
DONATION & TRANSPLANTATION INSTITUTE (DTI)

ANNUAL ACTIVITY REPORT

2019

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Annual activity report

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DTI
IN 1 MINUTE

LETTER FROM THE PRESIDENT

Dr. Martí Manyalich

President of the DTI Foundation

As is customary every year, DTI would like to present its business activity, especially from the international standpoint.

DTI has attended the most important congresses in all five continents, including ESOT (European Society of Organ Transplantation) in Denmark, STALYC (Sociedad de Trasplante de América Latina y Caribe) in Mexico, CAST (Congress of the Asian Society of Transplantation) in India, ISODP (International Society for Organ Donation and Procurement) in Dubai, European Tissue Congresses such as EATCB (European Association of Tissue & Cells Banks) and the Regional TTS (The Transplantation Society) Congress in Turkey, thus displaying its international character.

DTI has implemented training activities in all these continents and cooperation activities in the regions of Kunming (China), Abu Dhabi (UAE) and Trinidad & Tobago, achieving increases in organ donations in all these regions.

The scientific unit has played an important role in DTI's operations, and at the end of this year, in Kunming, an International Workshop on Leadership, Quality, Management and Innovation was organised jointly with an International Symposium in the region of China entitled the 4th China-International Organ Donation Conference & the Belt & Road Symposium on Organ Donation Development and International Cooperation (CIODC), where more than 1,000 professionals from China, 95 international experts and more than 50 countries announced the best practices in this area for improving donation and transplants.

We should not forget the social side of our work. First of all, we thank the Reventós family for offering life after death. Many years ago, their first son was the first multiple organ donor in this country.

On a more formal note, we should mention the implementation of the European Project Eudonorgan with a Social Awareness programme targeted not only at professionals, but also at other stakeholders involved. Events have been held in Portugal, Sweden, Hungary, Poland and the European Parliament in Brussels (Belgium). Not to mention the ODISSeA project in Southeast Asia, implemented for the purpose of improving knowledge practices in Malaysia, Thailand, the Philippines and Myanmar.

After much training, development and research, DTI is getting ready to face the future through innovation and the implantation of Artificial Intelligence technologies, using robots in its training courses and submitting a request for international aid through a window called E-DTI. It is applying data security and transparency techniques, such as Blockchain. We are all on the move in this new age, on a path that will enable us to continue saving lives.

Lastly, I would like to thank all those who have made this possible; the professionals who have assisted us with the training, the staff of DTI who do their best to excel day by day, the volunteers, trainees, training centres, universities and all those who have worked in partnership with us at some time during the year with joy, enthusiasm and determination.

ABOUT DTI FOUNDATION

DTI Foundation is a not-for-profit foundation formed by a group of internationally renowned experts in organ donation and transplantation.

TRAINING + COOPERATION + DISSEMINATION + RESEARCH

We are **committed** to increasing organ donation rates around the world, improving the population’s quality of life and promoting regenerative medicine.

Since 1991, we have trained over **17.000** healthcare professionals from **108** different countries through our **TPM®** education programme.

