

## 'You Can Do It!'

### An Interview with Nicole Vaysse

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#### Abstract

Dr. Nicole Vaysse's exceptional achievements in pancreatic research shifted the paradigm in hormonal regulation of pancreatic function. Her observations became a starting point for many investigators in this field. In this article, Dr. Vaysse shares with *Pancreatology* her experience as a pancreatic researcher and gives advice to young investigators starting in this area.

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**M.F.-Z.:** What initiated you to work in pancreas research in the first place?

**N.V.:** Pure chance. While I was earning my medical degree at the University Hospital Center at Toulouse (France), I met Professor A. Ribet and his team at the gastroenterological unit. They were extraordinarily attractive people, leaders in clinical gastroenterology and very motivated about research in pancreatology. Professor Ribet was the best teacher I ever had. He suggested to me to join the group with a full-time research position. I entered the INSERM, the French National Institute for Health and Medical Research, in 1966. My initial project was to study the hormonal regulation of human exocrine pancreatic secretion in order to establish new function tests. A rather old-fashioned concern now, but it developed my interest in gastrointestinal hormones. Since that time, I am passionately fond of research. I rapidly assembled a small research group of my own and started working on pancreatic acini receptors and signal transduction pathways.



**M.F.-Z.:** You have pioneered pancreatic research in so many directions. At the end of the day what has given you most personal satisfaction?

**N.V.:** My greatest personal satisfaction is to have reached my professional goals doing what I love to do. I have been very fortunate. Of course, it would not have been possible for me to pursue my professional life without the support of my family: my husband, who gave me

love and constant encouragements, my sons, who were very proud of their working mother, and my own mother, who was taking care of them when I was working.

From a scientific point of view, I take the greatest pride in having proved breakthrough ideas, such as the impact of gastrointestinal hormones on pancreatic cell proliferation and, also, the peculiar specificity of human pancreatic receptors for gastro-intestinal peptides. Our work on somatostatin analogs in a pancreatic cancer cell line identified novel mechanisms leading to the negative control of cell proliferation. The absence of cholecystokinin receptors on human pancreatic acini published in 1986 led to a new concept of human pancreatic regulation, developed later by a number of researchers. These ideas were the fruit of discussions with colleagues and fellows in the lab, especially Christiane Susini and Daniel Fourmy. I had the good luck to work directly with Christiane for several years. I still remember our nights working on human pancreatic acini, and our happiness when papers were accepted in the best journals. All people in the lab worked hard in a friendly atmosphere, impassioned by research. I cannot acknowledge them all.

**M.F.-Z.:** Based on your experience as mentee and mentor, can you comment on the value of mentorship for the development of a new investigator?

**N.V.:** The value of mentorship cannot be overestimated, especially for women. I can say I have broken my 'glass ceiling'. A 'glass ceiling' is this invisible barrier that prevents women from succeeding in science. To do that, I have been helped by a number of people. André Ribet, who asked me to head the INSERM Unit Laboratory of Biology and Digestive Pathology; Hugues Chap, a professor of biochemistry at the Faculty of Medicine, Toulouse, who asked me to take on more responsibilities in teaching activities; members of the European Pancreatic Club, including John Neoptolemos, Christoph Beglinger and others who asked me to be President of the Club. Each time I was asked whether I was interested by these positions, I had never applied for any of them. I was terribly hesitating, but all these people told me: you can do it. And I just did it.

**M.F.-Z.:** What is the best advice you have received during your career?

**N.V.:** 'Acquire an advanced understanding of cellular and molecular physiology and of novel biological tools available'. This advice was given to me by Jean-Pierre Pascal, a physician who, in the 1960s, had a clear vision of the future of medical research.

**M.F.-Z.:** What is your advice to the young investigators that are beginning in the field of pancreas research?

**N.V.:** 'Do not try to explore a thousand ideas per day. Take one and verify your hypothesis with multidisciplinary approaches. Volunteer when opportunities are offered to participate in the projects of colleagues: things are often simpler than you thought. You can do it.' Also, I would recommend to young PhD scientists to identify the unanswered questions relevant to pancreatic diseases and develop contacts with physician-gastroenterologists. For young women starting in pancreatic research, I have no specific advice, except to tell them once more that they have the same capabilities as men. They could refer to an excellent paper by Christina M. Surawicz published in the *American Journal of Gastroenterology* in 2000. Those who need advice are men, advice on how to provide women with opportunities and help them to reach leadership positions.

**M.F.-Z.:** What do you think are the big questions that need to be answered in pancreatology?

**N.V.:** There is one big question: how to cure, or at least to better manage, pancreatic cancer. No real progress has been made for several decades, in spite of improved imaging tests, endoscopic techniques and molecular and genetic analysis. In each domain, efforts should be pursued. We need to know more on molecular defects in pancreatic cancer. The discovery of gene(s) involved in familial pancreatic cancer and pancreatitis might highlight new pathways and lead to greater knowledge about the disease. How to detect high-risk persons will follow.

**M.F.-Z.:** What do you think is the major need that a journal like *Pancreatology* should fill?

**N.V.:** First, a journal like *Pancreatology* should publish papers at the cutting edge of clinical and basic research. This goal is going to be reached. Reviews published are excellent and diverse. Second, it should set an example of how to avoid gender discrimination in committees. And this is far from being the case. I am sure that discrimination is involuntary, but it is a fact. Of the 70 members of the Editorial Board, Associate Editors, Editor-in-Chief and Scientific Editorial Assistants, only 4 are women!!! Whereas there are so many working and publishing in *Pancreatology!* This should be corrected. An appropriate female representation is necessary. It is now time to go toward a more modern representation in the Editorial Board of *Pancreatology*.

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