

IN GRATEFUL REMEMBRANCE OF



Dr Paul Janssen
(1926 - 2003)



On Tuesday, November 11, 2003, Dr Paul – founder and for many years Managing Director of Janssen Pharmaceutica – died unexpectedly in Rome whilst attending the celebration of the 400th anniversary of the founding of the Pontifical Academy of Sciences. By his death we lose an unusually gifted and passionate scientist who laid the foundations for more than 80 medicines,

which have saved millions of lives and are still making an invaluable contribution to the health and quality of life of people all over the world. Exactly 50 years ago he started his own drugs research in the premises of his father's business in the Belgian town of Turnhout. In 1961, the young company was incorporated into the Johnson & Johnson group, the world's most comprehensive and broadly based manufacturer of healthcare products. In just a few decades, Janssen has grown into an international concern whose products are used everywhere in the world.

Dr Paul Janssen was without doubt one of the 20th century's most prolific researchers into new drugs. He and his co-workers developed breakthrough drugs in numerous fields of disease, including anesthesia and pain management, psychiatry, fungal infection and gastrointestinal disorders. Throughout his lifetime he received many high awards in recognition of his work, including 22 honorary doctorates and five honorary professorships at home and abroad. Until his death Dr Paul remained closely involved in the never ending quest for new drugs to treat the most severe diseases that endanger human health. His lifetime work will be continued by thousands of researchers at home and abroad, building on the foundations that Dr Paul Janssen has laid in the past 50 years.

Dr Paul and the realization of a lifelong dream

It all started precisely 50 years ago, in a simple laboratory on the third floor of his parents' business in Turnhout. The example set by his father, Dr Constant Janssen, stimulated his interest but at the same time turned his thoughts to new and even more ambitious ideas.

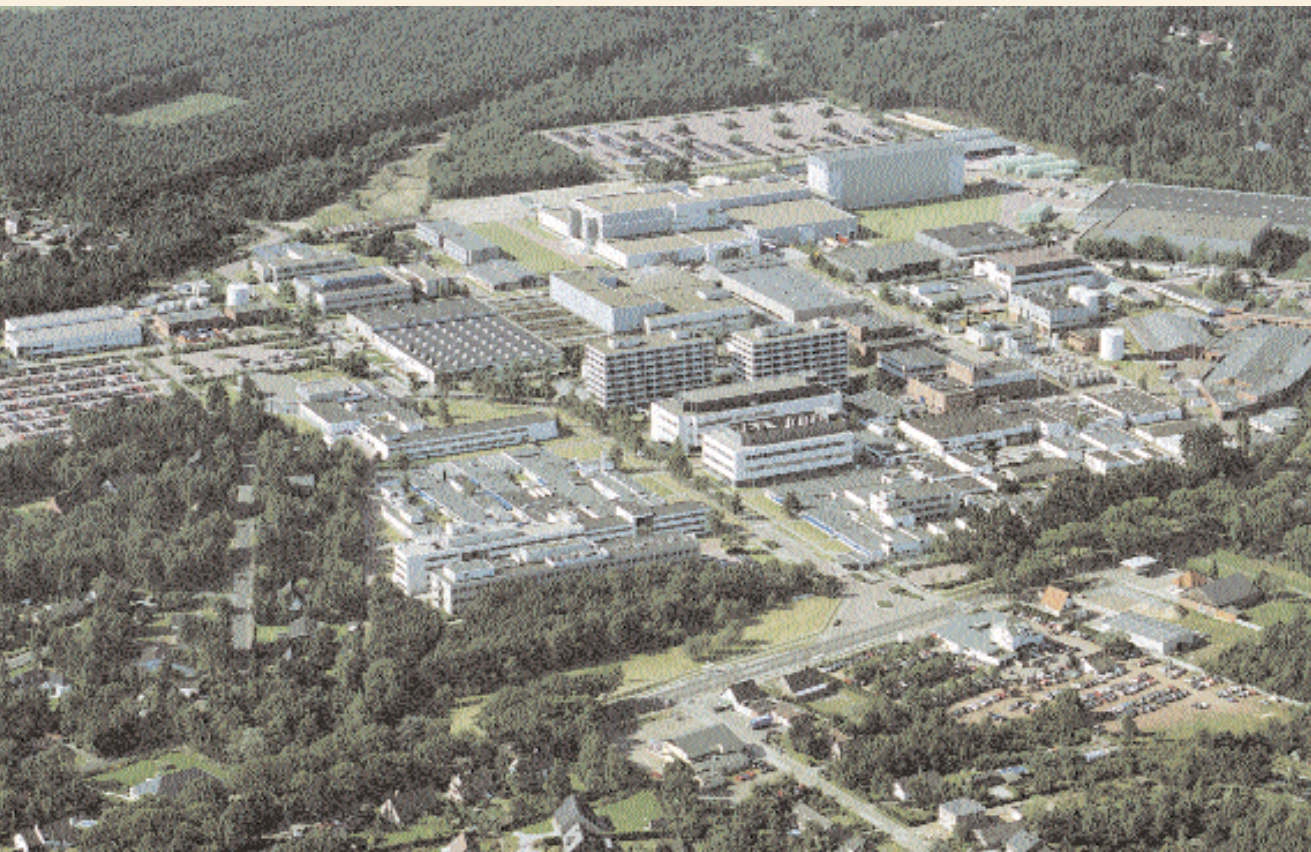
Despite skepticism and even overt disapproval from some quarters, the young doctor seized the opportunity to give his goals and ideals concrete form: to set up a completely independent and self-supporting research laboratory. Conditions in the early 1950s were quite favorable because medicine had quickly gained momentum after the Second World War. The risks, however, were huge and the modest resources at his disposal made the chances of success marginal.

Nevertheless, with his sound scientific grounding, the unshakeable conviction that he would realize his dream and the wholehearted support and confidence of his parents, Dr Paul stubbornly persevered.

