

SAMU - Emergency Medical Assistance Service

MEMORIES & TESTIMONIES



chu-toulouse.fr



Emergency medical services in France are provided by a mix of public and private organizations under the control of public health authorities. The central public organization that coordinates these services at departmental level are known as the SAMU, which stands for Service d'aide médicale urgente (Emergency Medical Assistance Service).

The SAMU is the medical emergency organization in charge of assisting all kind of health emergencies, by providing a distance medical guidance, dispatching the response resources and coordinating the transport to a referral health personnel or facility relevant for the best health outcomes for the sick or injured. They work side-by-side with the security forces and the fire service, as well as with the general practitioners, and public and private health care facilities.

The SAMU has a control room operating 24-hour service reachable by dialling the free nationwide emergency number, $n^{\circ}15$. This service can be mobilised by anyone (the general population, health care providers, etc.) as well as by the police/ gendarmerie ($n^{\circ}17$) and the fire service ($n^{\circ}18$). The European emergency phone number $n^{\circ}112$ can be responded by the SAMU or by the fire service.

The SAMU also operates the SMUR (Service mobile d'urgence et réanimation – Mobile Emergency and Resuscitation Service), which refers to ambulances and response light vehicles that provide advanced medical care, and are based in some local referral hospitals. Other ambulances and response vehicles are provided by the fire services and private ambulance organisations.

The SAMU and the SMUR are free-of-charge services, like the emergency phone numbers (15, 17, 18 and 112). Everything is financed by the public health insurance system (taxes and compulsory social contributions from salaries).

The Toulouse University Hospital hosts also the CCMM (Centre de consultation médicale maritime), the national centre for maritime medical consultations. The CCMM provides permanent and free telemedical consultation and assistance service for any ship at sea. That aims to guarantee access to the best possible quality care for any crew member, passenger or simple occupant of the ship, in liaison with the various medical, operational, administrative and institutional partners of the medical aid network at sea

The Toulouse University Hospital is made up of Hôtel Dieu, La Grave, Purpan, Larrey and Rangueil hospitals mentioned in this text.



Acronym for SAMU according to **J.-C. Franceschi**, anaesthetistresuscitator physician, at the time junior doctor, and large admirer of Father Favrel who appreciated the Latin language!

Michel Favrel, worker-priest of Mission de France (https://missiondefrance.fr/), first SAMU dispatcher in 1969.



Always Care

MORBI HOMINIS

Human diseases



A DEXTRA SINISTRAQUE Left and right UBICUMQUE SUNT

Wherever they appear



ANNIE COQUELIN

40 years at the secretariat of the SAMU and the emergency service recounts the beginnings of the SAMU

In 1968, as soon as I arrived at the secretariat of the SAMU and in the face of the increasing number of patients requesting certificates of intervention we had to establish identification forms.

These forms indicated the patient's civil status, his medical history, a brief diagnosis, the place of hospitalization. Directions, such as "On-The-Spot Care", "Deceased" or "Unnecessary Intervention" were also indicated.

These documents piled up very quickly in the secretariat, a cramped room shared with the Professor Virenque who had "a thirst for numbers".

Annie Coquelin, SAMU secretary, with Professeur Virenque in 1974





Medical Emergency Unit

(2) CATU:
Emergencies Reception
and Treatment Centre

(1) BUM:

After Prof. Virenque had asked the concerned authorities for their consent, each month I went to see the enormous registers of the admissions office of Purpan and Hôtel-Dieu hospitals, those of the BUM (1), the CATU (2), the paediatrics and other services...

The goal was to know the future of these patients, and if the diagnosis made by the SAMU teams was ok...

Unfortunately, despite the help of my colleagues, I only got very few results; the patients did not appear on any register! This went on several months, until the arrival of an IT specialist assigned to the SAMU.

A real detailed medical file was then created. The arrival of a typist-encoder secretary, then of a machine and punched cards, considerably improved the result of our searches...?



Intensive Care unit of the Toulouse Rangueil hospital where Dr. Philippe Michel was hospitalised in 1984.

The beautiful story of **Dr. PHILIPPE MICHEL, MD**

December 8, 2010, amphitheatre of the SDIS 31 (Service Départemental d'Incendie et de Secours: The Departmental Rescue and Fire Service), 1st seminar of the Master of Science in Disaster Medicine, Christian Virenque is preparing to convey to students his experience concerning "Telecommunications in a crisis situation"; a student approaches him and introduces himself "I'm doctor Philippe Michel, I would like to thank you...".

He then tells his story:

I study medicine at Toulouse Rangueil faculty and discover the emergency during an internship at the triage unit of Toulouse Purpan hospital. I prepare a thesis on neuro-traumatology, but I believe that this speciality is unattainable to me.

On August 30, 1984 at 10:15 a.m., I am a victim of a violent face-to-face car crash in the streets of Toulouse, the other driver having run a red traffic light.

As indicated in the medical note established at the SUR (3), I have a severe polytrauma with 13 fractures. I need a blood transfusion. Due to a fractured sternum (the central bone forming the anterior portion of the chest), I stay in intensive care. My lower jaw fractured is surgically blocked.

