive heart valve surgery	Minimal invasive heart valve surgery	Conventional heart valve surgery	Minimal invasive heart valve surgery
		Off-pump bypass surgery (OPCAB, MIDCAB)	Conventional coronary bypass surgery	Conventional coronary bypass surgery	Off-pump bypass surgery (OPCAB, MIDCAB)
OR 2	Cardiac surgery emergencies	Cardiac surgery emergencies	Combined surgical and interventional valvular surgery	Vascular surgery	Combined open heart surgery
				Vascular surgery	Interventional cardiac procedures
OR 3	Kidney Transplant	Kidney Transplant	Endovascular surgery	Endovascular surgery	Open and endoscopic thoracic surgery
	Vascular surgery	Vascular surgery	Vascular surgery	Endovascular surgery	
OR 4	Open and endoscopic thoracic surgery	Open and endoscopic thoracic surgery	Open and endoscopic thoracic surgery	Open and endoscopic thoracic surgery	Open and endoscopic thoracic surgery
OR 5	Emergencies in cardiothoracic and vascular surgery	Emergencies in cardiothoracic and vascular surgery	Emergencies in cardiothoracic and vascular surgery	Emergencies in cardiothoracic and vascular surgery	Emergencies in cardiothoracic and vascular surgery