CURRICULUM VITAE ABREVIADO (CVA)

***IMPORTANT** – The Curriculum Vitae **cannot exceed 4 pages**. Instructions to fill this document are available in the website.*

Part A. PERSONAL INFORMATION

First name	Rosario		
Family name	González Anera		
Gender (*)	Female	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail		URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0003-3614-2142	

(*) Mandatory

A.1. Current position

Position	Full Profesor		
Initial date	October 2015		
Institution	University of Granada		
Department/Center	Department of Optics	Faculty of Science	
Country	Spain	Teleph. number	
Key words	Physiological optics, Visual optics, binocular visión, ocular surgery, corneal shape, driving performance, dry eye		

A.2. Previous positions (research activity interuptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2007-2015	Profesor Titular de Universidad. University of Granada
2005-2007	Profesor Contratado Doctor. University of Granada
2001-2005	Profesor asociado. University of Granada

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Physics	University of Granada	2002
Diploma in Optics and Optometry	University of Granada	2000
BSc of Physics	University of Granada	1997

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

Full Professor at the University of Granada since 2015. PhD in Physics and Diploma in Optics and Optometry. She was awarded the 2004 Novel Researchers in Physics prize by the Royal Spanish Society of Physics, and the 2006 Social Council of the University of Granada prize for the trajectory of Young Researchers. Director of the Department of Optics of the UGR from February 2012 to March 2020, and secretary of this Department from January 2008 to February 2012. Secretary of the Vision Sciences Committee between 2008 and 2012, and a member of the Board of Directors of the Spanish Optical Society during the same period.

As a summary of her research career, she is the author or co-author of 89 peer-reviewed JCR-indexed articles in different categories: Optics; Ophthalmology; Applied Physics; Surgery; Radiology; Nuclear Medicine & Medical Imaging, Engineering, Industrial; Ergonomics; Public, Environmental & Occupational Health; Multidisciplinary Sciences; Psychiatry, Behavioral Sciences. It is remarkable the number of citations of some of these works. She has also

participated in the making of some research articles, and books for scientific dissemination and teaching.

Her research has been developed in the Laboratory of Vision Sciences and Application of the University of Granada (LABVISGR). In the beginning, her research focused on the study of visual quality in patients undergoing laser refractive surgery, particularly in the development of ablation algorithms and their influence on the vision and optical quality of these patients. Other research lines she has worked in are the epidemiology of refractive errors, the characterization of visual function in different ocular pathologies, the relationship between visual performance and optical quality, and binocular vision among others. In recent years, she started a new research line on the impact of visual performance on driving ability, studying the influence of substance use on visual function and safe driving.

Some of her works have had a great social impact; an example is a recent paper entitled: "Effects of cannabis on visual function and self-perceived visual quality", published in *Scientific Reports.* This paper was one of the 100 most downloaded articles in the journal in 2021, with a CNCI (category normalized citation impact) of 2.39, and currently has 166,000 downloads (https://10.1038/s41598-021-81070-5). It has also been shared by scientific profiles such as IFLS, which has 22 million followers on Facebook. This profile shared a video summarizing the results of the publication which currently has more than two million views.

Anera has been PI in four National research projects (grant numbers FIS2013-42204-R, FIS2017-85058-R, PID2020-115184RB-I00, PID2024-157219OB-I00). Within the framework of the PID2020-115184RB-I00, which is about to end and, therefore, in the results dissemination phase, a total of 32 articles JCR-indexed have been published in the last 5 years, and 6 more are currently submitted. She has been PI of two regional projects and a project from the infrastructure call (UNGR13-1E-1903).

Supervisor or co-supervisor of 4 doctoral theses (including an FPU fellow under her supervision (FPU15/05571), all of them occupying academic positions or working in companies in the ophthalmological sector. Currently co-supervising a doctoral thesis on the evaluation and diagnosis of dry eye, one of the main themes of the project presented.

