



Annual Report 2018

Doctors *for* Madagascar

Dear friends, supporters and donors of Doctors for Madagascar

Madagascar is a place to fall in love with. From the buzzing capital Antananarivo, to the dry savanna in the island's south to the palm-ringed villages at the coast - the beauty of the country and its people is ever-present and ever-new.

But at the same time, there is extreme poverty: approximately 75% of the population live on less than US\$ 1.90 a day. Not even 15% of households have access to electricity and the population is growing rapidly. Clean water is scarce and diarrheal diseases and malnutrition are widespread. About one third of Madagascans are infected with tuberculosis and the rate of maternal mortality is high. To make matters worse, 60% of Madagascans live more than 5 km away from the next medical facility. Especially in the infrastructure-poor south, this is a real challenge: daily we struggle with the procurement of drugs, medical equipment, construction materials or furniture, which have to be ordered weeks in advance, as little is available locally. Roads riddled with potholes and covered in water or sand can make transport of people and materials almost impossible. The lack of power and inconsistent internet connection are a constant challenge.

Nevertheless we are upbeat about the future - thanks to a few high points in 2018:

Our work to improve maternal and newborn health are being supported by the *Else Kröner-Fresenius-Stiftung* and the *ALTERN AID Foundation* for another three years! This decision followed two successful project evaluations through the Madagascan ministry of health and the *Else Kröner-Fresenius-Stiftung*.

One area of focus in the past year has been the scientific evaluation of our projects: We want to better understand the reasons for the lacking health care provision in Madagascar and measure the effects of our interventions. For this, we have won the *Institute for Global Health* of the University of Heidelberg and the Berlin-based *Charité University Hospitals* as new partners.

We are also active in one more region of the island: Analamanga, in the central highlands of the island. There, we concentrate primarily on protecting people from the financial risks caused by illness and have developed a mobile health wallet for this purpose.

Would you like to know more? All information about our activities in 2018 are in the pages of this report. Madagascar is waiting for you!



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mTOMADY - new ways to protect from medical impoverishment

mTOMADY = healthy / strong (Malagasy)



This cartoon drawn by a Malagasy artist explains how mTOMADY works to potential users. This and more can be found on mtomady.com



No money, no treatment - this is a common problem in Madagascar. Many sick people don't even go to the doctor because of this, for there is no public healthcare or insurance system.

But what is even more worrying: Every year more than half a million Madagascans are pushed into extreme poverty by healthcare costs. Many simply don't have the option of putting aside money as healthcare savings, for almost nobody in Madagascar has a bank account. A mobile phone however, or at least a SIM-card, almost everybody owns. This sparked the idea for this project:

With a team of software developers in Germany and Madagascar, law and finance experts, scientists and many volunteer helpers, we have developed a way for Madagascans to save money for healthcare - using a mobile health wallet on their phones. Saved funds can then be sent directly from the mobile health wallets of the patients to the health centres. At the same time, the system checks the bill to make sure the price paid is within the expected range, to prevent intransparent price gouging and additional costs to the patients.

As of October 2018, the health wallet is reachable using a USSD short code from the Madagascan phone network - without any need for an internet connection or a smartphone. In the pilot phase, this tool is now available to pregnant women in the region Analamanga. The next step is to make the health wallets available in other parts of the country.

This life-saving project would not have been possible without the generous support from the *Else Kröner-Fresenius-Stiftung* and the work of the *Berlin Institute of Health* and *ThoughtWorks Germany*.



10 partnering health centres
(agreed fixed prices for pregnancy care and the use of the health wallet)

457 pregnant women
using the health wallet to
save for their healthcare

1,200 pregnant women
were taught about health-related issues
during home visits and group discussions

An mTOMADY user checks the current state of her mobile health wallet savings.

Safely through the pregnancy

Thanks to the generous support of the Else Kröner-Fresenius-Stiftung, genialsozial and the ALTERNAID Foundation, our project to reduce maternal and neonatal mortality – “Vohoka leren Doza” – can enter its next phase.

The chance of death due to pregnancy complications is high in Madagascar – one in 55 women will suffer this fate. Neonatal mortality, too, is high, often caused by lack of oxygen during delivery, infections or complications during premature births. Antenatal checkups could help to identify risk factors early and help to direct preventative care for pregnant women and point out risky deliveries necessitating the presence of a qualified birth attendant.

