IN THE FOOTSTEPS OF MARIE CURIE

MONDAY, NOVEMBER 8, 2021

A celebration of 100 years of innovation in the fight against cancer and of friendship with the United States of America.
MARIE CURIE IN THE UNITED STATES: the trip that changed the history of science

100 years ago, Marie Curie, already the winner of two Nobel Prizes and certainly one of the world’s most famous female scientists, took a triumphant tour through the United States. She visited laboratories, women’s colleges and major American universities in Philadelphia, Chicago and Boston as well as Yale.

We are gathered here today to celebrate this exceptional trip and remember why it changed the history of science and the fight against cancer.

We are gathered here today to relive this history and to envisage the future fight against cancer.

The familial and emotional ties that Marie Curie maintained with her home country - Poland - throughout her life are well known. But Marie Curie also felt an attachment to the United States, a country that had welcomed her most warmly.

Marie Curie’s attachment to the United States would probably never have occurred without the efforts of Mrs. Marie Meloney, then editor of the American publication The Delineator. Marie Meloney, a descendant of Marie Curie, was fascinated by Marie Curie’s personality, and she launched a fundraising initiative called the “Marie Curie Radium Fund”, through which the United States was able to gift her a gram of radium worth $100,000. In fact, it was the US President, Warren G. Harding, who presented Marie Curie with a pendant in the shape of a gold key that opened the box containing the gram of radium at a convivial White House ceremony. The relationship between the physicist and the United States did not end there. In 1929, Marie Curie returned to the US to receive another gram of radium from President H.C. Hoover. This time, Marie Curie travelled to the US as a citizen of Poland. The gram of radium she received was destined for the Radium Institute in Warsaw so that her home country could also benefit from her international reputation. As for the first gram, she bequeathed it on her death in 1934, through a “radium will”, to the Institut du Radium in Paris and to the Curie laboratory, on the condition that it be used by her daughter Irène.

Throughout her lifetime, Marie Curie expressed her appreciation to the United States, a country that meant so much to her, and expressed “a feeling of gratitude for the precious gift of the American women, and affection for their great country tied with ours by a mutual sympathy which gives confidence in a peaceful future.”

Today, the descendants of Marie Meloney and Marie Curie are honoring us with their presence for this unique event to pay tribute to this American generosity, which also dates back 100 years. Through the history of these two exceptional women and the scientific innovations they made possible, it is also the Franco-American friendship that we are celebrating today.

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The meeting between
MARIE CURIE
& MARIE MELONEY

Marie Curie and Marie Mattingly Meloney - nicknamed Missy - met for the first time on May 18, 1920. The American journalist and editor of the women’s publication The Delineator travelled to Paris to the Institut du Radium. Despite ordinarily being a very reserved person, Marie Curie granted her a brief interview.

During this interview, Mrs. Meloney was very moved by the simplicity and modesty of Marie Curie, whom she described as “a shy woman with a magnificent face, patient and gentle, with the distant and detached expression of a scholar.” The humble nature of her laboratory also moved and surprised her. The two-time Nobel prize winner lacked resources and staff. When asked the question: “If you could choose just one thing that you want, anywhere in the world, what would you choose?”; the celebrated physicist replied that she needed a gram of radium to continue her research. Although she had discovered this radioactive element with her husband Pierre Curie in 1898, she lacked the means to purchase it. In the early 1920s, mining and extracting radium was slow and tedious. As a result, one gram of radium cost 10 to 20 times more than one gram of pure diamond!

The Curie couple had always refused to file a patent for this discovery, which revolutionized physics, chemistry and medicine.

Upon her return to the US, Missy set about raising the USD 100,000 needed to purchase one gram of radium. She contacted her female millionaire friends, launched a national appeal to all women in the United States and created the Marie Curie Radium Fund - a bold move but it paid off. In just a few months, she had raised USD 150,000 and collected equipment for Marie Curie’s laboratory. While initially reluctant to cross the Atlantic to receive her donations, Curie was eventually persuaded by the woman who had become her friend.

In 1929, on a second trip organized by Miss Meloney, Marie Curie set sail across the Atlantic once more to receive another gram of radium awarded to her by President Hoover. She donated it to the Radium Institute in Warsaw, founded by her sister Bronia Dluska, for medical purposes.