She has been an author or co-author of more than 100 contributions to national and international scientific meetings.

As part of her commitment to society, she has participated in 9 Development Cooperation projects funded by the University of Granada and by different Public Administrations and international NGOs, all of them oriented towards improving the visual health of populations in underdeveloped countries (Burkina Faso, Equatorial Guinea, Morocco). These projects allowed her to collect refractive epidemiological data.

Evaluator of Research Projects of the National Plan of the State Research Agency, both as an expert and participating in the panel (2019 and 2023 calls); she has also evaluated for regional calls. In the 2021 and 2022 calls, she was a member of the ANECA Research Activity Evaluation Commission (six-year research period).

General indicators of quality of scientific production:
Nº sexenios investigación: 3: (2002-2007), (2008-2013), (2014-2019)
Nº sexenios Transferencia: 1
Scientific publications JCR: 87. 16% as first autor, 38% as last.
Web of Science (ResearcherID L-4692-2017): H-index: 24. Nº total citations: 1281 (without self-citations: 956).
Google Scholar: H-index: 30. Total citations: 2353.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions) (most relevant ones last 5 years)*

-Ortiz-Peregrina S, Martino F, Casares-López M, Granados-Delgado P, Anera RG, Castro Torres JJ. Visual function and vehicle driving performance under the effects of cannabidiol: A randomized cross-over experiment. **Addiction 2025;** 1:1-9. doi: 10.1111/add.16746.
-Gala-Núñez C, Ortiz-Peregrina S, Castanera-Gratacós D, Anera RG. Development of a dry eye index as a new biomarker of dry eye disease. **Ophthalmic Physiol Opt**. **2024**; 44(7):1472-1483. doi: 10.1111/opo.13373.
-Granados-Delgado P, Casares-López M, Martino F, Anera RG, Castro-Torres JJ. The role of visual performance in fine motor skills. **Life 2024**; 14 (11) 1354. doi.org/10.3390/life14111354
-Ortiz-Peregrina S, Oviedo-Trespalacios O, Ortiz C, Anera RG. Self-Regulation of Driving Behavior Under the Influence of Cannabis: The Role of Driving Complexity and Driver Vision. **Hum Factors 2023**; 65(7):1506-1524. doi: 10.1177/00187208211047799.
-Casares-López M, Ortiz-Peregrina M, Ortiz C, Castro-Torres JJ, Anera RG. Comparison of the influence of alcohol and cannabis on the dynamics of the accommodative response. **Graefes's Arch Clin Exp Ophthalmol 2023;** 261 (8) 2281-2289. doi.org/10.1007/s00417-023-06020-5
-Ortiz-Peregrina S, Casares-López M, Castro-Torres JJ, Anera RG, Artal P. Effect of peripheral refractive errors on driving performance. **Biomed Opt Express 2022;** 29;13(10):5533-5550. doi: 10.1364/BOE.468032.
-Ortiz-Peregrina S, Ortiz C, Casares-López M, Jiménez JR, Anera RG. Effects of cannabis on visual function and self-perceived visual quality. **Sci Rep 2021**; 18;11(1):1655. doi: 10.1038/s41598-021-81070-5.
-Ortiz-Peregrina S, Ortiz C, Salas C, Casares-López M, Soler M, Anera RG. Intraocular scattering as a predictor of driving performance in older adults with cataracts. **PLoS One**. **2020**; 15(1):e0227892. doi: 10.1371/journal.pone.0227892.
-Casares-López M, Castro-Torres JJ, Martino F, Ortiz-Peregrina S, Ortiz-Herrera C, Anera RG. Contrast sensitivity and retinal straylight after alcohol consumption: effects on driving performance. **Sci Rep 2020;** 10 (1): 13599. doi.org/10.1038/s41598-020-70645-3
-Ortiz-Peregrina S, Ortiz-Herrera C, Casares-López M, Castro-Torres JJ, Jiménez del Barco L. Anera RG. Impact of age-related vision changes on driving. **Int J Environ Res Public Health 2020;** 17 (20) 7416. doi.org/10.3390/ijerph17207416