But this is only possible if pregnant women decide to seek medical care – but right now, only

44% of women give birth in the presence of a skilled attendant, in a few rural areas it can be as few as 10% of pregnant women who deliver in a health centre or clinic. The reasons for this are manifold, including intransparent costs and the need for out-of-pocket payments, but also long distances. But more than anything, there is a lack of knowledge about the possibilities and importance of medical care during pregnancy and birth.

For three years we have now been working with a growing number of health centres and reference clinics to intensify collaborations to improve care for pregnant women and new-borns. Currently we are supporting 50 health centres and four reference hospitals in four regions of the country, with great results in reducing the deaths of mothers and new-borns.

93 active community health workers

4 reference hospitals

50 Basic health centers

77 pregnant women came to the health centre in Tanantsoa to get an ultrasound exam.



90 sensitisation campaigns

11,147 safe deliveries

54,383 antenatal check-ups

312 emergency transports
by ambulance

3,857 women surveyed
about patient satisfaction

8,278 antenatal ultrasounds

655 treatments of serious
pregnancy complications

Familiar faces and suction bells

Over a period of four weeks in November 2018 we conducted training courses for 50 local nurses, midwives and doctors, in the towns of Fotadrevo, Ejeda, Fort Dauphin and Manambaro organised by Doctors for Madagascar. The primary goal was to improve the quality of care and treatment for pregnant women, women giving birth and their newborns and thus enhance safety for mothers (to be) and their children.

Our offer of training, the second of its kind, was again accepted with joy and many excited and enthusiastic participants came with their questions and requests. The practical sessions in particular were great fun for both trainers and learners. It was lovely to see some familiar faces from our 2017 aid mission and impressive to learn how much of last year's training had stuck.

Besides the training, we of course were also available to help with emergencies. In Ejeda for example we were able to assist with a complicated vaginal delivery and cared for a patient suffering eclampsia. In Manambaro, we helped with a delivery by suction bell and performed a C-section on a patient in the 28th week, suffering a case of placenta previa. We cared for sick newborns and, by request of the hospital director in Manambaro, performed diagnostic tests on young women suffering from obstetric fistulas. As far as possible, we always included the training participants in emergency care and diagnostic tests.

Claudia Schweppe-Unruh, midwife, and gynaecologist Dr Martin Frank of the Hamburg charity Fanajana e.V. (www.fanajana.de) have already performed multiple trips to Madagascar. The obstetric training courses were made possible by funding from the *Wienbeck foundation*.



Claudia Schweppe-Unruh after a delivery in Manambaro. After having been called from the lesson to the delivery room, the experienced midwife diagnosed concerning heart sounds. The suction bell was needed to make the delivery a success.



Dr Martin Frank demonstrates an obstetric ultrasound at a training event in Ejeda.



Under investigation – scientific evaluation of our work

One thing we have learned from many years of working in Madagascar is that the problems we tackle are often far more complex than they seem at first and require equally complex solutions. To better understand the status quo and to be able to measure what impacts our work is having, we have started a number of surveys and studies:

➔ **In the region of Analamanga we are asking:** What are the obstacles to accessing antenatal care? Are pregnant women saving money prior to delivery? How do pregnant women manage the financial risks of delivery? For the mTOMADY project, we have surveyed 400 pregnant women and 21 healthcare experts regarding their opinions and experiences.

➔ **In the regions Atsimo-Andrefana, Anosy and Androy, we measured patient satisfaction:** In the south of the country, pregnant women often have no choice about which health centre they deliver in. The project “Vohoka leren Doza” (see p. 8-11) surveys the experiences of young mothers in our partnering health centres. Long waiting times, poor hygiene and drug supply issues were revealed and could be addressed together with the leadership of each centre. A team of professional interviewers has already spoken to more than 4000 pregnant women.

➔ **Another study focusses on strokes:** Many people in Madagascar suffer stroke, but hardly any reliable numbers exist. As part of the “Tana Stroke Study”, one German and two Madagascan medical students have spent weeks working through files of a major hospital in Antananarivo, checking the criteria used to diagnose more than 400 stroke patients. There is no dedicated treatment path for stroke in Madagascar, making prevention and treatment of risk factors all the more important.

This work is made possible by the technical support provided by Dr Till Bärnighausen and his team at the *Institute for Global Health* at the university of Heidelberg and colleagues at the *Charité* Berlin.