I gradually emerge from my unconsciousness in the Intensive Trauma Care Unit with days of amnesia. A nail is placed in the centre of my femur after several weeks of a skeletal traction (a procedure that can help realign bones when the fracture is unstable, prior to be fixed with a surgical act).

The surgical aftermath is uncomfortable, lighter however by the presence of my wife.

(3) SUR: Emergency Service of Toulouse Rangueil hospital



The first swimming pool session with weight-bearing seems to me to be a resurrection.

Immediately thereafter, it is the trial period which "opposes" my adversary. A judge (I learned later that he had a score to settle with the medical profession) gives me 6 months suspended prison sentence and one year of driving license withdrawal. Conviction reduced on appeal to a simple fine and one month of license withdrawal.

I manage to defend my doctorate thesis, and I took on a series of substitute/ locum tenens physician positions with walking sticks and many difficulties.

The chance encounters lead me to be hired by a large pharmaceutical laboratory. I travel the world for 12 years. Gradually, despite insomnia and fatigue, I get back in shape of the fighter and the high-level sportsman I was. I even suffered a skydiving accident breaking my ankle already previously damaged!

1998 marks a professional and personal break. I discover emergency medicine as an attached medical staff with various hospitals of the Côte d'Azur (South-East of France) then as a contractual hospital practitioner.

As a full hospital practitioner position goes through obtaining the Master of Science in Disaster Medicine, I'm registering in Toulouse... So, thanks to the accident, I return to the profession who saved me.

DOCTEUR ÉMILE CONTRERAS

Anaesthetist-resuscitator and Emergency physician remembers...

At the start of my medical studies, I took a few on-call periods as a student aboard ambulances of the SMUR of Toulouse for "emergency prehospital interventions"; That's when I started to get a taste for emergencies.

Then I did an internship at the Medical Emergency Unit run by Professor Boulard. It was an excellent learning experience of medicine.

An anecdote comes to mind: a man, in his sixties, suffers from a 3rd degree atrioventricular block (a heart rhythm disorder) and has repeated cardiac arrests. I perform cardiac massage and get the heart pump to restart, but also the repeated awakening of the patient who complains every time he emerges that I hurt him. Finally, the infusion of Isuprel® (a medicine used in the past in certain heart rhythm disorders and certain cardiological emergencies) that I had asked for is there! It ensures a return to normal. It was the first time that I was saving a life. What pride!

Then comes the internship in intensive care where I confirm my choice.

I register for the Anaesthesia-Resuscitation CES (Certificat d'Étude Spécialisée - Specialist Studies Certificate).

During the 3 years of specialization, in addition to anaesthesia in the operating room, and on-call periods at the BRR (4), my activities mainly take place at the SAMU of Toulouse. We eat hospital meal trays there, fortunately regularly improved in collaboration with the on-call resuscitators of the BRR (4). We sleep there in a small room...

(4) BRR: Respiratory Resuscitation Unit



I team up with three other CES of my class: Annie-Claude Epstein, Denise Mathelin and Jean-Pierre Gaston.

Therefore, we take on-call turns either on-site or at home two weeks out of four, or more often during holidays. We didn't never complain.

However, I can't resist talking about my first contact with **anaesthesia**.

(5) CES: Specialist Studies Certificate

I am in the 1st year of CES (5), and I know nothing about anaesthesia: they send me to the operating room to anaesthetize a patient for an abdominal surgery, as the two anaesthetists of the block being overwhelmed. I show up there and I desperately look for an anaesthetist. In the corridors. I meet Dr. M. who tells me not to worry and to do "Pento-Flax", "It will work without any problem". Then he disappears. Great anxiety!!! What to do? I injected Pentothal® and Flaxédil® which I thus discovered. Fortunately, I had a certain experience of emergency and resuscitation! And that went fine. And it continued to go well during the subsequent internships, particularly in ENT (ENT = Ear. Nose and Throat Medicine or Otorhinolaryngology) where for good reason I was far from the patient's head usually intubated, spontaneously ventilated and connected to a 1 m long tube at the end of which was the "anaesthesia balloon". Hello the dead spaces! (Dead space is the volume of air that is inhaled that does not take part in the gas exchange; Here remaining in the long 1m tube) However, my experience of resuscitation still served me and Lacted as a ventilator device

In fact, I am not an anaesthetist at heart because I doesn't like to put people, who sometimes only have one benign pathology, in a coma at risk of not see them wake up. I am connected to intensive care -emergency because that's where I think I'm most useful and that "I'm having fun". During my specialization in anaesthesia-resuscitation I was delighted to be on duty

at the SAMU and the BRR of the Purpan hospital, even if this led to strong constraints that one imagines. This allowed me to often escape the anaesthesia on-call periods.

However, we owed ourselves to sometimes lend a hand to our colleagues at peripheral hospitals. And that's what I did replace anaesthetists at Auch hospital (6) (capital of the Gers department, 80 from Toulouse) and at Lavaur clinic (city in the Tarn department, 45 km from Toulouse). I will always remember Dr. K. who was an old anaesthetist working with ancestral methods. He made me attend one of his anaesthesia; It relatively relieved me because I then thought that I could not do worse. I admit that I have always "hidden" from anaesthesia and not do more. What has never been the case for emergencies, the SMUR, the SAMU and resuscitation.