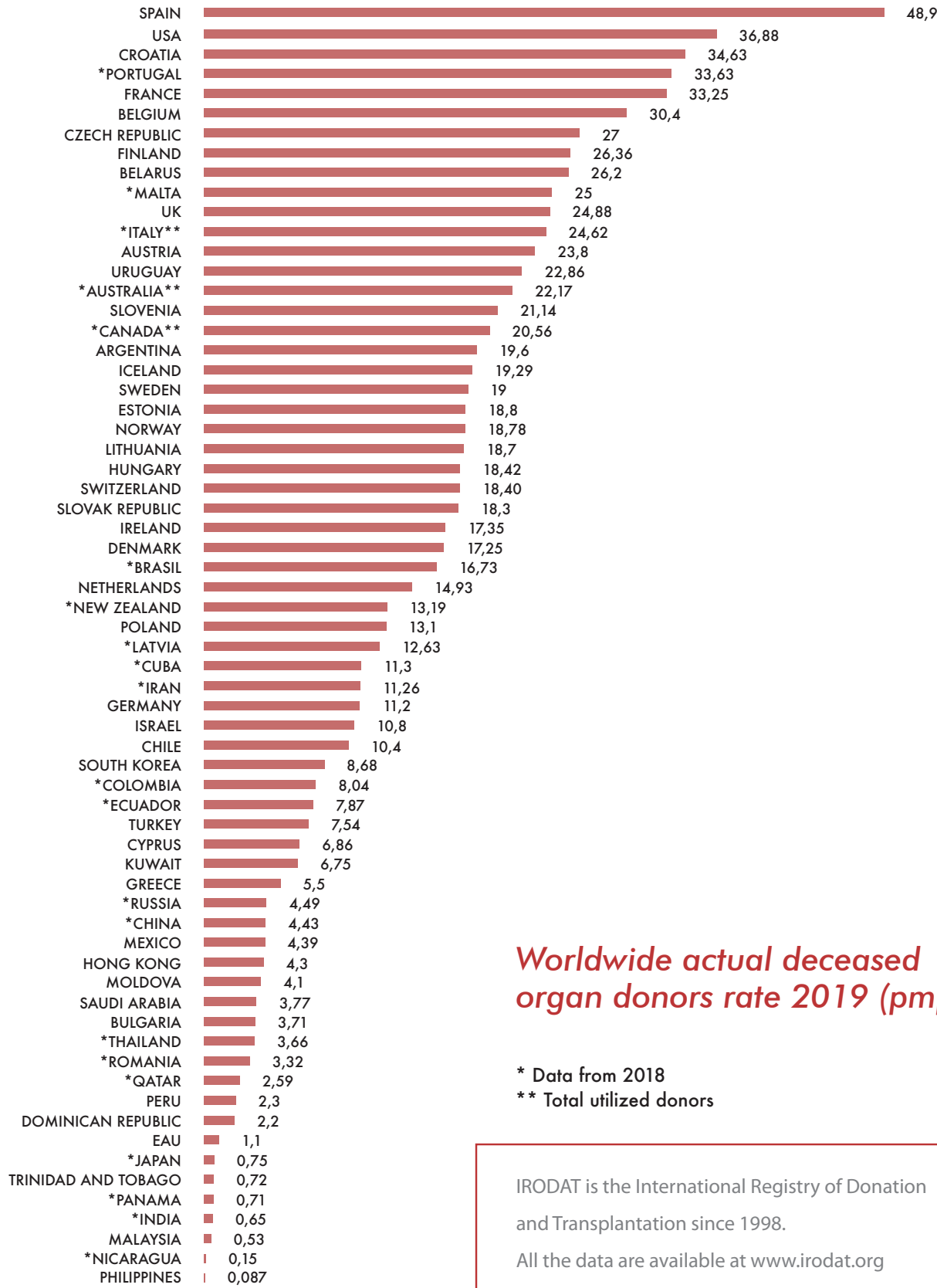
As well as providing training, we also **collaborate with organisations on an international level** through the **SEUSA programme**, which presents the best models for organ, tissue and cell donation for transplantation.

This report summarises the main activities of our organisation throughout the year **2019**.

*DTI staff



IRODaT



Worldwide actual deceased organ donors rate 2019 (pmp)

* Data from 2018
** Total utilized donors

IRODAT is the International Registry of Donation and Transplantation since 1998.
All the data are available at www.irodat.org

