



## Alfredo Lanari, a clinical research style

### Alfredo Lanari, un estilo de investigación clínica

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**ABSTRACT** The institutionalization of clinical research in Argentina reached its point of greatest maturity with the creation, in 1957, of the Institute of Medical Investigations (Instituto de Investigaciones Médicas) of the Faculty of Medicine of the Universidad de Buenos Aires, and the drive of the man who was its director for almost 20 years, Alfredo Lanari. In this paper I analyze the ways in which he generated a style of clinical research and a referential position in the local medical field that allowed him to carry out said institutional realization. This achievement was the result of a personal enterprise and at the same time part of a larger context of transformations within the medical discipline worldwide and at the Universidad de Buenos Aires. This study was carried out combining oral and documentary sources, such as interviews with physicians at the Institute of Medical Investigations, members of the journal *Medicina* and of the Argentine Society of Clinical Investigation (Sociedad Argentina de Investigación Clínica), as well as academic files and scientific articles.

**KEY WORDS** History, 20th Century; Clinical Medicine; Biomedical Research; Argentina.

**RESUMEN** La institucionalización de la investigación clínica en la Argentina adquirió su máxima madurez a partir de la creación, en 1957, del Instituto de Investigaciones Médicas de la Facultad de Medicina de la Universidad de Buenos Aires, y del impulso de quien fuera su director durante casi 20 años, Alfredo Lanari. En este trabajo analizo las modalidades mediante las cuales esta figura construyó un estilo de investigación clínica y una posición de referente en la medicina local que le permitieron llevar adelante dicha realización institucional. Esta construcción fue fruto de una empresa personal pero al mismo tiempo abrevó en un contexto más amplio de transformaciones en la medicina mundial y en la Universidad de Buenos Aires. Esta investigación se llevó a cabo combinando el uso de fuentes orales (entrevistas a miembros del Instituto de Investigaciones Médicas, integrantes de la revista *Medicina* y de la Sociedad Argentina de Investigación Clínica) y documentales (legajos académicos y artículos científicos).

**PALABRAS CLAVE** Historia del Siglo XX; Medicina Clínica; Investigación Clínica; Argentina.

## INTRODUCTION

Alfredo Lanari's name undoubtedly holds a significant place in the scientific and medical history of Argentina during the second half of the 20<sup>th</sup> century. His professional activity, characterized by an eagerness for innovation, was reflected in the different scientific enterprises that Lanari carried out with the aim of renovating various aspects of local and regional medicine.

His vision influenced the transformation of three fundamental fronts: medical education, health care practice, and research. Thus, along with other figures in the field, he was a force behind the efforts to reform undergraduate education (in the hospital teaching unit, providing a three-year clinical education cycle within the hospital), as well as graduate education (medical residency programs), which were introduced and carried out by the mid-1960s at the Faculty of Medicine of the Universidad de Buenos Aires (UBA). Lanari was who initiated, within the local medical field, the discussion regarding the necessity of full-time positions for practitioners, professors and researchers, and he put great effort into bringing clinical and experimental traditions together.

These changes were materialized paradigmatically in the Institute of Medical Investigations (IIM, from the Spanish *Instituto de Investigaciones Médicas*) of the Faculty of Medicine of the UBA, of which Lanari was director from its creation in 1957 until 1976.

Without minimizing Lanari's active role in the local field of clinical medicine and in the creation of the IIM, it is absolutely necessary to acknowledge the impact that the contemporary climate of innovative ideas and actions had on him, a climate found within both in the cosmopolitan arena of the discipline in the years after the Second World War and in the political and academic environment of renovation and scientific professionalization that the Argentine university underwent after the overthrow of the Peronist government in 1955 (1).

In the context of the medical discipline post-World War II in the U. S. and France – the two most important countries serving as centers of international reference for medical research, organization and funding – major transformations took place within

the state institutions charged with promoting and carrying out these activities. The years from 1955-1968 were known as “the golden years” of both budget expansion and the financing capacity of the National Institute of Health (NIH). In turn, in 1964, when the Institut National d'Hygiène of France became the Institut National de la Santé et la Recherche Médicale (INSERM), the activities of hospital-based medical research, practice and education were newly intertwined, serving as the basis from which to begin to redefine the professional profile of the clinical researcher as well as the relationship between the laboratory sciences and clinical medical practice (2).

