

# PROFESSOR ANTONIO BRANCO LEFÈVRE

## The forefather of child neurology in Brazil

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**Abstract – Objective:** To report on the life and works of Prof. Antonio Branco Lefèvre and the relevance that led him to be considered the Forefather of Child Neurology in Brazil. **Method:** The method utilized was the historical documents research; bibliographical. **Results:** Antonio Branco Lefèvre (1916-1981) was born in São Paulo city; graduated in 1941 from the São Paulo Medical School. The date – 1950 – can be considered when Child Neurology took shape for a fully specialty, when Lefèvre presented his two internationally acclaimed thesis. Lefèvre was recognized as he founder of Child Neurology in Brazil since the early years of his brilliant academic activities. In 1967 achieved the title of professor in the Child Neurology Clinic. His numerous trainees and Residents – from -1950 to 1981 - held today key positions in Brazilian Child Neurology. **Conclusion:** The extension and importance of the Child Neurology School of which he is the legitimate founder is recognized.

**KEY WORDS:** pediatric neurology, child neurology, history of neurology, Antonio Branco Lefèvre.

### Professor Antonio Branco Lefèvre o pai da neurologia infantil no Brasil

**Resumo - Objetivo:** Relatar a vida e obra do Prof. Antonio Branco Lefèvre e a relevância que leva a ser denominado o Pai da Neurologia Infantil no Brasil. **Método:** Pesquisa de documentos históricos e bibliográfica. **Resultados:** Antonio Branco Lefèvre (1916-1981) nascido em São Paulo; formou-se na Faculdade de Medicina de São Paulo em 1941. A data de 1950 pode ser considerada quando a Neurologia Infantil tornou-se uma especialidade completa quando Lefèvre defendeu suas duas teses aclamadas internacionalmente. Lefèvre foi reconhecido como o Pai da Neurologia Infantil no Brasil desde os primeiros anos de sua carreira acadêmica brilhante. Em 1967 atingiu o título de Professor de Neurologia Clínica Infantil. Seus numerosos estagiários e Residentes – de 1950 a 1981 – têm hoje posições de destaque na Neurologia Infantil brasileira. **Conclusão:** É reconhecida a extensão e a relevância da escola de Neurologia Infantil da qual Lefèvre é o legítimo fundador.

**PALAVRAS-CHAVE:** neurologia pediátrica, neurologia infantil, história da neurologia, Antonio Branco Lefèvre.

In this paper we report on the life and works of Prof. Antonio Branco Lefèvre and the relevance that led him to be considered the Forefather of Child Neurology in Brazil<sup>1-4</sup>. As Lefèvre's resident and later his assistant we (R. Reimão) learn to respect and admire him as one of the giants of Pediatric Neurology. Lefèvre was also renowned in the field of neuropsychology although this field will not be covered in the present paper.

### EARLY YEARS

Antonio Frederico Branco Lefèvre, Brazilian, was born in São Paulo city on October 6th 1916, the son of Eugênio

Lefèvre Junior and Ana Branco Lefèvre. During childhood and adolescent years he studied at the Externato Higienópolis and Colegio Sao Luiz, in São Paulo city.

### MEDICAL CAREER

Lefèvre graduated in 1941 from the University of São Paulo Medical School, and since 1939 Lefèvre had attended the Neurology Service of the Medical School which was formerly at the Santa Casa de São Paulo, as medical student.

From 1941 to 1943 Lefèvre realized that Neurology and Pediatrics alone would not be enough for specialization in the nervous system and he felt it important for his own

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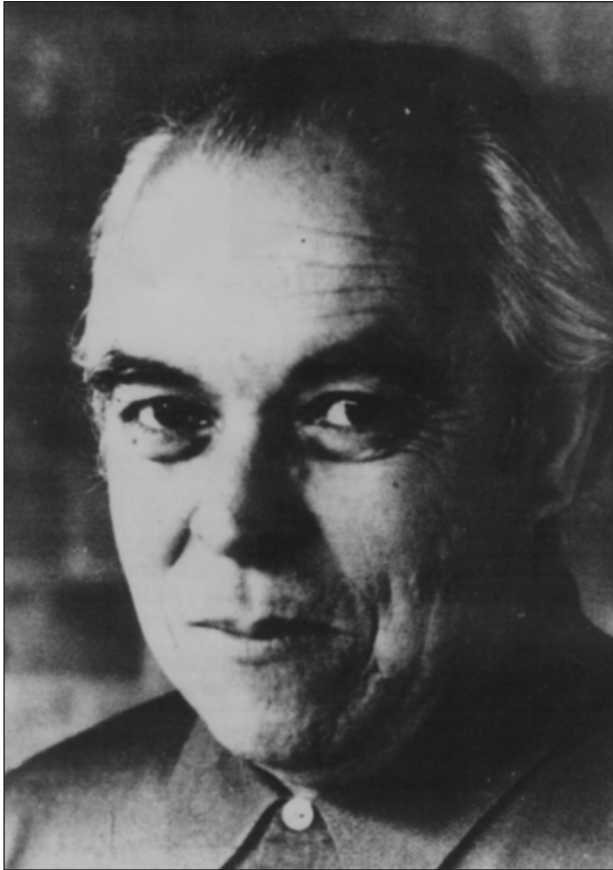