Today, his thousands of co-workers and former co-workers all over the world can look back on an extremely successful company that has spanned five decades. One that, with more than 40 foreign affiliates, has grown into a truly global concern and in many fields has become an indispensable cornerstone of Johnson & Johnson. Hopes and ideals that many people considered impossible back in 1953 have thus been realized: from its originally modest base in the Kempen region of northeast Belgium, Janssen Pharmaceutica has conquered the world and made an exceptional contribution to many fields of healthcare. Day after day, millions of patients in almost every part of the world derive benefit from the drugs discovered, developed and produced in Beerse.



The achievements of Dr Paul and his staff over the past 50 years are clearly shown by these aerial photographs of the Beerse site, which were taken in 1963 and 2000. Beneath are pictures of the site of Janssen in Geel and of the new campus Beerse II.





Paul Janssen was a descendant of a proud family of farmers from the Kempen region. In this family photo from 1928 he is seated at front-right on the ground.

Prelude

There was nothing to indicate that Paul Adriaan Jan Janssen was to become one of the most important medical scientists of Belgium when, on September 14, 1926, two days after his birth, his name was entered in the registers of the Registrar of Births, Deaths and Marriages in Turnhout. His father, descendant of a proud family of farmers, worked his way up to become a successful GP in Turnhout. Together with his wife, Margriet Fleerackers, he subsequently set his sights on owning his own business. Fate lent him a hand. During a period of practical training in Vienna, he met the son of Gedeon Richter, director of a successful pharmaceutical company in Budapest.

In 1933, Dr Constant Janssen acquired the sole rights to import Richter products from Hungary and to distribute them in Belgium, the Netherlands and the Belgian Congo. On October 23, 1934, **N.V. Produkten Richter** was officially incorporated as a limited company. By 1938 the volume of business had increased to such an extent that Dr Constant Janssen decided to end his medical practice and devote himself entirely to the expansion of the business. He developed the company from an old factory building at 78 Statiestraat in Turnhout, close to the old water tower, where he quickly realized his plans to make up and market his own products.

Following in father's footsteps

While his parents gradually expanded their business, their four children were growing up. Paul received primary and secondary school education at St.-Jozef College, Turnhout, one of the strictest Jesuit schools in Belgium. The ambitious and intelligent Paul wanted to follow in his father's footsteps and use his talents

to develop an independent research laboratory of his own. During the war years (1939-1945), Paul was able to enroll, thanks to the mediation of his uncle, at the Faculté Notre Dame de la Paix in Namur. The intensive courses in physics, biology and chemistry stimulated the young student's scientific fervor even more, and he became increasingly convinced of the importance of chemistry in medicine. In his view, reconciling the two disciplines with each other

was the greatest challenge.

At the end of 1945 he moved to Leuven to study medicine at the Catholic University. Even at that time he was undoubtedly thinking of developing original drugs because, as he saw it, the days were gone when you could sell products that were little more than combinations of universally known raw materials on which no patent could be established.

The young medical student was convinced that there had to be a connection between the chemical structure of a substance and its pharmacological action. These concepts laid the foundations for subsequent Janssen research: synthesizing molecules with the aim of finding the relationship between their pharmacological structure and activity.



After the Second World War, Dr Constant Janssen added his own range of products to his marketing mix, under the brand name Eupharma. Most of them were combination products, such as Cholagol, Ca.Vit.AD, Sulfavit, Multavit and Ferrotone.



Thanks to the mediation of his uncle, Paul was able to enroll during the war years (1939-1945) at the Faculté Notre Dame de la Paix in Namur.

Six months in America

To be able to develop novel drugs, he first had to gain a better understanding of worldwide research in chemistry and pharmacology. Accordingly, in 1948 his parents gave him their blessing for an extended visit to the United States, where he was able to attend courses as a part-time student at several scientific faculties and also visited several pharmaceutical companies, including Searle, Upjohn and Lederle, where he gained first-hand knowledge of contemporary pharmacological research. The young medical student made sure that he was back in Belgium just in time for the examinations of that academic year in Leuven. He passed *magna cum laude* and then moved on to Gent University where he completed his studies in 1951, graduating *magna cum laude* and receiving his degree as Doctor of Medicine.

With the ink still wet on his degree, the young doctor then had to do his military service near Cologne, Germany. As a recently graduated M.D. there was little for him to do in the army. He utilized the free time to continue his studies in pharmacology and chemistry at Cologne University. There he had the good fortune to meet Prof. J. Schuller, who let him perform a number of simple experiments in his Institute of Pharmacology. He remained as a part-time assistant at that institute of Cologne University until the end of 1952.

In this period he undertook several study trips abroad. He studied in Vienna and Paris (1951), Oxford, London and Stockholm (1953) and for a second time in the USA (1954). Between 1950 and 1956 Dr Paul regularly returned to Gent where he was part-time assistant at the Institute of Pharmacology and Therapeutics of Gent University. The institute was directed by Prof. Corneel Heymans, who had won the Nobel Prize for medicine in 1938. It was at this institute, in 1956, that Dr Paul received his Teaching Certificate for Higher Education in Pharmacology with a thesis on 'Compounds of the R 79 type'.

Although an academic career was his for the asking, it never appealed to Dr Paul. His choice had been made long ago, and that decision was never open to discussion. Early in 1953 – at a time when medicine was gaining momentum following a succession of major new discoveries – he took the calculated decision that the time had come for him to make a start with the achievement of his childhood dream. From the outset, he dismissed thoughts of developing a pharmaceutical company as part of a more comprehensive chemical concern. No, despite the very modest resources at his disposal the young scientist wanted to set up a completely independent research



company, capable of surviving and expanding on the income from its own research results. For that purpose he naturally had to discover, and discover as quickly as possible, active chemical compounds on which he could secure a patent, license them to large foreign companies and then, with the income thus generated, finance new research and recruit more associates.