In the area of medical education during the 1950s a series of innovations began to take place, as the result of a long process occurring both regionally and internationally and with strong repercussions locally, in which the prevailing medical education programs were the object of revision and discussion. A number of proposals for medical education reform were developed in such spaces as regional and international Medical Education Conferences (3,4). Many of these reforms worked to consolidate the “flexnerization” of medicine. This process, which started in the 1910s, consisted of a shift from an anatomopathological paradigm to a paradigm centered on the basic sciences (physiology) and laboratory sciences, as part of a series of reforms that took place in the field of medical education at US universities after the publication of what was called the “Flexner Report” (5). This report was the result of a study on medical education at universities in North America, appointed to Abraham Flexner by the Carnegie Foundation. Flexner's report emphasized the priority of experimental work, cultivated within the Germanic university model, highlighting the scientific foundations of medicine. This was precisely the core of Flexner's innovation: considering medicine to be sustained by the basic sciences and, thus, underscoring the importance of these sciences in the training of physicians, thereby giving content to the notion of “scientific medicine” (6). These elements appear within the idea and practice of the full-time physician adopted by Lanari, as well as in his comprehensive medical practice of research, care, and teaching, which combined experimental research with clinical care.

At the local level a series of ideas and actions were also being carried out by individuals

involved in movements for change and university renovation, with reverberations in the Faculty of Medicine of the UBA, which influenced and nourished the orientation that Lanari's participation took in the local clinical medical field.

The Universidad de Buenos Aires underwent, starting in 1955, a renovation process whose main characteristic was the beginning of the professionalization of research and teaching activities, that is, the creation and expansion of full-time positions at the university (1). This process gained extraordinary dynamism during Risieri Frondizi's term as head of the UBA rectorate in 1957, as well as during Rolando García's term as dean of the Faculty of Exact and Natural Sciences (a) (9).

A group made up of professors close to Bernardo Houssay organized as a force for modernization at the Faculty of Medicine (b). The points of greatest convergence within the core contents of the modernization process dawning at the UBA and particularly at the Faculty of Exact and Natural Sciences, the perspectives sustained, and the changes promoted by the group of modernizing professors of Medicine (and by Lanari in particular), were focused on the actions and projects to reform medical education and the implementation and expansion of a full-time modality for teaching and research. These views were reflected in the 1<sup>st</sup> Argentine Medical Education Conference (*1° Congreso Argentino de Educación Médica*) held in November 1957 (9) and organized by the Argentine Medical Association (AMA, from the Spanish *Asociación Médica Argentina*).

The ideas and actions of reform regarding medical education, healthcare organization and the profile of health professionals, promoted regionally and internationally, were shared by the modernizers at the UBA, by Houssay's group at the Faculty of Medicine and by the members under the Third Chair of Clinical Medicine. These groups provided programmatic support and carried out concrete actions that framed the process of institutional construction of the IIM.

Therefore, with this triple focus – provided by the shared orientation of the changes promoted after World War II in medical education and organization, of the ideas of reform and scientific professionalization fostered by Risieri Frondizi's rectorate, and of Lanari's course of studies – a variety of healthcare services, undergraduate and

graduate courses, and lines of research were established at the IIM, producing over three generations of disciples. This combination of organizational and institutional approaches, academic figures and research practices gave way to a tradition of clinical research that was developed and institutionalized within the social space delimited by the IIM. Even when taking into account this process of institution-building – in which not only Lanari but also others of his contemporaries participated – his “figure” must be highlighted as playing a central role, lending the process his personal touch and representing a fundamental pillar in the structuring and evolution of the clinical research field.

## ABOUT THE STUDY

This work is part of my doctoral thesis (9) (c), focused on the characterization and analysis of Lanari's social and professional intervention in the local field as well as the itinerary of his academic training. In this way, this work aims to show how his singularity was based on his ability to create his own research style (10), combining elements of the “laboratory style” of experimental medicine with the “practitioner style” of general medicine and the “clinical research style” he learned from teachers both in Argentina and abroad. With these elements he was able to bring together and resignify the work practices and institutional cultures of both experimental and clinical environments, oriented towards the local clinical medical field. This style allowed him to build a reputation and gain professional insertion in the field locally, differentiating himself from mere experimental researchers and practicing physicians so as to rapidly institutionalize clinical medical research with the foundation of the IIM in 1957.

