A BUILDING FOR THE "FIGHT AGAINST CANCER" IN SPAIN: THE PRÍNCIPE DE ASTURIAS INSTITUTE OF MADRID (1910-1939)

Un edificio para la "lucha contra el cáncer" en España:
el Instituto Príncipe de Asturias de Madrid (1910-1939)

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Abstract

The Cancer Institute, or "Instituto Príncipe de Asturias", was the first center in Spain devoted to cancer treatment and research. This article analyzes the development of the institution from the laying of its first stone in Madrid's Moncloa district in 1910 until its complete destruction during the Spanish Civil War. In what were likely the most turbulent years in the country's history, a collective effort was required, involving not only physicians and scientists but also state institutions, the monarchy, and philanthropic organizations such as the Spanish League Against Cancer.

The need to establish a dedicated cancer hospital arose from growing professional and public interest, as well as the increase in cancer incidence. Additionally, long hospital stays and a lack of specialized centers in Spain made it very difficult to provide adequate care for these patients. The process was complex and marked by recurring economic challenges, affecting both the construction and operation of the Institute. Its foundation took place in the context of national healthcare reforms spurred by campaigns against serious diseases—mirroring European models. Funding depended on state support, private donations, and public grants, but resources were never sufficient to meet the rising demand from patients.

During the period studied, figures such as José Goyanes and Pío del Río-Hortega led the Institute at various times and promoted histopathological and radiotherapy research. The outbreak of the Civil War had devastating consequences: the building was destroyed, and part of the staff, including del Río-Hortega, went into exile, representing a considerable loss for Spanish medical science.

Resumen

El Instituto del Cáncer o Instituto Príncipe de Asturias fue el primer centro especializado en el tratamiento e investigación del cáncer en España. En este artículo se analiza la evolución de dicho

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centro, desde la puesta de la primera piedra en los terrenos de la Moncloa de Madrid, en 1910, hasta su destrucción total durante la Guerra Civil española. Durante los que probablemente fueron los años más convulsos de la historia del país, hubo que hacer un esfuerzo colectivo para abordar los desafíos de la enfermedad, que implicó no solo a médicos y científicos, sino también a las instituciones estatales, a la monarquía y a organizaciones filantrópicas como la Liga Española Contra el Cáncer.

La necesidad de crear un hospital monográfico especializado en cáncer surgió debido al interés que despertaba, tanto en los profesionales, como en la población general, el aumento de la incidencia del cáncer. Por otro lado, las prolongadas hospitalizaciones de este tipo de pacientes y la falta de centros especializados en el país, hacían que fuera muy difícil encontrar una solución para poder prestarles asistencia. El proceso fue complejo, y estuvo influido por dificultades económicas recurrentes, que afectaron tanto la construcción como el funcionamiento del Instituto. La fundación del Instituto se enmarca en un contexto de reformas sanitarias nacionales impulsadas por campañas contra enfermedades graves, siguiendo modelos europeos. La financiación provenía de apoyos estatales, donaciones privadas y subvenciones de organismos públicos, pero nunca fue suficiente para cubrir el creciente número de pacientes.

Durante el periodo analizado, figuras como José Goyanes y Pío del Río-Hortega lideraron el Instituto en distintos momentos e impulsaron la investigación histopatológica y de radioterapia. El estallido de la Guerra Civil tuvo consecuencias devastadoras; el edificio fue destruido y parte del personal, como del Río-Hortega, se exilió, marcando una pérdida significativa para la ciencia médica española.

Keywords: National Cancer Institute, Principe de Asturias Institute, fighting cancer in Spain, radiotherapy, Spanish Civil War

Palabras clave: Instituto del Cáncer, Instituto Príncipe de Asturias, lucha contra el cáncer en España, radioterapia, Guerra Civil española

1. Introduction

"Will a cure for cancer be found soon?" Thus began an article published in the journal *El Siglo Médico* in 1929 by the surgeon Antonio Morales [Morales, 1929]. At that time, many people would probably have answered this question more optimistically than in previous decades. For a few years, the capital of Spain had had a center where not only clinical care was provided to cancer patients, but also, in its laboratories, some of the most prestigious Spanish scientists of the time conducted experiments aimed at deciphering the keys to this terrible disease, with the hope of eradicating it [Medina Doménech, 1996, p. 91]. The "Príncipe de Asturias" Institute had been born with the more explicit name of Cancer Institute. The change of name was related to the participation of the Royal Family in Spain's fight against the disease. But it was also done to "hide the imposing name of 'cancer' in the institution's dealings with its clients, poor cancer patients".[1] This paternalistic

1. Goyanes, José (1919) "El "Instituto Príncipe de Asturias, para la investigación del cáncer". *El Sol*, 23/09/1919, 12.

attitude, of concealing the word cancer, was due to the fact that at the time, any cancer was considered practically incurable.

> For the vast majority of people, to say 'cancer' is to speak of something that repulses and horrifies; the announcement of any disease always causes fear, but it does not strike terror; cancer, however, has the sad privilege of spreading alarm and the conviction that only atrocious and unending suffering awaits those afflicted, followed by an inevitable and cruel death.[2]

Nevertheless, as will be seen below, the fight against cancer in Spain began long before it had its own dedicated building.[3]

The establishment of this specialized center is part of the process of reorganizing the erratic health and scientific policy that the country had experienced up to that point. Indeed, during the early decades of the twentieth century, a series of "national" institutions were inaugurated in Madrid, which went on to become flagship entities in Spain's health campaigns or "battles." For example, the National School of Health was focused on combating infectious diseases, while the National School of Childcare primarily aimed to tackle the high infant mortality rate that the country faced at the time [Medina Doménech and Rodríguez Ocaña, 1994].

The fight against cancer was another one of the public health authorities' key objectives at the time. Since the second half of the 19th century, the "cancer problem" had become a significant medical and social concern [Medina Doménech and Rodríguez Ocaña, 1994]. Newspapers' statistics placed cancerous tumours among the leading causes of death. Advertisements from some private clinics, which were beginning to perceive cancer as a potential business opportunity, revealed that, unlike other countries, Spain lacked a hospital specialising in this type of disease:

> CANCER**.** Surgery does not always overcome cancer; it cleans the disease as a man shaves his face, but the more it is shaved, the more it grows; the same happens with pruning plants. After operating on a cancer, one must expect it to recur, then operate again, and it recurs once more until the patient succumbs. Radioactive treatment is more humane and logical; without the need for surgery, it attacks the disease, destroying it and preventing its return. Compared to surgery, it offers another significant advantage: it affects the cause of the cancer, while surgical operations are merely local, aimed only at the region where the cancer appears. In London, there is a hospital dedicated exclusively to the study and care of cancer patients, funded by the King. This hospital, known as the Cancer Hospital, employs only radioactive treatment. This method is the one used against cancer at Dr Díaz de la Quintana's medical establishment, located at 15 Calle de las Huertas, which also has equipment available for installation at the patient's home. Consultations take place from 9 to 12 and from 3 to 6.[4]

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2. "Liga Española Contra el Cáncer". *La Voz*, 02/05/1930, 6. Something similar happened with tuberculosis, as noted Susan Sontag [2003, p. 2].
3. In this article, the expression "fight against cancer" is used because it has traditionally been the preferred term in Spain, in contrast to alternatives such as "cancer control" commonly used in the United States. The latter appears more suitable today, as the focus is on enhancing patients' quality of life, even when complete eradication of cancer cells cannot be achieved [Oronsky *et al.*, 2015].
4. "Cáncer". *El Mundo*, 15/04/1907, 3. It was not until a few years later that the combination of surgery and radiotherapy began to be widely adopted in the treatment of oncology patients.

The clinical care of oncology patients was a complex issue, requiring long periods of hospitalisation and highly specialised technical and human resources, particularly since radiotherapy was added to the therapeutic arsenal against cancer. Poor cancer patients from the province of Madrid, who were previously treated in the overcrowded Provincial Hospital,[5] were from 1902 referred to the Hospital San Juan de Dios, a centre funded almost exclusively by the provincial council. This concentration of patients allowed for the optimisation of resources necessary for their treatment.[6] This hospital was intended for people suffering from incurable and contagious diseases, two conditions that converged in cancer, as at the beginning of the century there was also suspicion that cancer might be transmissible from one person to another.[7]

On the other hand, at the Institute of Operative Therapeutics, popularly known as the Instituto Rubio, there was a small research laboratory directed and funded by Eulogio Cervera.[8] Although Cervera is regarded as the major driving force behind cancer research in Spain, other doctors such as the gynaecologist Eugenio Gutiérrez also contributed to kick-starting the "fight against cancer" in the country [Martínez Nevot, 1940, pp. 179-180].[9] In fact, it was Gutiérrez who, during a lecture on uterine cancer in 1908 at the Instituto Rubio, enthusiastically expressed his desire to establish a society in Spain dedicated to combating cancer [Lozano, 1908].

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5. At the end of 1902, there were 1,265 patients admitted to the Provincial Hospital, far exceeding the maximum number of 800 stipulated in its statutes.
6. The origins of the Hospital San Juan de Dios in Madrid date back to the mid-16th century. Founded by the religious figure Antón Martín, its initial location was in the Atocha neighbourhood. Its main façade was situated on the square now bearing the name of its founder. The hospital was managed by the Brothers of San Juan de Dios until the Ecclesiastical Exclaustration of 1835, at which point it came under provincial charitable [Álvarez Sierra, 1952, p. 52-60]. Due to insufficient and deteriorating facilities, in 1890 the construction of a new building on Doctor Esquerdo Street was approved, following the Tollet system; this building was inaugurated in 1898 [Aguilar, 1918, p. 119]. The hospital was closed and demolished in 1966 to make way for the Francisco Franco Health City, which is now the Gregorio Marañón University General Hospital [Fonseca Capdevila, 2020].
7. "Diputación provincial. La sesión de ayer". *El Globo*, 25/10/1900, p. 1. See also the speech by Antonio Morales Pérez [1908, pp. 11-12].
8. Eulogio Cervera Ruiz (1855–1917) trained as a doctor at San Carlos and, after serving as a military physician like many of his contemporary Spanish colleagues, ended up working as a professor of Surgical Clinic at the Instituto Rubio [Díe y Más, 1964]. At this centre, Cervera organised and personally funded a small laboratory for cancer research [Medina Doménech, 1996, p. 87 y p. 227]. The Instituto Rubio was a pioneering institution, distinct from the academicism and rigidity of the Central University, where both doctors and some of the first "modern" Spanish nurses were trained [Vázquez de Quevedo, 2005; González Iglesias and Herrera Rodríguez, 2016]. Eulogio Cervera, who passed away shortly after the construction of the future Cancer Institute was completed, bequeathed to the centre all his apparatus, anatomical specimens, and scientific instruments, valued at 25,000 pesetas at the time, which became the first materials in his laboratory. To succeed him at the head of the Instituto Rubio, Martín Salazar, then Director General of Health, appointed José Goyanes [Anónimo, 1972, p. 152].
9. Eugenio Gutiérrez González (1851–1914) was one of the most renowned gynaecologists of his era in Spain, closely linked, like many others, to the Instituto Rubio. He attended to the births of Queen María Cristina and her daughters, for which he was granted the title of Count of San Diego. His son, Eugenio Gutiérrez Balbás (1879–1957), was also associated with the Prince of Asturias Institute [Zuloaga, 1914].