Curious? We want to share our results! **Our first publication can be accessed here: doi.org/10.2196/11420**

◀ *Our interviewer Elphine asks a pregnant woman about her experiences at the health centre of Ampitanaka in the Ejeda region. How will she rate the quality of her latest check-up?*

Saving lives!

Very few families in Madagascar have any kind of healthcare plan. To be treated in a hospital, they would have to raise significant amounts of money, which many are not able to.

This is why we cover part of the treatment costs for destitute, severely ill patients who would otherwise be left without. This project - 'Saving lives' - is made possible by funds from the *Ein Zehntel Foundation* and your donations.

17-year-old Pelatsena from Mandiso in the Anosy region in front of her house. She cultivates rice to make a living. In each individual case, the workers of *Doctors for Madagascar* use a questionnaire to judge if patients are affected by extreme poverty. If this is the case, a points-based system determines how much of the costs of hospital treatment should be taken over by the fund.

67 patients had all or part of their treatment costs covered

44 patients underwent surgery

27 women
14 men
26 children

Of births and good spirits

It's just after 10 pm in Manambaro. A call reaches our team. The ambulance was needed to carry a pregnant woman from the health centre of Ranopiso to the Manambaro clinic. The delivery had arrested and the situation was serious. It took 45 minutes to drive just about 10 km to get there. The building was completely dark, flashlights lighting the way through a large patient room. People are sleeping on the ground – relatives of other patients.

In the next room, a woman lies on the delivery table. 23-year-old Kajy is expecting her second child. The light solar-powered lamp shines on her, several people – members of her family and the head of the health centre –

are waiting in the darkness surrounding her. Kajy is close to delivery, but contrary to the phone call, the baby is not lying sideways. However, the grandmother-to-be is convinced that her daughter is possessed by an evil spirit. The head of the health centre wants her to be transferred to the hospital, because he doesn't want to deal with this whole evil spirit business.

Carefully and slowly, the team leads Kajy to the ambulance. Dr Mahery does not diagnose any complications. Around midnight they reach the clinic, where a midwife is already waiting for the mother-to-be. The next morning a little boy is born: Monja Magnasoa, healthy and happy. A good spirit after all?



Mother Kajy and her baby Monja, both safe and sound.



Dr Mahery and Kajy in the ambulance. In the background, Ando, the driver, documents the journey.

For many patients in Madagascar, communal basic health centres (Centres de Santé de Base) are the first port of call for any health issues. In rural areas, these centres typically employ three people, usually one midwife or nurse, or rarely a doctor.

These conditions present the staff with new and difficult challenges every day. Often these remote areas lack adequate supply with drugs and other materials. The buildings of many centres are dilapidated; equipment is worn out; running water and power are often unavailable.

In the past year and thanks to your support, we have been able to do much to improve the working conditions and patient safety in several health centres and the hospital of Ejeda:

Ejeda Hospital. As part of the project 'Skills to Save Lives', led by the *RC Kronach* and multiple other Rotary Clubs, the patient toilets and wells of the clinic have been repaired, the operating theatre has been renovated and completely equipped with new instruments, including an Africa-adapted anaesthesia machine donated by the German company *Dräger*. The *ALTERNAID Foundation* also enabled the construction of an incinerator to dispose of infectious hospital waste. The wards (44 beds in total) have been renovated and equipped in collaboration with the US-based *NGO Global Health Ministries*.

The Basic Health Centre of Ejeda used to be in a terrible state – including being inhabited by a colony of bats – rendering multiple rooms unusable. With funds of the *ALTERNAID Foundation*, we completely overhauled their buildings and toilets. The Madagascar Ministry of Health delivered new equipment and the local community contributed to renovating the ward. An altogether successful collaboration!

The NGO *Human Cooperations* and the German Embassy Antananarivo financed new solar power systems for **eight** health centres **in the region Atsimo-Andrefana** (which includes Ejeda and Fotadrevo). These now enable the lighting of treatment rooms and wards at night – a dramatic improvement compared to the current darkness.