Marie Meloney and Marie Curie remained close friends until Curie’s death in 1934 from leukemia caused by X-rays.
In the spring of 1921, newspapers in America announced the visit of Marie Curie - a trip organized by Mrs. Meloney which promised to be a true marathon.

The American journalist had arranged a triumphant welcome which began on her arrival in New York. A crowd formed on the dock, comprised of students, the curious and a delegation of 300 women representing Polish organizations in the United States, and applauded the first female Nobel Prize winner.

Over the next 46 days, Marie Curie, accompanied by her two daughters Irène and Eve, travelled across the US. The most prestigious universities, including Harvard, Yale and Columbia, as well as a number of women's universities awarded her honorary doctoral degrees. Galas, banquets and receptions came one after the other. There Marie Curie met female donors, scientists and politicians in socialite settings which she did not enjoy and found exhausting. Her daughters stood in for her on several occasions.

The most important part of the trip was no doubt the ceremony held at the White House during which she was officially awarded the gift from the American women. President Warren Harding then presented her with an hourglass symbolizing the radium, and a golden key that opened a lead-shielded mahogany box designed to protect her from the radium rays it contained. However in reality, that evening the box was carrying an imitation of the radioactive element. Deemed too valuable, the actual radium would be delivered to Marie Curie on the day of her return to France.
Timeline of the trip
ACROSS THE UNITED STATES

May 4, 1921: Marie Curie and her two daughters - Irène and Eve - boarded the ocean liner Olympic, the “twin” of the Titanic, in Cherbourg.

May 11, 1921: Upon arriving in New York, Marie Curie had to face some forty journalists. During this trip organized by Marie Meloney, no fewer than 20,000 press articles were published in periodicals and major daily newspapers. She was presented as a woman of genius, the woman able to beat cancer, though Marie Curie had never made this claim.

May 13, 1921: Marie Curie and her daughters visited Smith College, America’s largest all-women’s university. There she received the first in a long line of honorary doctoral degrees.

May 20, 1921: At a magnificent ceremony at the White House, President Harding presented Marie Curie with the gram of radium gifted by the Marie Curie Radium Fund, headed by Marie Meloney.

May 27, 1921: While Marie Curie was visiting the Pittsburgh-based Radium Chemical Company, the company responsible for preparing her gram of radium, the Fondation Curie was recognized as a public interest organization, which allowed her to receive donations to finance her research activity.

June 15-16, 1921: After a month of travel, Marie Curie was exhausted. A large part of the official trip on the west coast was cancelled. However, she still visited the Grand Canyon, Yellowstone National Park and Niagara Falls. She had dreamed of that trip.

June 18, 1921: Marie Curie visited Harvard University, where she was delighted to meet one of her former students, the physicist William Duane. During this visit, the university’s president, A. Lawrence Lowell, compared Marie Curie to Isaac Newton!

June 28, 1921: Marie Curie and her daughters sailed back across the Atlantic to France. With them they took the gram of radium, gifted by the American women, safely stowed away in the purser’s safe. It was divided into 10 small glass tubes, stored in a lead-shielded mahogany box.
OF RESEARCH AND INNOVATION TO BENEFIT PATIENTS

The Fondation Curie was created on May 27, 1921. At the origins of this project were two pioneers: Professor Marie Curie and Dr. Claudius Regaud. The two researchers had worked together for years on radioactivity and wanted to develop studies on the medical applications of radiation, but to do this, they needed resources. With financial backing from Dr. Henri de Rothschild, they founded the Fondation Curie which could receive donations and legacies from patrons.

In 1922, a dispensary was built near the Institut du Radium. The Fondation Curie then became the leading civil entity devoted entirely to fighting cancer in France. Patients treated received radiotherapy via X-rays for deep cancers or via radon bulbs when tumors were accessible. The department recorded its first recoveries beginning in 1923. Radiotherapy became a treatment for cancer in addition to surgery.

In 1926, the Fondation Curie was recognized as a regional cancer center, and the next year (1927), it opened a laboratory devoted to research on the genetic origins of certain cancers. Ten years later, a real hospital was built to be able to take care of more patients.

The Institut Curie was founded in 1978 from the merger between the Institut du Radium and the Fondation Curie. However, the “Curie spirit” lives on as physicians and researchers work side-by-side to beat cancer within these historic walls, performing research enabled and supported by the generosity of its donors.