These aspirations were realised a year later with the establishment of the "National Committee for Cancer Research".[10] The committee was composed of Ramón Jiménez García,[11] Antonio María Cospedal Tomé,[12] Juan Bravo Coronado,[13] Hans Leyden[14] and Adolfo López Durán[15]. The committee appointed Ángel Pulido Fernández as honorary president,[16] Eloy Bejarano Sánchez as president,[17] and Manuel Martín Salazar as vice president.[18] Later, Eugenio Gutiérrez and Alonso Sañudo joined as members.[19]

10. Many members of this committee had already taken part, in 1902, in a commission convened to compile statistics on cancer in Spain, initiated by the German embassy doctor Hans Leyden [Medina Doménech, 1996, p. 87]. Apparently, the survey was not very successful among the medical community at the time. For more information about the 1902 survey, the works of Enrique Wulff Barreiro [2013] and Rosa M.ª Medina Doménech [1996] can be consulted.
11. Ramón Jiménez García (1861-1928), trained as a medical doctor at the Faculty of Medicine of San Carlos in Madrid, obtaining the chair of Topographical Anatomy and Operative Medicine at the Central University in 1899 [Matilla, 1987, pp. 117-118].
12. Antonio María Cospedal Tomé (1855-1949) was a gynaecologist trained in Madrid who secured a position through competitive examination at the Provincial Charity of Madrid, assigned to the Hospital de La Princesa, developing his career in the field of gynaecology [Matilla, 1987, pp. 118-120].
13. Juan Bravo Coronado (1861-1936) studied medicine at San Carlos and specialised in surgery, winning competitive positions both in the General State Charity and the Provincial Charity of Madrid [Matilla, 1987, pp. 156-157].
14. Hans Leyden was the German embassy doctor in Madrid and nephew of Ernst von Leyden (1832-1910), founder in Berlin in 1900 of the *Zentralkomitee für Krebsbekampfung* (Central Committee for Cancer Control), according to Hans Leyden, the name was *Deutsches Zentralkomitee zur Erforschung und Bekämpfung der Krebskrankheit* (German Central Committee for Cancer Research and Control) [Leyden, 1925]. Hans Leyden promoted the 1902 cancer survey in Spain at the instigation of his uncle: Goyanes, José (n.d.) "Mi gestión en la dirección del Instituto Nacional del Cáncer". Archivo Histórico Documental de Patología. Fondo Horacio Oliva.
15. Adolfo López Durán (1872-1930) studied medicine at the University of Cádiz. In Madrid, he practised clinically, mainly related to traumatology, at the Instituto Rubio, where he became head of the clinical research laboratory [Anónimo, 1930a]. In 1907, a Royal Order issued by the Ministry of the Interior assigned him to study abroad, "especially in Berlin, the very important issues linked to the prevention and curability of cancer": "Noticias varias". *El Siglo Futuro*, 09/08/1907, 3 [Perdiguero *et al.*, 2025, p. 303]. Do not confuse him with the architect Adolfo López-Durán Lozano, 1902-1988.
16. Ángel Pulido Fernández (1852-1932) trained as a doctor at San Carlos and was one of the founders of the Spanish Gynaecological Society. He served as Director General of Health between March 1901 and December 1902, during the period when Spanish cancer information was being promoted [García Guerra and Álvarez Antuña, 1994].
17. Eloy Bejarano Sánchez (1835-1917) obtained his degree in Medicine and Surgery from the University of Salamanca. He held numerous public positions related to health, such as Health and Public Instruction councillor, or General Inspector of Internal Health [Matilla, 1987, pp. 125-127].
18. Manuel Martín Salazar (1854-1936), trained as a doctor at the University of Granada, entered the Military Health Corps, was appointed Inspector General of External Health in 1909, and eventually became Director General of Health in 1916 [Matilla, 1987, pp. 148-149].
19. Goyanes, José (1919) "El Instituto Príncipe de Asturias, para la investigación del cáncer". *El Sol*, 23/09/1919, 12. José Goyanes Capdevila (1876-1964) was a surgeon who made significant contributions to vascular surgery. For several years, he carried out his clinical work at the General Hospital of Madrid, where he had secured a post through competitive examination in 1905. He served as president of the Spanish Royal Society of Natural History [Gomis Blanco, 2023 p. 96] and of the Spanish League Against Cancer, which will be discussed later, and was the first director of the Institute under study in this research [Vaquero *et al.*, 2017; Die-Goyanes and Die-Trill, 2008; Gilsanz *et al.*, 2024].

After Germany, Spain was among the first European nations to organise a committee for the study of cancer, alongside Great Britain, the Austro-Hungarian Empire, the Netherlands, and Japan [Triolo and Reigel, 1961, p. 159]. Among the activities undertaken by the Spanish Committee was the promotion of scholarships abroad to undertake research stays. One of the scholarship recipients between 1913 and 1915 was Pío del Río-Hortega, who, as we will see later, played a decisive role in the life of the Cancer Institute.[20] However, the most significant aspect of this committee was its proposal to build a dedicated centre to properly develop cancer research in Spain.[21]

This research focuses on the evolution of the first specialised Spanish centre dedicated to the study and treatment of cancer, covering the period from the start of its construction in 1910 until its destruction during the Civil War. It provides a general overview of the institution and sheds light on many previously unexplored aspects. Although some studies have addressed this institution in a transversal manner, historiography has yet to dedicate a specific study to this centre. The researcher who has delved most deeply into the subject is Rosa M.ª Medina Doménech, through a fruitful line of enquiry centred on the development of radiology as a medical speciality in Spain, which began with her doctoral thesis [Medina Doménech, 1993]. Among her works, there is an important contribution that also deals with the construction of the Institute [Medina Doménech, 1996, p. 87-98]. More recently, Perdiguero-Gil *et al.* [2025] have attempted to reconstruct the fight against cancer in Spain during the Primo de Rivera dictatorship, using the daily press of the time as a source, and also approach the early years of the Institute.

Other works on the history of the fight against cancer in Spain have been published by scientific societies, such as the Spanish Association of Radiotherapy and Oncology [2006], or a recent contribution by Albert Biete [2022], although none provide extensive information about the Institute.

On the international scene, several countries were addressing the fight against cancer by establishing their own institutions. In the United States, some institutions dedicated to the fight against cancer had already been inaugurated in the 19th century, such as The New York State Institute for the Study of Malignant Diseases in Buffalo [Triolo and Reigel, 1961, p. 159]. In Portugal, the Portuguese Institute of Oncology (*Instituto Português de Oncologia*) was established in 1923 [Medori, 2021]. In 1934, the National Radium Institute

20. According to M.ª Aránzazu R. Díaz Labajo [2016, p. 93], Pío del Río-Hortega was to conduct studies at the Histology Laboratory of the Faculty of Medicine at the University of Paris, the Pathological Anatomy Laboratory of l'Hôpital Boucicaut (Paris), the Bacteriology Laboratory at the Institute of Infectious Diseases in Berlin, and the Cancerology Laboratory at Middlesex Hospital in London. He was later also granted a scholarship by the Board for the Expansion of Studies (Junta para Ampliación de Estudios, JAE).
21. José Goyanes explained the origins of the Cancer Institute on numerous occasions, although, as with other matters, he sometimes contradicted himself. For example, in 1919, he claimed that the idea to construct the building had come from Ángel Pulido: Goyanes Capdevila, José (1919) "El Instituto Príncipe de Asturias', para la investigación del cancer", *El Sol*, 23/09/1919, p. 12. However, years later, he attributed the initial idea to Eulogio Cervera [Goyanes, 1924a, p. 591].

was created in Colombia [Vega Vargas and Miranda Canal, 2020, p. 8]. Later, research on tumour treatment through radioactivity conducted in Canada preceded the founding, in 1947, of the National Cancer Institute of Canada [Razumenko, 2018]. Furthermore, the Hygiene Committee of the League of Nations created, in 1923, a subcommittee focused on cancer, with the aim of pooling efforts and forming alliances to advance in the challenge posed by this terrible disease [Horn and Vatten, 2017, p. 267].

This article is part of over five years of research work, during which primary sources scattered across various documentation centres have been consulted. Archival sources were examined at the General Archive of Administration (AGA), the Central Archive of the Spanish Red Cross (ACCRE), the General Archive of the Complutense University of Madrid (AGUCM), the Royal Library, the digitised collections of the Centre for Human and Social Sciences of the CSIC, the digitised holdings of the Historical Documentary Archive of Pathology, and the Law Library, Forensics Room of the Complutense University of Madrid. Daily and professional press, particularly the *Bulletin of the Spanish League Against Cancer*, a publication associated with the journal *Archivos Españoles de Oncología*, although as will be seen, it had antecedents, have also been fundamental in reconstructing the history of this institution.

2. The Construction of the Cancer Institute

The first draft of the Cancer Institute was presented by the doctor Adolfo López Durán on 15 February 1910 and was likely based on institutions he had visited during his study trip in 1907, particularly in Berlin. The project was revised a month later by the architect from the Ministry of the Interior, and the foundation stone of the Institute was laid that same year [Pulido, 1915, p. 52-53]. Eugenio Gutiérrez and Ángel Pulido were responsible for selecting the most suitable land for the building's location. The chosen site belonged to the Moncloa Estate, where the Alfonso XIII National Institute of Hygiene, the Santa Cristina Asylum, and the Instituto Rubio were also located. The choice of this site was a deliberate decision by Pulido, based on an attempt to emulate the scientific atmosphere fostered in some European centres:

> Since 1883, when I first visited the universities of the Austro-German Empires, my mind has been deeply concerned with those clusters of institutes, built side by side, each dedicated to the specialised study of a branch of medicine. They formed neighbourhoods, like small scientific communities, where everything pointed to and favoured the intense development of the specialised discipline to which they were dedicated [Pulido Fernández, 1915, p. 62].

Since the commencement of construction, the Ministry of the Interior had subsidised the centre in its annual budgets, initially with only 25,000 pesetas per year, which later increased to 100,000.[22] However, this amount was insufficient to undertake such an

22. Goyanes Capdevila, José (1919) "El 'Instituto Príncipe de Asturias', para la investigación del cáncer". *El Sol*, 23/09/1919, 12.

ambitious project. Even once inaugurated, the resources necessary to adequately equip the building were scarce.

