

# The grant application by Nicolás Achúcarro and other unpublished documents on Achúcarro and Lafora in the archives of the Junta para la Ampliación de Estudios

F. Vera Sempere

Emeritus professor of pathological anatomy. Department of Pathology. Universitat de València, Valencia, Spain.

## ABSTRACT

Nicolás Achúcarro Lund (Bilbao, 1880-Guetxo, 1918) was probably one of the most brilliant scientists of the now universally recognised Spanish Histological School. Despite his early death at the age of 37 years, his scientific production was very fruitful and of great neuroscientific relevance. His microscopy research marked the beginning of the outstanding work by his most important student, Pío del Río-Hortega. Both figures are unquestionably responsible for the most relevant neuropathological research conducted in Spain.

The aim of the present study is to disseminate the document drafted by Achúcarro in August 1907, which was presented to the Council for Study Extensions and Scientific Research (JAE, for its Spanish initials), applied for a grant of 4000 francs. Achúcarro wrote the document 12 months before travelling to the Government Hospital for the Insane in Washington. The content of this document has not previously been referenced in the frequent biographical studies performed on Achúcarro. The document presents an almost autobiographical account of the scientific activity conducted by Achúcarro up to 1907. As a primary source of information, the document mentions some biographical aspects that are not widely known, as well as his scientific interests and his opinion on the European institutions where he had worked.

Achúcarro's study grant application was ultimately not approved by the Ministry for Public Education. Similar circumstances also affected his student and close friend Gonzalo Rodríguez Lafora. This study, which also addresses other documents on Achúcarro from the archive of the JAE, contextualises the contents of these documents by discussing the relations between Achúcarro and the JAE and the reasons that led to the rejection of his application.

## KEYWORDS

Nicolás Achúcarro, manuscript, biography, Gonzalo Rodríguez Lafora, Junta para la Ampliación de Estudios, archives of the JAE, Spanish Histological School

## Introduction

Despite his early death, Nicolás Achúcarro Lund (Bilbao, 1880-Guetxo, 1918) was one of the most brilliant and productive scientists of the now universally recognised Spanish Histological School.

Achúcarro's abundant scientific work would be continued over time through the magnificent research of his most significant student, Pío del Río-Hortega (1882-

1945).<sup>1</sup> Both men are responsible for the main neuropathological research conducted in Spain in the 20th century. They have frequently been referred to as a single scientific figure, successively embodied by two different persons.<sup>2</sup>

Nicolás Achúcarro lived a short life, dying in 1918, when he was only 37 years old. Despite this, Achúcarro was the author of a fruitful and original body of scientific work. From 1912, he directed the histopathology laboratory of

the Junta para la Ampliación de Estudios (JAE; Council for Study Extensions and Scientific Research). This laboratory represented the immediate and essential predecessor to Del Río-Hortega's microscopy school, which was established at the Residencia de Estudiantes from October 1920.<sup>3</sup>

Numerous studies have been dedicated to the life and work of Achúcarro.<sup>4</sup> These works include two collective publications,<sup>5,6</sup> compiled and published to mark the 50th anniversary of his death. Many of these works were drafted by authors who directly knew and communicated with Achúcarro. Several other studies have sometimes revealed little-known aspects of Achúcarro's scientific career.<sup>7-14</sup>

However, in this extensive bibliography on Achúcarro, we found no reference to the six-page handwritten document that he wrote in August 1907, which is preserved in the archives of the JAE. This document includes a request for a study grant to cover a period of 11 months, which according to Achúcarro would amount to 4000 francs.

He drafted the document 12 months before travelling to the United States to work as a histopathologist at the Government Hospital for the Insane in Washington. We know that he obtained this position after an intervention by his master in Munich, Alois Alzheimer.<sup>9,12,13</sup>

The handwritten document, drafted 7 months after the creation of the JAE,<sup>15</sup> is of great historical interest. It represents a primary source of information on Achúcarro and offers an almost autobiographical account of his scientific work to that date. It also contains several of Achúcarro's opinions on the European institutions where he was trained, reporting some specific biographical details that are not well known.

This letter, like other documents on Achúcarro stored in the archives of the JAE, has not previously been mentioned or known by experts on his life. The application in this document was also neglected by the Ministry for Public Education, as it was ultimately not approved. Similar circumstances also affected Gonzalo Rodríguez Lafora, who is known to have trained at international centres almost consecutively and in parallel with Achúcarro.

The aim of the present study is to raise awareness of the mentioned letter, and to review other documents on Achúcarro in the JAE. Their contents are considered in the context of Achúcarro's life, with an analysis of the reasons for which the application was rejected.

## Material and methods

The document motivating our study is stored in the archives of the JAE, which are currently available digitally. These archives contain the JAE card/record of Nicolás Achúcarro Lund (No. 47 - folder No 1795) and other additional documents included in his file (JAE/1-32).<sup>16</sup> These additional documents are also analysed in our study.

Their contents are compared with known biographical data on Achúcarro from the extensive literature on his life, subsequent annual reports of the JAE,<sup>17</sup> and various studies and legislative documents related to the difficulties faced by the institution.

## Results

### *Achúcarro's grant application to the JAE*

The document analysed is a handwritten application letter on three sheets of paper, written on both sides (a total of six pages of text), included in the file JAE/1-32 on Nicolás Achúcarro. Each sheet bears a stamp on the front (11th class, 1 peseta) with the seal of the institution receiving the application (Figure 1).