The first co-workers

The unusual idea of setting up a completely independent, self-financing research laboratory was regarded with considerable suspicion and skepticism by his acquaintances. The risks were far from negligible. Dr Paul's parents nonetheless had every confidence in him. Encouraged by the moral support of his parents, the ambitious son set to work on the third floor of the company's premises in Statiestraat, Turnhout. There he furnished and equipped his first research laboratory with the absolute minimum of resources. The first co-workers he took on had not gone to university, but for Dr Paul that was not important. For him the most important selection criteria were a healthy dose of common sense and a desire to work.

In 1953 and just qualified as a Doctor of Medicine, Dr Paul started on the realization of his lifelong dream: the realization of an independent research laboratory specialized in the discovery and development of drugs.



A group photo, taken in the early 1990s, of Dr Paul's first associates.

The first objective of Dr Paul and his small group of co-workers was to try to understand how a chemical compound produces its effect on a living organism. This was the only way they could manipulate the chemical structure of a compound intelligently and precisely predict, control and improve its biological effects. From the very first day, Dr Paul had a clear research strategy in mind. He knew exactly what he wanted to find, but not whether he would actually find it. Time was vital. It was a question of synthesizing a chemical compound on which a patent could be obtained as quickly as possible, using the meager resources at his disposal. After performing simple basic screening tests, Dr Paul sent his first compounds to David K. de Jongh, a Dutch physician who was working at the Amsterdam Quinine Factory (ACF) and had the necessary equipment for undertaking more extensive pharmacological research. He performed a battery of tests on Dr Paul's compounds to determine whether they were in fact active and not too toxic.

"As a physician, I find it all the more remarkable that Janssen has succeeded over a fifty-year period in producing major new breakthroughs in different domains of disease. No other company has ever succeeded in introducing so many successful drugs in so many fields as us."

Dr Ludo Lauwers

Rapid success

In the 1950s, the process of synthesizing new molecules took much longer than it does with the advanced techniques we have today. Nevertheless, the first successful compound was soon discovered. This was ambucetamide, an antispasmodic that was found to be particularly effective for the relief of menstrual pain. The compound was given the number R 5. It was launched in April 1955 under the brand name **Neomeritine*** and is still marketed today.

The first important molecule after R 5 was R 79, isopropamide iodide, which was introduced in July 1955. This atropinic compound became a commercial success when the licensing rights were sold to Smith, Kline & French, of Philadelphia, who marketed it in the United States under the brand names Combid and Darbid. The next two compounds – R 875, or dextromoramide (**Palfium**) and R 1132, or diphenoxylate (**Reasec**) – were also commercialized in this way. The licensing rights to the new anti-diarrheal agent were acquired by Searle and it was launched in the USA under the brand name Lomotil. In the 1960s it even conquered space, because it was included in the medical kit of the Apollo astronauts and taken in their spacecraft to the moon.

* Names in bold type are Janssen trademarks.

List of the most important Janssen products for human medicine

<i>R number</i>	<i>generic name</i>	<i>brand name</i>	<i>synthesized in</i>	<i>launched in</i>
R 5	ambucetamide	Neomeritine	1953	1955
R 79	isopropamide iodide	Priamide-Janssen	1954	1955
R 253	diisopromine	Bilagol	1955	1956
R 516	cinnarizine	Stugeron	1955	1958
R 875	dextromoramide	Palfium	1955	1957
R 1132	diphenoxylate	Reasec	1956	1960
R 1625	haloperidol*	Haldol	1958	1959
R 2498	trifluoperidol	Triperidol	1959	1961
R 3345	pipamperone	Dipiperon	1960	1961
R 3365	piritramide	Dipidolor	1960	1967
R 4263	fentanyl	Fentanyl	1960	1963
R 4584	benperidol	Frenactyl	1961	1965
R 4749	droperidol	Dehydrobenzperidol	1961	1963
R 4845	bezitramide	Burgodin	1961	1971
R 6218	fluspirilene	Imap	1963	1971
R 6238	pimozide	Orap	1963	1970
R 7904	lidoflazine	Clinium	1964	1969
R 11 333	bromperidol	Impromen	1966	1981
R 12 564	levamisole*	Ergamisol	1966	1969
R 13 672	haloperidol decanoate	Haldol decanoas	1967	1981
R 14 889	miconazole nitrate*	Daktarin	1967	1971
R 14 950	flunarizine	Sibelium	1967	1977
R 15 889	lorcainide	Remivox	1968	1983
R 16 341	penfluridol	Semap	1968	1973
R 16 470	dexetimide	Tremblex	1968	1972
R 16 659	etomidate	Hypnomidate	1964	1977
R 17 635	mebendazole*	Vermox	1968	1972
R 18 553	loperamide	Imodium	1969	1973
R 33 800	sufentanil citrate	Sufenta	1974	1979
R 33 812	domperidone	Motilium	1974	1978
R 35 443	oxatomide	Tinset	1975	1981
R 39 209	alfentanil	Rapifen	1976	1983
R 41 400	ketoconazole	Nizoral	1976	1981
R 43 512	astemizole	Hismanal	1977	1983
R 46 541	bromperidol decanoate	Impromen decanoas	1978	1984
R 49 945	ketanserin tartrate	Sufrexal	1980	1987
R 50 547	levocabastine	Livostin	1979	1989
R 51 211	itraconazole	Sporanox	1980	1986
R 51 619	cisapride	Prepulsid	1980	1989
R 64 766	risperidone	Risperdal	1984	1993

* Four Janssen drugs are included in the World Health Organization's most recent Model List of Essential Drugs, of which there are presently about 300.



On account of the acute lack of space, Dr Paul and his initial research team moved to a wooded area between Beerse and the neighboring village of Vosselaar, where the first research buildings were soon under construction.