I have trouble remembering my on-call periods at the **SAMU** because the organization was not as strict as it is now. There were three or four dispatchers including Father Favrel, one priest-worker who had ended up there we don't know how but who was perfectly integrated and very friendly. These dispatchers took on-call turns day and night in the room where all the radio and telephone devices were located. The room where the doctors theoretically stood was an adjacent room whose door was open most of the time. However, de facto there was no segregation between the dispatchers and the doctors. The latter came regularly to answer sometimes the radio sometimes the phone, with no questions asked. Good mood always reigned. We were young. I also think that apart from our youth, our enthusiasm, our cheerfulness and that we never shy away from the task, momentum and professionalism were convey to us by our direct boss, Professor Virengue. He had the gift to communicate to us his passion for his profession and, to what concerns me, for the technique. What does not spoil anything, he actively participated in the improvement of the evening ordinary meals that we made in the kitchen area of the unit during our duty.

(6) CH: Hospital center



At the SAMU, we also participated in a particular action: distress calls from boats which circulated on all the oceans and on all the seas of the globe, and which reached us via radio antennas located in Saint Lys (the former famous short-wave radio station, based 25 Km North-East from Toulouse - https://trafficlist.altervista.org/history-of-st-lys-radio-first-part/). These calls seemed somewhat magical and seemed come from the Afterlife. I remember a distress call made by the captain of the merchant ship Bertrand Delmas. Who knows why this name has remained engraved in my memory. I provided some medical advice and diverted the ship to the nearest port: What power!

During my **SMUR interventions,** I discovered all human misery.

I remember this call in winter from the firefighters for the start of a fire with a possible intoxication by fumes. Upon entering the apartment under the roof, I discover a young girl of about twenty years old who had been sequestered all her life by her fifty-year-old mother. She was curled up, naked, in a corner of the only room, frightened by humans she didn't know the existence. The floor, like the bench used as a bed, was covered by newspapers, some of which in front of the fireplace had started to catch fire, releasing blackish smoke which had trigged the call of the neighbours.

Another time, it was the junior doctors who went by an Estafette (an old French popular van manufactured by Renault used as an ambulance) to an elderly lady who had an unexplained loss of consciousness at her home. The neighbours contacted the SAMU because the lady did not answer their calls. I was on-call. The students who didn't fully understand the origin of the discomfort asked me to come for support. When I entered the only room which also served as a living room and bedroom, I understood in less than a minute the origin of the collapse: the poor lady who lived in a filthy dirt was covered with a multitude of fleas who had literally pumped her blood.

Time to make the diagnosis, to put on a drip and to start "filling" (to compensate the blood loss), I saw my blouse fill with small bouncing black spots. I gave some quick advice to the students for the rest of the events, and I too jumped outside the apartment, urging the ambulance driver to quickly return to the SAMU. Arrived in our facility, we each rushed towards our own room by throwing without shame our belongings all the way along the corridor to quickly go take a shower rarely so welcome.

Besides that, **some memorable laughs**. Some unforgettable.

A young woman falls from a moped in Toulouse. The firefighters call us, and I accompany the students in the Estafette to supervise them. Upon arrival, we diagnose a head trauma with loss of consciousness: the lady whom we guestion does not remember anything. We end the clinical examination and decide on hospitalization for control and monitoring. Mrs. Jane Doe asks us: "But what happened?". We had already explained it to her, but we start again patiently: "Your moped skidded, and you hit your head on the ground". We start to leave towards Purpan hospital, and I stay in the rear passenger compartment with the patient and a student. Five minutes passed and the patient asks: "But what happened to me?". I start again explanations with some variations to avoid repetitions. The ambulance driver and the students start to smile. And it starts again every 3 minutes. And I add each time, with an extra touch of mischief, to the extent that after a quarter of an hour everyone collapsed with laughter, including the lady who still doesn't understand anything. The ambulance driver has (also) a hard time in the stretch before arriving at the hospital. Finally, everything ended well for everyone.



I particularly remember three women ambulance drivers who were called Casa, diminutive of Casanova, Toutoune, Antoinette's nickname, and Arlette. They drove particularly well and what's more they were very effective in the field. Moreover, apart from the seriousness they expressed during work, they liked to laugh just like me.

To deliver hospital-to-hospital transports, our ambulance was a very large Mercedes station wagon which swayed a lot in the turns. I remember that on several occasions I had severe nausea so much so that we sometimes wondered who was the sickest: the patient who was in the ambulance or myself. Once we were forced to stop at the roadside because I was having violent vomiting.

At that time, resuscitation in peripheral hospitals was not very advanced and we intervened sometimes for futile reasons: one day we went to Rodez (the capital city of the department of Aveyron, 160 km from Toulouse) to give an injection of corticosteroid (an anti-inflammatory medicine) to a child who had laryngitis and who we left there to return immediately.

Very often we went to hospitals or clinics whose equipment was then very limited. This is how I remember being obliged to put on more than one occasion a sick person who was in ventilatory distress across the bed, and to lie under it so that I could intubate the patient in such particularly difficult acrobatic conditions. We cared for both children and newborns, as well as adults. For example, we sometimes went to maternity wards to bring back newborns. There was no battery incubator, and we had to tinker with some of them. We even have ended up choosing incubators that we have made from polystyrene shells to preserve the baby's temperature as much as possible.