In the village of **Gogogogo**, we fixed up the well, installed a solar pump and a pipe to the ward of the small clinic. Finally, there is running water! Of course, the local population also got a new tap. Thanks to our strong partners *Fanajana e.V.* and the *Hamburger Klimaschutzfonds!*

The number of pupils at the secondary **school of Fotadrevo** is growing so quickly that their classrooms have become insufficient. Thanks to the *Oliver-Herbrich-Kinderfonds* and the *Froschkönig Foundation*, we were able to construct a new school building for them.

Buildings and equipment for better working conditions and patient safety

1 operating theatre (fully equipped)

2 health centres completely renovated
9 health centres equipped with solar power
3 waste incinerators built
3 toilet blocks repaired
2 wells repaired
1 school building constructed

equipment for numerous health centres



A new start in Andranobory

Early in the morning I am leaving Manambaro together with our team, passing palms, rice paddies and little villages. Soon there are only thorn bushes and goats left, not even the road is discernible after a while. After about two hours we reach the village Andranobory.

Two years ago, a calamity occurred: the petroleum-powered fridge of the health centre exploded, causing a fire that quickly spread. All the patients and staff were saved, but the building itself and all the equipment was lost to the flames.

For 16,000 people, the only healthcare facility in a 20km radius was destroyed. But the health ministry did not have the funds to rebuild the little clinic.

But the staff was not about to give up: in a scrap-wood shack and some repurposed market stall they performed about 300 treatments, antenatal check-ups and deliveries a month.

Thanks to the *ALTRNAID Foundation* and private donations, we were able to fully rebuild the health centre, including the electrics and equipment. In addition, we were able to run regular training events on the subjects of pregnancy care, cleanliness and hygiene.

Now I have the great honour to join the opening ceremony in Andranobory. Malagasy pop music blares from the speakers, chairs are arranged and an expectant mood lies in the air. The mayor delivers the first speech, followed by a troop of pupils singing the national

anthem while the flag of Madagascar is being raised. With great ceremony, the ribbon in Madagascan national colours is cut with a pair of bandage scissors. The staff proudly presents the new and spotless facility, followed by a feast of boiled goat and lemonade.

I am so happy to witness all of this succeed and to see all those beaming faces. For eight months we had been working to make this a reality. Building something new in such a remote place was a particular challenge – delivering materials and communicating between Germany, Antananarivo, Manambaro and Andranobory. Thank you to all who made this new start for Andranobory possible!

Amanda Hecktor | Project Coordinator

Good marks for Ejeda hospital

Fifteen months after my first stay back in May 2017, I was travelling to Ejeda again in August 2018 to re-evaluate the hospital there and to train the new anaesthesia assistant Noëlla.

Seeing everything that had changed in the meantime was almost unbelievable. Unchanged on the outside, all inside areas of the hospital had undergone major innovations, leading to dramatic improvements in the processes and equipment of the clinic. The wards had been completely renovated and equipped with new furniture. All patient rooms and dormitories now make a clean, bright and friendly impression. Equally, the operating theatre had been decluttered, deep-cleaned and renovated. The most visible innovations are a modern anaesthesia machine, a new operating table and a new LED surgery lamp.

Beyond this, the well had been repaired – a major undertaking – and new pumps and pipes had been installed. New concrete sintering pits and toilets had been constructed. Finally a new, high-performance generator had been installed, as well as a new solar power system and generally improved electrics to provide a secure power supply.

Thanks to the recruitment of the dedicated anaesthesia assistant Noëlla and the establishment of a modern anaesthesia workspace with a Dräger respirator and comprehensive monitoring, major surgeries can now be conducted more safely. A refurbished wake-up room now allows adequate care after the surgery.

But the change that struck me most was the cleanliness initiative begun and coordinated by Doctors for Madagascar and their local representative Dr Rinja, about two years ago. Organisation, training and monitoring have firmly anchored cleanliness in the everyday running of the hospital, leading to a significant and sustainable improvement in hygiene.

The Hopitaly Loterana Ejeda has made a decisive step forward and after spending three weeks there I am highly confident that its dedicated Malagasy team and their external supporters will be able to continue these improvements in the future.

Dr Ulrich Dittmer | anaesthesiologist from Hamburg. He has been working in areas affected by humanitarian crises for many years.

Women's ward at Ejeda hospital after renovation.

Training for medical staff

Over the course of 2018, many more of our partnering medical staff got the opportunity to participate in workshops and further training events. To enable these, we sent doctors, nurses, technicians and midwives from Germany and other countries to teach obstetrics, anaesthesia, lab tests and hygiene.

