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# Professor Paula Coutinho (1941-2022)

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Hélio Afonso Ghizoni Teive<sup>1®</sup> Léo Coutinho<sup>2®</sup> Joaquim José Ferreira<sup>3®</sup> Jorge Sequeiros<sup>4,5,6®</sup>

<sup>1</sup> Universidade Federal do Paraná, Departamento de Medicina Interna, Serviço de Neurologia, Hospital de Clínicas, Curitiba PR, Brazil.

<sup>2</sup> Universidade Federal do Paraná, Hospital de Clínicas, Programa de Pós-Graduação em Medicina Interna, Curitiba PR, Brazil.

- <sup>3</sup>Universidade de Lisboa, Faculdade de Medicina, Laboratório de Farmacologia Clínica e Terapêutica, Lisboa, Portugal.
- <sup>4</sup>Universidade do Porto, Instituto de Biologia Molecular e Celular, Centro de Genética Preditiva e Preventiva (CPPG), Porto, Portugal.

<sup>5</sup>Universidade do Porto, Instituto de Investigação e Inovação em Saúde, Unidade de Investigação Genética e Epidemiológica em Doenças Neurológicas (UnIGENe), Porto, Portugal.

<sup>6</sup> Universidade do Porto, Instituto de Ciências Biomédicas Abel Aslazar (ICBAS), Porto, Portugal.

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Maria Paula Mourão do Amaral Coutinho (**-Figure 1**) was born in Macieira de Cambra (Aveiro, Portugal) in 1941. Paula Coutinho, as she is internationally known, graduated with high grades in Medicine in 1966. Most of her neurology training and clinical career were at the Neurology Department of Hospital Geral de Santo António, in the city of Porto. She was the "favorite" disciple of renowned Professor Corino de Andrade, recognized worldwide for the first description of familial amyloidotic polyneuropathy (also locally known as paramyloidosis).<sup>1</sup>

Paula Coutinho worked as an assistant in neuropathology at Geneva University (1971–1972), where she later became Chief Clinical Officer of the Neurological Clinic (1973–1974). Upon her return to Porto, she worked, between 1975 and 1992, at Centro de Estudos de Paramiloidose, and from 1977 to 1998 at the Neurology Department of Hospital Geral de Santo António.<sup>1</sup> Professor Paula Coutinho also became an invited Professor of Neurology (1979–1998) at Instituto de Ciências Biomédicas Abel Salazar (ICBAS) at the University of Porto.<sup>1</sup>

Early in her career, in addition to her work in familial amyloid polyneuropathy, she became interested in the study of a novel clinical entity that would later be called Machado-Joseph disease (also known as spinocerebellar ataxia type 3, SCA3). This is the most common dominant ataxia worldwide Address for correspondence Hélio A.G. Teive (e-mail: hagteive@mps.com.br).



**Figure 1** Professor Paula Coutinho (1941–2022), courtesy of Professor Jorge Sequeiros.

and has some clusters in the Azorean islands (Flores and São Miguel) and central mainland Portugal (Tagus valley). She provided outstanding contributions to the clinical definition and diagnostic criteria of the disease, which had been previously described (as three independent clinical entities) in Azorean-Portuguese populations from the United

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Figure 2 Third International Workshop on Machado-Joseph Disease, Furnas, São Miguel, Azores, Portugal, April 7–9, 1994. From the personal archives of Hélio Teive.

States.<sup>2,3</sup> The numerous studies published by her research group on Machado-Joseph disease became a world reference in the area.<sup>1</sup>

She mentored and conducted, for over 12 years, a national systematic, population-based screening for hereditary ataxias and spastic paraparesis in Portugal. This remains a fantastic registry and never-ending resource of clinical, epidemiological, and genetic data, which led to the description of many new clinical and genetic entities.<sup>1</sup> These included other forms of dominant SCA, such as type 37, the recessive forms of cerebellar ataxia with ocular apraxia (AOA1, AOA2, AOA4), as well as various hereditary spastic paraplegias (HSPs).<sup>1</sup> She is rightfully considered the founder of neurogenetics and neuroepidemiology in the country.

In 1992, she attained her PhD in Neurology at ICBAS, with a thesis entitled "Machado-Joseph disease: Attempt at a definition".<sup>4</sup> In 1994, she organized the 3<sup>rd</sup> International Workshop on Machado-Joseph disease in Furnas, São Miguel, Azores, Portugal (**– Figure 2**).

In 1999, she moved to the new Hospital de São Sebastião, in Feira, Portugal, where she founded a Neurology Department and directed Centro de Responsabilidade Médica. She also worked, from its foundation in 1992 until very recently, as a researcher in the Unit for Genetics and Epidemiological Research on Neurological Diseases (UnIGENe), and as a neurologist at the Centre for Predictive and Preventive Genetics (CGPP), both integrated into the Institute for Molecular and Cell Biology (now part of i3S, Instituto de Investigação e Inovação em Saúde) at Universidade do Porto, Portugal.<sup>1</sup>

Paula Coutinho had a very sharp clinical sense and was extremely strict with herself and her students, residents, and colleagues. She was incredibly dedicated to her friends, as well as to her students and patients. She had a bright, intelligent demeanor, and was passionate about life. Her interests outside medicine were plenty. She adored good traditional food, the Azores, dogs, gardens, independent cinema, detective novels, Formule 1 (an enthusiastic fan of late racing driver Ayrton Senna), and football (a highly devoted supporter of Futebol Clube do Porto).

Professor Paula Coutinho died at the age of 79, on June 11, 2022, in the city of Porto, Portugal. Her enormous and invaluable contribution to Portuguese and world neurology will never be forgotten, and her name is forever engraved in the pantheon of the great neurologists and researchers of world neuroscience.

### Authors' Contributions

HAGT: conceptualization, data curation, investigation, writing – original draft; LC, JFF: resources, visualization, writing – review and editing; JS: data curation, visualization, writing – review and editing.

#### Conflict of Interest

The authors have no conflict of interests to declare.

#### References

- 1 Garcia BCM, Germiniani FMB, Marques P, Sequeiros J, Teive HAG. Paula Coutinho's outstanding contribution to the definition of Machado-Joseph disease. Arq Neuropsiquiatr 2017;75(10): 748–750. Doi: 10.1590/0004-282X20170127
- 2 Coutinho P, Andrade C. Autosomal dominant system degeneration in Portuguese families of the Azores Islands. A new genetic disorder involving cerebellar, pyramidal, extrapyramidal and spinal cord motor functions. Neurology 1978;28(07):703–709
- 3 Lima L, Coutinho P. Clinical criteria for diagnosis of Machado-Joseph disease: report of a non-Azorena Portuguese family. Neurology 1980;30(03):319–322
- 4 Coutinho P. Doença de Machado-Joseph. Tentativa de definição. Tese de Doutorado, Porto, Portugal, 1992 (available at: https:// repositorio-aberto.up.pt/handle/10216/10229; accessed on: 4 July, 2017).