



ACTIVITY REPORT 2016 BRUGMANN FOUNDATION

I. History and mission of the Foundation

The Brugmann Foundation is a Public Utility Foundation created in 2011. In 2012, it was officially registered in the “Moniteur belge” under reference number 0839.235.387.

Its mandate is to develop and support scientific research, save lives and stimulate the development of new medical treatments within the framework of the CHU Brugmann (Centre Hospitalier Universitaire Brugmann, University Hospital Brugmann), one of the biggest Brussels hospitals, with 854 beds, 24.500 admissions a year, the largest Belgian maternity and 330.000 consultations in its polyclinic.

The main aim of the Brugmann Foundation is to provide patients with the most effective treatments. To achieve this, the best scientists and clinicians from around the world should be attracted and development of new drugs and innovative approaches stimulated.

II. Activity report 2016

A. Tax certificates

By Ministerial Decision of the Ministry of Finance, the Brugmann Foundation is entitled to deliver tax certificates for donations reaching 40 € annually. In 2016 the total sum of donations amounted to 18.082 €. These donations have been used in their entirety to finance scientific research in the University Hospital Brugmann, in the framework of grants and scholarships awarded by the Foundation.

B. Projects selected by the Scientific Committee

In the framework of its objectives, the Foundation has launched a Call for Projects in three categories:

- Credits for short stay abroad for nursing/paramedical/staff/doctor/pharmacist/biologist
- Research mandate for 1 year for a doctor or pharmacist/biologist
- Research grant (material or personnel).

The proposals submitted have been examined by an independent Scientific Committee, made up of:
Professor Arsène Burny (FA Gembloux – FNRS Télévie) – President of the Committee
Professor Gilbert Vassart (Genetics – ULB – Francqui Prize)
Professor Robert Muller (Molecular imaging – UMH)

Professor Jean-Louis Vincent (Intensive Care – ULB)
 Professor Bart Leroy (Ophthalmology-Genetics – UGent)
 Professor Johan Kips (Director Erasmus Hospital)
 Professor Miriam Cnop (Laboratory experimental medicine-ULB)
 Professor Olivier Degomme (Reproductive Health care-UGent)
 Professor Vincent Donckier (Abdominal transplantation ULB).
 Professor Florence Hut (Secretary of the Committee and General Medical Director of the University Hospital Brugmann)

Based on the recommendations of this Committee, the Board of Directors of the Brugmann Foundation has selected the following projects:

Subsidy	Name	Discipline	Amount
Grant	Roxane Dewrée	Clinical biology	7.013 €
Grant	Jacques Jani	Gynaecology	50.000 €
Grant	Maureen Masset	Ophthalmology	20.000 €
Grant	André Nazac	Gynaecology	30.000 €
Fellowship	Xavier Noël	Psychiatry	40.000 €
Travel grant	Florence Rousseau	Geriatrics	2.446 €
TOTAL			€149.459

Supported projects

1. **Dr Roxane Dewrée**, Clinical Biology

Title of the project: Establishing of a hookworm-hamster model as especially *Necator Americanus*

Objective: Study the role of immunomodulatory effect of secretory products of hookworm

2. **Dr Jacques Jani**, Gynaecology

Title of the project: Prenatal prediction of neonatal macrosomia by Magnetic Resonance Imaging

Subject: All women with an apparently normal, live singleton pregnancy, planning to deliver at the CHU Brugmann's hospital maternity, will be invited to take part in this prospective observational study for prediction of neonatal macrosomia using antenatal MR vs US, between 36+0+36+6 weeks of gestation.

3. **Dr. Maureen Masset**, Ophthalmology

Title of the project : Role of TonEBP in the inflammatory response of ARPE-19 gells subjected to hyperosmolar stress

Subject: In vitro research into diabetic retinopathy

4. **Dr. André Nazac**, Gynaecology

Title of the project : Predictive value of the polarimetric imaging of the uterin cervix for the management of the threat of premature delivery

Subject: The Polarmap project proposes the possibility to directly observe in vivo, during pregnancy, the structural evolution, the density and the orientation changes, of collagen fibers. The instrument proposed here is based on optical imaging technologies with polarized light.

5. **Dr Xavier Noël**, Psychiatry

Title of the project: Alcoholism: a relapse prevent intervention

Subject: Lifetime prevalence of alcohol use disorders remains so high one considers the need of innovative prevention and treatments as top public health priorities. Regarding usual treatments efficacy, one detoxified alcoholic in two does resume drinking dangerously just a few weeks after discharged from an alcohol detoxification center. As an explanation, environmental stimuli (cues) and affective states that are repeatedly associated with alcohol unconsciously promote compulsive alcohol taking and craving and are a primary trigger of relapse. By using a non-pharmacological approach, the main aim of the present research is to permanently modify well-established long-term memories for high relapse rate.

6. **Dr Florence Benoît**, Geriatrics

Dr Florence Benoît who is specialized in onco-geriatrics follows a training at the « Université de Paris 13 ». Her thesis deals with detection of fragility by means of a global geriatric evaluation based on fragility criteria.