Other healthcare initiatives of the time encountered similar economic difficulties, such as the Santa Cristina Health House in Madrid, whose construction began in 1904 but could not be inaugurated until 20 years later [Martín-Alcaide, 2023], or the Valdecilla Health House in Santander [Salmón *et al*., 1990]. It seems that, in those early decades of the 20th century, the elites had too many options to choose from when offering their charitable support.

The Prince of Asturias Institute was inaugurated on 2 October 1922 [Medina Doménech, 1996, p. 91; Perdiguero-Gil *et al*., 2025, p. 303].[23] However, according to other sources, the centre had already been inaugurated and had begun operating as a research laboratory several years earlier.[24] he building had been completed in 1916 [Die y Mas and Baños G. Esteller, 1923] and one year later, following the death of Eulogio Cervera, José Goyanes was appointed "director of the Prince of Asturias Institute".[25] In fact, in the provisional programme of the First National Congress of Medicine, distributed in the spring of 1918, it was stated about this centre:

> This Institute [of Cancer] has its own building in the heights of La Moncloa, equipped with excellent materials and a select staff very experienced in scientific research. It is destined to bring glorious days to Spanish Science, contributing, along with other similar institutes abroad, to the discovery of means capable of stemming the relentless progress of this malignant disease [Aguilar, 1918, p. 141].[26]

The mention of the Institute's excellent equipment was probably a propaganda strategy by Florestán Aguilar to impress foreign congress attendees, as according to José Goyanes, the building's conditions in 1917 were dire: "I was then handed over the Institute's book previously held by Dr Cervera, a building unfinished. Without water, electricity, or furniture […]".[27] Of course, this could also have been a slight exaggeration by José Goyanes, intended to emphasise the importance of his work during his years leading the institution, so one might imagine that the centre was somewhere between these two views. What does seem

23. According to José Die y Mas, what was inaugurated on 2 October 1922 was the Prince of Asturias pavilion: "El doctor Die y Mas". *ABC*, 22/10/1968, 97. The coincidence of the pavilion's and Institute's names may have confused journalists of the time.
24. "El homenaje al doctor Goyanes". *El Liberal,* 22/12/1918, p. 4.
25. "Dr. D. José Goyanes". *Mondáriz*, 15/06/1917, pp. 10-11. The name "Prince of Asturias Institute" had already begun to be used before 1922, contrary to what other research suggests [Perdiguero-Gil *et al*., 2025, p. 303]
26. The idea to hold the First National Congress of Medicine in Madrid originated with the radiologist Celedonio Calatayud Costa (1880–1931). Initially, the event was scheduled for April 1918. However, it had to be postponed twice: the first time due to the success of the call necessitating the acquisition of suitable venues to accommodate so many delegates, and the second time due to the influenza pandemic. The congress was finally held from 20 to 25 April 1919 [López Gómez, 2004]. Marie Curie was among the delegates, marking her first trip to Spain [Fernández Talaya, 2020].
27. Goyanes, José (n.d.) "Mi gestión en la dirección del Instituto Nacional del Cáncer". Archivo Histórico Documental de Patología. Fondo Horacio Oliva.

Figure 1. The Cancer Institute after its inauguration in 1922.
Source: Anónimo [circa 1923].

clear is that patient care services could not begin until 1922, due to the economic difficulties facing the country: "The political reasons that force the postponement of its opening and operation are nothing other than the abnormal situation of the Spanish national treasury, as an old budget has been extended for nearly five years".[28]

The Institute was located in one of the most beautiful areas of Madrid at the time (Fig. 1). Let us consider the poetic description of the journalist, graphologist, and literary figure Matilde Ras (1881-1969) [Russo, 2022], during a visit she made to the centre in 1927:

> On this autumn morning in Madrid—liquid gold—I enter through La Moncloa … and by the same entrance that leads to the Instituto Rubio, I make my way to the Prince of Asturias Institute, among the pine forests and the large, wholesome eucalyptus trees.
> The Institute is a white, neat, elegant building with a green roof. The interior matches the impression given by the façade: impeccable cleanliness shines in the marble lobby, the stuccoed walls, the mosaic flooring, the nickel, the glass, the Portland cement, the polished benches, and the nurses' pristine white uniforms. Large windows, open onto a vast horizon like the sea, flood the space with light and oxygen.[29]

Years later, Alfonso XIII himself referred to these economic difficulties following a meeting of the Spanish League Against Cancer:

28. Goyanes Capdevila, José (1919) "El 'Instituto Príncipe de Asturias', para la investigación del cáncer", *El Sol*, 23/09/1919, p. 12.
29. Ras, Matilde (1928) "La Liga Española Contra el Cáncer. El Instituto Príncipe de Asturias". *Heraldo de Madrid*, 17/01/1928, pp. 8-9. The visit took place in 1927, although the report was not published until January 1928.

> If until today the Institute lacked the necessary materials and equipment, from now on the work of doctors will have the aid of the required apparatus and beds, the means, in short, for you to fight against the disease … Last year, when I visited this Institute, I spoke with its doctors about the resources it needed. Budgetary difficulties have prevented these from being provided … The amount is very modest: 600,000 pesetas over two years. The price of one of the cars we use for the road or a small combat aeroplane—the big ones cost more. Both instruments serve to kill. I believe we can employ the same amount in this work, which is to save many lives [Soldevilla, 1926, pp. 119-120].

When clinical activity finally began, the medical staff at the Institute was composed of the director, José Goyanes, who was also responsible for the clinical and experimental services, three assistant professors (José Antonio Gutiérrez Balbás, José M.ª Céniga Erquiaga, and Ricardo Noya López), and the intern doctor José Díe y Mas.[30] As for the heads of the laboratories, the Pathological Anatomy lab was directed by Luis Rodríguez Illera, Francisco Martínez Nevot headed the Biochemical Chemistry lab,[31] and Misael García Fernández the Radiology lab [Perdiguero-Gil *et al*., 2025, p. 304].[32]

Like other radiologists of the time, Misael García Fernández had established a private clinic for patients seeking treatment for cancer or other diseases "without surgery or discomfort," located at 27 Sagasta Street in Madrid.[33] The clinic, called the "Medical Institute of Roentgenology," likely generated substantial economic profits for its owner, enabling Misael García "and his wife" to permanently finance one of the beds at the Prince of Asturias Institute so that poor patients could be treated free of charge.[34] However, as of 2 October 1922, the Prince of Asturias Institute counted only this bed and another subsidised by Queen Victoria Eugenia among its allocations. For this reason, Goyanes decided to require admitted patients, not only the wealthy, to contribute financially to support the institution. Only the very poor were admitted without financial contribution, "either due to

30. José Die y Mas (1898-1977) was linked to the National Cancer Institute for practically his entire working life (from 1922 to 1968). Although born in Madrid, he studied medicine in Barcelona, where his family had moved, completing his degree in 1920 and earning his doctorate in 1930. After serving a couple of years as a medical officer, he joined the Institute as an intern doctor in 1922. In 1933, he passed the competitive exam to become Head of the Surgery Section [López Yarto, 1968. "Expediente para la obtención del título de doctor de José Díe y Mas en la Universidad Central" AGA, Fondo Educación, signatura AGA (05) 020 32/16027].
31. Francisco Martínez Nevot (?-1941) studied at the University of Granada and joined as a military health student in 1910. In 1912, he was stationed at the Chafarinas Hospital during the Rif War: "Páginas militares", *La Tribuna de Madrid*, 26/02/1912, p. 3. The following year, he was promoted to first doctor at Málaga Hospital: "Sección Oficial", *Revista de Sanidad Militar*, 01/03/1913, p. 168. Martínez Nevot was set to play a very important role in the first reorganisation of the anti-cancer fight after the Civil War [Ruiz-Berdún, 2026, in press].
32. "Nueva Institución benéfica en Madrid". *El Sol*, 27/09/1922, p. 4.
33. "Anuncio del Instituto Médico de Roentgenología". *ABC*, 20/04/1922, 2. Such clinics had an early presence in Spain: for example, in 1898, at 13 Fortuny Street in Barcelona, there was the "Roentgenology Medical Office" founded by cousins César Comas Llabería (1874-1956) and Agustí Prior Llabería (1873-1929), two pioneers of radiology in Spain. Both also suffered from the harmful effects of radiation, first undergoing amputations and ultimately dying from the side effects [Portolés Brasó, 2004, pp. 436, 550].
34. The financial system for bed endowment replicated the model established by Federico Rubio at the Institute of Operative Therapeutics: all 53 of its beds were funded by members of the Royal Household, the aristocracy, and the bourgeoisie. [Cano Guitarte, 1985, p. 30].

the nature of their conditions or their precarious economic circumstances, for the heart is not so hard as to reject patients totally devoid of economic means". José Goyanes justified this financial contribution from almost all patients, warning that the Institute "is not an asylum, and because the problem of providing asylum to all cancer patients cannot be solved in Spain or in any other nation" [Goyanes, 1924a, pp. 593-594].

Misael García Fernández also donated the first 45 milligrams of radium with which the Institute was equipped [Goyanes, 1924b]. This radiologist was one of the so-called "victims of Science" or "martyrs of Science" [Biete, 2022, p. 7], as he died on 24 April 1925 due to injuries caused by his exposure to radiation, like many of his colleagues of the time. He himself described his terrible suffering shortly before his death in an article written to respond to "the malice, slanders, and villainy of a certain colleague of the same profession and specialty, who said in astonishment: 'How is it possible that patients come to be treated by García Fernández, when he did not know how to protect himself!'" A comment that must have caused deep sadness to the radiologist:

> It is a most commendable, healthy, and worthy practice employed by this good colleague to uplift the spirit weighed down by constant suffering over many years and repeated mutilations carried out in the last four years. Such conduct is profoundly edifying.[35]

After his death, García Fernández's position as head of the radiology laboratory was taken over by Julián Ratera Botella and, after his resignation in 1930, by Carlos Gil y Gil, who joined the centre in January 1931 [Medina Doménech, 1996, p. 238; Gil y Gil, 1964, p. 16].[36]

The Institute was allocated an annual subsidy of 100,000 pesetas, an amount insufficient to cover the institution's expenses, which nearly doubled this sum, and it could not cope with the large number of patients without resources who came seeking help. This information comes from an academic work conducted within the framework of the "Natural Law" course in the Law degree at the Central University, by students Antonio Baños G. Esteller and Antonio Die y Mas. The latter was the brother of then-intern student José Die y Mas, who showed them the institution and provided explanations (Fig. 2). The work includes a series of 13 photographs of the Institute in 1923 and documents aspects of its layout and operation not found in other sources. For example, the families of patients who died in the Institute were obligated to allow an autopsy of the body. This warning was visible on a poster in the administration room, which added for the peace of mind of the relatives: "The

35. Due to space constraints, it is not possible to include the literal text of the clinical progression experienced by the radiologist, which Misael García Fernández himself described in his 1925 article [García Fernández, 1925]. However, I consider its reading to be of utmost interest for those interested in autoethnographies of illness or the history of emotions.