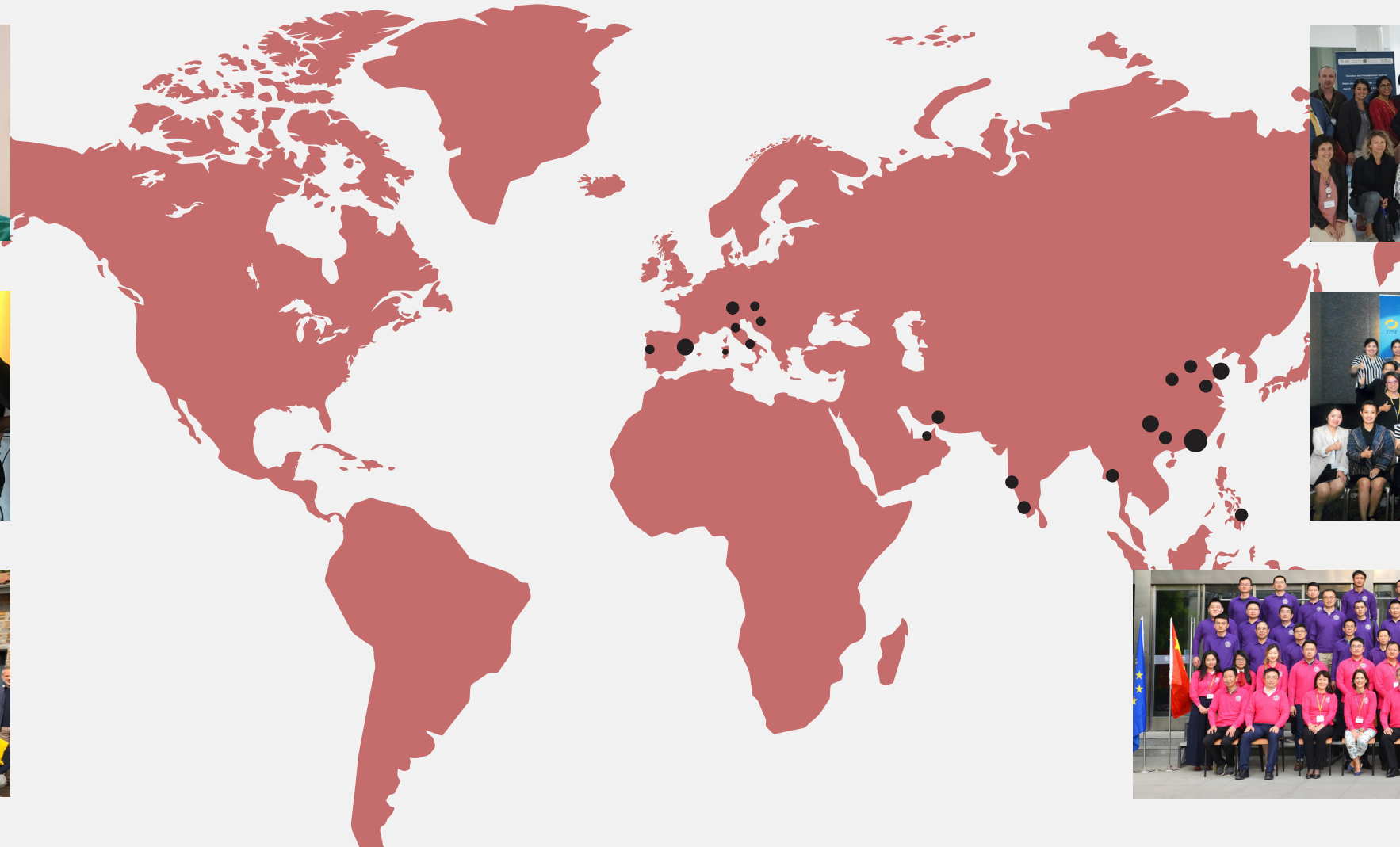
TPM COURSES MAP



Students trained in the Face-to-Face courses 2019: 629

- China: Hefei, Wuhan, Kunming, Zhengzhou
- Croatia: Rovinj
- Spain: Barcelona
- UAE: Ajmam
- Philippines: Dagupan, Davao

- India: Goa, Kerala
- Italy: Bari, Imola, L'Aquila, Bologna, Caserta, Florence, Naples
- Portugal: Vimeiro
- Thailand: Bangkok



MASTER D&T

Blended and Master programs

DTI offers 4 blended and postgraduate programs:

- **Organ Procurement**
- **Organ Transplantation**
- **Leadership, Quality and Management in Organ Donation and Transplantation**
- **Tissue Banking and Advanced Therapies**

Each blended program includes online and face to face training and it is accredited with a TPM-DTI diploma, equivalent to 10 ECTS of university education. The Postgraduate diploma includes a blended course plus 2 weeks of internship in any of our associated centres in Europe or USA, and it is equivalent to 15 ECTS.

Moreover, DTI offers the possibility to enrol into two different master programs certified by the University of Barcelona, in two different modalities: professional and investigation.

**Prof. Master
2018 - 2019:**



34 participants



13 different countries



UNIVERSITAT DE
BARCELONA

The educational offer has been designed to enable any student to follow an academic curriculum that may end up with the professional master program: the **International Master in Donation and Transplantation of Organs, Tissues and Cells**. Participants must complete 30 ECTS corresponding to blended training, 6 weeks of internship (15 ECTS) and Final Master Dissertation (15 ECTS).