C.Project: “Dialyse sans domicile fixe”

In Belgium, 1 person on 1000 is suffering from End Stage Kidney Disease (ESKD). ESKD is an irreversible degradation of the kidney function. It can be lethal for the patient.

The substitution treatment is often hemodialysis. It is a compulsory heavy and tiresome treatment: the patient must come to the hospital 3 times a week for 4 hours, he must follow a demanding diet and he also takes medication to treat complications of the ESKD which are not treated by dialysis, and to prevent the progression of cardio-vascular complications. In addition, the patient also needs to perform several complementary evaluations of other diseases such as diabetes, hematological disorders etc.

It is evident that patients with ESKD are continually facing periods of stress and fear.

The University Hospital Brugmann provides hemodialysis to ESKD patients in 2 centers:

- Site Horta : 5 shifts of 24 hemodialysis stations, about 120 patients and 35 patients in peritoneal dialysis
- Site Brien : 4 shifts of 12 hemodialysis stations. About 48 patients.

Besides classical nephrological care the nursing staff is particularly focusing on early diagnosis and prevention of symptoms and manifestations of ESKD-related and or hemodialysis-related psychological and psychosomatic complications.

In order to raise awareness about problems underprivileged patients and staff are confronted with during hemodialysis it was decided to produce a movie. The Brugmann Foundation has contributed to raising funds amounting to 28.500 € (donations from the National Lottery, the King Baudouin Foundation, the Lyons Club and Baxter) for its production.

D.Vietnam

The team of Professor Olivier Michel (ULB and Head of Clinic “Immuno-Allergology”, Brugmann University Hospital), in collaboration with Professor TRAN Thi Mong Hiep (Pham Ngoc Thach University in Vietnam), has obtained funding from the Belgian development cooperation to implement their multidisciplinary project “Monitoring and reduction of chronic respiratory diseases” (2017-2022). In Vietnam chronic respiratory diseases are often underestimated, insufficiently diagnosed and inefficiently treated. Because of demographic (including massive rural exodus), economic and social upheavals that the country is currently experiencing, chronic respiratory diseases are on the rise. The percentage of the population affected, is estimated at 10%.

These diseases represent a social and economic disaster for the country. The authorities are aware of the problem and place it high on the political agenda. Especially prevention and prompt treatment of the disease are a priority. On the initiative of the new Prime Minister a ten-year plan (2015-2025) has been established, inviting international actors to actively participate in it.

The project which aims to address chronic respiratory diseases, including capacity-building of Vietnamese university staff, focuses on the following actions:

Development of an early detection methodology at the level of the health centers and district hospitals, causing mortality and morbidity rates to fall, which in turn will have positive consequences for the number of hospitalizations and consequently a lower financial cost for society;

- Development of more appropriate treatments for chronic respiratory disease, taking into account the Vietnamese context;
- Development of techniques that reduce pollution in residential homes;
- Study of the protective effects of intestinal parasitic infections on the risk for sensitivity and allergies;
- Dissemination and integration of the project’s operational outcomes in the country strategy.

E. Project PROMOBILIA

The Brugmann Foundation ensures administrative follow-up of the project, : “A randomized placebo controlled trial of lidocaine patch for lower limb amputation pain”. The project will be implemented by the Rehabilitation service of the University Hospital Brugmann and is financed by the Swedish Foundation Promobilia for an amount of 12.500 EUR.

F. Foundation against Cancer

The Foundation against Cancer has approved a grant of 60.000 € for our two-year project ‘Medical and Social Coaching of the isolated cancer patient’, which is being implemented by the Brugmann Foundation in collaboration with the Social Service and the Hemato-Oncology Department of the Brugmann University Hospital. With the help of the ‘social coach’ – a social worker by training – we strive for a more sustainable intervention than the one actually offered by the institutional framework. The isolated cancer patient does not have the necessary resources at different levels (financial, family, language barrier, illiteracy, psychiatric disorders...). He has specific needs that the social support offered by the hospital does not always cover. These needs include physical assistance while dealing with administrative procedures and organization of daily activities. The “social coach” works with trusted partners. He will evaluate the situation by means of home visits. The needs of the patient also include coordination and management of doctors’ appointments and organization of transport.

After one year of activity, we had the pleasure to welcome a representative of the Foundation against Cancer to our hospital site.

G. Various

g.1. The Foundation monitors and analyses project calls. Partnerships have been established with the European Commission, the National Fund for Scientific Research, BELSPO, INNOVIRIS, the Flemish Community, the French Community, with medical Foundations, with companies and with Universities affiliated to the University Hospital Brugmann.

g.2. The Foundation publishes a monthly information bulletin.

g.3. The Foundation publishes a bi-annual Newsletter.

g.4. On November 17th 2016 a charity night was organised at Filigranes.

g.5. In collaboration with the Nursing and Paramedical Department of the CHU Brugmann, a rally was organized to support the Brugmann Foundation’s research activities.

g.6. Organisation of direct mailing (4X/year).

g.7. ‘Duo bequests’ → Contact with Brussels Notaries.

31 January 2016