This study was carried out during the period of 2007-2010 combining oral and documentary sources. Using in-depth interviews with the members of the IIM (Lanari's contemporaries and disciples from the first, second and third generations), colleagues of the journal *Medicina* and of the Argentine Society of Clinical Research (*Sociedad Argentina de Investigación Clínica*), it was possible to uncover individual and collective discourses according to shared professional

characteristics such as the interviewees' medical specialty, association experience, and generation. These discourses were compared to stable sources and materials such as the academic files of researchers (11-13) and scientific and opinion articles written by researchers, mainly published in *Medicina* (13) but also in other local scientific outlets of the time, such as *Ciencia Nueva* (14) and *Prensa Médica* (15).

### EXPERIMENTAL AND CLINICAL TRAINING: LOCAL INSTITUTIONS AND FIGURES

Alfredo Lanari, also known among his friends as "Pipo," was born on February 9, 1910 in the city of Mar del Plata, to a middle-class family with a previous generation of professionals on his father's side (d).

During his undergraduate studies (1928-1934) he participated in different academic environments in which he early on performed teaching and research activities, showing interest in the development of both experimental medicine and clinical practice.

Bernardo Houssay was among the principal forerunners and figureheads of experimental medicine, giving rise to physiology and advocating in particular endocrine research locally (16). Lanari was teaching assistant in Physiology, of which Houssay had been chair since 1929. It was in that context that Lanari chose to carry out his doctoral thesis with Houssay:

I met Bernardo Houssay while in my second year of studies at the Faculty of Medicine. I had been selected to take part in a special commission to receive more intense lessons in physiology. To students with a family connection in medicine, Houssay was a very well-known name. He had a wise air about him, the air of someone entirely devoted to research and teaching. Everything connected to Houssay was serious [...] What was it that most impacted us in our first impression of Houssay? That he was always in his Institute, either at his desk or in the laboratories, teaching and doing research. He had rare manual and surgical

skills which made it so that practical demonstrations and assignments always tuned out well. (15 p.15) (Own translation)

The condition set by Houssay to be thesis director, as well as his general way of working, required that theses fall within the lines of interest and activity of the Physiology Institute (*Instituto de Fisiología*). This was part of the organizational system put into practice institutionally. Pursuant to this system, the topic of research Houssay suggested to Lanari, which connected with Lanari's own interests, was on the chemical transmission of nerve impulses. As with the majority of theses carried out at the Institute, not only did Houssay advise the election of the topic, but, especially at the beginning, he himself performed the experiments (14).

Houssay is known to have had a particular "laboratory style" (17) characterized by little use of technology, intense work dynamics, the creation of experimental systems, a holistic approach to physiology, and the deliberate choice to perform research in areas of endocrinology with little international competition. Many if not all of these elements had a major influence in Lanari's subsequent scientific itinerary in terms of the training in physiology he received, the specific skills and style he was transmitted, and the relational, personal and moral values he was taught, as well as in terms of the importance that was given to creating generations of disciples for the amplified reproduction of the group and the scientific institution (18).

The culture of clinical care particular to "health practitioners" (19) was acquired by Lanari through the figure of Mariano Castex. As the first chair of Clinical Medicine in the university from the period of 1918-1947, Castex worked at the Carlos G. Durand Acute General Hospital (*Hospital General de Agudos Carlos G. Durand*) and at the Clinical Hospital (*Hospital de Clínicas*) where he not only practiced medicine, but was also in charge of providing extracurricular courses in clinical medicine. Although he did some theoretical research and he carried out some experimental studies, principally he developed a clinical healthcare practice covering a wide and diverse range of topics, such as the study of inherited syphilis, intestinal parasitosis, septic foci, and allergies, publishing works of local and international impact (12).

After obtaining his degree in 1933, Lanari worked as assistant physician in the Clinical Medicine Service at the Clinical Hospital, under the direction of Dr. Mariano Castex. Dr. Castex trained him in semiology and in clinical practice and taught him the importance of performing routine hospital rounds, meticulous and systematic clinical observation, and professional and personal commitment to the care and treatment provided to each patient. Although he continued to value the skills acquired through his work with Castex, Lanari found Castex's skills related to research and work methodology to be more problematic:

The fact that he and I did not think alike regarding research methodology has to do with the 25-year age difference between us as well as our different research fields. Present-day researchers schooled in molecular biology would say the same about me if they saw me working with dogs. (15 p.16) (Own translation)

Lanari worked with Castex until 1947 when Castex resigned from the university, in a context of political dismissals and resignations of faculty resulting from the tensions held with the recently elected Peronist government (1,14). While his relationship with Castex did not continue in time nor outside of the work he developed between 1933 and 1947 under his chair, Lanari did keep close professional and personal contact with Houssay and Vaccarezza (who will be discussed next), even after finishing his work under their chairs.