The **Master in Clinical Investigation** (60 ECTS) is an official Master that offers eight different modalities including the specialty in *donation and transplantation of organs, tissues and cells*. This master is addressed to students who want to follow a PhD program in this field. It is designed to provide the students the knowledge and skills necessary to develop scientific activities in the field of donation and transplantation.

You can find more information about the blended and Master programs in:

www.tpm-master.org

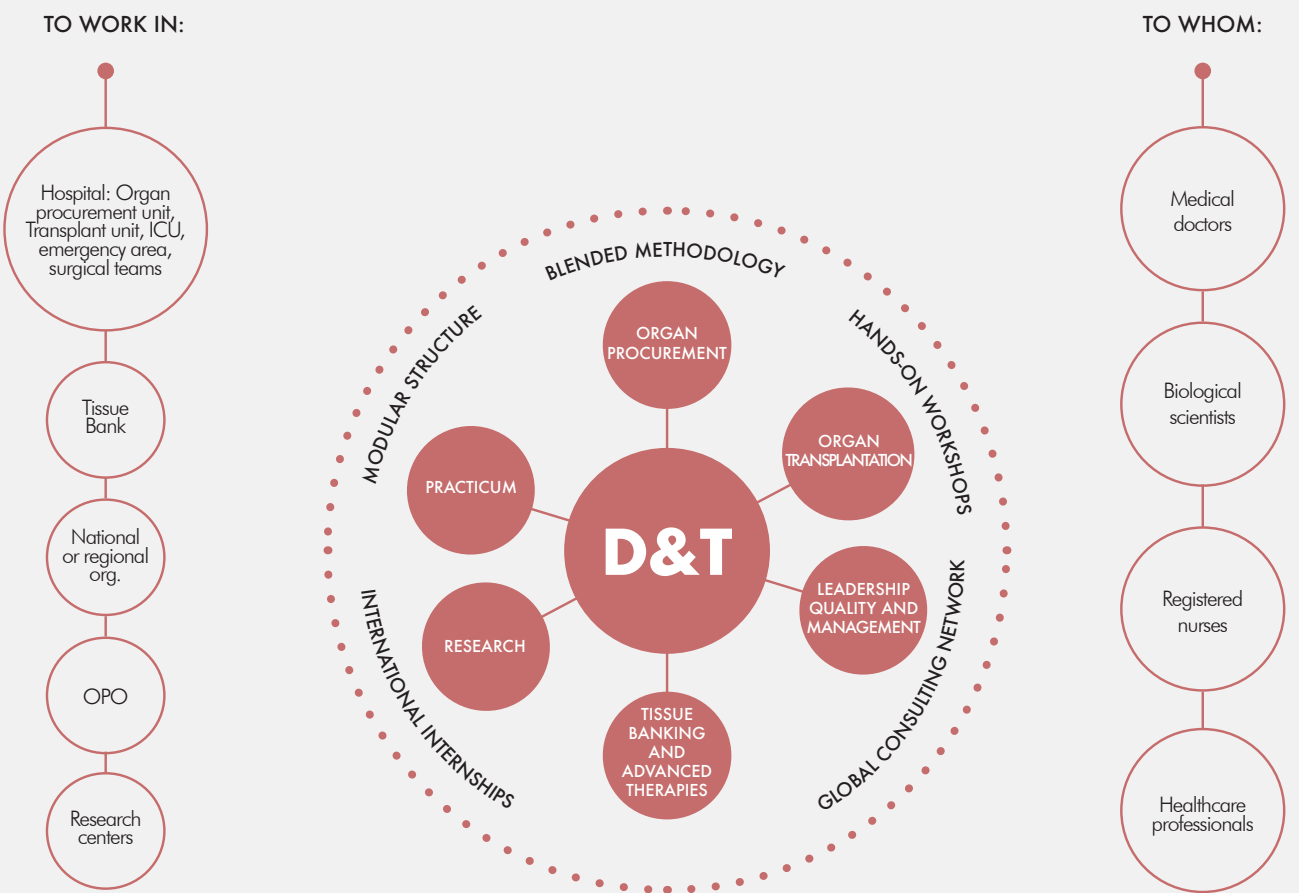
**Prof. Master
2018 - 2019:**



19 participants



8 different countries



COOPERATION PROJECTS



Trinidad & Tobago
Ministry of Health



Trinidad & Tobago

The international collaboration project with the **Repsol Foundation in Trinidad and Tobago** continued for its tenth consecutive year. Thanks to various training courses and collaboration based on the SEUSA methodology, the **National Organ Transplant Unit (NOTU)** has enhanced its hospital structure. Our experts observed during their visit in June, where the DTI delegation met with the **Minister of Health** and representatives from the **Repsol Foundation** to evaluate the progress made in the past year.

