

**Elena Vecino**

Professor of Cell Biology, University of the Basque Country (Spain)

ORCID ID: 0000-0002-1672-5132

Education:

BSc and PhD in Biology, University of Salamanca, Spain (1986, 1989)

Second PhD in Vision Sciences, University of Lund, Sweden

BSc Fine Arts, University of Basque Country, Spain

Post. Doc. New York Medical College, University of Davis (USA), University of Lund

Professional Experience:

Leads a multidisciplinary group in experimental Neuro-Ophthlmo-Biology since 1995

(www.ehu.eus/gobe)

Visiting Prof. University of Oxford, Strasbourg, Paris, UPEN (USA), Cambridge.

Fellow of Clare Hall, Cambridge, UK since 2012

Visiting Prof. Initiative Excellence, University of Bordeaux, France (2020-2023)

Research Contributions:

Directed 16 PhD Theses and over 50 Master's Theses

Referee of 10 international research journals

131 publications (113 in JCR); 5000 citations. h-index: 35

More than 150 conferences and international lectures

Member of editorial boards including PRER, Translational Journal (TVST), and others.

Evaluator of European Grants and member of national evaluating agencies of Spain

(ANEP; ANECA), UK (MRC), France (ANR), Argentina (FONCyT), and Portugal (FCT).

Grants and Collaborations:

Held over 80 national and international grants since 1990, including two European grants. Collaborations with researchers from Universities of Cambridge, Oxford, Paris, Strasbourg, Bordeaux, Coimbra, München, NYMedical College, Davis, UPenn.

Collaborated with pharmaceutical companies on Glaucoma treatments (Sylentis).

Current Work:

Holding grants from pharmaceutical and biotech companies investigating neuroprotective treatments for glaucoma and identification of tear biomarkers to diagnose early Parkinson disease.

Achievements and Awards:

Received prizes from International organizations including the American Glaucoma Foundation (2004), Fundaluce (2004) the First International Prize of ONCE Foundation (2005), and the Alcon Foundation (Prize for Excellence in Glaucoma Research, 2015).

Research Impact:

- Participation on preclinical trials, including the first and unique existing gene therapy in humans for Retinosis Pigmentaria (Collaboration with Prof. Gustavo Aguirre, UPENN), funded by Fundaluce and ONCE foundation.
- Developed a pig model for glaucoma (Exp. Eye. Res. 2005), funded by The Glaucoma Foundation, contributing significantly to glaucoma research.
- Developed several animal models of experimental glaucoma used globally for research (beads model of glaucoma Exp. Eye. Res 2006).
- Investigated neuroprotection strategies in glaucoma, collaborating with pharmaceutical companies to enhance the duration of the glaucoma treatment with iRNA.
- Pioneered the study of Müller glial cells' role in glaucoma, potentially revolutionizing future treatments (Cell & Bioscience 2024).

Teaching experience:

- Thirty-five (35) years of teaching at the University of Salamanca and Basque Country: Teaching in Grades of: Biology, Biochemistry, Physiotherapy, Biomedical Engineering, Dentistry, and Medicine. Subjects covered were: Cell Biology, Histology, Developmental Biology, and Methods in Cell Biology.
- Lecturer in Master's and Doctoral courses at various Universities in Spain (Salamanca, Valladolid, Sevilla, Barcelona, Madrid) and Europe like Lund, Göttingen and Coimbra.

Additional Interests:

- Bachelor in Fine Arts, specializing in sculpture (2014).
Lectured on art and science at the Guggenheim Museum of Bilbao (Arte, Ciencia y sinestesia), Caja Rural Foundation Zamora.
- Held several international exhibitions on scientific photography accessible to low vision and blind persons “the eye of the whale” with more than 40.000 visitors in Museums of Natural Sciences, Photography and art galleries of Spain, Portugal, France and UK.
- Awarded for scientific photography by organizations including the Spanish Ophthalmology Society (SEO), Neurosciences Society (SENC), Scientific American Journal, and FOTCIENCIA from the Spanish Foundation for Science.
- She has produced three animation videos related to her research on “the eye of the whale” and the accessibility exhibitions to low vision and blind persons. Free access in YouTube “ciencia y ballenas” with more than 15K visualizations until now.

Summary:

Art, Science, and Education are the pillars of Elena Vecino's career, exemplified through her extensive contributions to cell biology research, particularly in the field of neuro-ophthalmology. With a diverse background spanning both scientific and artistic endeavors, Vecino continues to make significant strides in understanding ocular pathologies and exploring innovative treatments.