The letter is dated 9 August 1907. It is signed by Nicolás Achúcarro Lund, whose address was at no. 8 Calle Arrenal, Bilbao (Spain). The document is addressed to the president of the JAE and indicates that:

[...] considering the conditions published in the Official Gazette of 13 July 1907, I [Achúcarro] hereby request from the JAE a grant amounting to 4000 francs (4500 to 4600 pesetas) to continue with my neurological studies abroad for a period of 11 months between 1907 and 1908, practising clinical psychiatry and conducting personal research on anatomical pathology of mental illnesses in Paris, and several places in England.

Subsequently, Achúcarro details his academic achievements, relating to his baccalaureate in Bilbao and his time at the Real Gymnasium in Wiesbaden (1896-1897). He mentions his medical studies in Madrid (1897-1898), which he continued at the School of Medicine in Marburg (Hesse) (1899-1900) and completed upon graduating with a degree in Medicine and Surgery from the Medical School of Madrid in 1904.

His scientific achievements include his microscopy training at the laboratory that Simarro had at his home.



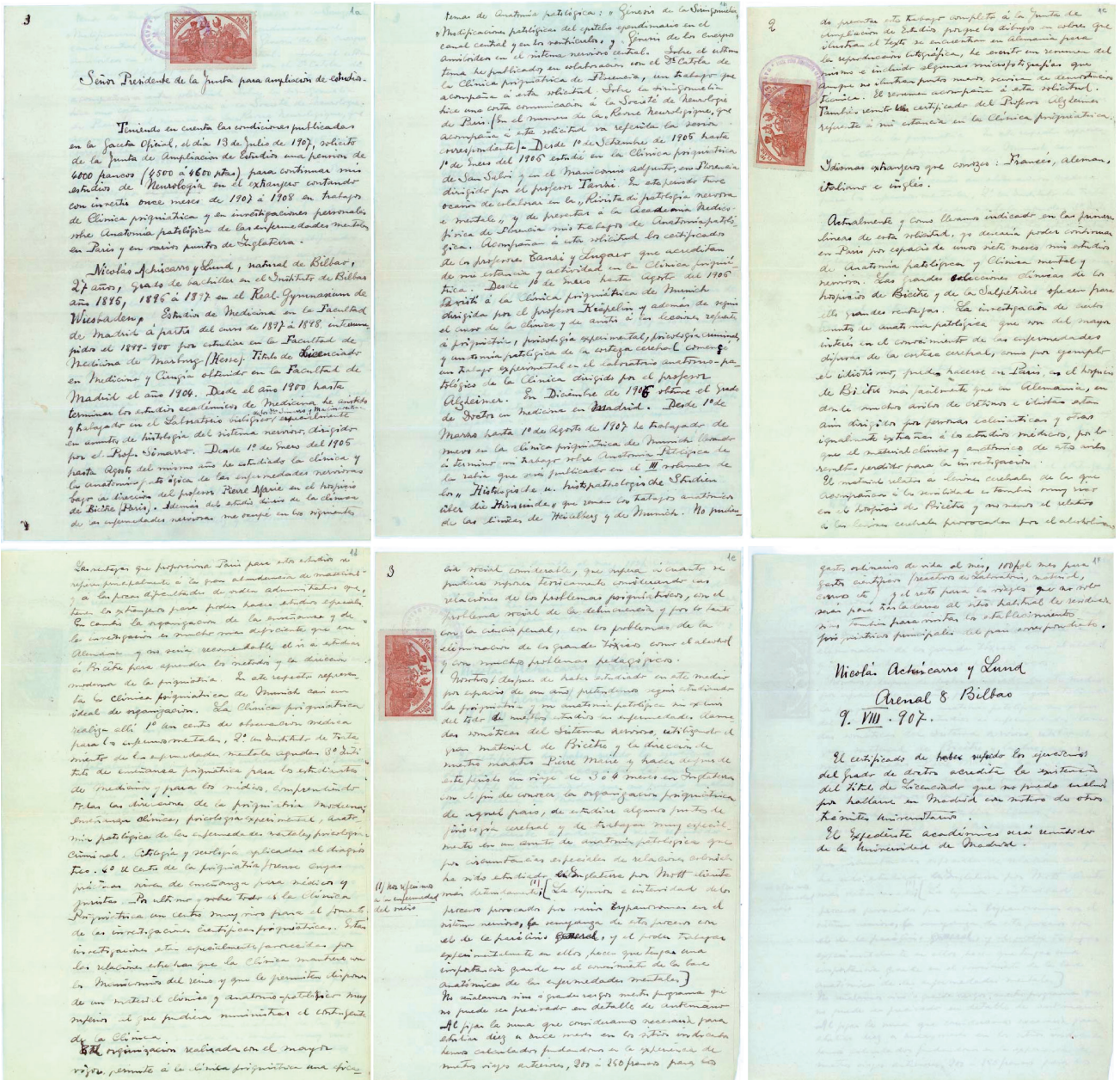


Figure 1. The handwritten letter that Achúcarro addressed to the president of the Junta para la Ampliación de Estudios dated on 9 August 1907, applying for a grant to study abroad. Source: Archive of the JAE, personal file on Nicolás Achúcarro Lund (JAE/1-32).