Along with Houssay and Alfredo Bartolomé Lanari (Senior), Raúl Francisco Vaccarezza was the third person of great impact and influence in the orientation and characteristics of Lanari's scientific training, both at its beginnings and as it developed. Unlike with Houssay and Castex, Lanari maintained not only a professional connection but also a personal, friendly and familiar relationship with Vaccarezza (13).

This closer tie was possible because of the relationship that Vaccarezza already had with Alfredo Bartolomé Lanari (Senior): Vaccarezza had been Lanari's assistant in the Chair of Medical Physics and was one of the physicians who supported him during his time as dean, acting as Secretary of the Faculty from 1919-1920 (during Lanari's first term) and in 1927-1929 (during his second term).

Vaccarezza worked at the Physical Therapy Institute of the Clinical Medicine Hospital (*Hospital de Clínica Médica*) and held the role of senior practitioner of the Model Institute of Clinical Medicine (*Instituto Modelo de Clínica Médica*). Later he began his experience at the Dr. Francisco Javier Muñiz Hospital of Infectious Diseases (*Hospital de Infecciosas "Dr. Francisco Javier Muñiz"*), where he received scientific recognition for his research, clinical care and teaching developments regarding tuberculosis. He became chair of Pathology and Clinical Practice of Tuberculosis in 1939 and ran the Antitubercular Drug Dispensary and the Koch Ward, both located at the Muñiz Hospital (20).

After finishing his undergraduate education, Lanari started working for the Infectious Disease Service at the Muñiz Hospital under Vaccarezza's direction:

Although I started attending the Muñiz Hospital before 1939 [...], it's been since that year, with long periods where I've been abroad, that I've been connected to the Chair of Tuberculosis. In this chair I've seen what real organization is, what the scope of Professor Vaccarezza's work is. His duties range from giving classes to getting dogs sent to my experimental lab [...] Attending during these fifteen years the three weekly meetings, discussing cases, suggesting treatments, inspiring original research, reading everything published within the chair. (21 p.57) (Own translation)

Unlike Castex, Vaccarezza was considered by Lanari to be a promoter of clinical as well as experimental research, especially in pneumology (15).

### **Training with the Boston group: the clinical research style of Cannon, Luco and Rosenblueth**

Between September 1938 and May 1939, Lanari acted as voluntary assistant in the service of Professor Minot in Boston, where he met Arturo Rosenblueth and Joaquín V. Luco. He worked with them on discussing and comparing electric theory and chemical theory in the synaptic transmission of nerve impulses, although fundamentally he

built connections that were of great importance in the maturation of his views on medicine and professional practice (22). Both men later became referential figures in neurophysiology: Rosenblueth was director of the Institute of Advanced Studies of the Mexican Polytechnic Institute (*Instituto de Estudios Avanzados del Instituto Politécnico de México*), and was creator, along with Norbert Wiener, of cybernetics, while Luco was a person of reference in that field of studies in Chile. Lanari remembered both of them and their influences: Rosenblueth was “a friend, geographically distant but with whom I nonetheless kept in touch until his death in 1970.” Luco was “an inseparable friend in Boston, whose decision to take on full-time work in Chile had an influence on me; it took me away from the classic scheme of the part-time clinical physician to foster in me the rigor of the full-time professor and researcher with exclusive dedication to the institution” (23 p.36-37).

When Lanari met both in Boston, Walter Cannon was the figure behind them. He was one of the most prominent scientific personalities in the field of international medicine. From the time he served in the First World War until his death at the end of the Second World War, Cannon was a pioneer in the field of physiology, acting as chair of Physiology at Harvard Medical School during 1920-1940 (22).