Furthermore, I think that we also allow an upgrade of the artificial respirators, which were unsophisticated at the time.

Our favourite means of transport, whether for prehospital emergency one or for hospital-to-hospital one, was the helicopter. At the beginning we had at our disposal throughout the year an Alouette II of the gendarmerie based in Francazal (an air force base near Toulouse). This aircraft was not very convenient because there was not much space. Then we were able to have an Alouette III from the ALAT (the air support service of the army land forces) based at Pau airport (the capital city of the department of Pyrénées-Atlantiques, 190 Km from Toulouse) but only during summer periods and Easter holidays. It was much more convenient for everyone. We quickly fraternized with the pilots whose dedication, will, and skill were appreciated.

I remember three anecdotes

The first takes place while we were going to Auch hospital in the department of Gers by a foggy weather. We were flying pretty low. On two occasions we were obliged to get closer to the ground to be able to read the road signs indicating the direction of Auch. What fear!

The second took place when we went to pick up a patient in Rodez while there were anti-militarists demonstrations targeting the military installations located in Larzac. Imagine our apprehension when we flew over Rodez, and we learned that there were these demonstrations against the military while we were in an Alouette III of the army. Fortunately, the demonstration had scattered when we landed on a place near the hospital. I still got a sign left there by a demonstrator on which was written: "Let's stop Debré from braying" (Michel Debré was the defence minister at the time, 1969-1973). I brought it back to the SAMU as a souvenir.



The third could have been dramatic. We are called to a traffic accident near the state road 113 in the south of Toulouse. The indications are imprecise and, moreover. it is quite difficult to spot an accident from the sky. We fly over the road at low altitude when I suddenly indicate to the pilot the presence of the accident on our left. Maybe because my signal had been somewhat abrupt, the pilot made a sort of swerve to the left and dived towards the around to restore the helicopter twenty meters from the ground. During the dive, everything who was in the passenger compartment, including all our medical equipment, is mounted towards the ceiling. Fortunately, I was strapped into my seat, and I didn't move but I felt all my organs coming back up towards my head. However, we have landed without problem, and I was able to take care of the injured person, put him in a good shape and take him by helicopter to Purpan hospital. I was amazed by the composure and the quality of this piloting, and I expressed it to this young pilot who has since become a friend. It was then that he admitted that his manoeuvre had been somewhat abrupt and that, in fact the helicopter had fortunately "dropped out" for a short moment only. Looking back, I got very frightened.

These years spent at the SAMU and the SMUR in Toulouse were very enriching for me. The fact to be left on my own and to have to manage very complex situations in difficult contexts taught me to react very quickly and to keep cool in all circumstances. It was very useful to me throughout my professional career.

The entire team of the respiratory resuscitation unit (BRR) of Purpan hospital was extraordinary and I loved to work there. There was the rotunda shape with its 10 "hot beds" and an intensive care wing with "lukewarm beds". I participated very regularly in the morning visit, and I watched all the actions of the doctors with exceptional qualities such as Professor Christian Virenque, Dr. Marie-Françoise Jorda and Dr. Annie Brouchet, as well as senior doctors who succeeded each other (I really liked working with Michel Krempf who was both an excellent clinician and a man with

an irresistible sense of humour). I really learned my job with all of them and it was very useful to me later. The on-call periods were sometimes very harsh, but I always carried them out with enthusiasm. I appreciated particularly the rotunda shape of the resuscitation unit.

An anecdote comes to mind: during his first on-call period at the respiratory resuscitation unit, Doctor Counillon, a senior doctor, had a particularly difficult night. All the sick people he has had to manage were in very critical situations and during the night, he lost six of them out of the 10 who were in the rotunda. The next morning, he was devastated. We cheered him up by gently making fun of his clumsiness during this night which nevertheless had been tragic for him. He had not luck, that's all! and neither do the sick, alas!

Plunged into this difficult medicine, I have yet another time learned a lot both medically and technologically. Resuscitation was booming. It was necessary to master all these machines but also demonstrate a lot of imagination to implement treatments that high technology had not yet invented. For example, to apply a positive pressure at the end of an expiration, we inserted in the expiratory circuit a jar filled with water up to a certain height in which a stainless-steel pipe was dipped in. But there were many other examples. Professor Virenque was the handymen king, and his inventions were brilliant. I got often inspired by him.

During summer of 1974, I met Professor Lareng in the corridors of the service, and he told me in his gravelly accent of the Hautes-Pyrenées: "Contreras, you must go to **Auch hospital** which has just been rebuilt and which needs you to make its emergency service working".

Of course, I didn't respond right away because this announcement had a bomb effect. I lived in Toulouse with all my family. I had just moved there. And I worked at Purpan hospital within an extraordinary team and in which I felt good. I saw my future mapped out there.



What to answer?

The decision was very difficult to make because it was brutal. I didn't want to disappoint my master Mr. Lareng and I told myself that the experience was worth living. It was an opportunity to prove myself.

This is how I joined Auch hospital on October 1st, 1974.

