



ACTIVITY REPORT 2017

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Donations of 40€ a year are tax deductible.

A. Tax certificates

By Ministerial Decision, the Brugmann Foundation is entitled to deliver tax certificates for donations reaching 40€ annually.

In 2017, the total sum of donations amounted to 26.308,95 €. 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 Brugmann Foundation.

B. Projects selected by the Scientific Committee and approved by the Board of Directors of the Brugmann Foundation

In the framework of its objectives, the Brugmann 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 one 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
- Professor Gilbert Vassart (Genetics – ULB – Francqui Prize)
- Professor Robert Muller (Molecular Imaging-UMH)
- Professor Jean-Louis Vincent (Intensive care – ULB, Erasmus)
- Professor Bart Leroy (Ophthalmology–Genetics-Ugent)
- Professor Johan Kips (Director Erasmus Hospital, Brussels)
- Professor Miriam Cnop (Laboratory experimental medicine – ULB)
- Professor Olivier Degomme (Reproductive Health Care – Ugent)
- Professor Vincent Donckier (Bordet Institute, Brussels).

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

DEPARTMENT	PROJECT	BUDGET	DESCRIPTION
BLOOD BANK/Deleers Marie	Improving red blood cells transfusion policy in Sickle Cell Disease (CSD)	24.254	Red Blood Cells (RBCs) transfusions remain a cornerstone treatment for acute and chronic complications in sickle cell disease. About 90% of adults with SCD will have received at least 1 RBC's transfusion. The objective of this study is to improve RBCs transfusion policy.
CARDIOLOGY/Almorad Alexandre	Formation en électrophysiologie à l'AZ Sint Jan Bruges	14.500	Le Dr Alexandre Almorad se spécialisera dans les arythmies et, plus spécifiquement, l'électrophysiologie. Cette spécialité est en grande expansion et il y a un vaste champ d'activités à la fois dans les domaines non-interventionnels et interventionnels : arythmie clinique (e.g. Holter, implantable ou non), pacemakers, défibrillateurs internes (implantation, contrôle et suivi), électrophysiologie.

GYNAECOLOGY/Jani Jacques	Prenatal prediction of neonatal macrosomia by Magnetic Resonance Imaging (MRI)	50.000	This is an on-going single centre study at the Department of Obstetrics and Gynaecology, University Hospital Brugmann. During routine third trimester US scan between 30+0-35+6 weeks gestation, all women with an apparently normal, live singleton pregnancy, planning to deliver at our hospital maternity, are invited to participate in this prospective observational study for prediction of neonatal macrosomia using antenatal MR (Magnetic Resonance) vs US (Ultra sound), between 36+0-36+6 weeks of gestation. Thereafter, a US scan and an MR examination for acquisition of FBV (Fetal Body Volume) is carried out the same day during the 36 th week of gestation.
IMMUNO-ALLERGOLOGY/DERMATOLOGY/ Mostmans Yora	Study on Chronic Urticaria (CA)	31.021	Objectives of the study are: 1) to determine the incidence of Chronic Spontaneous Urticaria (CSU) and Chronic Idiopathic Urticaria (CIU) in a Belgian city centre hospital 2) to investigate the role of Endothelial Cells (EC) in Chronic Spontaneous Urticaria on a clinical and molecular level: Molecular: determination of specific biomarkers of EC participation (ie activation) in plasma and skin: Stem Cell Factor (SCF), Vascular Endothelial Growth Factor (VEGF), Endothelial Progenitor Cells (EPC), E-Selectin; Clinical: NVC in all CSU and CIU patients; Clinical – Molecular: measurement of serum EPC and E-Selectin before and after exercise in patients with CSU.
IMMUNOLOGY/Nagant Carole	Humoral and Cellular immune response to vaccine in sickle cell patients according to treatment: Correlations with clinical and immune status of patients?	19.202	Recent data suggest that not only inflammatory status but also humoral immune response to antigens in SCD (Sickle Cell Disease) patients may differ according to treatment. The objectives of the project are to assess whether different humoral immune responses to vaccines or to erythrocyte alloantigens are related to the type of treatment administered to patients with Sickle Cell Disease. The aim is also to study if these differences might be related to different immune parameters: expression of HO-1, Treg cells, cytokines' production. . . Moreover, the aim is to explore global immunity against influenza vaccine in SCD which could have a clinical impact on the establishment of more appropriate vaccination schedules. Cellular (memory B and T Cells), and humoral immunity against influenza vaccine at different times after vaccination have been investigated. Sub-group analyses of the different explored parameters according to gender, age or clinical presentation will also be investigated.
NEUROLOGICAL REVALIDATION/Fernandez De Houwer Isabel	Participation au congrès WFOT Congress (World Federation of Occupational Therapists) 2018 in South Africa « Connected in diversity, positionned for impact »	2.500	The title of the Communication presented at the Congress is “Laughter yoga as a part of a Multidisciplinary Adult Neurological Rehabilitation Program-Theoretical aspects and tools for practical implementation”.
NEUROLOGICAL REVALIDATION/Gillard Olivier	Participation au congrès WFOT Congress (World Federation of Occupational Therapists) 2018 in South Africa « Connected in diversity, positionned for impact »	2.500	The title of the Communication presented at the Congress is “Laughter yoga as a part of a Multidisciplinary Adult Neurological Rehabilitation Program-Theoretical aspects and tools for practical implementation”.
NEUROLOGICAL REVALIDATION/Bulinckx Anna Maria	Formation Education Thérapeutique du patient suite à un accident vasculaire cérébral- GRIEPS-France	1.990	Le GRIEPS accompagne les établissements sanitaires et médicosociaux et leurs professionnels à répondre aux besoins de santé de la population et à s'adapter aux mutations de l'environnement sur les plans humain, technique et socio-économique.