Moving to Beerse

Meanwhile, the number of employees in Turnhout continued to grow and the original Richter products gradually faded into obscurity. A few years after the Second World War the Richter brand name was superseded by **Eupharma**, although Richter was retained as the company name until 1956. In the meantime, at the family business in Turnhout there was growing awareness that the rapid evolution of medicine in the post-war period called for a different approach by the pharmaceutical industry. As a consequence, Dr Paul's parents devoted increasing attention to the production and sale of the original compounds discovered by their son and his growing research team. On April 5, 1956 the name of the family business was changed to **N.V. Laboratoria Pharmaceutica Dr. C. Janssen**.

1957 was a crucial year in the development of the fast-expanding pharmaceutical company. There was an urgent need for new premises because the accommodation in Turnhout was becoming too small for the ever-growing production volumes and the increasing number of employees. A year earlier, Dr Constant Janssen and Dr Paul had cast their eyes on a wooded area covering 36 hectares between Beerse and the neighboring village of Vosselaar.

As it happened, the clerk of the local council, a Mr Feyen, had tentative plans at the time to establish an industrial estate on wasteland which was available on the outskirts of the village, a revolutionary concept in those days.

In just a few months, the first buildings were constructed on the site at Beerse between the end of 1956 and the beginning of 1957. Dr Paul and thirty of his staff moved into the new premises on Saturday, April 27, 1957.

About one year later, on May 2, 1958,

Dr Paul's research laboratories in Beerse were given independent status with the incorporation of the limited company **N.V. Research Laboratorium Dr. C. Janssen**. This served to underline the research character of the young company, which was henceforth a legally independent entity, as well as benefiting its image in the medical community. The registered office of the Turnhout company wasn't moved to Beerse until February 1964 and the move from Turnhout to Beerse was completed in 1971-1972 with the transfer of the pharmaceutical production activities.

Dr Paul's independent research company in Beerse initially had four departments: a synthetic chemistry facility, a pharmacological laboratory, an analysis laboratory and eight offices. There were also several areas for experimental animals, mostly rats and mice. Helped by the royalties that were soon arriving from the USA, the team could now surge ahead in their quest for new drugs. A growing number of university graduates came to swell the ranks of the thirty or so original researchers, working together day after day on the bold undertaking. The work at Beerse never stopped, not even on Sunday, although Dr Paul could occasionally be seen in those days out on the soccer pitch.

Out of Africa

Dr Paul proved not only to have a great flair for spotting promising compounds, for he also had a talent for recognizing outstanding colleagues. He recruited a number of people who had previously worked for many years in the former Belgian Congo where they had built up a wealth of experience, most of them as veterinarians or parasitologists. Bob Marsboom, Carlos Niemegeers, Denis Thienpont, Jan Van Cutsem, Jan Van Nueten and Oscar Vanparys: these are just a few of the better-known names from a long line of experts who came out of Africa. In various new departments in Beerse, they all worked their way up to become specialists in their respective fields, such as parasitology, pharmacology, mycology, neurology and many others. Apart from giving full rein to their individual talents, this success was due to the principle adopted by Dr Paul Janssen right from the start in 1953: to build research around people, not the other way round. He gave all his co-workers the greatest possible latitude in their work, but he himself determined the direction it was to take. Just like his father, he acted with authority but also with great respect for the individual qualities of his associates. He had the talent of being able to stimulate and encourage them by continually entertaining high hopes and seeing them rise to the challenge and achieve results that they hadn't thought possible.

The results were not long in coming. The still youthful company seemed to be producing major breakthroughs in every field at the same time. This was certainly the case in psychiatry with haloperidol (R 1625), which was synthesized in 1958, and in anesthesia with fentanyl (R 4263), which saw the light of day in 1960. **Haldol** soon became the reference drug of a new range of neuroleptics, the butyrophenones, which now include benperidol, droperidol, bromperidol and pipamperone. These were later supplemented by a new class, the diphenylbutylpiperidines, and more specifically pimozone, fluspirilene and penfluridol. All these successful drugs not only revolutionized mental healthcare, but also still offer millions of patients all over the world the chance to enjoy a dignified existence.



A similar transformation occurred in the surgical world. The wide range of potent Janssen analgesics, with **Fentanyl** leading the way, are still making both short and long operations possible with minimal discomfort for the patient.

Soccer was the principal form of relaxation for Dr Paul and his initial research team. The photo shows the Janssen soccer team in 1963. Front row (from left to right): Frans Verbruggen, Charel Van Ravesteyn, Dr Paul Janssen, Oscar Vanparys and Dr Bob Marsboom; back row (from left to right): Louis Van Hoeck, Paul Demoen, Leo De Proost, Fred Lenaerts, Hugo Verhoeven and Jan Wouters.



Jan Van Cutsem was one of the many associates who had gained a wealth of expertise in Africa and was subsequently able to utilize that know-how to discover new Janssen compounds in their specific disciplines.

In search of stability

At the end of the 1950s Dr Paul's parents gradually retired from the business, starting with his mother in 1957. His father, however, did not yet consider that the time had come for full retirement and he even set up a new company, **N.V. Bercot Cosmetica**, which specialized in the sale of medical skin care preparations and personal care products. He remained chairman of the Board of Directors of that company until his death in April 1970. In the meantime, Dr Paul's research company continued to grow steadily, with success following success.

Dr Paul had his hands more than full with research into novel drugs and their subsequent commercialization. Good managers were now needed to assist Dr Paul with the further development of his fast-expanding company. One of these newcomers was Bob Stouthuysen, who joined the family business in Turnhout and Beerse in September 1957, first on a part-time basis and later, from October 1, 1958, full-time. As the company's personnel manager, Stouthuysen was initially occupied with general work

organization but he was soon involved in widely diverse personnel affairs. After the merger with Johnson & Johnson in 1961, Stouthuysen was appointed to a management position. In 1963 he became assistant manager under Frans Van den Bergh, who could only work for Janssen on a part-time basis because of his other functions outside the company. In 1965 Stouthuysen was officially appointed director of the company, and in 1971 he was co-opted to the Board of Directors, of which he has been chairman since October 12, 1991. Stouthuysen succeeded Luc Wauters, who had come from the banking sector and became a member of the Board of Directors in September 1978. He was chairman of the Board from 1980 to 1991 and is now honorary chairman.