The DTI team also visited other countries in the Caribbean, including **Guyana, Barbados and Jamaica** to provide consultation on best practice for organ donation and transplantation. As a result, three doctors from Jamaica and one from Trinidad signed up to participate in the advanced international course that took place in Barcelona in October.



Abu Dabi
SEHA

United Arab Emirates

The collaboration project with the **Abu Dhabi Health Services (SEHA)** to improve the country's cadaveric donation rate has now completed its second year. With the aim of monitoring this programme, the team of experts from DTI made five visits to evaluate hospitals in 2019 and helped to implement a detection mechanism for potential donors within the EAU's healthcare system.

In November, the **Hospital Organ Donation Unit (ODU)**, with its head office at the **Mafraq Hospital** in Abu Dhabi, received the quality certification **ISO 9001:2015**. Another three hospitals that participated in this project are following the same accreditation process and will be certified in 2020. This includes the creation and implementation of standard operating procedures (SOPs), as well as internal and external audits.



Bombay
ROTO-SOTTO

India

During recent years, we have been working in collaboration with the **Ministries of Health in Goa and Kerala**, two **South-western Indian states**, and have obtained remarkable results in organ donation.

The Department of Health and Family Welfare in the state of Kerala has created a new position with the title "**Hospital Transplants Manager**" in each of the regional government's medical faculties. Over the last three years of collaboration, 2019 saw a 25% increase in cadaveric donations.

In August, the DTI Foundation was invited to participate in the "**Fortis Annual Symposium in Organ Donation and Transplant**" in **Delhi**. In October, we visited the **Kasturba Medical College and the Manipal Academy of Higher Education in Mangalore**, where we were also invited to give a conference on best practice in organ donation.



Kunming
UCI del Kunming Old Hospital

Kunming

After the **SEUSA** project initiated in 2017, the DTI Foundation continued with visits to the province of **Yunnan**, specifically in **Kunming**, to provide educational, clinical and structural support and consultation to the Intensive Care Units and Emergency Departments of selected local hospitals.

These visits took place in May and August and were carried out thanks to the **Kunming Organ Procurement Office (KMOPO)**. DTI experts also visited the **Red Cross in Kunming** following an invitation from one of the International Master's students.

For the first time, the DTI Foundation awarded the **KeTLOD Bridge** grant to two Chinese students: Dr Zhou Zhigang completed the Master's in Organ Donation and Transplantation (see Master's section), while Dr Fu Ting completed the Postgraduate diploma in Donation.

EUROPEAN PROJECTS

EUDONORGAN – Training and social awareness for increasing organ donation in the European Union and neighbouring countries (2016-2019)

The main objective of the **EUDONORGAN** project is to develop and implement two types of activities on a European level, focused on **training** and **raising awareness** to increase organ donation within the **European Union** and **neighbouring countries**.

This was a pilot project that combined the various different **medical and social** levels (**patients and communicators**) involved in the process of donation and transplantation, the resources created and the experiences gained in previous projects and studies.

Developed as an international consortium and funded by the **European Commission**, this was coordinated by the University of Barcelona – Bosch I Gimpera Foundation (**UB-FBG**), and included the DTI Foundation (**DTI**) and **Dinamia** as representatives from **Spain**, **Slovenia** (Slovenija-Transplant), **Croatia**

(Ministry of Health) and **Italy** (National Transplant Centre) were also involved in the project.

To round off the educational programme “Train the Trainers” in 2018, 6 events were organised between September 2018 and April 2019 to raise social awareness, with a total of 525 participants from 27 EU countries and 10 neighbouring countries: 95 participants in Warsaw, 49 in Budapest, 127 in Brussels, 95 in Stockholm, 96 in Athens and 63 in Lisbon.

There are currently various initiatives in progress to ensure its continuity beyond the end of the project.

