

A centenary to celebrate for the Jules Bordet Institute!



Brussels, 7th of August, 2019 – 2019 is the centenary year of the Nobel Prize in Physiology or Medicine won by Professor Jules Bordet in 1919 for his major discoveries relating to immunity. On this occasion we look back at the historic links between Jules Bordet, an exceptional scientist, and the Institute that bears his name, a reference centre in the fight against cancer in Belgium. Links that continue to this day through modern immunological research.

Immunity at the heart of his research and a Nobel Prize in recognition of his work.

Jules Bordet was a microbiologist and immunologist. In 1919 he was the first Belgian to be awarded the Nobel Prize in Physiology or Medicine in recognition of his major discoveries relating to immunology. Set out in the "Treatise on immunity in infectious diseases", these discoveries show that the organism reacts to the introduction of foreign agents (microbes, cells or substances) by creating antibodies. These antibodies are able to attach themselves to these foreign agents and destroy them thanks to a complement that is present naturally in the body, *alexine*. With this discovery Jules Bordet laid the foundations of our understanding of humoral immunity, our body's defence system resulting from the combined action of this complement and antibodies, and revealed the way in which microbes are destroyed in vaccinated subjects.

The historic links between the Professor and the Jules Bordet Institute

In 1894, as a young Doctor of Medicine from the Université libre de Bruxelles, Jules Bordet joined the Pasteur Institute in Paris where he explored the mechanisms of bacteriolysis or the destruction of bacteria. In 1931, at just 31 years of age, he founded the Pasteur Institute of Brabant, in Brussels, where he continued his research into microbiology while at the same time, until 1935, holding the chair of bacteriology at the Faculty of Medicine of the Université libre de Bruxelles. In 1919 he was awarded the Nobel Prize in Physiology or Medicine for his work in the field of immunity. In 1924 already he had joined the Scientific Board of the Tumours Centre at the Brugmann Hospital in Brussels. **In 1939 the first national centre in the fight against cancer opened in Brussels. It bore the name of this exceptional scientist dedicated to research into tumours: The Jules Bordet Institute.**

Jules Bordet opened pathways to modern research into immunology

Professor Jules Bordet's discoveries in immunology find an echo in modern research into immunology, still today largely carried out at the Jules Bordet Institute. His studies lie at the basis of immunotherapy, a type of treatment that seeks, among other things, to "mobilize" the patient's own immune defence to attack and destroy cancer cells. This is an important field of contemporary cancer research as it increases survival among certain patients while potentially being less toxic for the body than chemotherapy. Immunotherapy has already shown revolutionary results in the condition of patients suffering from skin, lung, bladder, kidney and other cancers.

Press Contacts

Jules Bordet Institute

Alexandra Cazan

GSM : +32 493 16 74 79

E-mail : alexandra.cazan@bordet.be

Ariane van de Werve

GSM : +32 486 17 33 26

E-mail : ariane.vandewerve@bordet.be

www.bordet.be

About the Jules Bordet Institute

An integrated multidisciplinary centre, unique in Belgium, the Jules Bordet Institute is an autonomous hospital devoted exclusively to cancer.

For more than 75 years, the Jules Bordet Institute has been providing its patients with diagnostic and therapeutic strategies at the forefront of progress to prevent, detect and actively combat cancer. The Institute pursues three missions: care, research and teaching. Its international reputation attracts the world's leading cancer experts. Its spirit of innovation has enabled it to participate in the development and discovery of major new methods of diagnosis and treatment with the aim of bringing the findings to the patient as rapidly as possible.

In May 2018, the Jules Bordet Institute received official accreditation and designation from the OECI (Organisation of European Cancer Institutes) as a "Comprehensive Cancer Centre", a quality label reserved for multidisciplinary cancer care institutions whose activities include research and teaching. This is a first for Belgium.

The Jules Bordet Institute is a member of the Iris and Université Libre de Bruxelles hospital networks. With its 160 beds dedicated exclusively to cancer patients, every year the Institute treats more than 6,000 in-patients, 12,000 out-patients and provides 75,000 consultations. To effectively meet future demographic and scientific developments, the Institute is planning to build a new Institute Bordet on the ULB university campus in Anderlecht, next to the Erasmus Hospital. Inauguration is planned for 2020.

www.bordet.be

About the Friends of the Bordet Institute

The Friends of the Jules Bordet Institute is a non-profit-making organisation with the sole aim of supporting and financing research at the Jules Bordet Institute, a cancer centre that is a reference in Belgium and abroad. As the largest private donor to the Bordet Institute, "The Friends" have donated almost 12 million euros in the past five years.

Rue Héger-Bordetstraat 1, B-1000 Bruxelles/Brussel

T + 32 (0)2 541 31 11, F + 32 (0)2 541 35 06, BELFIUS: BE72 0910 0972 7816, www.bordet.be

Institut Jules Bordet, Association Hospitalière de Bruxelles régie par la loi du 8 juillet 1976
Jules Bordet Instituut, Ziekenhuisvereniging van Brussel onderworpen aan de wet van 8 juli 1976



Considerable progress has been made in the field of oncology in recent years. Our understanding of the biological origin of cancer is growing all the time. Whereas 10 years ago we spoke of the microscopic analysis of tumours, today we speak of genetic profile, of sequencing, etc. Dozens of new molecules and markers have been developed, permitting the advent of personalised treatment. This progress has to a large extent been made possible through the extraordinary technological progress of recent years. But these new techniques that now enable us to probe the infinitesimally small are increasingly expensive.

For 50 years, the help of the "Friends" has enabled the Jules Bordet Institute to pursue its research using the most advanced technologies, thereby providing patients with the most innovative screening and treatment techniques. Techniques that generate life and hope.

By helping and supporting "The Friends of the Bordet Institute" you are participating in the many research programmes that they support and that all pursue a single aim: victory for life.

To find out more about the association The Friends of the Jules Bordet Institute, go to the website www.amis-bordet.be
To find out more about the "101 tables pour la vie", go to the website www.101tables.com