"Pharmaceutical research is a question of teamwork. Dr Paul succeeded – by trial and error – in surrounding himself with people who empathized with the bold undertaking and have given, and indeed in some cases are still giving, of their best in order to realize his ambitious research goals."

Bob Stouthuysen

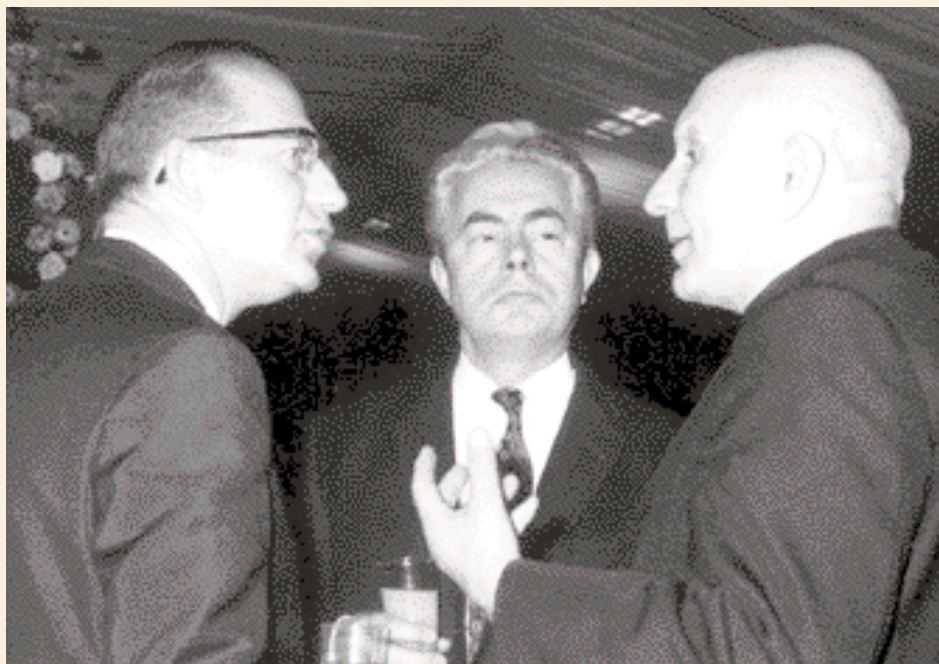
Dr Paul in the Janssen Home, together with Luc Wauters, chairman of the Board of Directors from 1980 to 1991, and Bob Stouthuysen, who has been closely involved with the everyday management of the company since the end of the 1950s. Stouthuysen is chairman of the Board of Directors since 1991.

A very important person with demonstrable leadership qualities in the company's early years was Frans Van den Bergh, who had successfully developed his own cigar factory (Alto) in Turnhout and was clearly an outstanding self-made manager. He was related to Dr Paul's mother by the marriage of his daughter Lea. With this background he was a natural choice and Dr Paul's parents therefore engaged him to help steer the family business, now consisting of five different branches, in the right direction. Van den Bergh became chairman of the Board of Directors in 1961, a position he held until 1980. He died on October 21, 1990.

American ally

Frans Van den Bergh was not only a born manager but also a consummate diplomat. These were exactly the talents that were needed in Beerse at the beginning of the 1960s. Van den Bergh was therefore the ideal person to collaborate with Dr Paul in conducting the negotiations with the American healthcare company **Johnson & Johnson**. Founded in 1886 by three brothers – Robert Wood, James Wood and Edward Mead Johnson – in New Brunswick (New Jersey), this family business grew within a few decades into an international concern. At the end of the 1950s the American concern was scouting Europe for pharmaceutical research companies with a promising future. In 1959 it had already acquired the American McNeil Laboratories and a Swiss company called Cilag Chemie.

Agreement was soon reached between the Americans and the Janssen family. After several months of amicable negotiations with the American delegation, which included Harry C. McKenzie, a member of the Board of Directors of Johnson & Johnson, and Gustav Lienhard, the then chairman of the Board of Directors – a private contract was drawn up between Johnson & Johnson and the Janssen family on July 17, 1961. Under the terms of this contract, which officially took effect on October 24, 1961, Johnson & Johnson acquired the two research companies in Turnhout and Beerse, the export business (Bepharex) and Janssen's two foreign subsidiaries in Tilburg (the Netherlands) and Düsseldorf (Germany). This merger took place in exchange for a block of shares in the American parent company. With effect from February 12, 1962, Johnson & Johnson officially held all the shares in the company.



A remarkable aspect of the merger process was that the Americans originally were more interested in Paul Janssen himself, but he was not for sale. On the contrary, he was more than ever aware of the tremendous potential of his still young research company. The American directors soon realized this. Dr Paul was given a formal guarantee that the Belgian company would be permitted to retain its own identity and independence within the international group. This was underlined by Dr Paul in an interview early in 1992: 'During the negotiations that led to this cooperation, the future and the protection of our company were uppermost in my mind. For me and my employees, the merger was a sort of life insurance.'

Frans Van den Bergh (seen here in the middle) played an important role in the negotiations with Johnson & Johnson and in the successful development of Janssen. He was chairman of the Board of Directors from 1961 to 1980.



Fungi and worms, all sorts of mental illnesses, cardiovascular diseases, allergies and gastrointestinal disorders: these are just a few of the very diverse fields of medicine in which research has successfully been conducted in Beerse over the past 50 years. At the picture: Koen Andries, Dr Paul and StafVan Reet.

Growth in many areas

For Johnson & Johnson, the acquisition of the business site and companies at Beerse and Turnhout was in the first place an investment, and a very lucrative one, as events were soon to prove. At that time the name Janssen Pharmaceutica hadn't yet been coined. Up to the beginning of February 1964 the subsidiary, which had 370 employees when it merged, retained its former name. The suggestion for the new name, **Janssen Pharmaceutica N.V.**, came from Frans Van den Bergh. Dr Paul agreed. This has been the official name of the company since February 10, 1964.