Lanari also completed an advanced course from 1938 to 1939 in which he worked with Cannon. This relationship as well as those with Luco and Rosenblueth were the experiences of greatest importance to Lanari, as they helped solidify his particular belief in breaking the duality between clinical and experimental (laboratory) medicine, and they strengthened his inclination for research. Cannon was a great proponent of this conjunction and particularly of physiology and its application within clinical medicine (24):

I worked with Cannon and Rosenblueth for no more than eight or nine months, we published some works, and then I know exactly what I wanted to do. I came back to Buenos Aires with the idea that I would work full-time in clinical research. (14 p.26) (Own translation)

Indeed, Cannon strengthened the vocation for physiology that Lanari had received from Houssay

and helped him to apply it – with his methods, practices and ideas – to clinical medicine. After his stay in Harvard, Lanari developed more formally his predilection for clinical pulmonary physiopathology. Later on, the influences of these figures would reach further than the choice of a research area. The ideology and style of Cannon, Luco and Rosenblueth would be expressed in the institutional and intellectual project of the IIM.

## THE DEVELOPMENT OF A NEW RESEARCH STYLE

In 1939, back in Buenos Aires and with no opportunities to do full-time clinical research because there were no such positions for a clinical physician at the Faculty of Medicine, Lanari divided his time between clinical and experimental medicine: in the morning, part time, with Mariano Castex, acting as adjunct professor in the Chair of Clinical Medicine and in the afternoon, at the Physiology Institute.

Although he never stopped frequenting the Institute and exchanging ideas with Houssay, Lanari soon resigned this ad honorem position and started working at the Muñiz Hospital, where the Chair of Pathology and Clinical Treatment of Tuberculosis was held by Vaccarezza, who offered Lanari a paid position. Although it was not a full-time position, it was enough to live on; he was appointed Interim Chief of Physiopathological Research under the chair. It was then he started developing lines of work on topics of respiratory physiology. These topics were added to his first lines of research in the field of neurophysiology and neuromuscular disorders (with myasthenia gravis receiving most of his attention), topics which he never abandoned, although they were sometimes interrupted or discontinued at different stages of his career (14).

In addition to these positions, he also worked as physician at the General Directorate of Taxes (*Dirección General Impositiva*). Although this meant an important workload, it was a necessary addition in order to round out his salary in a way that would allow him to live comfortably; doing so was difficult with only his part-time work as professor in the university and in the hospital.

Not long after his return to Buenos Aires, in October of 1939, he founded the journal *Medicina* with a group of physicians that, although they had been trained by Houssay, did not limit the orientation of their research to the experimental field (physiology) but rather were interested in its clinical application as well. Lanari was member of the journal's Editorial Committee until his death in 1985. The publication and dissemination of this type of work in clinical research required a particular outlet, and with that purpose *Medicina* was founded:

*I would say that the Houssay's core group is Braun Menéndez, Foglia, Lanari. These individuals basically dedicated themselves to the direct study of the human being. They are the same people who, at a certain point, when they started finishing their studies and wanted to release their results, found that, in Argentina, there was no scientific society appropriate for publishing their work [...] Therefore, years later when we appeared, we were "their hands" (they were the minds; we can say we were the hands), and in 1960, the Argentine Society of Clinical Investigation emerged. But long before that, that same group had gathered to publish the journal Medicina. It was 1939 and they all belonged to Houssay's group. (e)*

The journal was born out of the inspiration of Lanari and others, none of whom were older than 30 or 35. They thus belonged to the new generation of physicians trained in the years after the University Reform of 1918: Alberto Taquini, Osvaldo Fustinoni, Venancio Deulofeu, Mario Brea, Alfredo Pavlovsky, among the main figures (25).

In the first lines of the first issue, Lanari highlighted that the platform of the journal should "provide the Argentine medical family with a journal specialized in general medicine with an organization grounded in the quality of its original articles" (25 p.1). This mission was materialized in the three sections that structured the journal: the first section aimed at publishing original works and considerations of cases, which should be "brief and productive" (in terms of generating new knowledge and not giving a mere description of a clinical case); the object of the second section was

to "highlight new advances in any of the medical fields"; and the third section was dedicated to critical reviews of books of both national and international origin. A fourth section was made up of editorials (25 p.1).