Achúcarro specifies that his training on the histology of the nervous system had lasted 4 years. He writes that:

From 1900 until the completion of my medical studies (1904), I attended and worked at the biological laboratories of Dr Simarro and Dr Madinaveitia, especially focusing on the histology of the nervous system under the direction of Prof Simarro.

He also recounts his eight-month stay in Paris (1905) under Prof Pierre Marie at Hospice Bicêtre, during which he studied the clinical and anatomical pathology signs of diseases of the nervous system. He lists his studies on syringomyelia, the ependymal epithelium, and the origin of amyloid bodies in the central nervous system. Furthermore, he mentions that copies of those studies are attached to the letter.

He continues by mentioning his four-month stay (from September 1906) at the San Salvi Psychiatric Hospital and the asylum in Florence, under professors Eugenio Tanzi and Ernesto Lugaro (certificate attached). Achúcarro also mentions his publications in the journal *Rivista di Patologia Nervosa e Mentale* and collaborations with the Accademia Medico-Fisica Fiorentina. He continues by recounting his stay during 1906 at the Munich Psychiatric Hospital under professor Emil Kraepelin and at the hospital's anatomical pathology laboratory under Alois Alzheimer.

He mentions that he obtained his doctorate degree from the University of Madrid in December 1906. He describes how in March 1907 he returned to the Munich Psychiatry Hospital, where he had prepared a study on the histopathology of rabies that was going to be published in the third volume of *Arbeiten*, a journal gathering anatomical studies performed in the hospitals of Heidelberg and Munich. Achúcarro mentions that together with his application, he attaches an abstract of the study to be published and some photomicrography images, but that he could not send the coloured figures that illustrated the study to the JAE because they were being lithographed in Germany for their publication.

He finishes the first part of the application by noting that he spoke French, German, Italian, and English, and listing the objectives he would pursue with the help of the grant.

He was interested in a new seven-month stay to continue his studies in anatomical pathology and mental neurological signs of diffuse diseases of the cerebral cortex, as is the case of idiocy, using material from the Hospice Bicêtre and La Salpêtrière.

According to Achúcarro, it was much easier to obtain material in France than in Germany, as “many of the insane asylums [in Germany] are still managed by church people or by others who are equally foreign to medical studies, and therefore clinical and anatomical material is wasted and not used for research.”

He says that it was also easier at the Bicêtre to obtain anatomical material from cases of brain lesions caused by alcoholism or associated with senility, considering the “abundance of existing anatomical material and the lack of administrative obstacles for foreign researchers to work with them.”

However, Achúcarro continues his argument by listing the multiple organisational, technical, and teaching advantages for studying mental illnesses at the Munich Psychiatric Hospital and at Alzheimer's laboratory. From Achúcarro's text, one can deduce that his intention was to study in Germany the abundant clinical and anatomical material he would obtain in France.

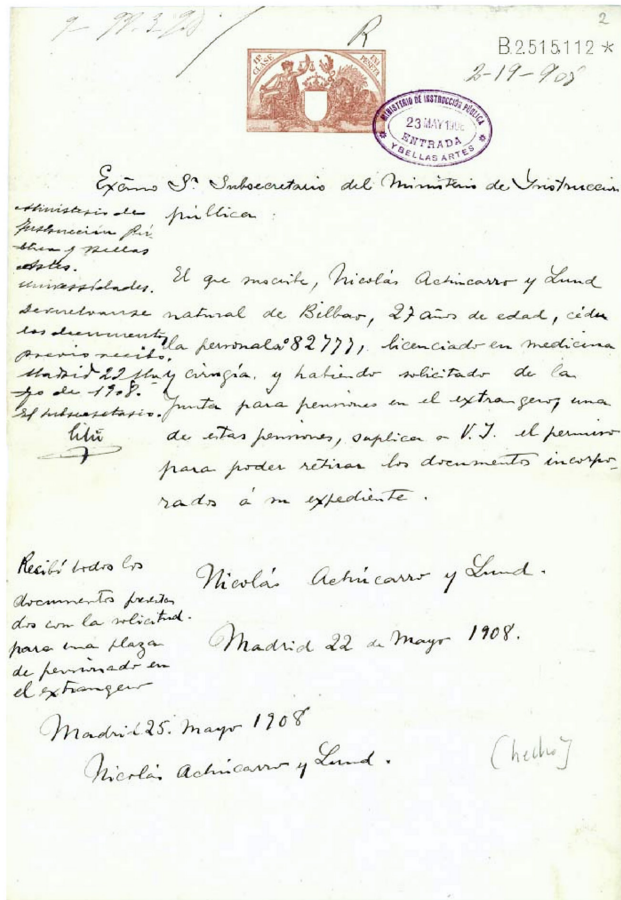
He also expresses his wish to travel for a further three or four months to England to acquaint himself with the psychiatric institutions there. He expresses his desire to study brain physiology and anatomical pathology with Dr Frederick Walker Mott, with a special interest in sleep disorders. Achúcarro asserts that the similarity between the processes caused by trypanosomiasis and some features of the general paralysis of the insane would enable him to open several study or research lines.

Lastly, he estimates that for this 10- to 11-month stay, he would require 4000 francs, based on his previous experience visiting other countries. He ends the letter with a footnote explaining that the University of Madrid would send the JAE his academic records.