For more information, visit:
www.eudonorgan.eu



ODISSeA – Organ Donation Innovative Strategies for Southeast Asia (2019-2021)

Organ Donation Innovative Strategies for Southeast Asia (ODISSeA) is an **Erasmus+** project, co-financed by the **European Commission** as part of the programme “Developing Erasmus+ skills in higher education”. The main aim is to design and implement an academic postgraduate programme in organ donation at 8 universities in 4 countries in Southeast Asia (**SeA**); **Malaysia, Myanmar, The Philippines and Thailand**. The training is to be carried out by 3 **European** universities in **Spain (FBG – University of Barcelona)**, **Italy (University of Bologna)** and **Croatia (Sveučilište u Zagrebu)**, with **DTI** acting as a key partner in its design and academic development.

The project was launched in **Davao (Philippines)** in March 2019, with **40** project representatives from 6 countries in attendance.

In the programme **Train the Trainers**, 41 professionals successfully completed online and face-to-face training in **Barcelona** in May, and in **Davao (Philippines)** in October.

The postgraduate programme (January to October **2020**) will provide a common framework for these 8 **SeA** universities to develop a **student-focused** learning strategy that equates to highly specialised knowledge within the sector, and which will contribute to improvements in organ donation rates in Southeast Asia.

For more information, visit:
www.odisseaproject.eu



DTI Social groups together all of the activities and initiatives carried out within the DTI Foundation, and which are sponsored by organisations or companies through their CSR departments. It also encompasses the charity events and crowdfunding campaigns organised by the DTI Community.

DTI Social is the vehicle through which scholarships and training grants are awarded to professionals from developing countries.



Training grants

Colombia is experiencing serious problems, specifically in Barranquilla, the region with the lowest donation rates in the country. In recent years, the country has seen a 4% decrease in organ donors, with the total number of donors being just 418.

With the aim of improving this situation, in February **DTI Social** enabled Dr Guillermo Oeding, a Colombian doctor of intensive care, to attend the **Advanced International Course in the Donation and Transplantation of Organs and Tissues**, which took place in **Barcelona**. After the course, he also visited the donation unit at the **Hospital Clínic** (Multi-transplant Centre).



India is a country with around 1.339 billion inhabitants facing various challenges related to public health. Among them, the scarcity of donations presents an obstacle that prevents a greater increase in transplants within the country. According to the latest report from 2017, India had 723 deceased donors (0.58 pmp).

Vietnam has great potential for donation, but it is still working to consolidate its deceased donation programme, specifically with regards to the diagnosis of brain death and donor maintenance.



In this context, two doctors from **Kerala (India)** and another two from **Ho Chi Minh (Vietnam)** were awarded scholarships to participate in the **Advanced International Training Course** that took place in October.

These training courses and assessments have been created thanks to the support of the micro-sponsorship platform **GlobalGiving**, through which donations have been raised throughout the year.



Charity and cultural activities by the DTI Community

The DTI Community has spent another year linked with culture, taking part in two events in 2019. Both events had the aim of raising funds to finance scholarships for organ donation training for healthcare professionals in developing countries.

In October, DTI was present at the performance of the play “Bola de Neu”, by the Catalan author and journalist Carles Soldevila. The event took place at the Teatro Helena de Barcelona theatre, in the Gracia district, and received a great reception from the audience.



On Wednesday 20 November 2019, a charity concert took place in collaboration with the **Fundació Nen Déu** from Barcelona. Students from Barcelona’s music college, the **Conservatori Municipal de Música de Barcelona**, performed works by Bridge, Dvorák, Chaminade, Schotakovich, Mendelsshon and Chopin in the Petit Palau concert hall. Both organisers considered the event a true success, with over 200 people attending and supporting both projects thanks to their ticket contributions.



DTI Community joins Maite Raventós to honour her son, the first multi-organ donor from Catalonia

On 30 January 1990, Jordi Madorell, aged 19, died in a car accident. At that moment, Dr Martí Manyalich, Transplant Coordinator at the Clinic Hospital in Barcelona, saw an opportunity to save lives and help the **Madorell-Reventós** family’s grieving process through organ donation. On 12 March of the same year, Jordi’s parents, Maite Raventós and Pere Madorell received a letter from Dr Manyalich.



The letter, which Maite has still kept to this day, explains that thanks to their difficult decision, their son had become the **first multi-organ donor** from Catalonia, and thanks to him, four patients had received transplants and had therefore had a second chance at life.