In October 1943, in the context of suspensions of faculty initiated by the de facto government established in the country, Lanari resigned his positions in the chairs held by Castex and Vaccarezza. His distance from the university was relatively short-lived, given that after two years' time, in May 1945, Lanari was reincorporated into the university. At that time he was appointed Chief of the Experimental Laboratory of the Chair of Pathology and Clinical Practice of Tuberculosis, and began offering his first course on "Complementary Teaching of Clinical Medicine" in Castex's service. Moreover, that same year in September, he was appointed honorary adjunct physician in the Fifth Ward of the Clinical Hospital (24).

In the 10-year period following Lanari's designation as tenured professor and full-time investigator in the Third Chair of Clinical Medicine and his directorship of the IIM in the Tornú Hospital, Lanari continued developing and improving training activities both locally and internationally.

Starting in 1947, he offered classes in Physiopathology of Respiration in the advanced training course for phthisiologists under Vaccarezza and continued as Chief of the Experimental Laboratory under Vaccarezza's chair, in addition to offering his collaboration as auxiliary in the Antitubercular Drug Dispensary. He was appointed adjunct professor in the First Chair of Clinical Medicine in June 1950 as a result of a public selection process.

In 1949, he was relieved of his responsibilities as physician at the General Directorate of Taxes after he declined to sign an official announcement organized by the Peronist government (14). Thus, from 1949-1951 he only exercised private practice, providing health care to patients at his office and at a clinic, the Thorax Institute (*Instituto del Tórax*), with Vaccarezza and other members of the Muñoz Hospital group (14).

This event in 1949 was added to the massive faculty dismissals that had taken place in 1943. In 1947, the University Act No. 13031 (*Ley Universitaria 13.031*) came into effect, which annulled the University Reform Bylaws of 1918, thereby overriding university autonomy, the tripartite

government [among faculty, students, and graduates] and student participation. Given the accumulation of all of these conditions adverse to his professional development and an offer he received for a position to work and do research in the USA, he decided to leave the country: "I was quite fed up with the political situation of the country and I was experiencing some difficulties in my job; I was offered a position and I left" (14 p.27).

### **Second period abroad at the National Jewish Hospital, Denver**

Between January and May 1951, with a scholarship granted by the Rockefeller Foundation, Lanari carried out a research fellowship in the USA at the University of Colorado, Denver. He focused on the study of methods used in the functional exploration of the respiratory system (26). Later, between the end of 1951 and July 1952, he was appointed Advisor in Cardiopulmonary Physiopathology by the World Health Organization (WHO) in Guayaquil, Ecuador.

He returned to Argentina the following year when he was appointed adjunct assistant professor in the Third Chair of Clinical Medicine and, one month later, he was appointed *ad honorem* professor of the advanced course in physiology in the Chair of Tuberculosis. During that period, he dedicated time to preparing the thesis needed in order to receive his degree as medical educator: "El problema general de injertos y trasplante de órganos" (The general problem of grafts and organ transplants), which was approved in 1954 (24).

Later that year, he again left the country and moved to Denver, where he worked as assistant professor of Medicine at the University of Colorado, Denver, until 1956. There, he worked at the National Jewish Hospital, associated with the university, serving as Chief of the Cardiopulmonary Laboratory and as Assistant Professor. During the years he worked in Denver, Lanari invited a number of young physicians to work with him. Those physicians later became part of the IIM staff (27).

His return to and reestablishment in Argentina were due to the favorable professional conditions that he saw in the new scientific scenario that opened up nationally after 1955, as a result of the

process of university renewal and reconstruction mentioned previously (28). In that context, a public selection process was started to hire a Chair of Clinical Medicine in mid-1956. This event in particular helped him decide to return and apply for the position under the condition of it being full-time.

This way of working, core to the professional ideals that Lanari had carried with him up to that point, was something he had learned first from Houssay and later from Rosenblueth, Luco and Cannon. The peculiarity and novelty of these last three figures was to consider full-time work as part of the professional responsibility of the clinical researcher:

With them I realized that the only way to do research seriously was to do it full-time. In theory, at least, one would want researchers to be devoted to clinical research, to see and provide care to patients in their workplace, and not to have concerns that lead them to private practice. Full-time work is in fact a mental state. (14 p.27) (Own translation)

In these reflections on the nature and the functions of the full-time researcher-physician, his vision of the organizational and physical base needed for such practice also stands out: it is a vision of the shared ecology of clinical care and research. This perspective would later be expressed within the organizational culture of the IIM, encompassing comprehensively the work of patient care, research and education.