Working under the incentive of its parent company in the USA, the Belgian subsidiary now embarked upon a period of even more rapid growth than before. The expansion soon assumed worldwide proportions. It was almost impossible to keep up with the number of successful new compounds: levamisole, miconazole, flunarizine, etomidate, mebendazole, loperamide, domperidone, sufentanil, ketoconazole, astemizole, itraconazole, cisapride, risperidone... A seemingly endless succession of new drugs were discovered in Beerse, each of them breaking new ground; a total of 71 drugs in all, the vast majority for human medicine. Some of them, however, were also destined to give sterling service in veterinary medicine and plant and materials protection.

The rapid growth of Janssen Pharmaceutica is reflected in the constantly growing employment. The company is by far the largest in the Antwerp Kempen region and is regarded as one of the most attractive employers in Belgium.

1950	Richter/Eupharma	95
1955		190
1960		350
1965		465
1970		807
1975		1378
1980		1734
1985		2322
1990		2914
1995		3245
2000		4036
2002		4234

Infestations by fungi and worms, all sorts of mental illnesses, cardiovascular diseases, allergies and gastrointestinal disorders: the research spanned the most diverse fields of medicine. The researchers at Beerse also turned their attention increasingly to the health of animals and plants, which again led to successful products in both of these areas. More specialists were recruited in all these varied disciplines. The company was now continually extending its horizons – not least because Janssen compounds were also meeting with increasing success in other countries.

Despite this increasing range and extent of the company's activities, Dr Paul still managed to keep abreast of day-to-day developments, ably assisted by his closest co-workers, in whom he had unshakeable confidence. Needless to say, the number of employees steadily rose:

from 377 in 1961 to 807 in 1970 and 1734 in 1980. This exponential growth seems virtually unstoppable, because an average of 120 people have joined the company each year since 1980. In 1991, Janssen passed the milestone of 3000 employees in Belgium alone, and at the end of 2002 the number of employees in Beerse, Geel and Olen totaled 4234.

"The worldwide R&D organization can look back on a very successful track record, one in which Dr Paul played a key role for decades. Thanks to these firm foundations, we now stand stronger than ever to meet the challenges of the 21st century."

Didier de Chaffoy

Worldwide expansion

The rapid growth in Belgium was undoubtedly due in part to the worldwide expansion of Janssen, especially in the 1970s and 1980s. Plans to expand the company beyond the national borders in fact dated back many years. In 1939, Dr Constant Janssen opened a small office in Tilburg, the Netherlands, for the purpose of supporting Richter products in that country.

On September 16, 1958, initiated by Dr Paul, Janssen's first foreign affiliate was set up in Düsseldorf.

Another diversification of the company was the export business **Bepharex**, which, until the acquisition by Johnson & Johnson in 1961, looked after the sales and distribution activities for a number of countries from its Belgian offices, including the Belgian Congo, Jordan and Egypt.

The number of foreign affiliates has now grown to more than 40, together employing a workforce of more than 23,000 employees worldwide. Major milestones in that evolution were the incorporation of Janssen subsidiaries in the UK (1971), Japan (1978), USA (1979) and China (1985), where Janssen – after years of patient negotiations – was one of the first Western pharmaceutical companies to be allowed to enter China and establish operations there. On each of these occasions Dr Paul played an active and decisive role in the finalization of the agreements, which were sometimes reached only after lengthy negotiations. With unrelenting perseverance, a characteristic that he displayed even as a young man, he succeeded in achieving his goal and reconciling the most incompatible viewpoints. He patiently demolished each bureaucratic obstacle standing in the way of his lifelong goals. The research activities likewise expanded internationally. Janssen research facilities were established in the USA in 1972 and subsequently in the UK, Germany, France and Spain. During the recent past decades, the chemical and pharmaceutical production has also been dispersed over numerous countries with the aim of optimally meeting local requirements. Chemical production outside Belgium, under the direction of Achiel Ossaer, currently takes place in Ireland, the USA, Switzerland and Australia (Tasmania). For the pharmaceutical production, directed by Antonio Guiggi, apart from the plants in Beerse other key production facilities are located in France, Italy, Switzerland and Portugal.

Established values

The expansion of Janssen into a pharmaceutical company with affiliates all over the world is the result of the founder's unshakeable belief in his own abilities and is based on a very calculated decision to be completely self-financing. The absorption into a larger



entity was therefore certainly not prompted by a lack of equity capital. On the contrary, it was more a form of financial life insurance for the fast-growing company. Moreover, it should be emphasized that the successful management at Beerse has been key in the past decades to the successful worldwide expansion of Janssen Pharmaceutica. Thanks in part to the tremendous productivity of Janssen research, the firm leadership of Dr Paul and the shared values set forth in *Our Credo*, the relationship between the parent company and Janssen has always been excellent.

The worldwide success of the small family business in Turnhout has surprised a lot of people. Not in the least because it has all happened so quickly. Nevertheless, the people in Beerse have always been very much aware, right up to the present day, of the tremendous task that faces each and every one of us. For the challenges of today and tomorrow are much greater than those of yesterday. With its 50th anniversary, Janssen Pharmaceutica has certainly not reached its peak. On the contrary. Thanks to our increased international cooperation in many fields, including R&D, but also in respect of production, marketing, finance, information management and many other support services, our company has gained an even stronger position than ever within the most comprehensive and broadly based healthcare company in the world. Inspired by the example of its founder, Janssen Pharmaceutica is meeting the challenges of the 21st century with increasing strength and confidence.

In research and development as well as chemical and pharmaceutical production, Janssen has been hugely successful internationally in a relatively short space of time.