36. Carlos Gil y Gil (1896-1975) was trained as a physician in Zaragoza and Madrid. In 1927, supported by a scholarship from the Board for the Expansion of Studies (JAE), he went to Germany to study the application of Roentgen therapy and radioactivity to obstetrics, as he was working at the Santa Cristina Health House in Madrid at that time [Martín Alcaide, 2023, p. 88].

Figure 2. Visit of Antonio Baños G. Esteller and Antonio Díe y Mas to the Prince of Asturias Institute to carry out academic work for the Natural Law course. José Díe y Mas wears a lab coat. Source: Díe y Mas and Baños G. Esteller [1923].

professors commit to not deforming the bodies, leaving them with their normal external appearance." It was also noted that the chemistry laboratory was not operational at that time because the section head was abroad [Díe y Mas and Baños G. Esteller, 1923].

To attempt to solve the financial problem, a Royal Decree granted the usufruct of the buildings and gardens belonging to the "Parisiana Chalet" to the Prince of Asturias Institute in 1924. The chalet was a former centre dedicated to the leisure activities of the Madrid bourgeoisie, located on state-owned land.[37] The aim was to increase the number of hospital beds to a minimum of 100; however, funding to carry out the necessary works remained unresolved [Goyanes, 1924a, p. 597].

37. "Real decreto cediendo en usufructo gratuito al Instituto Príncipe de Asturias, dedicado al estudio y tratamiento de las enfermedades cancerosas y a hospitalización de enfermos pobres, de cáncer, los terrenos que en la finca del Estado "La Moncloa", en esta Corte, ocupa el chalet de "Parisiana"". *Gaceta de Madrid*, 23/01/1924, p. 373. The chalet had been leased by the Franco-Spanish Society of Grand Hotels to install a restaurant, although the project had broadened its goals to include a theatre and a gambling casino, and it attracted criticism for its activities as a brothel: "El asunto de Parisiana". *El Socialista,* 12/05/1922, p. 2. It seems the buildings were not immediately handed over to the Institute, as in October of that year, a case of what is now termed gender-based violence involving one of the centre's "tanguistas" was reported in the press. After leaving her work shift, she was stabbed by her former partner: "Tanguista gravemente herida por su amante", *El Socialista,* 27/10/1924, p. 4.

The staff of the Institute soon began to grow. Since 1922, José Goyanes had organised the outpatient consultations, which were "public and free," initially conducted solely by him with the support of assistant professors from the Institute, and later assisted by consulting physicians from various specialties, some of whom were assigned one day per week for consultations.[38] The Institute attracted patients who had been discharged from other centres, coming from all over Spain, with a demand far exceeding the centre's hospitalisation capacity, which only had 28 beds: 14 for women and 14 for men. On those occasions, Goyanes chose to send patients who required hospitalisation to the "Victoria Eugenia cancer ward" of the San Juan de Dios Hospital. This action was not well received by the Provincial Council of Madrid, which wished to reserve those beds for patients from the city and province itself, and was unwilling to pay for the stays and treatments of patients coming from elsewhere.[39]

It was clear that the fight against cancer and other diseases could not be confined to Madrid. To generalise these health campaigns throughout the country, Article 128 of the Royal Decree approving the "Provincial Statute" of 1925 urged the provincial councils to:

> To organise, through the provincial charitable establishments, an isolation ward for those suffering from infectious diseases; a radiographic and radiotherapeutic facility for the diagnosis and treatment of cancer; a public consultation exclusively dedicated to poor pre-tuberculous and tuberculous patients; a ward for the hospitalisation of ill prostitutes; a free public clinic for venereal diseases; and a childcare service, also public.[40]

The Provincial Council of Madrid, following these instructions, approved on 9 February 1927 the construction of a "cancer patients' pavilion" on the grounds of the Parisiana, intended for the treatment of residents of the province of Madrid.[41] Almost a year later, on 24 January 1928, the cornerstone laying ceremony for the future pavilion was held [Soldevilla, 1928, p. 36].[42] This pavilion, which was to be situated between the Prince of Asturias pavilion and the laboratory pavilion built by the League, was also to be called Queen Victoria Eugenia (see figure 3), not to be confused with the one also intended for incurable cancer patients bearing the same name at the San Juan de Dios Hospital

38. The assistant professors were Ricardo Noya (throat, nose, and ear), Juan Antonio Gutiérrez Balbás (gynecology, one of the sons of Eugenio Gutiérrez González), and José Die y Mas (surgery). The consulting physicians were Lafora (neurology), Sampelayo (dermatology), Enrique Noguera (internal medicine), Manuel Marín Amat (ophthalmology), and Castro (dentistry). The pathological anatomy examinations were overseen by Luis Rodríguez Illera, José Ratera was responsible for radiography and radiotherapy, and Francisco Martínez Nevot headed the Biochemical Chemistry section [Anónimo, 1925].
39. "El doctor Goyanes, los enfermos de cáncer y la Diputación". *El Socialista*, 12/02/1927, p. 1.
40. "Real Decreto, de 20 de marzo de 1925, aprobando el Estatuto provincial". *Gaceta de Madrid*, 21/03/1925, pp. 1.446-1.483.
41. "Diputación provincial". *El Socialista*, 10/02/1927, p. 3.
42. The building plans were the work of the architect Baltasar Hernández Briz (son of the doctor of the same name) and met the specifications of José Goyanes. The new pavilion was located between the Parisiana building and the Prince of Asturias pavilion. It had a capacity of 70 beds and included a solarium on the attic, accessible by a patient lift, so that patients could receive heliotherapy sessions [Hernández Briz, 1929].

Figure 3. Oncology pavilion of the Provincial Board of Charity of Madrid.
Source: Archive of the Centre for Human and Social Sciences of the CSIC.
Catalogue reference ATN/LLL/0059/3564.

This new pavilion was inaugurated, alongside the building constructed by the Spanish League Against Cancer for research laboratories, on 8 May 1929. From this inauguration, the centre took the name National Institute of Oncology. It is surprising to note how the number of patients who died was relatively low, considering the therapeutic possibilities of the time. This could mean that either patients in very advanced stages of the disease were not admitted, or they were discharged to die in their own homes.[43]

3. The "Príncipe de Asturias" Institute and the Spanish League Against Cancer

The French League Against Cancer, founded in 1918, served as a model for many countries that created their own "Leagues" in its image and likeness, including Spain and Argentina, whose League was founded in 1921 [Buschini, 2021, p. 63].

43. In 1929, 34 of the 515 patients admitted to the Prince of Asturias pavilion died, as did 11 of the 265 at the Victoria Eugenia pavilion. In 1930, there were 26 deaths among the 668 admitted to the former and 20 deaths among the 608 admitted to the latter [Goyanes, 1931, pp. 64-66]. It should be noted that by the time these figures were reported, both pavilions had changed their names, as will be seen later.

The Spanish League Against Cancer, driven by the president of the French League, Justin Godard, was formally established on 8 March 1924 [Perdiguero *et al*., 2025, p. 306], although it is clear that work towards this constitution had begun much earlier, given the complexity of the composition shown in its organisational project [Liga Española Contra el Cáncer, 1924]. In fact, a newspaper on that very day reported that the League, which at that time was presided over by the gynaecologist Sebastián Recasens,[44] was already established at the Parisiana premises. Other sources indicate that, as early as 1914, there existed a Spanish League Against Cancer: on the occasion of a conference on "the fight against cervical cancer," delivered by the gynaecologist Antonio María de Cospedal Tomé, the journal *España Médica* requested an article on the topic in which reference was made to his position as president of a league bearing the same name: "We consider his words so important, his opinions accurate, and his judgments of such consequence that we ask the president of the Spanish League Against Cancer to put his words onto paper" [Cospedal, 1914]. Indeed, at the closing session of the III Spanish Congress of Obstetrics, Gynaecology and Pediatrics, held in Valencia the previous year, and at the proposal of the Valencian gynaecologist Enrique López Sancho, Cospedal was acclaimed president of the "Anti-Cancer League" [Alcober Alafont *et al*., 1913, p. 518]. The news was widely reported in the daily press of the time.

It is highly likely that this first attempt to organise a "League Against Cancer," following the example of neighbouring countries such as France and Belgium, was unofficial, driven by a group of enthusiastic professionals but did not gain much traction, and that the event of 8 March 1924 marked the culmination of a much more successful effort.

The organisational project of the League included a Board of Directors, a scientific committee of 21 members composed of doctors from various parts of Spain, a "ladies' committee," the list of founding members, and the first members [Liga Española Contra el Cáncer, 1924].[45]

Figure 4. Logo and letterhead of the Spanish League Against Cancer.
Note the crown, which represented its royal character.
Source: AGUCM, reference D-1599.

44. Sebastián Recasens Girol (1863-1933) studied medicine in Barcelona, his home city. In 1902, he won by competitive examination the Chair of Obstetrics at the Central University. He is considered one of the introducers of radiotherapy in Spain. He was to be the president of the Scientific and Social Fight Against Cancer Congress, held in Madrid in October 1933, but he died in August of that year.

45. Further information about the Spanish League Against Cancer can be found in Perdiguero Gil *et al*. [2025, p. 306] and especially in Medina Doménech [1996, pp. 42-50], who provides an extensive analysis of its evolution.

The incorporation of the "ladies' committee" was considered a "very important part of the League's work" because "their tenderness, kindness, and generosity are indispensable for this endeavour" [Liga Española Contra el Cáncer, 1925, p. 14].

But what is most relevant for this research is that, from the foundation of the League onwards, the Institute came to depend entirely on it, including the pavilions funded by the Provincial Council of Madrid. The goal was to secure donations, given that the costs of the fight against cancer were so high that it seemed unlikely that the State alone could bear them.

The Spanish League Against Cancer did not wish to limit its activities to Madrid but aimed to establish branches throughout the national territory. To this end, it participated in activities of organisations outside the capital. For example, one took place on 8 February 1926 in the city of Barcelona, organised by the "Patronage of Catalonia for the Hospital Asylum of Cancer Patients". The intention of this patronage was the construction of a monographic hospital for cancer patients with a capacity of 100 beds.[46]

In 1928, several developments occurred at the Institute. In addition to the start of construction of the pavilion for cancer patients, financed by the Provincial Council, that year saw the appointment of Pío del Río-Hortega as head of the Experimental Cancerology Laboratory, a key and not uncontroversial figure in the life of the centre in the following years.[47] Furthermore, at the end of the year, the League received from the National Institute of Social Security a cheque for 1,000,000 pesetas as a loan repayable over 20 years [Liga Española Contra el Cáncer, 1930, p. 1]. As will be seen later, this money was fundamental for increasing the quantity of radium at the Institute.