*The other documents on Achúcarro in the archives of the JAE*

Achúcarro's file in the JAE includes a second handwritten document, stamped and signed on 22 May 1908. The document is not addressed to the JAE, but rather to the deputy secretary of the Ministry for Public Education (Figure 2), and requests the return of all the documents





**Figure 2.** A handwritten request by Achúcarro, dated 22 May 1908, asking for the return of the documentation he presented in August 1907 in his application for a grant to study abroad. Three days later, Achúcarro signed a receipt for the collection of this documentation.

he had presented in August 1907 with his grant application. At the end of the document, an added paragraph, signed by Achúcarro, states that the documents had been delivered on 25 May 1908.

The remaining documents in the file of the JAE do not refer to the application submitted by Achúcarro in 1907, but rather to subsequent events.

Thus, it includes the syllabus of ten lectures on the histology of the nervous system and mental diseases that Achúcarro gave at Fordham University (New York) in September 1902 (Figure 3), as part of an international course on neurology and psychiatry.

The next document is a certificate of the participation in the International Congress of Neurology and Psychiatry in Ghent in August 1913 (Figure 4), which Achúcarro attended with a grant from the JAE as a Spanish delegate.

The three additional documents in the archive of the JAE include Achúcarro's personal file (file No. 1795, Figure 5), with a chronological summary of the following aspects:

- 1) his grant application in 1907;
- 2) his designation as member of the steering committee of the Residencia de Estudiantes in May 1910;
- 3) his designation as an assistant instructor at the Laboratorio de Investigaciones Biológicas in 1911, with a monthly wage of 300 pesetas;
- 4) his designation as a Spanish delegate for attending the 5th International Congress for the Care of the Insane in Moscow, with a grant of 1200 pesetas;
- 5) his teaching activity at the Instituto de Ciencias; and
- 6) his designation as a delegate in the Congress of Neurology and Psychiatry in Ghent in 1913.

The last document in the personal file is a new document signed by Achúcarro in May 1905 (Figure 6) requesting that the JAE decrease his salary to 150 pesetas due to "other responsibilities that will prevent me from dedicating more than half the usual time to directing the courses I have been entrusted with."

## Discussion

Achúcarro's application for a study grant from the JAE in 1907 raises several questions. The main question is what motivated the rejection of the application, considering the excellent curriculum vitae that Achúcarro attached.

Achúcarro wrote the document in 1907, when the JAE published its first call for applications for study grants. This first call, mentioned by Achúcarro in his application, was published on 13 July 1907 in the Gazette, signed by Ramón y Cajal as its president.<sup>18</sup>

At that time, the JAE was only seven months old. The JAE was created by virtue of a Royal Decree signed by king Alfonso XIII.<sup>15</sup> The decree had been drafted by Amalio Gimeno Cabañas, minister of education of the Liberal government presided by Antonio Aguilar y Correa.

The image shows three pages of a syllabus for an international extension course in nervous and mental diseases, organized in September 1912 by the Fordham University Medical School. The pages are numbered 34, 35, and 36.

**Page 34: International Course in Nervous and Mental Diseases. First Week.**

Hours	Monday, Sept. 9	Tuesday, Sept. 10	Wednesday, Sept. 11	Thursday, Sept. 12	Friday, Sept. 13	Saturday, Sept. 14
9-10	History of Nervous Diseases. Wash. 1.	Sensibility in Nerve and in Spinal Cord. Henry Head. 1, 2.	Sensibility in Nerve and in Spinal Cord. Henry Head. 1, 2.	Sensibility in Nerve and in Spinal Cord. Henry Head. 1, 2.	Topographical Anatomy of Spinal Cord. Gordon Holmes. 3, 4.	Topographical Anatomy of Spinal Cord. Gordon Holmes. 3, 4.
10-11	Anatomy. McManis. 1.	Henry Head. 1, 2.	Henry Head. 1, 2.	Henry Head. 1, 2.	Henry Head. 1, 2.	Henry Head. 1, 2.
11-12	History. Ashburn. 1.	History. Ashburn. 2.	History. Ashburn. 3.	History. Ashburn. 4.	History. Ashburn. 5.	History. Ashburn. 6.
12-1	Chemistry. Ashberg. 1.	Chemistry. Ashberg. 2.	Chemistry. Ashberg. 3.	Chemistry. Ashberg. 4.	Chemistry. Ashberg. 5.	Chemistry. Ashberg. 6.
1-2	LUNCH-RECESS					
2-3	Topographical Anatomy. Gordon Holmes. 1.	Anatomy. McManis. 2.	Anatomy. McManis. 3.	Central Nervous System. 1.	Central Nervous System. 2.	Central Nervous System. 3.
3-4	Reflexes. Abrahamson. 2.	Electrodiagnosis. Abrahamson. 3.	Reflexes. Abrahamson. 4.	Reflexes. Abrahamson. 5.	Reflexes. Abrahamson. 6.	Reflexes. Abrahamson. 7.
4-5	LUNCH-RECESS					
5-6	The Pupils. Graf. 1.	Visual acuity and Near Vision. Graf. 2.	Optic Nerve. Graf. 3.	Optic Nerve. Graf. 4.	Optic Nerve. Graf. 5.	Optic Nerve. Graf. 6.
6-7	Stephen's Anatomy of Brain and Cerebellum. Ashberg. 1, 2.	Laryngoscope Examination. Mac-Person. 1.	Paralytic Cerebellum Examination. Mac-Person. 2.	Cerebellar Ataxia. Joffe. 1, 2.	Paralytic Cerebellum Examination. Mac-Person. 3.	Paralytic Cerebellum Examination. Mac-Person. 4.