### **Return and reestablishment in Argentina as the full-time Third Chair of Clinical Medicine**

In October 1956, back in Argentina, he was appointed a full-time position as Chair of Clinical Medicine, becoming the first professor of Clinical Medicine with full-time dedication at the Faculty of Medicine of Buenos Aires (f). He immediately asked to take leave until February 1957, so that he could travel to Denver, where he had left some research activities unfinished at the National Jewish Hospital as well as some teaching activities at the University of Colorado (24).



Once back in Buenos Aires, in July 1957 the IIM was opened and he was offered the position of director. He accepted, under the condition that the position be full-time, uniting this new position with the chair obtained a year earlier. The permanent committee in charge of analyzing measures to foster and finance scientific research at the Faculty of Medicine, presided over by Houssay, honored his request, stating him to be under full-time employment and joining the directorship with his position as Third Chair of Clinical Medicine. In this role he spearheaded the initial formation of the IIM, recruiting colleagues under his chair, members of the group that worked with him at the Muñiz Hospital and at the Clinical Hospital, and other researchers who had taken advanced courses abroad (24).

The experience and the path that Lanari would undertake from that moment onward, as a trained researcher, was built on the integration and resignification of the inheritance he received from the local and foreign clinical and experimental traditions that he passed through during his years of training. That inheritance consisted of specific ways of exercising medical care, research and education practices and the construction and support of institutional environments and organizational models conducive to the comprehensive development of these activities.

## FINAL REMARKS

If we pay attention to the evolution of the lines of research established and developed by Lanari, as well as to the different institutions in which he participated throughout his education, we can observe how research styles from Houssay's experimental perspective and how practices and visions regarding the health care provided to clinical medicine patients, represented by Vaccarezza and Castex, helped to forge Lanari's style. What he did not take from the Argentine pioneer in physiology, and, in turn, did take from his teachers of clinical medicine, was the high value placed on the activities of care, taking the patient and the patient's disease as the focal point of medical interest and in the formulation of research problems.

Lanari's singularity therefore lies in how he connected the practitioner style he learned from Castex and the clinical research style he learned from Vaccarezza with Houssay's laboratory style: not only did he consider health care activities to be inherently important, he understood them to be irreplaceable inputs for clinical research, that is, to produce original knowledge oriented towards the resolution of (or inspired by) human health problems. This conjunction of institutional practices and cultures had a unique expression in Lanari, resulting in his full-time work within the clinical environment of the hospital and the university. This was the legacy that he received from his teachers Luco, Cannon and Rosenblueth and that he resignified within the local clinical medical field, unlike his predecessors, who had never before been awakened to this type of vocation. Thus, the combination of experimental and clinical cultures and practices within a full-time dedication became the seal and the originality of Lanari's educational itinerary.

Later on, his path, his perspectives and his practices coincided both with a local political academic context and with a disciplinary context conducive and favorable to their institutional materialization. On the one hand, the context of the so-called academic modernization or Argentine university renewal after 1955, which fundamentally supported the professionalization of the role of professor/researcher. On the other hand, the support of experimental research activities provided by American and French financial networks and promoters, reinforcing what was called "scientific medicine" (2). These processes made the creation of the IIM as well as the institutionalization of the Lanari style possible, leading to the development of a tradition of a unique type of research, developed over the course of 20 years. However, this favorable "climate of the times," as well as the creation of the IIM, are objects of analysis that go beyond the scope and objectives of this work. They are mentioned for the sake of at least signaling the direction that Lanari's individual path would take within the context of an institutional project materialized in the IIM.