Almost everything had to be done.

I think Mr. Lareng must have been happy because I succeeded in the assigned mission. Thanks to my solid Toulouse experience, an emergency reception service, an intensive care unit, a SMUR, and a SAMU very closely linked to the firefighters and general practitioners were quickly operational.

The following anecdote will show how lucky I was: within a few days of the start-up of the SMUR, our intervention vehicle with a medical student was called for a serious traffic crash in the upper town of Auch. The firefighters who had arrived on site before us confirm the seriousness of the situation. Listening to the radio at the SAMU, I then decided to take my personal vehicle, and to go to the scene because I feared that the student would not be experienced enough to deal with the situation

When I arrived there, I saw a lady of a certain age who was lying on the road and unconscious. She had been hit by a car. There were firefighters, police, and a crowd of onlookers watching the scene. Everyone considered that the brave lady had died. Her head was bloody. She had lost consciousness and was no longer breathing. In fact, I quickly noticed that her pulse was still beating but that her upper airways were blocked (this is often the case in an unconscious person lying on the back: the tongue obstructs the throat). I just had to free these airways, and the injured woman started breathing spontaneously. I then ventilated and oxygenated her with a mask, and she awaked. This had an extraordinary effect on the

onlookers who were present. A local journalist was among them. The next day, the press headlined: "She was dead, she is resurrected". A boon for the image of the SAMU."

Dr. Contreras in support to the SMUR of Auch in 1974



CHRISTIAN VIRENQUE

talks about falling off his bike

On July 14, I'm on vacation on the Island of Beauty (Corsica). Looking forward to patriotic events of the "Bastille Day" to which I am invited to in the afternoon, I leave early in the morning on this cornice road overlooking the sea. The ride is pleasant, traffic is almost zero, the silence is intense with the distant sound of the sea. It must be 11 o'clock and I am on the way back from my cycling loop.

Around 12 p.m. or 1 p.m. I see myself lying down on a bed in a hospital, a little bit like ex-corporealized. Caregivers are busy around me, then everything becomes blurry.

Later, I am in a helicopter which takes me away. New hole, and it's waking up in a another more modern and bigger hospital. I am then entitled to some explanations.

I had a cycling accident. But no one can explain to me the circumstances. My cranial trauma made me say some strange things. To dismayed gendarmes, I apparently declared that my bike doesn't belong to me!

The local SMUR carried me to the emergency medical unit (AMU) of Calvi, famous for its Genoese citadel.

Many fractures and a consciousness well altered by an effective analgesia make one decide my evacuation to the Bastia hospital (the capital city of Northern Corsica). The "Dragon 2B" helicopter is mobilised (the civil protection helicopter providing emergency rescue and transport in Northern Corsica – 'Dragon 2B' is its radio callsign). At my arrival they pull out all the stops: scanning, etc.



This fall was an opportunity to test by myself the effectiveness of emergency medicine to which I always believed passionately. From the gendarmes who picked me up a few meters below the road up to the Bastia hospital, include the SMUR of Calvi, all the links of the chain operated perfectly. I finally came out okay.

A time of my life has certainly been erased and that is very frustrating. But I regained my bike rides. It is the life. And it's priceless. $\ref{eq:property}$





The SAMU team around Louis Lareng in 1980



The SAMU team around Christian Virenque in 2002



The SAMU team around Jean-Louis Ducassé in 2016, on a convivial moment during the departure of Dr. Christophe, Dr. Ducassé and Dr. Villacèque



The SAMU team around Vincent Bounes in 2017



8 QUESTIONS

ASKED TO

4 HEADS OF SERVICE

WHO HAVE SUCCEEDED EACH OTHER OVER A HALF-CENTURY AT THE SAMU 31

QUESTION N° 1

What is your older memory concerning medical emergency?

LOUIS LARENG

In memories of the medical emergency, there is one that comes to mind. It conveys the necessary consensus which seemed essential for the creation of the SAMU, between the different emergency stakeholders who worked separately until that point. Louis Lareng then recounts his best memory (see question and answer 2).

CHRISTIAN VIRENQUE

I'm 18 years old. I'm driving my 2CV (an old French popular car model manufactured by Citroën) on the way to the department of Aveyron for holidays.

A few kilometres after Montastruc city, I virtually witness live a car crash; the vehicles are totally dislocated. Several cars stop, and the road is almost obstructed. Totally incompetent, I'm not interested in the injured.

The engine of one of the vehicles is still running. Gasoline flows onto the road.

This risk of fire is clear to me.

I turn off the vehicle's ignition and await rescue which take a long time to arrive.

JEAN-LOUIS DUCASSÉ

My first on-call period in the SAMU in 1975 as a student doctor: extraordinary feeling of practicing medicine in places where I have never been before; during my first on-call duty, I went in the jail of the Central Police Station, in the office of an investigating judge at the courthouse, in the safe room of a bank... and each time the need to practice emergency medicine was a reality in unsuitable places.

VINCENT BOUNES

My oldest memories go back to my on-call periods as a student doctor at the emergency reception service of Purpan hospital.