**Page 35: International Course in Nervous and Mental Diseases. Second Week.**

Hours	Monday, Sept. 16	Tuesday, Sept. 17	Wednesday, Sept. 18	Thursday, Sept. 19	Friday, Sept. 20	Saturday, Sept. 21
9-10	Topographical Diagnosis. Spinal Cord. Gordon Holmes. 1, 2.	Sensibility in Spinal Cord. Henry Head. 1, 2.	Sensibility in Spinal Cord. Henry Head. 1, 2.	Sensibility in Spinal Cord. Henry Head. 1, 2.	Sensibility in Spinal Cord. Henry Head. 1, 2.	Sensibility in Spinal Cord. Henry Head. 1, 2.
10-11	Pathology. Achúcarro. 6.	Pathology. Achúcarro. 7.	Pathology. Achúcarro. 8.	Pathology. Achúcarro. 9.	Pathology. Achúcarro. 10.	Pathology. Achúcarro. 11.
11-12	Peripheral Lesions. Colla K. Russell. 1.	Colla K. Russell. 2.	Colla K. Russell. 3.	Colla K. Russell. 4.	Colla K. Russell. 5.	Colla K. Russell. 6.
1-2	LUNCH-RECESS					
2-3	Operating Tables and Control. Eberhart. 1.	Operating Tables and Control. Eberhart. 2.	Operating Tables and Control. Eberhart. 3.	Operating Tables and Control. Eberhart. 4.	Operating Tables and Control. Eberhart. 5.	Operating Tables and Control. Eberhart. 6.
3-4	Psychology. Ashburn. 1.	Psychology. Ashburn. 2.	Psychology. Ashburn. 3.	Psychology. Ashburn. 4.	Psychology. Ashburn. 5.	Psychology. Ashburn. 6.
4-5	Neurological Lesions. Colla K. Russell. 1.	Neurological Lesions. Colla K. Russell. 2.	Neurological Lesions. Colla K. Russell. 3.	Neurological Lesions. Colla K. Russell. 4.	Neurological Lesions. Colla K. Russell. 5.	Neurological Lesions. Colla K. Russell. 6.
5-6	Mental Medicine. White. 1.	Mental Medicine. White. 2.	Mental Medicine. White. 3.	Mental Medicine. White. 4.	Mental Medicine. White. 5.	Mental Medicine. White. 6.
6-7	Neurological Lesions. Colla K. Russell. 1.	Neurological Lesions. Colla K. Russell. 2.	Neurological Lesions. Colla K. Russell. 3.	Neurological Lesions. Colla K. Russell. 4.	Neurological Lesions. Colla K. Russell. 5.	Neurological Lesions. Colla K. Russell. 6.

**Page 36: International Course in Nervous and Mental Diseases. Third Week.**

Hours	Monday, Sept. 23	Tuesday, Sept. 24	Wednesday, Sept. 25	Thursday, Sept. 26	Friday, Sept. 27	Saturday, Sept. 28
9-10	Clinical Responsibility. Ritz. 1.	Clinical Responsibility. Ritz. 2.	Clinical Responsibility. Ritz. 3.	Clinical Responsibility. Ritz. 4.	Clinical Responsibility. Ritz. 5.	Clinical Responsibility. Ritz. 6.
10-11	Psychic Analysis. Jung. 1.	Psychic Analysis. Jung. 2.	Psychic Analysis. Jung. 3.	Psychic Analysis. Jung. 4.	Psychic Analysis. Jung. 5.	Psychic Analysis. Jung. 6.
11-12	Psychic Analysis. Jung. 1.	Psychic Analysis. Jung. 2.	Psychic Analysis. Jung. 3.	Psychic Analysis. Jung. 4.	Psychic Analysis. Jung. 5.	Psychic Analysis. Jung. 6.
1-2	LUNCH-RECESS					
2-3	Orthopedic Surgery. 1.	White. 1.	White. 2.	White. 3.	White. 4.	White. 5.
3-4	Orthopedic Surgery. 2.	White. 6.	White. 7.	White. 8.	White. 9.	White. 10.
4-5	Orthopedic Surgery. 3.	White. 11.	White. 12.	White. 13.	White. 14.	White. 15.
5-6	Orthopedic Surgery. 4.	White. 16.	White. 17.	White. 18.	White. 19.	White. 20.
6-7	Orthopedic Surgery. 5.	White. 21.	White. 22.	White. 23.	White. 24.	White. 25.

Figure 3. Syllabus of the international extension course in nervous and mental diseases organised in September 1912 by the Fordham University Medical School, including the ten lectures delivered by Achúcarro. Source: Archive of the JAE, personal file on Nicolás Achúcarro Lund (JAE/1-32).