NEUROPATHOLOGY/Kadhim Hazim	The aims of the study are : 1) to finalize investigations on the implication of different cytokines and associated immune-inflammatory mediators in Central Nervous System (CNS) pathophysiology and to explore particularly their role in immune-mediated and neuro-degenerative diseases of the brain and spinal cord, mainly in Amyotrophic Lateral Sclerosis (ALS) and 2) to publish remaining research projects on CNS neuropathology and on neuromuscular pathology, on which promising and rewarding results have been obtained.	2.000	15 years ago, the researchers extended their neuropathological explorations of the CNS by contemplating an elaborate and ambitious multi-centric/collaborative research project to study the potential role(s) of various cytokines, specifically in the etio-pathogenesis of human CNS diseases. More recently, the expertise in the related field of neuromuscular pathology was also widely acknowledged whereas the center has been recognized as a “Reference Center for Neuromuscular Pathology” for the U.L.B. & IRIS Network of University Hospitals. These engagements in the specialized field of neurological and neuromuscular pathology resulted in obtaining a large array of innovative medical research results and publications, some of which are pending.
PSYCHIATRY/Campanella Salvatore	Verify whether the use of a new tool i.e. posturography, could help to predict whether recently detoxified alcoholic patients are at high risk to relapse in a three-months period after detoxification	19.820	Participants in the research project are 60 patients from 18 to 60 years old, undergoing a three-weeks detoxification cure in the Alcohol Unit of CHU Brugmann, diagnosed with alcohol dependence, according to the DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders, 4 th Revision), and anti-craving medication free at arrival may be included in the study; stable doses of antidepressants will be accepted. Patients taking part in the study will be those receiving Campral, which make up for approximately 90% of all patients treated in the Alcohol Unit of CHU Brugmann. Participants with a history of neurological disorders, other serious medical conditions, and under neuroleptic treatment, assessed during the intake consultation will be excluded. An anamnesis will be performed, in order to gather information, including previous detoxification cures, past and current medications, tobacco and/or other drug consumption, as well as family history of alcoholism. Neuropsychiatric interviews and psychological measures evaluating anxiety, depression, and impulsivity will be performed, as psychiatric comorbidities are frequent in alcohol dependence. At the end of the detoxification, just before being discharged, patients will be confronted to our posturography study.
PSYCHIATRY/Rogiers Anne	Understand and identify the possible neuro-cognitive and emotional problems in melanoma survivors treated with immunotherapy in order to develop detection tools and offer adapted care	4.797	The objectives of the study are: 1) to describe neurocognitive functioning, fatigue, psycho-social outcomes, quality of life and subjective wellbeing in survivors of metastatic melanoma after ICIT; 2) to better understand the relationship between psycho-social symptoms, neuro-cognitive functioning and quality of life in these patients; 3) to produce a cross-sectional analysis with data base lock on 02/06/2016, and on 01/11/2017; 4) to ensure a twelve-month longitudinal follow-up of this study population in order to observe how these problems in melanoma-survivors evolve; 5) to identify psycho-social and neuro-cognitive care needed in this study population.

RADIOLOGY/Devriendt Arnaud	Use of Cone Beam Computed Tomography (CBCT) for erosion evaluation in rheumatoid arthritic hands and wrists	6.500	The objective of the study is, with Multiple Detector Computed Tomography (MDCT) as the reference method, to investigate the sensitivity, the specificity, the accuracy and the interobserver agreement of Cone Beam Computed Tomography and radiography for detection of bone erosions in Rheumatoid arthritis hand and wrist. In that way, the diagnosis and follow-up of Rheumatoid Arthritis patients may be improved.
CHIRURGIE DIGESTIVE/Jottard Katleen	Evaluation of the reliability of the dynamic pelvic floor MRI (Magnetic Resonance Imaging)	20.570	The first part of the study is to evaluate the reliability of the dynamic pelvic floor MRI. A secondary endpoint will be to compare clinical objective and subjective results related to pelvic floor abnormalities with imaging. The 2 nd part of the study aims to evaluate the anatomical changes in correlation with the clinical results, organ position and inter-compartment relationships after surgery. It is hoped that these radiological studies will allow to understand and explain some relapses and failures and maybe lead to an improvement of indications for surgery and the surgical techniques needed.

