



MATILDA

EFFECT



Pionierinnen der Forschung **Female Pioneers of Research**

Pt. 20

Eva Ramón Gallegos



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Eva Ramon Gallegos

Biomedical Scientist & Nanobiotechnologist

After completing her Bachelor's degree at the University of Veracruz, she obtained her Master's and PhD at the IPN, a large technical university in Mexico City.

Immediately afterwards, she took up a professorship there in 2001 and heads several departments.

Her research focuses on the non-invasive treatment of cervical carcinoma, i.e., cervical cancer, caused by human papillomaviruses (HPV).





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Photodynamic therapy (PDT) is used
for this purpose.

It is a two-stage treatment.

In stage 1, patients receive a non-toxic drug, a photosensitizer, which accumulates in the cancer cells.

In stage 2, irradiation, usually with a laser, is performed.

The photosensitizer is activated and kills the cancer cells.

This treatment is primarily used for skin diseases and skin cancer.





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The team led by Gallegos succeeded in completely eliminating cervical cancer caused by HPV in 29 women. The remission and recurrence rate within 6 months was also in the groundbreaking range of about 6%.

Furthermore, unlike other invasive methods, fertility was preserved: the treated patients were still able to become pregnant and have children afterwards.





The World Health Organization (WHO) currently predicts an increase in the mortality rate from cervical carcinoma by 21.1% by 2030, affecting several hundred thousand people.

Gallegos' treatment method is a promising approach to curb this mortality.