The creation of the JAE in January 1907 undoubtedly represents the incorporation into government institutions of the spirit and the methods promoted by the Institución Libre de Enseñanza (ILE). Considering the structure of the political parties, which were taking alternating turns in power at that time, we can say that the Liberal party shared some affinities with the institutionalist ideas,<sup>19</sup> and it was a Liberal government that enabled the creation of the ILE. A key figure in this process was Amalio Gimeno, an old friend and colleague of both Cajal<sup>20</sup> and Simarro<sup>21</sup> (who would both be members of the JAE) since his time at the University of Valencia.

One week after the publication of the decree that founded the JAE, the Liberal government fell. It was replaced by the conservative government of Antonio Maura, who remained in power until October 1909. In the new conservative government, Faustino Rodríguez San Pedro became minister of education.<sup>22</sup> He soon attempted to clip the wings that had led, in his opinion, to the creation of the JAE. Thus, in June 1907, the minister issued a

regulation amending the decree that created the JAE and its statutes, largely limiting the technical independence of the JAE to replace its members and to award grants.<sup>23</sup> Among other provisions, the regulation by Rodríguez San Pedro forced the JAE to publish shortlists of proposed grant recipients (ie, proposals for recipients that included triple the number of grants to be awarded); the ministry would make the final decision regarding the selection of candidates, as well as on the designation of the members of the JAE, even when no proposal had been made by the JAE.

The modification of the regulation by Rodríguez San Pedro was one of the main obstacles faced by the JAE throughout its history in terms of its relationship with Conservative governments and with the Primo de Rivera dictatorship.<sup>24,25</sup>

As a result of this regulation, no grant requested from the JAE was awarded in 1907, as detailed in the 1908-1909 annual report of the JAE.<sup>17</sup>





Figure 4. Diploma of the 3rd International Congress of Neurology and Psychiatry, held in August 1913, which Achúcarro attended as a JAE delegate. Source: Archive of the JAE, personal file on Nicolás Achúcarro Lund (JAE/1-32).

<p>NOMBRE <i>Nicolás Achúcarro y Lund.</i></p>		47	Carpeta N.º <i>1795</i>
<p>DOMICILIOS</p>			Archivo N.º
			Trabajos...
<p><b>RELACIONES CON ESTA JUNTA</b></p>			
<p>1907 - Solicitante pensión. (9-VIII-1907)</p>		<p>Congreso Internacional de Moscú con 1200 ptas</p>	
<p>16-7-1910 - Nombrado vocal del Comité Directivo de la Residencia de Estudiantes.</p>		<p>7-12-1912 - RD - concedida esta pensión</p>	
<p>20-6-1910 - Promueve para vocal de la Residencia</p>		<p>1911-12 - Profesor del Instituto de Ciencias</p>	
<p>1-1-1911 - Nombrado ayudante instructor del Laboratorio de Investigaciones Biológicas con 300 pesetas mes</p>		<p>19-11-1912 - Joven - <del>continua</del> su trabajo en el presente curso.</p>	
<p>30-11-1912 - Propuesto como delegado en el</p>		<p>1913 - id. id.</p>	
		<p>16-7-1913 - Promueve para Delegado del Consejo de Sante con 600 pesetas y 380 ramos</p>	

Figure 5. Achúcarros's personal file in the JAE, folder 1795.

That year, the JAE received 211 grant applications, finally selecting 74 candidates. The list of selected candidates was sent on October 1907 to the Ministry for Public Education for payment of the grants. Despite this, no grant was awarded by the Ministry for Public Education of Rodríguez San Pedro. The ministry argued that the proposal received did not fully meet the requirements of the new regulation. The news about the rejection of the application was finally made public, after the proposal was also discussed in the parliament in late November. Finally, at the end of 1907, no grant had been awarded for studies abroad.<sup>17</sup>

Thanks to the 1907 annual report of the JAE, we know that 29 of the 211 applicants were working in the field of Medicine, with 22 having completed their medical studies at university centres administrated under the Ministry for Public Education.<sup>17</sup>

These 22 applications for medical study included that of Achúcarro, who had finished his studies in 1904 at the University of Madrid. Today, thanks to the annual reports of the JAE, we also know that Gonzalo Rodríguez Lafora, who had just obtained his degree in June 1907, also responded to this call for candidates, submitting his application on 8 August 1907.<sup>26</sup>

As was the case with Achúcarro, Rodríguez Lafora's application was ultimately not accepted by the Ministry for Public Education. Lafora applied again for a grant to study abroad one year later, in September 1908, and finally obtained it in this second chance. Curiously, these data on Rodríguez Lafora are not mentioned in the extensive biographical study on Lafora performed by Valenciano Gayá,<sup>27(p26-32)</sup> who obtained his data not directly from the archives of the JAE but rather from Lafora's descendants.

Achúcarro, unlike Rodríguez Lafora, did not respond to this second call for applications, published on 5 August 1908.<sup>28</sup> In this second call, only 30 grants were offered, with a pre-established list of study topics to which grants should be associated.