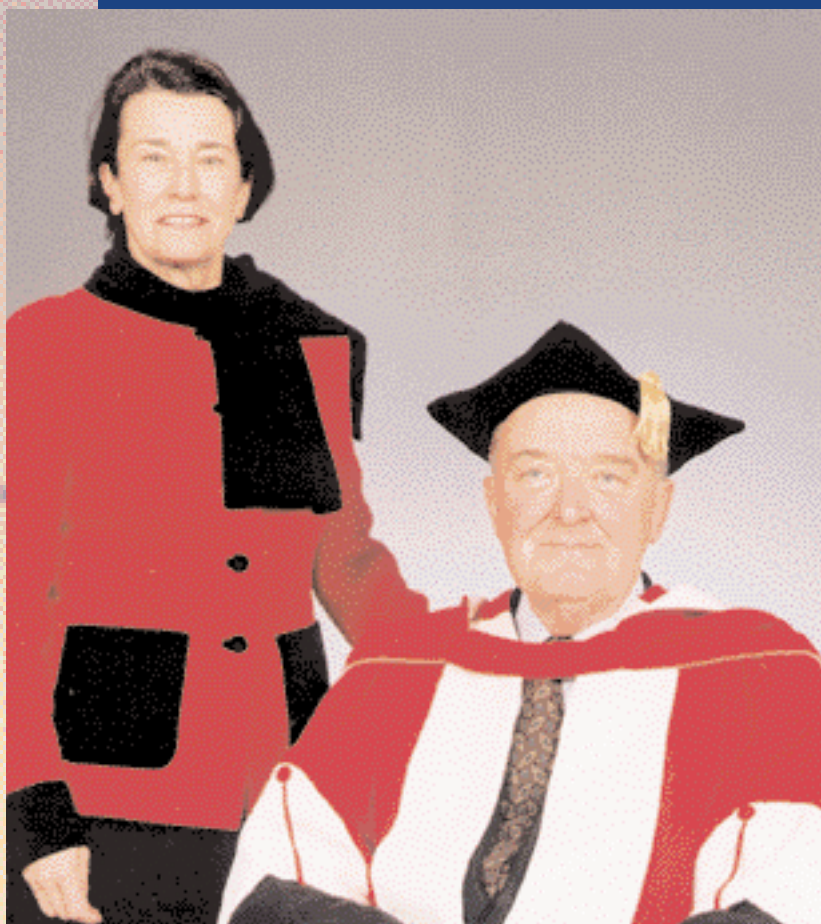
"Janssen possesses tremendous growth potential, but it is up to each and every one of us to realize that potential. We can do that, each of us in his or her own discipline, by trying to be excellent and doing everything right the first time."

Ajit Shetty

Twenty-two honorary doctorates

It is really quite exceptional for a scientist to receive so many awards from so many nations in recognition of contributions to so many different scientific disciplines. Dr Paul was such an exception. During his prolific career, he received 22 honorary doctorates, not only in medicine but also in natural science, veterinary medicine, general science, pharmacy and even in philosophy (see below). Then again, when one considers the way in which he uniquely embodied all the qualities of a chemist, a pharmacologist and a physician, perhaps it is not so surprising. His wide-ranging and multidimensional knowledge of pharmacological research had a beneficial impact on the climate of research at the company. That multidimensional aspect and open-mindedness were also entirely in keeping with his personal outlook on life.

The award of 22 honorary doctorates, an exceptional number in the scientific world, clearly demonstrates that Dr Paul uniquely embodied the qualities of a chemist, a pharmacologist and a physician.



■ June 13, 1978	Honorary doctorate in natural science, Frankfurt (Germany)
■ June 5, 1981	Honorary doctorate in medicine, Lund (Sweden)
■ February 2, 1982	Honorary doctorate in medicine, Leuven (Belgium)
■ February 15, 1984	Honorary doctorate in medicine, Szeged (Hungary)
■ March 1, 1984	Honorary doctorate in veterinary medicine, Gent (Belgium)
■ July 12, 1985	Honorary doctorate in the sciences, Dublin (Ireland)
■ April 28, 1986	Honorary doctorate in medicine, Düsseldorf (Germany)
■ December 7, 1986	Honorary doctorate in philosophy, Beersheba (Israel)
■ March 24, 1988	Honorary doctorate in medicine, Liège (Belgium)
■ May 29, 1989	Honorary doctorate in medicine, Montreal (Canada)
■ November 27, 1989	Honorary doctorate in medicine and the life sciences, Granada (Spain)
■ May 8, 1992	Honorary doctorate in medicine, Antwerp (Belgium)
■ June 11, 1992	Honorary doctorate in medicine, Pavia (Italy)
■ October 2, 1992	Honorary doctorate in pharmacy, Istanbul (Turkey)
■ December 16, 1992	Honorary doctorate in medicine, Rome (Italy)
■ May 18, 1993	Honorary doctorate in pharmaceutical chemistry, Nanjing (China)
■ January 12, 1996	Honorary doctorate in medicine, Maastricht (Netherlands)
■ November 21, 1996	Honorary doctorate in the sciences, Alberta (Canada)
■ April 7, 1998	Honorary doctorate in medicine, Prague (Czech Republic)
■ May 28, 1999	Honorary doctorate in law, Halifax (Canada)
■ October 16, 1999	Honorary doctorate in the sciences, Maryland (USA)
■ May 5, 2000	Honorary doctorate in pharmacy, Potchefstroom (South Africa)



Positive dissatisfaction

Dr Paul often drew a comparison between the various scientific disciplines involved in pharmaceutical research and the fingers of a hand. 'A good scientist is someone who succeeds in getting the different scientific disciplines to work in harmony with one another, just as the fingers of a hand can function properly only when they work together smoothly.' His success in achieving that goal is unparalleled. Each and every one of the many awards he received, the most prestigious of which was the Gairdner Foundation Award (Canada) in 1982, is a token of appreciation of his extraordinary life's work.