13 projects have been approved for a total amount of 199.654€.

C. Fund Désiré and Simone Drieghe Miller, King Baudouin Foundation

In the framework of its Fund ‘Désiré and Simone Drieghe Miller’ the King Baudouin Foundation has awarded 25.000€ to the Brugmann Foundation for implementation of the research project “Evaluation of cardiac hemodynamic modifications during cardiac surgery”, implemented by the Service of Cardiac Surgery of the University Hospital Brugmann, directed by Prof Pierre Wauthy, Head of Unit.

The Brugmann Foundation ensures administrative follow-up of the project.

Project description :

“Cardiac dysfunction is commonly encountered in cardiac surgery. The pathology leading to surgery is often accompanied by dysfunction, and the surgical act generates frequently transient dysfunction. Then accurate evaluation of the cardiac function is fundamental to enhance the ability to detect, quantify and treat clinical disorder of cardiac dysfunction. The only way to do this is to measure instantaneous ventricular pressure and volume. A conductance pressure volume catheter, not used in clinical routine, is the most accurate technique for evaluating cardiac function. The project is based on the use of conductance catheters during cardiac surgical procedures to precisely determine the changes in cardiac performance during different phases of the interventions, when realizing different therapeutic alternatives”.

D. Mailings

In 2017 two mailings have been sent out to relevant donors.

The first mailing concerns the FRISBEE study (Fracture Risk Brussels Epidemiological Enquiry). The aim of the study is to develop a model that is capable of measuring the risk of fractures among women older than 60, taking into account a variety of factors.

After a period of ten years of research, the FRISBEE project continues to build upon its success while continuing to publish articles and develop new projects.

With more than 3.560 participants, the FRISBEE initiative is one of the most important research projects in Europe and the main one in Belgium.

The second mailing invites donors to financially contribute to the realization of the 13 above-mentioned research projects.

E. Research Council

Supported by the Medical Management of the University Hospital Brugmann a Research Council was set up, bringing together all actors involved in this domain, including the Brugmann Foundation. This Council serves as a transversal platform to develop medical and clinical research at the University Hospital Brugmann.

The aim of the Research Council is to guarantee the university character of the Brugmann Hospital in the long term and to promote clinical research in the University Hospital Brugmann.

Expected results are :

- The number of theses (Faculty of Medicine) increases ;
- The number of doctoral theses increases ;
- The number of indexed publications increases annually ;
- The faculty laboratories receive additional support;
- Visibility with regards to research improves ;
- External funding for research increases.

The Research Council is made up of the Brugmann Foundation, the laboratories affiliated to the ULB (Laboratory for translational research, Laboratory for Medical Psychology and Addictology and the Laboratory for Pediatrics), the Heads of Unit and/or promoters, the Unit of Clinical Research and the Medical Management of the University Hospital Brugmann.

F. Association des Anciens de la Commission Européenne, Section Belgique (Association of former employees of the European Commission, Section Belgium)

On June 28th, 2017, the Belgian section of AIACE has organised a session on the theme “Progress in scientific research on Alzheimer’s disease”, in favour of the Brugmann Foundation.

Speakers were Dr Florence Benoît, Geriatric doctor and Head of Clinic ‘Geriatrics’ of the University Hospital Brugmann and Dr Kurt Segers, Neurologist and Deputy Head of Clinic ‘Geriatrics’. Both of them are specialized in Geriatrics and Alzheimer’s disease.

G. Charity night at Filigranes, 20 November 2017

On November 20th 2017 a Charity night was organised at Filigranes. 5.500 € have been raised. This amount has been used in its entirety to fund scientific research projects implemented in the University Hospital Brugmann.

H. Monitoring of open project calls and funding opportunities

The Brugmann Foundation monitors open project calls and funding opportunities to the attention of the medical corps and researchers working in the University Hospital Brugmann.

Partnerships have been established with amongst others the European Commission, the FRS/FNRS, the FWO, BELSPO, INNOVIRIS, the King Baudouin Foundation, the National Lottery, the Foundation against cancer, the Belfius Foundation, Kom op tegen kanker, the Fédération Wallonie-Bruxelles, ARES-CCD, the Alzheimer research foundation, the SCK/CEN, the Lyons' Club, as well as with enterprises and Universities affiliated to the University Hospital Brugmann.

The Brugmann Foundation publishes a monthly information bulletin and a quarterly Newsletter.

31st of January 2018