Achúcarro, at the time of this second call for grant applications was published (August 1908), had already decided to accept the unlimited contract he was offered to work in the United States, thanks to the intervention of Alzheimer. Proof of this decision is the fact that on May 1908, Achúcarro requested that the JAE (Figure 2) return all documentation and works he had presented when applying for the grant in 1907. His decision to work at the

Government Hospital for the Insane in Washington became a reality in September, when he set sail from the Port of Le Havre for New York.<sup>29</sup>

The scientific projects and objectives proposed by Achúcarro in his application for an 11-month grant, with the aim of travelling to Paris, then Munich, and subsequently to stay in London for two or three months, were clearly not carried out. Despite this, we know, thanks to Teófilo Hernando, that at an unspecified time in 1909, Achúcarro travelled together with Hernando first to Paris, visiting some psychiatric hospitals, and later to London, where Hernando mentioned that they only visited one hospital, whose name he did not specify.<sup>30</sup> This was a short trip. It probably took place when Achúcarro was already working at the Government Hospital for the Insane in Washington, on the occasion of some autumn holidays in 1909, as in November of that year, Achúcarro set sail from Liverpool to New York on the transatlantic ship *Lusitania* in order to complete his last months' work in Washington.<sup>31</sup>

Furthermore, Achúcarro's scientific ambition of furthering his training at Maudsley Hospital in London, where Frederick Walker Mott was performing histopathological studies on schizophrenia, would be achieved years later by his student Miguel Prados Such.<sup>32</sup> The latter was one of the first assistants, first to Achúcarro, and later to Del Río-Hortega, at the histopathology laboratory.

All these data explain and contextualise the rejection of Achúcarro's grant application in 1907. If his application had been approved by the minister of Public Education, he very likely would not have worked in the United States, an experience that was very enriching and fruitful for Achúcarro in scientific terms,<sup>9,12,13</sup> further reinforcing his already solid reputation as a researcher.

We will now make some comments on the remaining documents on Achúcarro in the archive of the JAE, which were also reviewed.

The contents of his personal file, although very brief, do shed light on some details and on the timeline of his subsequent relationship with the JAE. The first detail mentioned is his designation as a member of the trust of the Residencia de Estudiantes in June 1910.

Achúcarro definitively returned from the United States by mid-May 1910,<sup>29</sup> after the end of what Pedro Laín Entralgo calls "the pilgrimage years that accredited him with a clear proficiency."<sup>31</sup>



Cajal, the president of the JAE, was fully aware of Achúcarro's personal and scientific value. Between 1908 and 1909, while he was in the United States and not yet working at Cajal's laboratory, Achúcarro had published three studies in French in the journal *Trabajos del Laboratorio de Investigaciones Biológicas*.<sup>33-35</sup>

This was completely exceptional for Cajal's journal. His studies on rod-like cells are especially important; in two of these, Achúcarro listed his affiliation as a histopathologist at the Government Hospital for the Insane in Washington.<sup>34,35</sup>

Thanks to his position as president of the JAE, Cajal surely would have known about the grant applications made by Achúcarro and Rodríguez Lafora in 1907, as well as the reasons for their rejection.

By mid-May 1910, when Achúcarro returned from the United States, Cajal unquestionably wished to keep Achúcarro within the sphere of his histological school. Proof of this is Achúcarro's designation eight months later as an assistant instructor at Cajal's laboratory, with a monthly salary of 300 pesetas, as recorded in his profile in the archives of the JAE.

Cajal was well aware of Achúcarro's teaching and personal skills, which made him an ideal person to be linked with the teaching institutions that were being created by the JAE at that time.

Thus, Achúcarro's personal file includes his designation as a member of the steering committee of the Residencia de Estudiantes. This designation practically coincided with his arrival to Madrid, and also with the creation of the Residencia de Estudiantes and its trust.

The Residencia de Estudiantes and its trust were created by virtue of a Royal Decree issued on 5 May 1910.<sup>36</sup> Initially, the Residencia was located in a small hotel on Calle Fortuny, which had been rented by the JAE. The trust was directed by Ramón Menéndez Pidal. In its early days, the Residencia only had 17 students, three of whom were JAE grant recipients. One of the first grant recipients at the Residencia was Luis Calandre Ibáñez, from Cartagena, who obtained his grant with the support of doctor Simarro and also began studying under Achúcarro at the histopathology laboratory in 1912.<sup>37</sup>

Thanks to Miguel Prados Such, we know that Achúcarro frequently visited the Residencia to establish direct contact with the students, usually dining with them in the canteen.<sup>38</sup>

Achúcarro's conversations with students of medicine usually centred around neurohistological research. These direct contacts with the students of the Residencia began to materialise in a series of technical lectures that Achúcarro delivered to the students, which are mentioned in the 1911-1912 annual report of the JAE.<sup>17</sup>

Similarly, the 1912-1913 annual report of the JAE mentions that in September 1912, Fordham University (New York) had invited Achúcarro to give a series of lectures on histopathology in the International Extension Course in Medical and Nervous Diseases held at the university. Achúcarro also used the material from these lectures, as well as the slides he presented, to show them to the students of the Residencia.<sup>17</sup>

The detailed programme of the lectures that Achúcarro delivered in New York is included in the JAE file that we have reviewed (Figure 3). Several European professors participated in this international course, travelling from London (Stead and Stolmes), Zurich (Carl Jung), and Munich (Knauer); they are mentioned in the 1912-1913 annual report of the JAE.<sup>17</sup> Fordham University celebrated the centenary of the course in 2012,<sup>39</sup> commemorating the famous lectures delivered by Carl Jung, in which he expressed his disagreements with Freud's sexual theories.<sup>12,13,39</sup>

The documents reviewed refer to the congresses that Achúcarro attended as a JAE delegate. Thus, Achúcarro's personal file includes a diploma certifying his attendance at the Congress of Neurology and Psychiatry in Ghent in the summer of 1913.