Figure. Prof. Antonio Branco Lefèvre.

complete education to also study the field of psychology. For this reason, he traveled to Rio de Janeiro – the cultural and scientific center of the Nation at that time – to attend the Psychology Course of Professor André Ombredane – a French professor, also a specialist in language impairment. In the same year he enrolled onto the Psychology Course at the University of Brazil Philosophy School, a three-year course which Lefèvre was able to complete in one year. Lefèvre also followed Prof. Ombredane practical works in Psychology, within Rio de Janeiro State primary schools, as well as practical studies of language disorders – written and spoken – in the National Institutes of the Blind and Deaf, showing his interest in child mental development. In this same year he attended a Course in Rorschach Psychodiagnosis taught by Prof. José Leme Lopes – at the National School of Medicine, and a Course of Pediatric Neurology, initially taught by Prof. Ary Borges Fortes and Prof. Martagão Gesteira, in São Paulo.

From 1945 to 1950 Lefèvre returned to São Paulo and joined the Neurology group at the University of São Paulo Medical School. By then it was already established - at the recently inaugurated Hospital das Clínicas. This date – 1950 – can be considered the date when Child Neurology took the shape of a fully scientific specialty, when Lefèvre presented his two thesis:

The Doctoral thesis<sup>5,6</sup> – entitled “Contribution to the study of the pathology of aphasia in children” – an original and pioneering thesis that won international acclaim, and was cited by the great professors Hecaen and Lenneberg, both specialists in language disorders.

The Post Doctoral thesis (Docência-Livre)<sup>7</sup>, on “Contribution to the standardization of the normal newborn neurological exam” – a landmark work that preceded the book by André-Thomas and Saint-Anne Dargassies by two years in which several signs attributed to these French pediatricians were in fact first described by Lefèvre. We should mention here the opinion of one of the greatest American names in the study of the neurological exam – Wartenberg – who upon receiving the summary of the thesis of Lefèvre promptly answered emphasizing the relevance and monumental importance of the newborn neurological exam study by Lefèvre.

Lefèvre was recognized as the founder of Child Neurology in Brazil since the early years of his brilliant academic activities<sup>4</sup>. This is evident in 1967 when presenting his Memorial in order to obtain his title of professor in the Child Neurology Clinic. The evaluating committee was composed by Adherbal P.M. Tolosa, Paulo Pinto Pupo, Oswaldo Lange, Fernando Oliveira Bastos and Horácio Martins Canelas, unanimously approved the candidate, concluding their report with the following: “After thoroughly analyzing the curriculum presented by Dr. Antonio Frederico Branco Lefèvre it was proved the extension and importance of the Child Neurology School of which he is the legitimate founder...” and concludes with his approval to the post.

In 1977 Lefèvre reached the highest rank as Head of the Department of Neurology, University of São Paulo Medical School (Professor Titular)

From the decade of 1960 on Lefèvre also dedicated his efforts to a research quantifying the child neurological exam, which gave rise to the Neurological Developmental Exam (*Exame Neurológico Evolutivo*), standardized systematically into age brackets by his staff<sup>8</sup>.

## PUBLICATIONS

Prof. Lefèvre was a prolific writer and, as his publications have been listed in his Memorial<sup>4</sup>, will not be outlined here. Notably, in his short life, he published more than 80 full articles in national and international journals. The main book Lefèvre edited with his assistants was the first and most important large compendium of Child Neurology in the country in 1980<sup>9</sup> - “Child Neurology: semiology + clinical practice + treatment” (*Neurologia Infantil: semiologia + clínica + tratamento*), internationally considered a landmark in the field of Child Neurology.

### THE LEFÈVRE'S MANEUVER

The Lefèvre's Maneuver<sup>10</sup> (also known as Branco Lefèvre's Maneuver) is a maneuver for lower limbs muscle strength in children. It is internationally recognized and Bollea in 1963<sup>10</sup> refers to the "Neurological Exam of Normal Newborn" by Lefèvre in the following words: "In the Maneuver of Branco Lefèvre, useful to test muscle strength, the lower limbs are flexed like a frog, such that both palms align. The excitation is made by pressing both palms and applying light flexion and extension movements to both lower limbs. This maneuver is very sensitive for us to show light hemi-syndromes in the first 6 months of life".

### LEFÈVRE AND THE MEDICAL SOCIETIES

In 1962, Lefèvre was elected President of the Department of Neurology of the São Paulo Medical Association.