Another example of the progress experienced by the Institute was that, in 1930, the publication *Archivos Españoles de Oncología* (*Spanish Archives of Oncology*) began, serving as the Institute's official outlet, which included as an annex the *Boletín de la Liga Española contra el Cáncer* (*Bulletin of the Spanish League against Cancer*). This joint publication fulfilled two distinct objectives: *Archivos Españoles de Oncología* published research articles, while the *Bulletin of the Spanish League against Cancer* was intended for dissemination.

> In the second part: Boletín de la Liga Española contra el Cáncer, the social work carried out by this organisation and the dissemination and propaganda efforts undertaken in other countries to

46. Marqués de Camps (1926) "Carta del Marqués de Camps dirigida a Miguel Primo de Rivera solicitando una subvención para construir un hospital anticanceroso en Barcelona". AGA, fondo Gobernación, signatura (08) 02544/ 00189.

47. Pío del Río-Hortega (1882-1945) was one of the most brilliant scientists of Spain's Silver Age. He qualified as a doctor in Valladolid in 1905, preferring laboratory work over clinical practice. He undertook his doctoral studies after three years working as a general practitioner. From that point onwards, he devoted himself exclusively to research. When he joined as head of the histopathology laboratory at the Cancer Institute, he already had significant international scientific prestige, having been nominated twice for the Nobel Prize, which he unfortunately never won [López Piñero, 1990].

> reduce the spread of cancer as a social scourge are set out in simple language accessible to everyone [LA REDACCIÓN, 1930].

It seems to have been common practice to publish this type of bulletin in cancer centres. The *Boletim do Instituto Português de Oncologia* was first published in 1934 and enjoyed a much longer lifespan than its Spanish counterpart [MEDORI, 2021].

The change of political regime in Spain, following the proclamation of the Second Republic, had profound repercussions for the National Cancer Institute. Jorge Silvela y Loring, president of the Royal Committee of the League,[48] tendered his resignation, which was accepted in the same decree that dismissed the members of the Executive Committee and confirmed José Goyanes as director of the National Cancer Institute. This decree affirmed the official status of the Spanish League Against Cancer and established a Technical Board composed of the following members:[49]

— José Goyanes Capdevila: Director of the Institute.
— Pío del Río-Hortega: Deputy Director and head of the Experimental Cancerology Section.
— Luis Rodríguez Illera: Head of the Pathological Anatomy Section.
— Francisco Martínez Nevot: Head of the Biological Chemistry Section.
— Carlos Gil y Gil: Head of the Radiology Section.
— Ricardo Noya López, César Campesino y García Sierra, Juan Antonio Gutiérrez Balbás, and José Díe y Más: Heads of Clinics.

Other changes that took place were related to the names of both the centre and the pavilions. The National Oncology Institute, which many continued to call the Prince of Asturias Institute, was renamed the National Cancer Institute; the Prince of Asturias pavilion changed its name to the Eulogio Cervera pavilion, and the Victoria Eugenia pavilion became the Provincial Oncology pavilion.[50]

The new political regime did not bring an improvement in the economic situation of the Institute, as the purchase of 700 milligrams of radium had emptied the League's coffers. This financial difficulty hindered progress on the construction work, while the

48. The Marqués de Silvela did not remain in office for long, as he had been appointed only a few months earlier: "Real orden nombrando Delegado Regio, Vicepresidente, Tesorero, Secretario y Vicepresidente y Secretaria de la Liga Española contra el cáncer a los señores y señoras que se mencionan". *Gaceta de Madrid*, 29/01/1931, p. 533.
49. "Decreto, de 20 de abril de 1931, confirmando el carácter oficial de la Liga Española contra el Cáncer y dictando los acuerdos que se indican relativos a dicha Institución". *Gaceta de Madrid*, 21/04/1931, p. 257.
50. "El cambio de régimen político en España". *Boletín de la Liga Española Contra el Cáncer.* 30/06/1931, p. 30. This issue of the bulletin reproduces various photographs of the centre, including the radiotherapy room. The changes in names complied with the decree that abolished any reference to the monarchical regime in institutions: "Decreto suprimiendo para todas las Academias, Corporaciones, Sociedades, Patronatos, Establecimientos públicos, Industriales o mercantiles y cualquier otra entidad, no mencionada, las denominaciones que expresen o reflejen la dependencia o subordinación respecto del régimen monárquico suspendido". *Gaceta de Madrid*, 21/04/1931, pp. 254-255.

date for the International Congress of Scientific and Social Fight Against Cancer, scheduled to be held in Madrid, was dangerously approaching. This was a commitment made by José Goyanes at the International Congress of Leagues Against Cancer, held in London in 1928, which he attended accompanied by the secretary of the Spanish League, Florestán Aguilar [Anónimo, 1928, p. 67]. The idea was to be able to show the world facilities worthy of admiration.

José Goyanes came up with a way to solve the problem. At that time, the construction of the University City of Madrid was underway, with a multimillion budget, and its execution was entrusted to a Governing Board.[51] In May 1931, José Goyanes addressed a letter to this board, signed by all members of the Technical Board of the Institute. In it, Goyanes began by briefly explaining the development of the buildings of the Cancer Institute:

> The first building, constructed at the expense of subsidies from the General Directorate of Health, housed, in modest development, outpatient services, a hospital for cancer patients, research laboratories, and X-ray and curietherapy services. Additional buildings were added over time, so that today the Institute also includes, besides that first building—which is now exclusively used for the hospitalisation and treatment of cancer patients—a splendid hospital built by the Provincial Council, also intended for hospitalising and treating cancer patients; a large pavilion constructed with the financial resources of the League for research laboratories; and another large pavilion for incurable patients, located in the Hospital of San Juan de Dios and administered and supported by the Provincial Council of Madrid. The Institute also received from the Government the transfer of the building and land known as Parisiana, thereby completing the topographical area of its premise.[52]

The purpose of the letter was to request financial assistance from the Governing Board of the University City, which possessed "considerable economic resources," in order to complete the outstanding construction work at the Institute. These pending works consisted of the construction of two pavilions attached to the Parisiana building, one intended for the Polyclinic and the other for the Radiotherapy Institute. In return, Goyanes offered the possibility of establishing an agreement whereby the University could use the Institute's facilities for teaching purposes. The matter was not discussed by the Governing Board until its session on 9 September of that year, in which its members expressed their positive reception of this proposal for collaboration and stated that they would carefully consider the request when circumstances permitted.

However, it seems that these circumstances, despite pressure from the General Directorate of Health urging the Governing Board, did not materialise until two years later, by which time significant changes had occurred at the Institute.

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51. Acording Pilar Chías Navarro [1986, p. 129], the year 1930 had closed with assets amounting to 53,855,849 pesetas, and an investment of 29 million pesetas in construction works was planned for the 1931 fiscal year.
52. Goyanes Capdevila, José (1931) "Carta de la Junta Técnica del Instituto del Cáncer dirigida a la Junta de Gobierno de la Ciudad Universitaria", 05/1931. AGUCM, D-1599.

4. THE DISMISSAL OF JOSÉ GOYANES AS DIRECTOR OF THE INSTITUTE

One of the most significant challenges faced by the Cancer Institute was securing enough radium to meet the needs of an increasing number of patients. José Goyanes' statements about how radium was acquired for the Institute are at times contradictory. In March 1924, he declared that the first 45 milligrams of radium were a donation from Misael García Fernández [GOYANES, 1924b]. Just one month later, he announced the "acquisition of the necessary radium" thanks to a donation of 50,000 pesetas from the military directory, delivered by Antonio Magaz y Pers, who was temporarily replacing Primo de Rivera while he was involved in his African campaigns [GOYANES, 1924a, p. 597]. In a later writing, Goyanes, without referring to the first 45 milligrams donated by Misael García, stated that the first 100 milligrams of radium were obtained thanks to the donation of 50,000 pesetas "made by a private benefactor," and that another 200 milligrams were purchased in instalments.[53]

In 1928, José Goyanes and Pío del Río-Hortega were commissioned by the executive committee of the Spanish League Against Cancer to manage the acquisition of additional radium for the Institute, which at that time was limited to 300 milligrams. Radium was not an easy element to obtain, due not only to the scarcity of companies extracting it but also to its high market price. The efforts of both scientists during an extensive journey across Europe resulted in the acquisition, in Brussels, of an additional 700 milligrams.[54]

To prevent possible thefts of radium at the Cancer Institute, José Goyanes had installed a complex device that also served to protect the precious element against potential fire. This consisted of a double metal box embedded in a thick wall. Inside this box was another made of lead containing the 62 items that held radium, including tubes, apparatus, and needles. The key to the box was guarded by one of the Sisters of Charity who worked as nurses at the Institute. Both the application and removal of radium were carried out by the physician in the presence of one of the sisters, who from that moment had to constantly monitor the patient carrying the radium.[55] Once the tube or needle had been removed and cleaned, it was returned to the safe. The entire process was monitored by a complex documentary record-keeping system, which ensured the security and integrity of the Institute's radium

53. GOYANES, José (n.d.) "Mi gestión en la dirección del Instituto Nacional del Cáncer". Archivo Histórico Documental de Patología. Fondo Horacio Oliva.

54. The journey concluded at the beginning of January 1929: "El cáncer y la 'radium'". *El Parlamentario*, 10/01/1919, p. 2. The news explained that the two doctors had made a stop in Paris to organise the preparations for the Congress of the Social and Scientific Fight Against Cancer, which was scheduled for the spring of 1930 but was delayed until the autumn of 1933.

55. It was a complicated task, considering that there could be up to forty patients being treated with radium simultaneously.

deposits.[56] However, this system apparently failed and was the cause, or for some the excuse, to force José Goyanes to resign as director of the centre.