Dr Paul was the personification of a unique combination: on the one hand the brilliant scientist, and on the other the very successful manager. Nevertheless, he never wished to take all the credit for himself. His elevation to the Belgian peerage in 1990, when the title of baron was conferred on him, was not just a personal accolade but above all a token of recognition of the achievements of all those people who assisted over the years and dedicated their best efforts to spreading the excellent reputation that Janssen has earned within just a few decades all over the world.

All the words of praise heaped upon him during the presentation of numerous prizes, honorary memberships and visiting professorships, never dazzled Dr Paul or made him pretentious. On the contrary, true to his origin and upbringing, he always remained great simply by virtue of his unassuming manners. He

found inner strength and derived intense satisfaction from making music and playing chess, from studying historical literature and pursuing recreational sports, from his love of his family and from the friendship of his many fellow workers and former associates. His positive dissatisfaction, refusing to accept that there are ultimate limits to science, his continuous willingness to consider new developments and to seize opportunities: these were the most typical characteristics of Dr Paul Janssen. They also constitute the fundamental strength of the company that he founded and developed into its present global proportions. Encouraged as always by the unflagging inspiration of its founder, the people in Beerse and our close collaborators in the research centers in other countries will continue in times to come to follow the often surprising path of pharmaceutical research – because there are still so many new things to discover and so many diseases that must be overcome.

In October 2002, Dr Paul visited the Chinese capital of Beijing, accompanied by his wife and their five children with their spouses. The Forbidden City can be seen in the background.

"I am not a genius but merely a man who has had a lot of luck in his life. I founded the company and for the rest I took up a position as the conductor of an orchestra. That is my only achievement."

Dr Paul Janssen



Selected milestones from 50 years of Janssen history

Year	Major event	Year	Major event
1934	Incorporation of the limited company N.V. Produkten Richter, the business owned by Dr Paul's parents in Turnhout.	1984	Opening of Plant 3 in Geel.
1953	Start of own research by Dr Paul in Turnhout.	1984	Synthesis of Risperdal , the prototype of a new class of antipsychotics, the serotonin-dopamine antagonists, and the gold standard in the treatment of psychoses.
1956	Incorporation of the limited company N.V. Laboratoria Pharmaceutica Dr C. Janssen.	1985	Signing of the agreement with the People's Republic of China to set up a modern pharmaceutical factory, Xian-Janssen, which was voted the best Sino-Foreign Joint Venture on no less than four occasions in the 1990s.
1957	Research moves from Turnhout to Beerse.	1987	Establishment of Janssen Research Foundation Worldwide (JRF).
1958	New name: N.V. Research Laboratorium Dr C. Janssen.	1991	Dr Paul is succeeded by Staf Van Reet, and Bob Stouthuysen by Philippe Vanavermaete; Stouthuysen becomes the new chairman of the Board of Directors.
1958	Bob Stouthuysen joins the company as personnel manager.	1992	Opening of Janssen Biotech in Olen.
1958	Synthesis of Haldol , the first antipsychotic that allows patients to be treated in the home setting instead of in institutions and was the reference drug for decades.	1993	Synthesis of R 100,000 and celebration of 40 years of Janssen research.
1960	Synthesis of Fentanyl , still the most widely used anesthetic in the world.	1994	Following the death of Philippe Vanavermaete, Ajit Shetty is appointed to serve in his place as Managing Director.
1961	Johnson & Johnson acquires the Belgian research company via a shares exchange agreement.	1994	Janssen merges its worldwide marketing and sales organization with that of its sister company, Cilag.
1961	Frans Van den Bergh becomes chairman of the Board of Directors.	1995	Opening of Plant 4 in Geel.
1964	Janssen Pharmaceutica N.V. becomes the new name of the research laboratories in Beerse.	1996	Opening of the Center for Molecular Design in Vosselaar, which focuses mainly on research into HIV with supercomputers.
1964	Establishment of the Veterinary Medicine department.	1996	Opening of the new pharmaceutical factory (Plant 1) in Beerse.
1967	Synthesis of Daktarin , one of the first drugs for the local treatment of fungal infections; it is still widely used.	1997	Incorporation of Janssen Animal Health B.V.B.A.
1968	Synthesis of Vermox , still used on a worldwide scale as an anthelmintic agent.	1999	Finalization of the transfer of chemical production from Beerse to Geel.
1969	The antidiarrheal Reasec goes to the moon with NASA astronauts.	1999	Clinical Research and Non-Clinical Development put on a worldwide footing.
1969	Opening of the chemical plant in Beerse.	1999	The Plant Protection department widens its sphere of activities to include materials and becomes the Plant & Materials Protection department.
1969	Synthesis of Imodium , still the world's best selling antidiarrheal.	2000	Opening of the new building for Chemical Process Development in Beerse.
1971	Opening of the first pharmaceutical plant in Beerse.	2001	Merger of JRF and PRI into the global organization J&JPRD and approval of two major new construction projects for Research & Development in Beerse.
1972	Establishment of the Plant Protection department.	2001	Completion of new building for Pharmaceutical Development in Beerse.
1974	Synthesis of Motilium ; Janssen introduces the new scientific concept of motility to the world of gastroenterology.	2002	Opening of the Logistics and Informatics Center on the new Janssen site, Beerse 2.
1975	Opening of Plant 1: the start of chemical production at the new site in Geel.	2003	Construction of the two new research buildings on the Janssen site in Beerse: the Discovery Research Center (DRC) and the Drug Safety Evaluation Center (DSEC).
1976	Synthesis of Nizoral , the first broad-spectrum antifungal agent for oral administration.		
1977	Opening of Plant 2 in Geel.		
1979	Establishment of the Marketing & Sales affiliate Janssen US, the largest and most important affiliate in the Janssen group.		
1980	Luc Wauters succeeds Frans Van den Bergh as chairman of the Board of Directors, a position he holds until 1991.		
1980	Synthesis of Sporanox , an extremely potent and efficacious antifungal agent, effective against both external and internal fungal infections.		
1984	The world's first artificial heart transplantation is performed with the aid of the anesthetic Sufenta .		