The content and format of each training event depends on local needs: hygiene courses in basic health centres (following a Japanese curriculum) each run for several days and are repeated in regular intervals. All staff - from the doctor in charge to the janitor - are expected to attend. Courses for laboratory staff run alongside the work over a period of ten months, in which experienced Malagasy lab technicians direct their colleagues in remote hospitals.

Aid missions with international specialists tend to run for shorter stretches, typically three to six weeks.

Further training events:

- 2 x anaesthesia
- 2 x obstetrics
- 1 x urology
- 1 x hospital technician
- 3 x obstetrical ultrasound

trained staff

- 84 midwives
- 5 lab technicians
- 1 radiology technician
- 1 anaesthesia nurse

- 66 (medical) staff receiving hygiene training
- 195 communal health workers

6x hygiene in health centres

Anaesthesia nurse Noëlla received training by the anaesthetists Dr Karin Steinecke and Dr Ulrich Dittmer during their aid missions to the hospital of Ejeda. Their focus was on administering general anaesthesia safely. The operating theatre had previously been renovated and equipped with new or repaired instruments by Doctors for Madagascar.

2 aid missions
(urology and plastic surgery))





Letter from Sister Fanilo

Sister Fanilo | head of the health centre Sahan'i Maria in Fort Dauphin, Anosy region:

I well remember the first visit of Dr Julius Emmrich and Nadine Muller to our dispensary about two years ago. I told them about our work with the patients, many of whom are very poor.

Doctors for Madagascar is supporting us step by step in improving our lab diagnostics: We received a fluorescence microscope to diagnose tuberculosis. In addition, our lab technicians received training over a period of 12 months.

From the beginning of our partnership, the team of Doctors for Madagascar has been working with great conviction and readiness to improve healthcare delivery. The charity does exemplary work in healthcare improvement in our country and to free the needy from sorrows and suffering.

We are very grateful to Doctors for Madagascar and are hoping for a long-term collaboration and support for our country.

The Catholic *Dispensaire* consists of two well-kept treatment rooms, a medication store, a tiny lab and a few simple wooden huts to accommodate the patients. The sisters' focus is the unpaid care for destitute, severely ill patients. The *Dispensaire* is the biggest treatment centre for TB-patients in the region. Our support for the dispensary is made possible by the *Initiative Hospital Partnerships* of the German governmental aid agency GIZ. In 2018, this support also included training X-ray, lab and hospital technicians in the clinics of Ejeda and Manambaro, two aid missions with international doctors and hygiene courses.

Together against tuberculosis

492 patients undergoing treatment

193 patients cured

279 new diagnoses

1,230 suspected cases of TB tested

In 2017, more than 10 million people globally became ill with tuberculosis (TB), an infectious disease that can usually be cured by timely antibiotic therapy.

In the south of Madagascar, TB patients are faced with several problems: Due to widespread poverty and scarcity of health centres, patients seek medical care far too late. In many cases, the illness has already progressed far by this point, leaving patients emaciated and weak. Once the diagnosis has been made, they have to make regular visits to the treatment centre for the next six to nine months, because the TB-pathogen is highly resilient and requires a long course of antibiotics. Many TB-sufferers are unable to make a living under these circumstances.

Our project „Tohan'aina ho any Marary Tiberkilaozy”, or *TOMATI* for short, aims to reduce the

high number of TB-cases in the region Atsimo-Andrefana in the south of the country:

Regular mobile diagnostics camps allow people with suspected TB to be rapidly tested in their home villages. A motorbike-courier carries the drugs to the treatment centre. Over the course of the treatment, the patients are also given rice, soy and maize meal and additional nutrients. This also helps to get people to reliably turn up at the health centre.

Thanks to the support of the *Nord-Süd-Brücken Foundation* and the *Equity Solidarity Compassion Foundation*, TB-patients can be examined and treated in the towns of Fotadrevo, Gogogogo and Ejeda and their surrounding villages. In addition, community health workers teach the population about symptoms, ways of transmission, prevention and treatment of TB.

17,627 kg of food distributed

Monsieur Henriot, lab technician of the clinic in Ejeda at a mobile TB-diagnostics lab in Fotadrevo.