José Goyanes was dismissed at the beginning of November 1931, not only from his position as director of the Institute but also from his roles as commissioner of the League and as Health Councillor, being provisionally replaced by Pío del Río-Hortega.[57]

In his new role as director of the Institute, Pío del Río-Hortega was responsible for negotiating the terms of the collaboration agreement with the Governing Board of the University City. These negotiations seemed to reach no agreement satisfactory to all parties. Initially, the construction of a single building to house all the services of the Institute was considered, but this project was discarded due to its high cost. A few months later, it was proposed to adapt part of the pavilion intended for the School of Dentistry, which was not in use at the time. This option was also dismissed due to strong opposition from the students of that school. The final decision of the Governing Board of the University City, taken on 29 July 1933, was to integrate both the Cancer Institute and the Venereology Institute into the Clinical Hospital, requiring that the allocated funds for construction works of both institutes be used for this purpose.[58]

In April 1932, the Republican government took measures to resolve the peculiar administrative situation the Institute had experienced since 1924 by incorporating it, by Decree, as a State health institution under the General Directorate of Health, as it had been before the official foundation of the League. It also committed to reorganising the Spanish League Against Cancer.[59] The General Directorate of Health was empowered to agree with the University City Construction Board the fate of the Parisiana building.[60] E The decree

56. The head physician authorised the application and signed the voucher from a booklet with a duplicate. Once the tube or needle was returned, the voucher was removed from the box. Additionally, a daily list was prepared recording the apparatus number and its location—specifying the pavilion, room, and bed of the patient with radium, as well as the name of the requesting physician. Finally, a brightly coloured card was placed on the bed of each patient carrying radium, containing the patient's details, the amount, dose, time and dosage of application, and the date it was to be removed: Pérez, Fernán (1952) "Las grandes conquistas de la Humanidad. Becquerel y la radiactividad. Los esposos Curie y el radium". *Domingo*, 24/08/1952, p. 12.
57. "Dimisión del Dr. Goyanes". *ABC*, 04/11/1931, p. 17. "Decreto disponiendo que D. José Goyanes Capdevila cese en el cargo de Director del Instituto Nacional del Cáncer, y que se encargue de dicha Dirección y sus funciones el Subdirector de dicho Instituto D. Pío del Río-Hortega". *Gaceta de Madrid*, 04/11/1931, p. 750.
58. Junta de Gobierno de la Ciudad Universitaria (1931-1933) "Acuerdos relativos al Instituto del Cáncer de la Junta de Gobierno de la Ciudad Universitaria", 09/09/1931–19/09/1933. AGUCM, D-1599.
59. In October 1932, an order was published establishing an "Organising Board of the National Anti-Cancer League" to replace the former Spanish League Against Cancer in its functions. Sebastián Recasens Girol headed it, with members including Pío del Río-Hortega, Pedro Cifuentes Díaz, Manuel Varela Radio, Antonio García Tapia, Vicente Carulla Riera, and Manuel Usandizaga Solaruce. The secretary was Francisco Martínez Nevot: "Orden de 19 de octubre de 1932, disponiendo quede constituida en la forma que se indica la Junta organizadora de la Liga Nacional Anticancerosa". *Gaceta de Madrid*, de 20/10/1932, p. 462.
60. "Decreto disponiendo que el Instituto Nacional de Cáncer quede adscrito de la Dirección general de Sanidad, como Institución sanitaria del Estado". *Gaceta de Madrid*, 17/04/1932, p. 399.

also stipulated that, within one month, the General Directorate of Health would draft the Institute's regulations, although this deadline was extended by a few days.[61] The decree also stipulated that, within one month, the General Directorate of Health would draft the Institute's regulations, although this deadline was extended by a few days. This reorganisation was set to cause quite a stir within the institution, as posts had previously been assigned without public competition, something now required to continue working at the centre. The profile for the Institute's director pointed directly to Pío del Río-Hortega, as in his appointment, through competition among section heads, special consideration was given to "having dedicated oneself exclusively to research and having made cancerological publications of recognised scientific importance." This was logical, considering that few Spanish scientists could boast of having been candidates for the Nobel Prize not once but twice. A similar situation occurred with the profiles for section heads. Selective processes were announced in the following months.

The tribunal responsible for assessing the position of head of the Medicine section concluded that none of the four candidates who had applied met the necessary qualifications to occupy the post, and it consequently remained vacant. This decision caused indignation in Juan Noguera, one of the candidates, who had previously worked as a consultant in the Institute's clinics. Noguera used the press to attack Pío del Río-Hortega, whom he considered the intentional person responsible for the situation.[62] Noguera, among other things, accused Pío del Río-Hortega of being responsible for the destruction of the Institute and of "giving 9,000 peseta positions to socialists." In a response from the director of the Institute, also published in the press, he replied to this latter accusation: "I do not believe that doctors Gil y Gil, Díe y Mas, and Martínez Nevot are socialists".[63]

Once all the selection processes were completed, the Institute was organised as follows: a director, Pío del Río-Hortega, with an annual salary of 12,000 pesetas, paid in monthly net instalments of 900 pesetas, after a deduction of 100 pesetas for "utilities." The Roentgen Therapy section had a head, Carlos Gil y Gil, and two assistants, José M.ª Roda Pérez and Germán García García. José Díe y Mas had managed to retain his position as head of the Surgery section and had Alberto Pelegrín Cervera as assistant. Francisco Martínez Nevot was once again in charge of the Chemical Research section. There was no recorded head in the Biological Research section, but there was an assistant named Rafael Ibáñez González

61. "Decreto de 31 de mayo de 1932, relativo al Instituto Nacional del Cáncer". *Gaceta de Madrid*, 09/06/1932, pp. 1772-1774.
62. Rosa Medina Doménech [1996, pp. 106–108] offers a detailed review of the conflict between Juan Noguera and Pío del Río-Hortega.
63. Del Río-Hortega, Pío (1934) "Tal como viene. El Instituto Nacional del Cáncer. Réplica a un artículo del doctor Juan Noguera por Pío del Río-Hortega". *Informaciones*, 17/11/1934, p. 9. It seems that Don Pío was fully aware of the political ideology of his colleagues. Both Carlos Gil and Francisco Martínez Nevot joined the rebels during the Civil War.

and two scholarship holders, Enrique Vázquez López and José Manuel Ortiz Picón. There was also no head in the Medicine section, where Juan Guijosa Pernús worked as an assistant.[64]

Nursing care also underwent changes during this period. In 1930 there were "eleven Sisters of Charity belonging to the Community of Santa Ana" to care for patients [Anónimo, 1930b], but by 1935 none remained, at least apparently. It is possible that they were replaced, as in many other institutions, by secular nurses, given the dual intention of the Republic to, on the one hand, reduce the power of religious orders, and on the other, replace those without professional qualifications to practice.[65] Although there were 10 workers classified as nurses, considering the salary they received, we can deduce that the highest paid was Ángeles Ortiz Ranero, with 2,200 pesetas annually, who was the head nurse. Two other nurses, Carmen Zolle Díaz and M.ª Paz Llerena Padrino, must have been qualified, as they earned 2,000 pesetas a year. All worked 25 days a month. The other seven nurses must have had a much lower rank, since their salary was meagre, only 540 pesetas per month, much less than the two cooks (1,000 pesetas) and even the four maids (700 pesetas), despite working, like them, 30 days per month. Perhaps some of these nurses had previously been nuns, but certainly their names did not appear as such on the payroll. The salaries of non-medical male staff were much higher, 3,000 pesetas annually, both for the two interns, the two preparers, and the two orderlies. The nine porters earned the same as the qualified nurses. Santos López Casado had also joined the Institute as a draughtsman, with a salary of 4,000 pesetas annually.[66] Despite the fact that the Second Republic is considered a very beneficial period for women, these wage differences show the low regard still given to female work at the time.

5. "Ciudad Universitaria de Madrid", war zone

The failed military coup attempt of 18 July 1936 and the subsequent outbreak of the Spanish Civil War were soon felt in the city of Madrid in general, and in the subject of our study in particular. Fearing that the wounded in the conflict would overwhelm the few charitable hospitals in the capital, beds were set up in other hospitals such as Niño Jesús (120 beds) and the National Hospital of Chamartín de la Rosa (50 beds), as well as in a large

64. "Nóminas del personal del Instituto Nacional del Cáncer en 1935": AGA, Fondo Gobernación, signaturas AGA (08) 025 44702506, AGA (08) 025 44702511 y AGA (08) 025 44702513.

65. This Republican secular proposal to replace religious members in institutions, whether health or other types, with qualified staff, aroused many sensitivities. In many cases, there was concern that the change would result in an unnecessary budget increase, since religious nurses were cheaper than lay staff. There was also an expectation that secular nurses would show less self-sacrifice and dedication to work. This view was reinforced when news reached the press, such as the case of nurses at the Institute of Childcare in Oviedo who declared a strike, leaving the infants in their care unattended: "Lo que nunca habrían hecho las hermanas de la Caridad. Las enfermeras de un Instituto de Puericultura se declaran inopinadamente en huelga y abandonan a los niños lactantes confiados a su vigilancia". *Informaciones,* 28/04/1933, p. 1.

66. "Nóminas del personal del Instituto Nacional del Cáncer en 1935": AGA, Fondo Gobernación, signaturas AGA (08) 025 44702506, AGA (08) 025 44702511 y AGA (08) 025 44702513.

number of small clinics in Madrid during the first ten days of the conflict. The Hotel Ritz and the Casino de Madrid were also adapted as "blood hospitals." Due to its small size, the Cancer Institute only contributed 20 beds in an attempt to meet the most immediate clinical care needs of war casualties.[67]

On 10 August, there were only four wounded patients admitted to the Institute. The staff responsible for their care were as follows: José Díe y Mas (head of the Surgery Service), Germán García García and José M.ª Roda Pérez (Assistants at the Institute), Manuel Casas (former Navy doctor and volunteer assistant), Juan Guijosa Pernús (assistant in Medicine), Vicente Gilsanz García (junior doctor), Abelardo Gallego García (volunteer assistant doctor), Antonio Galiano Espinosa (practitioner), and the nurses Modesta de Lucas Peña, Carmen Guerrero Galisteo, Teresa Puente León, María Paz Llerena Padrino, Herminia Galiano Castro, Laura Fernández Gómez, and Carmen Zolle Díaz. The latter, as previously seen, was a qualified nurse and was probably the sister of one of the admitted wounded patients, Manuel Zolle Díaz, the only one without a diagnosis of gas gangrene.[68]

In a few days, the number of casualties from the fighting and bombings rose sharply, and the families of the missing demanded information, prompting the Provincial Council to issue the following appeal:

> The Provincial Council of Madrid urgently reiterates to all establishments responsible for sending to this body lists of the wounded, deceased, prisoners or detainees due to the current events not to delay their submission, providing the information they know, especially the facility where they are located.[69]

On 11 August, Pío del Río-Hortega submitted a report to the Provincial Council, offering to treat at the Institute all cases of gas gangrene that appeared in the other hospitals of Madrid. The eagerness of the civilian population to help had led to the proliferation of healthcare facilities scattered throughout the city, which greatly complicated the coordination of medical care in the capital. For this reason, the Ministry of Labour, Health, and Social Welfare, a few days after the conflict began, had to impose order and designate the only centres that could receive war wounded and announced that, indeed, only patients diagnosed with gas gangrene would be admitted to the Cancer Institute. This provision was not published until 23 August.[70]

Figure 5 is an examples of the daily records filled out by the director of the National Cancer Institute, reporting to the Chief Medical Inspector of the Red Cross about the movement of wounded patients in the establishment. According to the 44 records that have been consulted, Pío del Río-Hortega served as director of the centre until 18 September 1936,

67. "Los Hospitales en Madrid", *El Liberal*, 25/07/1936, p. 6.
68. To learn more about the female motivations that led them to participate as nurses in the war, Ruiz-Berdún [2016] and Germán Bes *et al*. [2020] can be consulted.
69. "El servicio de información sobre muertos, heridos y prisioneros". *Ahora*, 24/07/1936, p. 8.
70. "Orden enumerando los Hospitales a los cuales serán evacuados los heridos de los distintos frentes y los Hospitales de convalecencia, cura de heridos leves, enfermos de afecciones comunes y Casas de reposo". *Gaceta de Madrid*, 23/08/1936, pp. 1430-1431.