On 13 June 2019, Maite Raventós, together with her family and DTI, met to commemorate the Madorell family’s decision. It was an emotional day, where Maite and Dr manyalich, among others, participated in a conference on organ donation. Family and friends of Jordi Madorell shared stories, anecdotes, tears and laughter.

Spanish transplant surgeon Dr Pepe Buitron’s stay in Southern Philippines Medical Centre in Davao

The **ISN-TTS Sister Transplant Programme** is a joint partnership between the **International Society of Nephrology (ISN)** and **The Transplantation Society (TTS)**, set up to create new kidney transplant centres and develop existing kidney transplant centres in emerging countries. In this context, the University of Barcelona (Spain), **Southern Philippines Medical Centre (Philippines)** and the **DTI Foundation** have been collaborating to train Filipino healthcare professionals since 2016, thanks to this organisation.



In light of this, Dr Pepe Buitrón (Spain) spent 6 weeks as an Expert Transplant Consultant in the Surgery Department and the Transplant Coordination Unit at the Southern Philippines Medical Centre (**SPMC**) in **Davao (Philippines)**, in order to support the living donor organ transplant programme, to further develop the deceased donor programme, and to carry out a viability study on the implementation of a programme for donation after cardiac death (DCD).

The DTI Community takes part in the Heroes project at Barcelona’s Garbí school

Students from the 4th grade (age 15) at the **Garbí** secondary school in Barcelona carried out a project called “Heroes”, where they got involved with various charitable organisations to raise their profile in the area.



For this reason, they selected the DTI Community to help create and distribute teaching materials on organ donation and transplantation, to **raise awareness** amongst the general public about the importance of donation, and to distribute information on **child transplants** in Catalunya, as well as the implications on daily life and the challenges faced by children on the organ transplant waiting list.

CONGRESSES 2019

1st Regional Meeting The Transplantation Society
Istanbul, Turkey – 28-29 March

11th International Conference on Education and New Learning Technologies
Palma de Mallorca, Spain - 1-3 July

16th Congress of the Asian Society of Transplantation
Delhi, India – 29 September - 2 October

19th Congress of the European Society for Organ Transplantation
Copenhague, Denmark – 15-18 September

34° Congreso nacional de Coordinadores de Trasplantes
Murcia, Spain – 25-27 September

28th Congress of European Association of Tissue and Cell Banks
Leiden, The Netherlands – 16-18 October

25° Congreso Latinoamericano y del Caribe de Trasplante
Mérida, Mexico, 23-26 October

15th Congress International Society in Organ Donation and Procurement
Dubai, UAE – 14-16 November



SCIENTIFIC SUMMARY

The DTI Foundation has always sought to contribute to **research** in the world of organ donation and transplantation. Through its different European and cooperation projects, DTI collects and analyzes the information obtained to identify strategies that positively impact donation rates, optimizing government resources. During 2019 DTI presented **11 abstracts** within the framework of the different congresses with a total of **40 presentations**. The most relevant are:



Evaluation of the impact of training among health professionals and society

- Increasing demand on **Master Education** for donation and transplantation: a 15 years experience" (A. Coll, ESOT 2019),
- **EUDONORGAN** - training and social awareness for increasing organ donation in the European union and neighbouring countries" (M. Manylich, ISODP 2019),
- **TPM**® Organ donation training in the UAE (MP. Gómez, ISODP 2019)
- Implementation of educational improvements in **Tissue Banking & Advanced Therapies TPM**® training program" (A. Coll, EATCB 2019)



Effective strategies in international projects

- Knowledge transfer and leadership in organ donation from Europe to China: **KeTLOD** (C.Ballesté, ESOT 2019)
- Impact on donor detection after the implementation of a **Quality System** on the Kingdom of Saudi Arabia (E. Arredondo, CAST 2019)
- Organ Donation Innovative Strategies for Southeast Asia: **ODISSEA** (M. Istrate, ISODP 2019)

The members of the Foundation also collaborated as authors on three chapters of the book "Brain death, Organ donation and transplantation. How to make real all over the world the immense gift of a new life" from Oxford Press University.

In collaboration with the **Hospital Clínic and the University of Barcelona**, we have carried out **9 clinical sessions** addressing organ donation and transplantation from multiple perspectives.