Community health workers on tour

The photo on the right shows Pierre Olivier. He is one of many 'agents communautaires' (community health workers) that we are collaborating with on the ground and without whom many of our projects would hardly be possible.

Community health workers form the frontline of the public healthcare system in Madagascar. The training offered by the government is short, lasting barely two weeks. There is no fixed pay, but still, the job is not unpopular, for health workers are well-respected in their communities. Our projects offer them regular opportunities to learn various skills. Anyone interested in a closer collaboration will receive visual training materials, a bicycle, mobile phone and a little remuneration.

For community health workers are always on the move: They cycle through deep sand or over muddy paths from one village to another, visit families at home or lead discussion groups with villagers. They have to answer all kinds of questions regarding safe pregnancies and deliveries, but also about diseases like tuberculosis and general health issues like how to prevent malnutrition.

When people are streaming into the village on a market day, the community health workers are never far: together with our local teams they use this opportunity to conduct information campaigns.



Community health workers Mahatoly, Victoire, Adolphine and Charles during a training in Ejeda. Hot topics today: Safe pregnancy and vaccinations.



Pierre Olivier, community health worker in the commune of Agnavoha, near Fotadrevo.

**Doctors for
Madagascar**

Thank you!

We want to extend our heartfelt gratitude to all of you. Our thanks go out to all who have supported us for years or have only just joined in with their financial support, gifts-in-kind, encouragement and hands-on help. Without you there would be fewer happy faces, contentedly chortling babies or (solar-)light in the darkness.

Our teams and partners in Fotadrevo, Ejeda, Manambaro and Antananarivo have made these successes possible. They overcame all the weather- and man-made challenges, never gave up and spent their sweat and blood to deliver better healthcare for their country.

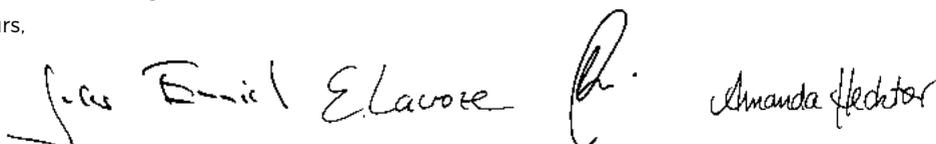
Together, we can achieve this. And we are far from done.

Please stay on our side in the years to come.

Sincerely,

Doctors for Madagascar

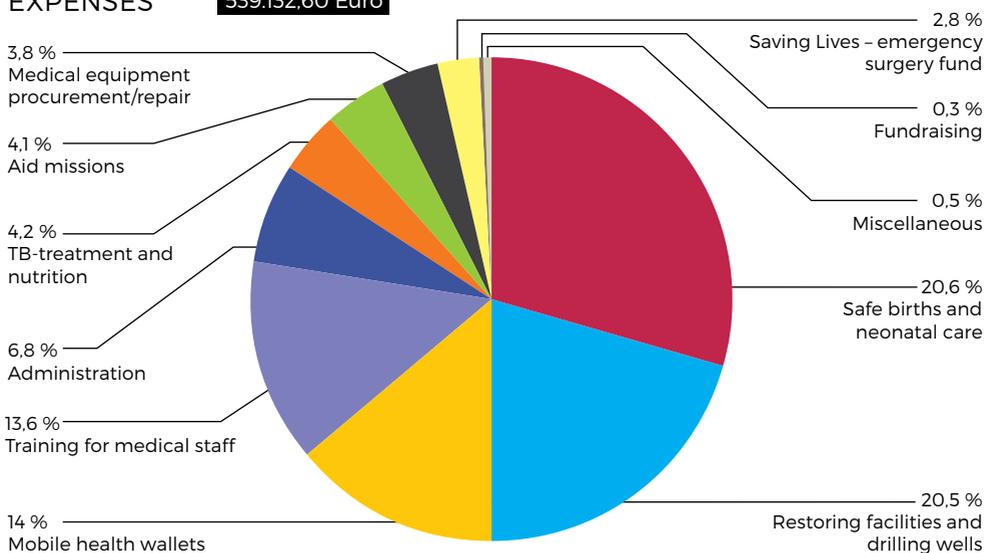
Yours,



Dr. med. Julius Emmrich Etienne Lacroze Nadine Muller Amanda Hecktor

INCOME Total donations **730.241,13 Euro**

EXPENSES **539.132,60 Euro**



Get involved!

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