Figure 5. Information card about the movement of wounded patients in the National Cancer Institute, signed by Pío del Río-Hortega. Source: Spanish Red Cross Documentation Centre.

with José Díe y Mas replacing him during his trip to Brussels. Most of the admitted patients had a very grave prognosis; many died the day after admission and only two were discharged—one to his home in Torrejón de Ardoz, and another to the Convalescent Hospital on Abascal Street.

Some members of the Cancer Institute were on their summer holidays when the war broke out, which proved to be the perfect excuse for Martínez Nevot and Carlos Gil y Gil to join the insurgents without hesitation. Martínez Nevot claimed that during the war he had been persecuted by the "Marxist horde," was later freed by an undeniable miracle, performed truly exceptional military service for several months, and subsequently fell ill. Despite these circumstances, he made efforts to stay informed about the latest "cancer research" happening overseas.

After his release from the Cellular Prison in Valencia, Martínez Nevot was assigned to the Francoist army's prisoner concentration camps until December 1938. However, due to ill health, he was compelled to retire, spending some time in Santander where he had access to the library of the Valdecilla Health House, before spending the remainder of the war in Burgos [Palanca, 1940, p. 20; Martínez Nevot, 1940, p. 27]. In the capital of the insurgent government, specifically at the Hygiene Institute of Burgos, Martínez Nevot

delivered a series of lectures on cancer aimed at "safeguarding the prestige of our foremost military propaganda organ, while also contributing to the intellectual life of the rear." These lectures were subsequently published as a book the year following the end of the conflict [Palanca, 1940. p. 21].

The reference to "safeguarding the prestige of our foremost military propaganda organ" is explained by the fact that Radio National,[71] had reported a method to cure cancer, which called into question the broadcaster's credibility. Neither the newspaper articles covering the issue nor the radio programmes mentioned the name of the doctor who supposedly discovered the cancer cure, but this information must have been well known within José Alberto Palanca's circle.[72]

> Almost all the doctors from Burgos and many from outside attended the Burgos lectures … We all attended, therefore, but with one exception. The famous doctor who 'cured cancer' did not honour us with his company. He knew full well the controversy of his position and guessed that a claim made on the radio is always harmful, but even worse if the assertion is not based on serious scientific experimentation. We were left uncertain as to whether the individual concerned had authorised that propaganda, but he missed the opportunity to make amends and, at that time, we knew no more of him, although we hope that what happened will be beneficial to him and that he will take the right path of serious experimentation and clinical support [Palanca, 1940, p. 21].

It is clear that Martínez Nevot sought to silence any possible accusations of cowardice or of failing to serve the "national cause" throughout the entirety of the war. Clarifying this was crucial under the new regime, which carefully scrutinised the conduct of those wishing to return to their positions after the conflict: "my illness has allowed me to study and somehow be of use to our beloved Spain, first galvanised and then revived by the providential Leader whom God has bestowed upon us" [Martínez Nevot, 1940, p. 28].

Martínez Nevot's close relationship with Palanca during the war facilitated his confirmation as interim director of the Cancer Institute at the conflict's conclusión.[73] This was a logical development, as he not only aligned with the new regime but had also served

71. Radio Nacional de España was established as Franco's propaganda station during the war [Gómez García and Martín Quevedo, 2020]. It began broadcasting on 19 January 1937: "75 años de Radio Nacional. Del parte de guerra a la radio pública", 25/08/2012. Available in: https://www.rtve.es/play/audios/documentos-rne/75-anos-radio-nacional-parte-guerra-radio-publica/1293896/

72. The man in question was Eduardo Morejón, a doctor, writer, and pharmacist. There is not much information available about Eduardo Morejón. After escaping from Madrid, he settled with his wife and children (two daughters and a son) in the Burgos town of Pancorbo [*El Corresponsal*], "Vida local". *El Castellano, Diario independiente*, 19/03/1938, p. 4. According to Ortiz Picón [1993, pp. 171-172], he conducted experiments in the provisional laboratories of the Cancer Institute after the war in an effort to test his theories.

73. This detail is confirmed by Ortiz Picón's account of a meeting held at the Institute of Pharmacobiology, which Martínez Nevot attended shortly after his "arrival among the victors" in Madrid. Besides Martínez Nevot and Ortiz Picón, the meeting was attended by José Alberto Palanca and several military doctors in uniform. Ortiz Picón discreetly accused some of them of being turncoats, including the pharmacist Alfredo Botello and the medical commander Rafael Álvarez Pérez [Ortiz Picón, 1993, p. 158-159].

as the institute's deputy director prior to the military uprising. Martínez Nevot had the opportunity, during the war, to devise plans for the reorganisation of cancer treatment in Spain [Ruiz-Berdún, 2026, in press].

As is well known, those who defended or were sympathetic to the Republican legality, including scientists, endured post-war repression in its various forms. Many were forced into exile to avoid more severe consequences.[74] The scientific diaspora, which had already begun at the outset of the war, severely affected the National Cancer Institute. The most significant loss in this respect was undoubtedly that of its director, Pío del Río-Hortega, to whom Palanca's words were undoubtedly addressed:

> However, many absurd things have occurred here that the Americans still fail to understand: for example, that those very individuals (many of them doctors) who contributed most to supporting the famous Popular Front and unleashing the Marxist human beast were the first to flee, horrified by the consequences of their mistake, and, as a result, now call out every day from abroad to return to the country they handed over to anarchy [Palanca, 1940, p. 22].

The director of the Cancer Institute travelled to Brussels on 21 September to represent the Institute at the 3rd International Cancer Congress held in the Belgian capital that same month, subsequently spending a period in Paris [Albarracín Teulón, 2001; Cano Díaz, 1985, p. 68].[75] However, on 1 November, he decided to return to his position at the Cancer Institute after being accused of having removed a certain quantity of radium [Riera Palmero and Del Río-Hortega, 2004, p. 191]. This accusation is believed to have prompted the then director of the Cancer Institute to conduct an audit of the radium held by the centre. While this motivation cannot be ruled out, it is highly probable that the audit was a preliminary step before the radium's deposit in the Bank of Spain.[76] As can be seen in figure 6, at that time, following the alleged disappearance that had prompted Goyanes' dismissal, the amount of radium amounted to 914.97 milligrams. The audit also included quantities of gold, copper, and aluminium filters used for the application of radium.

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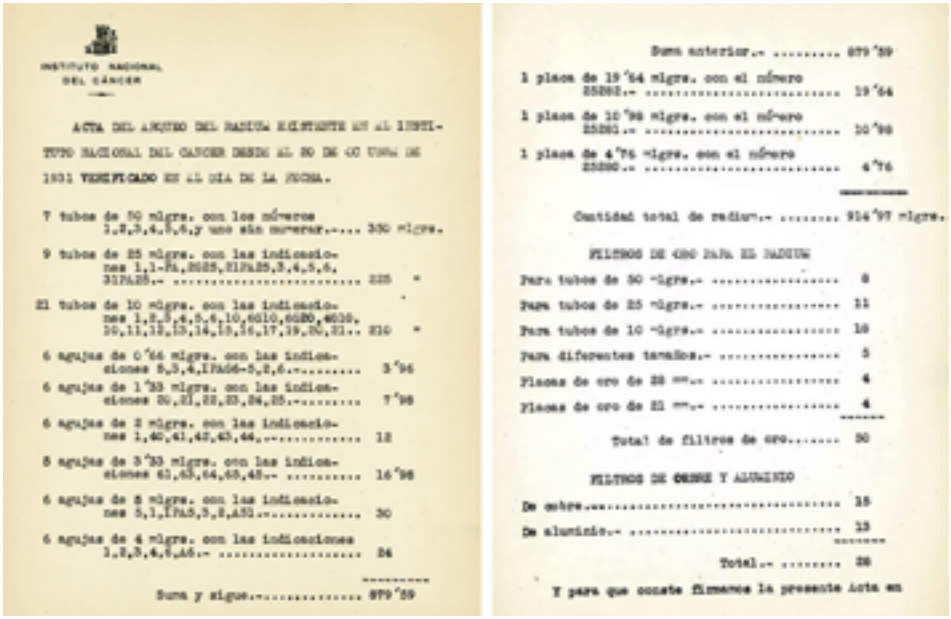
74. Several studies have highlighted the devastating consequences that the war which began in 1936 had on Spanish science. Among the most notable are the works Luis Enrique Otero y Carvajal [2006] and Josep Lluis Barona Vilar [2010].
75. Numerous veiled accusations of cowardice were levelled against Pío del Río-Hortega for leaving Spain. Ortiz Picón stated that del Río-Hortega, despite being the director of the Institute, had "secretly" left for the Brussels congress and that "we only saw Río-Hortega passing through Madrid twice, very frightened" [Ortiz Picón, 1993, p. 143]. These remarks appear rather inconsiderate towards someone who had been his mentor and are especially surprising coming from an individual who does not appear in the list of Institute personnel compiled by the director. More so considering that Ortiz Picón himself admits in his book to having been in hiding at the end of the war to avoid being recruited as a military doctor to the front in Guadalajara [Ortiz Picón, 1993, pp. 155-156].
76. The audit is dated 6 November 1936, the same day that Pío del Río-Hortega deposited the radium in the Bank of Spain.


INSTITUTO NACIONAL
DEL CÁNCER

ACTA DEL ARQUEO DEL RADIUM EXISTENTE EN EL INSTITUTO NACIONAL DEL CANCER [illegible]

[illegible]

Suma y sigue.- .... 879'59

Suma anterior.- .... 879'59

[illegible]

Cantidad total de radium.- .... 914'97 mlgrs.