## FINAL NOTES

a. The Argentine university was born and developed in the Napoleonic tradition, structured basically and fundamentally as a place for the reproduction and transmission of knowledge. Therefore, the professionalist profile outlined by the university aimed mainly at granting qualifying degrees for the exercise of classic liberal professions, relegating the production of original knowledge to a place of less importance (7). The transformations introduced into the university by the process of the University Reform of 1918 primarily impacted organizational aspects of the university government and its academic course of studies, and although it meant an affirmation of the university as a research environment, it also demonstrated contradictions and profound limitations, preserving the professionalist pattern held since the university's origins (8). From that perspective, the historical phase of openness at the UBA from 1955-1966, considered to be a time of "university reconstruction" (1), took on particular meaning by granting renewed importance both materially and symbolically to the production of original knowledge. This led to the creation and multiplication of full-time positions for researching and teaching, in turn giving way to the professionalization of those activities and to the establishment and initiation of public selection processes to fill and occupy these positions. In this context, the fundamental issue, raised by renovators such as Risieri Frondizi, centered on the debate of the "social function" of the university, whose basic role was said to be that of research – and of teaching – as well as that of professional training and social extension. These meanings tied to the social function of the university recovered constitutive reform ideals – autonomy and extension – giving them new purpose in the new context of academic reform that had opened in 1955. Looking at the issue more broadly and generally, the framework of ideas and processes within which this series of actions and projects of university renewal were taken, aimed at granting science and the university a space of renewed importance in society, should be considered. After World War II a new phase in the relationship between science and the State began. In central countries, the State gave science and technology a place of priority on the agenda, increasing resources and creating new institutions devoted to research as well as specialized national and regional organizations such as the United Nations Educational Scientific and Cultural Organization (UNESCO) and the Economic Commission for Latin America (ECLA), created to promote and regularize science and technology. This trend was followed in developing countries, in the climate of ideas and actions known as "developmentalism," as

National Research Councils were created in the mid-1950s – in 1958 in Argentina the National Council of Scientific and Technological Research (CONICET, *Consejo Nacional de Investigaciones Científicas y Técnicas*) was created – as well as National Institutes devoted to research, management and promotion of scientific and technological activities. The National Institute of Agricultural Technology (INTA, *Instituto Nacional de Tecnología Agropecuaria*) was created in 1956 and a year later the National Institute of Industrial Technology (INTI, *Instituto Nacional de Tecnología Industrial*) was formed.

b. The Physiology Institute, created in 1919, and its director Bernardo Houssay, were key to the consolidation of experimental medicine in Argentina and to physiology and endocrinology worldwide (their importance was no less in the field of Argentine scientific policy). By the 1940s, the Institute was a central part of the Faculty of Medicine, with a staff of 130 instructors teaching physiology, biochemistry and biophysics to more than 800 students. While he worked in several areas of research, his major interest was in the relationship between the pituitary gland and diabetes; indeed, in 1947 he obtained the Nobel Prize in Medicine precisely for discovering the role played by the hormones from the anterior lobe of the pituitary gland in carbohydrate metabolism (6). The "Houssay group" was formed out of this Institute. In 1958, Florencio Escardó was appointed "normalizing" dean of Medicine, supported in the Faculty's Executive Council by Eduardo Braun Menéndez, Eduardo de Robertis, Alfredo Lanari, Mario Brea, Eduardo Manzini, Armando Parodi, and Venancio Deulofeu.

c. This article is based on "Conformación de la tradición: Alfredo Lanari, la construcción de un estilo de investigación propio" ("Forming the Tradition: Alfredo Lanari, the creation of a research style") (9).

d. Lanari's primary socialization is significant considering his father's weight and position in the Argentine medical field during the 1920s. Alfredo Bartolomé Lanari (Senior) was head of the Physical Therapy Institute (*Instituto de Fisioterapia*), where he taught Medical Physics. He was appointed Dean of the Faculty of Medicine in May 1919 – and again from 1927 to 1929 – putting into effect a series of transformations throughout his three-year term which were very relevant to medical education: the effective implementation of "docencia libre" [a 1903 regulation that allowed graduated professionals to teach open extracurricular courses to undergraduates, with which they could also gain experience favorable to them in competitive selection processes for paid positions], limitation of the

age range within which professors were eligible to give classes, and amendments to the curriculum. Among the primary modifications, the new plan reduced the number of hours devoted to teaching descriptive anatomy and emphasized the importance of basic sciences with the creation of the Physiology Institute (11). This way of working and this commitment to research and teaching, as well as the active participation in university politics within the Faculty government, evidently served as model of professional conduct that was positively internalized by his son, who also molded his path

giving these three spheres of action significance, performing them full-time.

e. Barousse Amadeo, researcher at Institute of Medical Research, Pneumology Section, Third Chief. Personal Interview, 4 March 2009.

f. The Third Chair had been in the hands of Alberto Taquini until 1955. In the selection process held in 1956 for the position of full-time chair, Lanari was the only candidate. He obtained the position.

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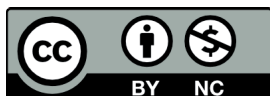
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