In 1967, a group of child neurologists and child psychiatrists met at Lefèvre's home – with the constant support of the child psychiatrist Stanislaw Krinsky – and founded the Brazilian Association of Child Neuropsychiatry (today Brazilian Association of Child Neurology and Psychiatry), which joined the effort toward making to both specialist titles become reality. Their efforts were acknowledged and the Brazilian Academy of Neurology recognized the title in Child Neurology Specialty, under the aegis of the Brazilian Medical Association.

In 1973, Lefèvre took part in the International Association of Child Neurology since its beginnings, and was elected Vice-President for two mandates (1975, 1979). In 1973, Lefèvre was also elected President of the Latin American Child Neurology Society.

### THE LEFÈVRE PUPILS

From 1950 to 1956, a few students remained in the Child Neurology Service with Prof. Lefèvre, generally pediatricians interested in child neurology but as yet without a defined course. The only student who stayed longer in this phase was Dra. Maria Irmina Valente who thus became the first assistant of Lefèvre.

In 1956, Aron J. Diament started his training with Lefèvre, as at that time there was no Child Neurology Residence, and the Clinical Neurology Residence (Adults) had only recently commenced. In 1958, two other trainees joined the Child Neurology Service of the Division of Clinical Neurology of the Hospital das Clínicas, University of São Paulo Medical School: Dr. Líbia E. Ávila coming from Argentina where she studied with Escardó, and Dr. Joelson Amado, a pediatrician working for years in Rio de Janeiro. Líbia E. Ávila became interested in cerebral palsy and focused on rehabilitation training with the head of this sector, then Dr. Abrão Anghinah. After three years of training,

Joelson Amado was invited by Prof. Roberto Melaragno to be the head of the new Service of Child Neurology of the São Paulo State Public Server Hospital (Hospital do Servidor Público) that had been recently founded.

From 1960 on, the Lefèvre Child Neurology Service began to receiving a larger intake of trainees pursuing Child Neurology, with stays from one to three years. Several trainees that studied in the period from 1948 to 1972 today held key positions in Brazilian Child Neurology: Ivoneide Barreto de Sá Trindade; Newra Tellechea Rotta; Orlando Salles; Marcio Lara Resende; Saul Cypel; Sérgio Rosemberg; Ana Maria van der Linden; Silvia Lima Lemos; Fernando Pondé and others.

Recognition of the Child Neurology Residence occurred in 1972. At this time it was agreed that a minimum of two years full-time training was needed, where its program was similar to the Clinical Neurology Residence program. By that time there was a Residence program in Child Neurology at the Ribeirão Preto University of São Paulo Medical School as well as training in Child Neurology at the Catholic University Medical School in Rio de Janeiro with Olavo Neri. After 10 years of training Residents in Child Neurology, the National Commission of Medical Residence changed plans and started to require one year at least of Residence in General Pediatrics as a pre-requisite for Child Neurologist training.

In 1980, the following physicians were in the Prof. Lefèvre Department: Aron Diament, Satoe Gazal, Umbertina Conti Reed, Maria Luiza Giralde de Manreza, Lívia Cunha Elkis, Maria Joaquina Marques Dias, Rubens Reimão, José Luiz Dias Gherpelli. Maria Irmina Valente had retired short before Prof. Lefèvre's death.

On August 21, 1981 Lefèvre unexpected death of heart disease shocked us all – ending his short and brilliant life at the apex of his career and life. Prof. Aron J. Diament continued the aims of Lefèvre as head the Child Neurology Service and since 2005, the Child Neurology Service has been run along the same lines by Prof. Umbertina Conti Reed.

### RECOGNITIONS OF LEFÈVRE

Prof. Lefèvre received numerous recognitions<sup>11</sup>. In 1979, at the Brazilian Association of Child Neurology and Psychiatry Congress, in Salvador city, Bahia, the first meeting of the Lefèvre's Pupils Society was held in order to join those who had studied under his leadership.

In 1984, at the Latin American Congress of Child Neurology, a Master Lecture called the Prof. Antonio Branco Lefèvre started to be presented in all the congresses of this society.

In 1999, the Department of Neurology of the São Paulo Medical Association, by means of its President Rubens

Reimão instituted the valuable Antonio Branco Lefèvre Award to neurologists who have dedicated their lives to the specialty. This award has been offered regularly since.

A public school (primary) bears the name of Prof. Antonio Branco Lefèvre in São Paulo city, close to the hospital where Prof. Lefèvre used to practice. (*Escola Municipal de Educação Infantil – Prof. Antonio Branco Lefèvre*).

The Green Cross Hospital (*Hospital Cruz Verde*) building – dedicated to neurologic patients – in São Paulo city, bears the name of Prof. Antônio Branco Lefèvre. Prof. Lefèvre was one of the key first early supporters of the Green Cross Association, dedicated to severe cerebral palsy patients and founded in 1959. This association was the origin of the Green Cross Hospital.

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