I really liked this atmosphere, this tension, this humanity, this effectiveness... But my "old" significant memory remains September 21, 2001, the day of the explosion of the AZF factory. I was a student doctor, in the middle of the harvest period as I am a vigneron too. Upon learning of the explosion, I came to offer my services at the SAMU 31. They did not need me, but I remain marked by the engagement and the humanity of these men and women.

QUESTION N° 2

What is your best memory of emergency medicine?

LOUIS LARENG

Several years ago, close to Christmas Eve, the SAMU was called because of a serious car crash on the Saint Michael bridge in Toulouse. I took charge of the medical part of the rescue team which included firefighters, SAMU, and police. Without the complementarity of skills and the pooling of all these means at the scene of the crash, one injured person could have died. He required a difficult extrication manoeuvre. Appropriate anaesthesia was necessary to release him from the sheet metal. Pain from any move stopped the intervention. That has lasted 2 hours 30 minutes. The patient was saved. He owes his rescue to the police who made possible to intervene in calm, to the firefighters who were extricated with precautions, and to the SAMU which removed the pain and permanently resuscitated him until his hospitalization. The formula which was the line of conduct of this entire team was respected, "from the foot of the tree to the hospital, people come first: for this we must experience emergency."



(7) VL: light car

CHRISTIAN VIRENQUE

We started making a film about polytrauma patient. Together with the video team, we are waiting for the opportunity to capture authentic images "in live".

From the 2nd day, the circumstances are good for us: a car goes off the road around thirty kilometres from Toulouse, there would be a seriously injured...

It is a light vehicle (7) of the SMUR which intervenes for this accident. The movie team follows in another vehicle.

Indeed, the camera can capture the "SMUR big game": intubation, macromolecules, analgesia, and the first aiders skills: a great style extrication.

The arrival at the centre of the rotunda of the intensive care unit shows the taking over: artificial respiration, transfusion, etc.

Haemostasis hepatectomy and then trepanation for an intracranial hematoma occur in a few hours.

The surgical outcomes are "exemplary".

The hydro-electrolytic and nutritional resuscitation is orthodox...

No problem during the rehabilitation; That is filmed in a second phase...

The film can is then closed.

A year later, it is shown at the auditorium of Paul Sabatier University in attendance of the injured person; he is offered a copy of the film. On a medical film festival, our film is rewarded. That goes straight to my heart as well as to our entire team.

JEAN-LOUIS DUCASSÉ

A successful cardiopulmonary resuscitation of an elderly woman who appeared with the external signs of death: lying on her bed, hands joined, rosary, candles, band around the head holding the chin...That allowed me to see that medicine must know how to go beyond appearances.

VINCENT BOUNES

Hard to say, there are several. Childbirths, always a great moment of pure happiness. Giving birth to a child is for me a challenge and a great satisfaction. My most striking intervention was undoubtedly care of a young man at Place du Capitole (central square of Toulouse) one evening of a rugby match, for an under xyphoid knife wound (the lower tip of the sternum). Thanks to an ultrasound machine I diagnosed a cardiac wound tamponade (the fluid sac around the heart fills abnormally, here with blood). We were able to arrive just on time at the cardiovascular surgery block. My memory is that we literally fled above the road with a patient who required all my attention... But he was healed without after-effects. I didn't believe it.

QUESTION N° 3

What is your worst memory of emergency medicine?

LOUIS LARENG

Memories of my many interventions, some of them are painful to me. These are the ones that remind me that we were unable to resuscitate someone despite a deployment of a very intensive monitoring. This is the risk faced by road crash and cardiac arrest victims who can suffer from by an irreversible coma. We experienced a great fatigue or even a moral exhaustion because we felt like a great defeat in our fight against death. Our strong desire to save lives fortunately resumed very quickly its strength. Great scientific progresses come true on this point.



CHRISTIAN VIRENQUE

My charge of manslaughter after the death of a patient who received an injection of Droleptan® during his transport from the police station to the hospital (a sedative neuroleptic).

JEAN-LOUIS DUCASSÉ

The announcement to the daughter of this elderly woman that her mom was not quite dead and not quite alive... allowing me to see that emergency medicine like medicine in general is not an exact science but a human science being made of more doubts than certainties. And faced with the total incomprehension of his daughter, faced with my action, my growing discomfort, becoming extreme, to have "upended" what seemed an established order, only disappeared when this elderly woman was discharged following her voluntary drug poisoning.

VINCENT BOUNES

The death of a patient despite a medical care that I considered optimal. The whole team was shaken that day because the patient feeling like he was dying asked us for help, and that despite all our attention, we couldn't bring it to him. I really figured out my limits. We had always to remain humble, human and empathetic.

QUESTION N° 4

What were the brakes and who were the allies in Toulouse which participate in emergency medicine?