All scientific papers presented by the DTI Foundation within the framework of scientific society congresses can be downloaded at:

www.dtifoundation.com/abstracts



KUNMING SYMPOSIUM

The “**Belt & Road Initiative**” is a strategy adopted by the Chinese government which involves countries and organisations from all over the world to encourage international economic and commercial development.

As part of this initiative, two events were held in Kunming last December, organised by the China Organ Transplantation Development Foundation (COTDF) and the **DTI Foundation**. The aim of both events was to share experiences, discuss the future of organ donation and learn about leadership, management, quality and innovation in the field.

1st International Workshop on Leadership, Management, Quality & Innovation in Organ Procurement

During this international workshop, 81 participants from 33 countries worked together to follow DTI’s training methods, with the aim of identifying problems and measures that would help to achieve self-sufficiency in donation programmes. The participants were experts and leaders selected from the **Belt & Road** region, as well as other countries relevant to the field.

At the end of the workshop, the participants agreed on a set of recommendations regarding the requirements for self-sufficiency in organ donation in the **Belt & Road** region, forming the “**Kunming Recommendations Working Group**”.

4th China-International Organ Donation Conference & the Belt & Road Symposium on Organ Donation Development and International Cooperation

This conference, which took place on 7 and 8 December, brought together 95 guests invited from 50 countries, representing all of the **WHO** regions, as well as 1,100 national participants.

At the event, the **DTI Foundation** was responsible for designing the scientific programme and selecting the international guests to be invited to the conference from their international network of experts in the sector.

The programme included topics such **Leadership, Administration, Intensive Therapy Medicine, Quality and Innovation, Tissue Banking, Social Awareness and Ethics & Religion**. Moreover, the final recommendations from the Kunming Workshop group were also presented to the public.



DTI IN 1 MINUTE



17.000

TRAINED IN FACE-TO-FACE AND
ONLINE COURSES



113

COUNTRIES BENEFITED FROM ACTIONS
BY THE FOUNDATION



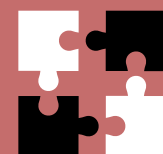
10%

NEW
STUDENTS



8 COUNTRIES VISITING
DELEGATIONS IN 2019:

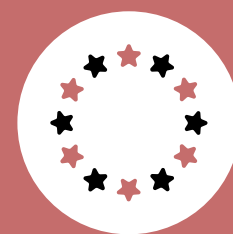
CHINA
GERMANY
USA
SAUDI ARABIA
INDIA
VIETNAM
JAMAICA
JAPAN



4

INTERNATIONAL COOPERATION
PROJECTS ON GOING

Thanks to our dedicated staff, internationally recognized pool of experts and over 40 committed volunteers/interns who have worked in the Foundation, we have contributed to offering a second chance to millions of patients on a waiting list for a transplant in the world.



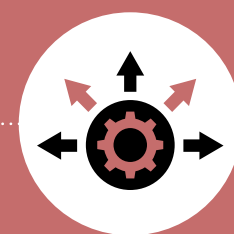
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EUROPEAN
PROJECTS



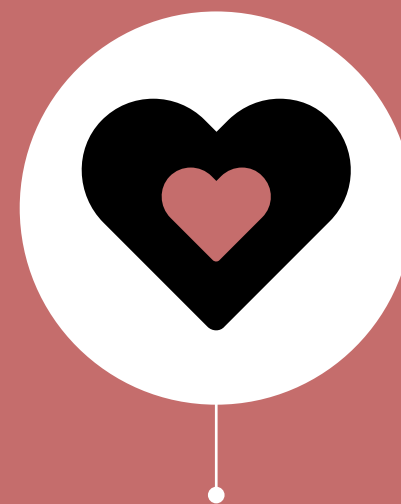
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COUNTRIES



17

ORGANIZATIONS



125.000

YEARS OF LIFE GAINED*

since 2009 thanks to our contribution

**Each donor means theoretically 50 years of life gained*

WWW.DTICOMMUNITY.ORG

SAVING ONE MILLION LIVES

Organ donation offers a second chance
in life to many people.

Your donation empowers doctors and nurses from Africa, Asia
and South America to implement and operate organ donation
programs in their respective countries.

*DTI Community is the worldwide community
of reference in organ donation for
transplantation.*

Give your support at:
www.dticommunity.org

DTI Community