Similarly, thanks to the 1914-1915 annual report of the JAE,<sup>17</sup> we know that Achúcarro, together with Cajal and Tello, were also designated JAE delegates to attend the congress of neurology, psychiatry, and psychology that would take place in Bern in September 1914. Ultimately, this congress was cancelled, very likely due to the outbreak of the First World War.

Limited data are included on another congress, which Achúcarro also attended as a JAE delegate. Thus, Achúcarro's personal file mentions that he was sent as a JAE delegate to the 5th International Congress for the Care of the Insane in Moscow, held in the second half of December 1912, with a grant of 1200 pesetas. Thanks to the Official Gazette,<sup>40</sup> we know that Achúcarro was sent to the congress as a delegate together with Arturo Giné

Marriera, son of Giné y Partagás; we have found no further mention or record on his attendance.

The last document in Achúcarro's file is a request he sent to the JAE in May 1915. The content of this request, which is proof of the good work and honourable nature of Achúcarro, gives rise to new questions that should be answered. In this request, Achúcarro asks Santiago Ramón y Cajal, as president of the JAE, for his salary to be reduced to 150 pesetas in the following months due to "other responsibilities that will prevent me from dedicating more than half the usual time to directing the courses I have been entrusted with."

Achúcarro did not specify these responsibilities. We may consider two possible reasons for the contents of this request, which may even be interconnected.

The first is associated with his health status. It has been reported that the symptoms of Achúcarro's disease had already started to manifest in 1915. The initial symptoms included pruritis, asthenia, and nodes in the neck.<sup>41</sup> As advised by Madinaveitia, Achúcarro travelled together with his wife to recover at the sanatorium-asylum in El Pardo, directed by his friend Alberto Giner. He was admitted to the sanatorium of Dr Gómez Gereda in the Sierra de Guadarrama, and was later transferred, very disabled, to the family home in Neguri, where he died in April 1918.<sup>42</sup>

It is very likely that Achúcarro, in May 1915, already foresaw the progression of his disease and, considering that it would prevent him from continuing with his work at the laboratory, had the good will to request that the JAE reduce his salary by half.

The second possible reason was linked to his student Del Río-Hortega. Achúcarro received a monthly salary of 300 pesetas from the JAE. The sum of 150 pesetas he requests in his letter is therefore equivalent to half his salary. Thanks to Nicolás Gómez del Moral, we know that Del Río-Hortega began receiving a scholarship of the same amount from the JAE; after Achúcarro's death, Del Río-Hortega learned it was deducted from his master's salary.<sup>43</sup>

It is very likely that Achúcarro, aware that he would be absent from the laboratory due to his disease, wished to favour his student Del Río-Hortega with half of his salary, even considering him as a possible successor as director of the laboratory.

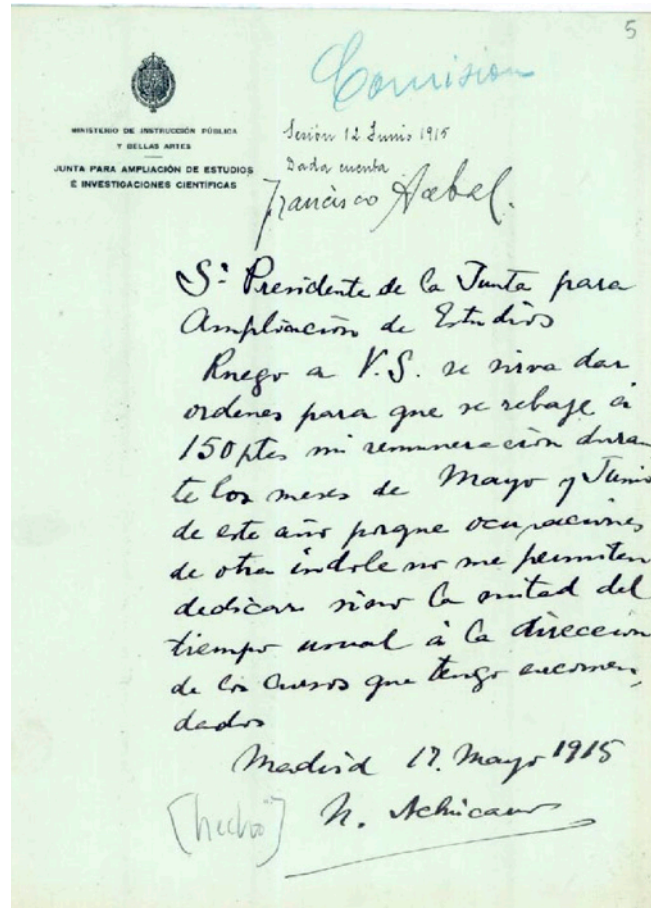


Figura 6. A letter signed by Achúcarro in May 1915 and addressed to Cajal as president of the JAE, in which he requests that his monthly salary be reduced to 150 pesetas.

We lack any document that may enable us to corroborate which of these two possible reasons is the most likely, or if both are true, which is also very likely. In any case, and more than a century after Achúcarro's death, either would be very informative about his uprightness of thought and honourable character.

### Conflicts of interest

The author has no conflicts of interest to declare.

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