FILTROS DE ORO PARA EL RADIUM

[illegible]

FILTROS DE COBRE Y ALUMINIO

[illegible]

Y para que conste firmamos la presente Acta en

Figure 6. Radium audit conducted by Pío del Río-Hortega on 6 November 1936
(the last page with date and signature has not been included).
Source: File on the recovery of radium from the National Cancer Institute.
Reference: AGA, (10) 54/06834.

According to Ortiz Picón, between November 7 and 8, 1936, the buildings of the Cancer Institute had to be hurriedly evacuated due to bombings, taking only the most essential items and leaving behind much of the equipment and the splendid library that had been accumulated [ORTIZ PICÓN, 1993, p. 143]. It is possible that the books were used as part of the parapets and barricades organized by soldiers in the grounds of La Moncloa, as had happened with the library of the Faculty of Philosophy [PALOMERA PARRA and PÉREZ MONTES, 2006]. Regarding this evacuation, Ortiz Picón does not mention either the radium or Pío del Río-Hortega at any point, but the dates indicate that the deposit of the radium in the Bank of Spain was simultaneous with the abandonment of the building. In figure 7 it can be seen how the Clinical Hospital and the Cancer Institute had fallen into the hands of the insurgents, while the Republican troops defending Madrid controlled the Faculty of Medicine. The University City, which was already in a very advanced stage of development, was utterly destroyed as it became one of the longest frontlines during the course of the war [QUINTERO MAQUA *et al.*, 2024, p. 226].

Just a few days later in November 1936, specifically on the 21st, Pío del Río-Hortega received an order from Federica Montseny to leave Madrid and relocate to Valencia [RÍO-HORTEGA BERCIARTU, 2010, p. 191]. He departed the city accompanied by a significant

Figure 7. Two sections of the University City map "at its liberation".
Source: AGUCM, 10/22-1

group of scientists, writers, poets, and doctors. The intention was for them to continue their research in a less hostile environment:

> Never before have we, academics and professors, poets and researchers, holding degrees from Spanish and foreign universities, felt so deeply rooted to the land of our homeland; never have we felt so Spanish as in the moment when the people of Madrid, defending Spain's freedom, compelled us to leave the city so that our research work might continue uninterrupted, to protect us in our work from the bombings endured by the civilian population of Spain's capital; never have we felt so Spanish as when we witnessed the militias, who risk their lives for the good of Spain, taking care to save the books from our libraries and the materials from our laboratories from the incendiary bombs dropped by foreign planes on our cultural buildings.

The same newspaper report explained that, apart from their families, everyone was accompanied by their scientific instruments, and it even specified that "a formula in progress, which Pío del Río-Hortega was developing, had been carefully packed and was travelling alongside its autor".[77] Upon his arrival in Valencia, Pío del Río-Hortega told the

77. The evacuations were carried out in two buses, escorted by four armoured tanks transporting the instruments. Among the members of the expedition, in addition to Pío del Río-Hortega, were the poet Antonio Machado (1875-1939), the Professor of Inorganic Chemistry at the Central University Enrique Moles Ormella (1883-1953), the urologist Isidro Sánchez Covisa (1879- 1944), the pharmacist and director of the Biological Chemistry Laboratory of the JAE, Antonio Madinaveitia Tabuyo (1890-1974), the psychiatrist and director of the women's asylum in Ciempozuelos, José María Sacristán Gutiérrez (1887-1957), the poet and painter José Moreno Villa (1887-1955), the psychiatrist and researcher at the Cajal Institute Miguel Prados Such (1894-1969), and the physicist Arturo Duperier Vallesa (1896-1959): "Hay que salvar la ciencia y el arte. Salen de Madrid médicos, escritores, poetas e investigadores". *La Libertad*, 25/11/1936, p. 8.

press that he had left the Cancer Institute "amidst a hail of bullets", and that he had to overcome his initial disbelief when he was informed that the rebel troops had decided not to respect the blood hospitals.[78]

Pío del Río-Hortega's exile has been extensively studied. After a brief stay in Valencia, he was ordered to move to Paris to continue his research as a scholar sponsored by the JAE, and in November 1937 he relocated to Oxford, where he received the honours that had been denied to him by his compatriots. In August 1940, he was invited to teach courses in Buenos Aires. Although he always wished to return to Spain, and perhaps in an effort to escape the wars, he went there and remained until the end of his days. He was initially employed to deliver a theoretical and practical course that allowed him to continue his laboratory work. Subsequently, he worked at a Histological Research Centre created specifically for him by the Spanish Cultural Institution [Albarracín Teulón, 2001; Riera Palmero and Del Río-Hortega, 2004; López Piñero, 1990, pp. 71-78].

Another member of the Cancer Institute who went into exile was the radiologist Germán García García. At the outbreak of the war, he was working at the Radium Institute in Paris, commissioned to acquire medical supplies for the Republic. He went into exile in Mexico on 10 January 1940, where he established the Chair of Oncology at the National Polytechnic Institute.[79] His uncle, Domingo Barnés, reflected on the talent drain caused by the war and the proclamation of the dictatorship: "My plan was to make the journey with my nephew Germán García, the great radiologist who is going to build or rebuild his life in Mexico: what values our poor Spain is losing, many of which it will never recover!" [Soler, 2015]. Ricardo Noya López also had to defend the Republican legality, as he was sanctioned by the Madrid Medical Association during the purging process, being disqualified from holding positions of trust and leadership [Guerra, 2003, p. 163; Simón Lorda, 2018, p. 274].

Juan Manuel Ortiz Picón and José Díe y Mas remained in Madrid throughout the war. The latter assumed the responsibility of replacing Pío del Río-Hortega at the head of an institution that no longer had a headquarters or significant resources. Before his departure, del Río-Hortega had deposited the institute's supply of radium in a couple of boxes at the Bank of Spain, handing the receipts over to José Díe y Mas.[80] According to Ortiz Picón, it was thanks to the efforts of Díe y Mas that the members of the Institute who remained in Madrid were able to settle temporarily in an abandoned mansion on Velázquez Street, after the buildings at La Moncloa were evacuated. Shortly afterwards, they moved to the

78. "Pocos pueblos serían capaces de ofrecer el espectáculo grandioso que viene dando Madrid". *El Socialista*, 26/11/1936, p. 1.

79. Germán García García, who earned his medical degree in 1933 and a degree in Sciences specialising in Physics, was a student in Negrín's laboratory in 1928; after his scholarships abroad funded by the JAE, he was hired as a radiologist at the Cancer Institute upon his return [Otero y Carvajal, 2006, p. 85].

80. "Expediente sobre la recuperación del radio del Instituto Nacional del Cáncer". AGA, Fondo del Ministerio de Asuntos Exteriores, 04/04/1939, signatura (10) 54/06834.

Figure 8. Ruins of the National Cancer Institute at the end of the Civil War.
Source: BNE, Civil War Photographs: GC-CAJA-59-13-5r. Creative Commons License.

Clínica del Rosario, which during the war served as Military Hospital No. 9 and was known as the "Lina Odena Hospital" [Ortiz Picón, 1993, p. 145]. At the end of 1937, a space was set up in a convent confiscated by the CNT as an "Anti-Cancer Hospital," located on Ayala Street [Ortiz Picón, 1993, p. 153]. In fact, the facility at 79 Ayala Street had begun operating on 20 April 1937, initially only as a clinic, and shortly thereafter including the hospitalisation of patients, although it was unable to provide radiotherapy treatment to them:

> The director of the Cancer Institute informs us that this institution has not ceased to operate, albeit with some limitations given the current circumstances: patients attending the free public consultations on Mondays, Wednesdays, and Fridays at 10 a.m. are properly attended to and admitted (those requiring the treatment currently available) at the premises now occupied by the Institute at 79 Ayala Street.[81]

This news item was published the day after another report announced that the oncology department of the Provincial Hospital had ceased to provide services and that patients were in desperate need of assistance.[82]

Meanwhile, the fighting continued on the University City front. The rebel army had used what remained standing of the Cancer Institute buildings as an ammunition depot, a situation the Republican army exploited in May 1938 to inflict the greatest possible human and material losses:

81. "Instituto Nacional del Cáncer. Con limitaciones sigue funcionando", *El Socialista*, 07/08/1937, p. 3.
82. "¿Se puede atender a estos enfermos? *El Socialista*, 06/08/1937, p. 2.

> Yesterday, a mine was detonated in the University City subsector, completely destroying the Cancer Institute building as well as all enemy trenches and strongholds located on the adjacent road. The rebels suffered an extraordinary number of casualties, mostly caused by the explosion of the substantial ammunition store housed in the said Institute.[83]

Thus definitively ended the life of buildings that had been conceived as the headquarters of a leading institution within the national scientific system, and the beacon of hope for many individuals affected by cancer. Rebuilding all that had been achieved in the fight against cancer in Spain during the early decades of the twentieth century was to be a slow and complicated process due to the devastation in which the country was left following the end of the war [RUIZ-BERDÚN, 2026, in press].

6. CONCLUSIONS

The idea of establishing a specialised centre in Spain for the treatment and research of cancer originated with a group of doctors interested in studying the disease. However, raising the necessary funds to finance its construction proved a complex process. The fight against cancer required human and material resources that were difficult to obtain, and the country was not in favourable economic circumstances. One of the most significant problems was raising sufficient funds to purchase the radium necessary to provide adequate radiotherapy treatments. The establishment of the Spanish League Against Cancer, led by Queen Victoria Eugenia and joined by numerous members of the aristocracy, helped to raise sufficient funds to expand the initial facilities.

The change in political regime, with the exile of the monarchy abroad and the arrival of the Second Republic, had significant repercussions on the Institute. The aristocrats collectively resigned from their positions in the League Against Cancer, and José Goyanes, the Institute's first director, was soon dismissed. The polarisation experienced by the population was reflected in the life of the Institute, whose new director, Pío del Río-Hortega, made several decisions that were not well received by all.

When the military uprising failed in July 1936, and turned into a civil war, the Institute was converted into a Blood Hospital to care for wounded individuals suffering from gas gangrene. However, this role was short-lived. The beautiful location of the Institute became, instead, a dire site, as the entire University City area became the scene of a war front where fighting would continue throughout the conflict.

During the war, like the rest of the population, the staff of the Institute was divided between those who supported the Republican legality and those who joined the rebels, as the latter aligned more closely with their ideology. Several scientists from the Cancer Institute, including Pío del Río-Hortega, probably one of the most brilliant Spain has ever had, were forced into exile to avoid Francoist repression, a situation that further impoverished the country's scientific future.

83. "Al fracasar sus ataques en el Este y Levante, el enemigo sufre durísimo castigo". *El Socialista*, 04/05/1938, p. 2.

The ruins to which the Cancer Institute was reduced, along with the loss of such a significant human capital for cancer research due to the Civil War, stand as a symbol of the destruction of the nascent social and scientific progress that was beginning to emerge in the country.

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