Jean-Paul Ortonne, 1943-2022

Jean-Paul Ortonne was born on 25 September 1943, in Yzeure, a city located in the Allier region of France. He studied medicine in Lyon and then trained from 1970 to 1974 in the Department of Dermatology of the Edouard Herriot Hospital, led at that time by Professor Jean Thivolet, where he became Clinical Assistant in 1975. During this era, the Department of Dermatology of Lyon was the symbol of modern dermatology, definitively oriented toward research. In 1972, he graduated as Medical Doctor after passing his medical thesis on vitiligo, already showing his interest in pigmentation disorders. In 1975, he succeeded in getting one of eight annual Eli-Lilly-USA grants, which allowed him to spend a year in Boston where he worked closely with one of the world's leading experts in pigmentary disorders, Professor Thomas Fitzpatrick, at the Massachusetts General Hospital. Together, they wrote the first scientific textbook dedicated to vitiligo, and Jean-Paul Ortonne was also trained in the histological and ultrastructural studies of melanocytes.

Back in Lyon in 1979, he occupied a research position at the Institut National de la Santé et de la Recherche Médicale (INSERM) until 1980 and then took the opportunity to move to the Department of Dermatology at Nice University Hospital, where he became head in 1983. Following his arrival in Nice, he developed a research program and put all his efforts into transforming the Department into a world-renowned, high-level expert center. While doing so, he managed to attract young and talented doctors fascinated by his dynamism and the modernity of his vision. Simultaneously, he educated a new generation of dermatologists, organized several postgraduate formations, and created a leading basic and translational research center from scratch. Thanks to his efforts, the first INSERM-labeled research unit associated with the dermatological department was officially created in 1994. Two teams rapidly emerged, one involved in studies on the physiology and pathophysiology of melanocytes, and the second on the dermoepidermal junction and related diseases. Jean-Paul Ortonne led this ensemble of two teams for 10 years. Collaborating with immunobiologists from the United States, he assessed the reactivity against the skin of mAbs extracted from the placenta. Professor Ortonne showed that one of those, showing a strong reactivity against the dermoepidermal junction by immunostaining analysis, recognized a thus far unknown skin protein that he called nicéine. His characterization of this protein and of its composition in 3 subunits was a key step, and this protein was first called laminin 5, and ultimately laminin 332, which he showed not to be expressed in junctional epidermolysis bullosa (JEB). Together with Dr Guerrino Meneguzzi, a researcher who joined his INSERM laboratory, he identified the 3 genes encoding laminin 5. The team also worked on other molecules involved in JEB. Altogether, these findings strongly contributed to a better understanding and classification of JEB and led to preclinical gene therapy studies. Professor Ortonne also initiated the launch of the cellular and genetic therapeutics unit in Nice.

Skin pigmentation was always a pivotal research area of interest for Professor Ortonne. As early as the 1970s, he made important clinical observations which would serve as a rational basis for many basic research projects aiming to unravel the molecular mechanisms of skin pigmentation. In 1993, Professor Ortonne wished to increase the research capabilities of his team in the field of skin pigmentation, and for this purpose,
he supervised the PhD of a young student, Corine Bertolotto, and at the same time hired a young INSERM researcher, Robert Ballotti at his laboratory. Thanks to Professor Ortonne’s wise advice and his expert clinical knowledge of pigmentation, the biologists from his team carried out work that had strong impacts in the field. Indeed, two striking examples of the huge impact of research conducted in Professor Ortonne’s laboratory should be emphasized.

The first relates to the work that dissected the molecular mechanisms underlying UV-induced pigmentation, identifying the central role of the cAMP pathway and of MITF, the key transcription factor in melanocyte differentiation processes. The second relates to experiments that identified RAB27a, one of the central players in the transport of melanosomes to the dendrite tips of melanocytes. This work was carried out by three dermatologists passionate about biological research, Christine Chiaverini, Thierry Passeron, and Philippe Bahadoran, during their PhDs in the laboratory. This latter work was initiated by Professor Ortonne’s intuition that the pigmentary alterations observed in Griscelli-Prunieras syndrome were attributable to a defect in melanosome transport. This instinct turned out to be correct, as inactivating mutations of RAB27A are found in patients with this syndrome.

Concomitantly to these fundamental and translational activities, Professor Ortonne also developed very productive clinical research. He contributed to many key advances in pigmented disorders, including vitiligo and melasma. He also developed within our department an active center dedicated to clinical trials, and he also contributed to the launch of the pharmacological center dedicated to the skin. During his life, Jean-Paul Ortonne took numerous responsibilities at both the national and international levels, including INSERM commissions and the presidency of the French Society of Dermatology and that of the French Society for Dermatological Research. He acted as board member of the European Academy of Dermatology and Venereology (EADV), European Society for Dermatological Research, and European Society for Pigment Cell Research; member of the French Agency for Medicine, board member of the Nice University Hospital, board member of the Faculty of Medicine of Nice, President of the Department of clinical research and innovation of Nice University Hospital, board of several editorial committees, and Chief-Editor of Nouvelles Dermatologiques and the Journal of the European Academy of Dermatology and Venereology. He organized the annual EADV meeting in Nice in 1998, and co-organized with Professor Jean Revuz the World Congress of Dermatology in Paris in 2002.

Jean-Paul Ortonne published more than 700 scientific peer-reviewed publications and books. We have lost the founder of our University Department of Dermatology and a true giant of Dermatology.

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