LOUIS LARENG

The first obstacle to all innovation is the culture. Innovation is firstly dependent of a change in lifestyle habits. This is understandable because it is necessary for the interlocutor to own the proposed solution that it has not vet proven its effectiveness. This change may also cause fears about living and working conditions. Anyway, it seems that the people of Toulouse adhered very quickly to our proposals. They very quickly understood that we worked to widen the outline of the yellow lines unsuitable for our times. They judged that this was feasible to obtain, and that we were not in a blind path of impossible promises to achieve. Many have made known publicly this position: the University Hospital, the peripheral hospitals, the administration members at regional and central levels, including René Coirier, head of office at the Ministry of Health, the written and the spoken press, personalities such the General commanding the regional legion of the National Gendarmerie, and the Director of the Departmental police. Proof of total support of the city of Toulouse was the authorization to experience the SAMU daily in a limited time from 5 p.m. to 7 p.m. There were very strong oppositions; anyway, they rallied very quickly. However, the law of February 6th, 1986, for which I was the rapporteur, was necessary for the creation of the SAMU in all French territories. May I remind you that the SAMU was established at Toulouse University Hospital in 1968.

At the foot of the tree, it introduced into practice the principle of the Shared Medical Record.



CHRISTIAN VIRENQUE

Administrative and medical decision-makers who present us as cowboys drawing intravenous catheters, or as kids playing with their SAMU as with an electric train. But also, those jealous of our effectiveness which they find too publicised by the media did not facilitate the development of the emergency medicine.

Doctors, directors, nurses, rescuers and above, all lucid journalists greatly supported our efforts.

JEAN-LOUIS DUCASSÉ

In my opinion there is nothing specific to Toulouse. The brake is the non-acceptance of emergency doctors by the rest of the medical community (except for the SAMU one). The future will be better when an emergency doctor who has received a person with an abdominal pain and has diagnosed an appendicular syndrome, will have his patient admitted to a speciality department without the surgeon coming to check the diagnosis of his colleague. Beyond the emergency medicine in the first sense of the term. Toulouse was fortunate to have a culture of emergency medicine with quality teachers (Ch. Virengue, B. Cathala) without forgetting the disaster medicine that their successors are trying to maintain.

VINCENT BOUNES

Being a young doctor, I have few opinions regarding the past of emergency medicine in Toulouse. I believe it was able to develop thanks to passionate, charismatic doctors, who have, beyond generations, carried the torch and passed it on. These are the ones that I recognize as my masters, in the Hippocratic sense of the term (from Hippocrates, an ancient Greek physician the "father of European medicine" who is credited with founding the study of medicine. French doctors take the Hippocratic Oath that

states the professional conduct and obligations of doctors, emphasizing ethical, deontological and professional standards).

QUESTION N° 5

What medical speciality (anaesthesia, resuscitation, emergency, telemedicine) brought you most satisfaction?

LOUIS LARENG

It is difficult for me to choose among the specialities the one that gave me the most satisfaction: anaesthesia, resuscitation, emergency or telemedicine.

In fact, at the Toulouse University Hospital, anaesthetists very quickly became anaesthetist-resuscitators, emergency physicians, and often innovative people in this new medical practice that is Telemedicine.

I am unreservedly faithful to the peasant proverb: "Don't forget who made you king." Anaesthesiology was the speciality that satisfied me the most as it introduced me to the world of specialities. It is this discipline which is at the origin of the greatest number of positions created throughout the world in medicine whether in the public or private sector.

CHRISTIAN VIRENQUE

The emergency medicine for sure because it is the one that is almost constantly and macroscopically the most effective.

JEAN-LOUIS DUCASSÉ

First, resuscitation as contacts with the patient and his entourage is essential... In second, emergency medicine as the feeling of usefulness is key... but limited in time.

VINCENT BOUNES

Very difficult for me to cut into pieces the facets of my job. I finally feel less "anaesthesiologist" since I do not practice in an operating room. But the contribution of my first speciality is invaluable, both in the rigor specific to



QUESTION N° 6

Do you think that emergency medicine in Toulouse is better than elsewhere in France and in the world? What are its weaknesses and its strengths?

anaesthesia and resuscitation, as in the clinical experience and the technical expertise it provides. I will say that my satisfaction is whole in the multifaceted exercise of emergency medicine.

LOUIS LARENG

All the doctors in Toulouse who practice emergency medicine are enthusiastic and heart-driven engaged. They are combative on the ground. They keep their enthusiasm which commands admiration, even when the emergency services increase their activities over time. Seeing them at work, it is logical to think that we benefit from an excellent emergency service that can compete in the top of the best. In the interest of patients, I openly agree with this. My students who succeeded me at the SAMU in Toulouse, Professor Christian Virenque and Doctor Jean-Louis Ducassé contributed to continue to strengthen and amplify this reputation.

It must be admitted that emergency services in Toulouse benefit from renewed constructions adapted to needs. The SAMU was the catalyst element. Over time the investments have supported the needs in relation to the number of entries, in surgical and medical devices (respirators, iron lungs), etc. Very high-quality doctors and surgeons have been and are in charge of medical and surgical emergency services. Complementing the outside hospital SAMU work their beneficial action proves essential and very effective.

A territorial organization will only be able to settle the exponential spiral of the number of entries. The SAMU must be able to hospitalize directly in specialized services at all costs. It's an approach to reinforce and to amplify to improve the reception of emergency cases.

This is a courageous direction to take for the renewal of the organization of health services. The SAMUs, handling competently regulation and direction of emergency cases, require staff, construction of emergency service premises, as they lack places, and their staff are overloaded with work. The mental strength of health staff remains a strong element which helps to face the general problem of a shortage of health professionals in the territory. Hospital emergency is also demanding, and this is important for a quality of care which integrates the healthcare pathway of the sick and the injured people..., in an extra- and interhealth facilities territorial logic. Telemedicine will be the basis for the strengths for the decompartmentalization and for encouraging generalization of the Shared Medical Record. In the views of our scientific societies, will it not remain in history as the Personnel Medical Record paradigm?

CHRISTIAN VIRENQUE

Toulouse combines all types of emergency medicine and emergency telemedicine. Its seniority of know-how in helicopter-borne medicine, in hostile environments and in disaster situations, and in quality evaluation, puts Toulouse emergency medicine as one of the European top leaders.

Performance in the medico-social and psychological field must be improved.

JEAN-LOUIS DUCASSÉ

Difficult to answer: What could be the criteria of such a comparison judgment?
Its strengths:

 Historically, a good transition from anaesthesia resuscitation and internal medicine towards emergency medicine.



 Good relationships currently between prehospital emergency medicine and reception of emergency cases at hospital.

Its weaknesses:

- The inability to date to have been able to promote the academic side of the emergency medicine: a single full university hospital professor, no senior doctor positions...
- The absence of paediatric emergencies in the emergency medicine pole at the Toulouse University Hospital.

VINCENT BOUNES

It is certainly at the forefront of emergency medicine on a global scale. I have an experience of emergency medicine in the USA, and, in my opinion, we have nothing to envy them. The strengths of the emergency medicine are probably its history and its memory, its search for excellence, its passionate men and women and the exponential development of international research and publications.

QUESTION N° 7

Is emergency medicine fragile and threatened by financial constraints and a physiological fatigue after the initial enthusiasm?

LOUIS LARENG

Emergency medicine is certainly under threat of financial constraints. To settle them sustainably, we must adjust the needs in relation to a territorial organization integrated into the healthcare pathway. Until now, we have experienced emergency medicine, such as the SAMU, as an additional service. During the growth of the SAMU we have recourse to dedicated recruitments and budgets. In the societal disturbances caused by information and communication technology, the will of the State to renovate the health organization in France should integrate the emergencies, including the SAMU, in this desired organisation of the healthcare pathway.

"From the hospital outside the walls, from the creation of the SAMU, we need to evolve through telemedicine towards a hospital without walls." In response to the initial enthusiasm of our colleagues, modifications alone without organization cannot resolve the problems posed. They can potentially lead to moral fatigue through a feeling of helplessness in the face of the risks incurred in the field.

I hope that initiatives could improve this situation such as the regional health digital space, the Shared Medical Record, etc.

CHRISTIAN VIRENQUE

(8) CESU: Critical Care Teaching Centre. Toulouse was able to find favourable financial arrangements for the helicopter and for the CESU (8).

Let's be imaginative...

To diversify the activities of emergency physicians in many sectors while preserving their versatility. For the future, we must smooth the workforce over a period beyond a halfgeneration.

JEAN-LOUIS DUCASSÉ

I don't believe in the physiological fatigue but rather in the buy-in by the "new generation" of texts on work time which complicates acceptance and response to the emergency medicine constraints, and to its activity in continuous time.

Financial constraints are only the consequence of the strategic choices of our governments regarding emergency medicine: either it is the pivot of the continuity of care, and it will have means, either the latter is dedicated to liberal medicine, and thus emergency medicine will have to endure financial constraints.



VINCENT BOUNES

I don't believe. Being young, I am necessarily a little more optimistic. I think there will be always motivated and dynamic stakeholders who will know how to carry the torch, following the example of the emergency medicine pioneers. In these times of crisis and budgetary restrictions, we must all be vigilant to bring the best care at the fairest cost for our patients.

QUESTION N° 8

Emergency
medicine
increases the
quantity and the
quality of life. If
it is applied and
optimized in all
the countries
of the world,
are we heading
towards a
paradise or
a violent
and hungry
overcrowding?

LOUIS LARENG

In relation to paradise, I will answer that medical progress tends to provide better care and better living, and can offer us happiness only if they can apply to all humanity and even beyond. This is inseparable from our desire for research and applications. It is in this dynamic that we have integrated a spirit of ethics and deontology which imposes to us a moral conduct which cannot tolerate that the permanent humanization inhabiting us cannot submit to the blind rigor of technology.

CHRISTIAN VIRENQUE

Nothing prevents the emergency physician from investing in humanitarian medicine, and in social, trade union, associative or political action to limit or reduce poverty, famine...

JEAN-LOUIS DUCASSÉ

I think that the increase in the hope of life (and of its quality!) is essentially linked to external factors to the medical practice: genetics, hygiene, food, sanitation. It is usual to quantify the share of medicine in this longevity increase around 20%. Within this 20%, it is evident that emergency medicine allows to fight against the negative effects of our "consumer society": cardio- and neuro-vascular diseases mainly.

VINCENT BOUNES

Life expectancy can only increase. According to me, the true cause of global overpopulation lies in the lack of mastery of the control of births. An international health education action is needed regarding contraception.



1968, SAMU 31 is already at the forefront of progress, experimenting telemedicine...





En 2018, SAMU 31 uses its new tools: It's a SAMU 3.0.