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

-F Martino, JJ Castro, M Casares, P Granados L Jiménez del Barco, RG Anera. Do alcohol consumption and the presence of interocular differences affect driving performance?. Reunión Nacional de Óptica, Murcia 2024.
-P Granados, M Casares, JJ Castro, F Martino, S Ortiz, RG Anera. Concordancia entre medidas de estereoagudeza mediante análisis de Bland-Artman. 28 congreso de Optometría, Contactología y Óptica Oftálmica, Madrid 2024.
-S Ortiz, M Casares, C Robles, L Hervella, E Alcon, JJ Castro, RG Anera, JM Marín, P Artal. Effect on driving performance of a new inverted meniscus-shaped intraocular lens. The Association for Research in Vision and Ophthalmology (ARVO 2023). New Orleans. *Póster*
-S Ortiz, M Casares, C Ortiz, L Jiménez del Barco, RG Anera. Comparison of the influence of alcohol and cannabis on visual quality and driving performance.10th European Meeting on Visual and Physiological Optics (VPO 2022). Cambridge. *Póster*
-S Ortiz, C Ortiz, M Casares, P Granados, JR Jiménez, RG Anera. Effects of smoking cannabis on visual performance. XXXVIII Reunión Bienal de la Real Sociedad Española de Física, Murcia 2022. *Oral*
-S Ortiz, C Ortiz, M Casares, JJ Castro, RG Anera. Effects of cannabis on vision: relationship between objective measures and perceived visual quality. V Congreso Internacional de Investigación en Salud y Envejecimiento 2022. *Oral*

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

-Desarrollo de biomarcadores y herramientas predictivas para la mejora de la salud ocular y la práctica oftálmica (PID2024-157219OB-I00). Ministerio de Ciencia e Innovación. IPs: Ortiz-Peregrina, Sonia y González Anera, Rosario. 2025-2028. 87500€.

-Caracterización optimización e implicaciones de la visión binocular y la estereopsis en tareas cotidianas (PID2020-115184RB-I00). Ministerio de Ciencia e Innovación. IPs: González Anera, Rosario y Castro Torres, José Juan. 2021-2025. 54450€.

-Efecto en la conducción de la anisocoria inducida por métodos quirúrgicos para la corrección de la presbicia (PPJIA2023-090). Junta de Andalucía. IPs: Ortiz-Peregrina, Sonia y Casares-López, Miriam. 2024. 1250€.

-Evaluación y optimización del rendimiento visual binocular y las habilidades visomotoras y motoras (A-FQM-532-UGR20). Junta de Andalucía. IPs: Castro Torres, José Juan, González Anera, Rosario. 2021-2023. 30000€.

-Desarrollo de un test visual para conductores y evaluación de la calidad óptica y rendimiento visual en distintas condiciones (C-EXP-194-UGR23). Junta de Andalucía. IPs: Ortiz-Peregrina, Sonia y Jiménez Cuesta, José Ramón. 2024-2026. 18000€.

-Implicaciones de la calidad visual en la conducción. Evaluación tras el consumo de alcohol, cannabis y tras cirugía ocular (FIS2017-85058-R). Ministerio de Economía, Industria y Competitividad. IP: González Anera, Rosario. 2017-2020. 29040€.

-Evaluación, impacto y mejora de la calidad visual en situaciones cotidianas y tras cirugía ocular (FIS2013-42204-R). Ministerio de Economía y Competitividad. IP: González Anera, Rosario. 2014-2018. 50820€. She led the assembly process of the driving simulator and the start-up of this new research line.

-Adquisición de un simulador de conducción para la caracterización del rendimiento visual en situaciones cotidianas (UNGR13-1E-1903). Ministerio de Economía y Competitividad. IP: González Anera, Rosario. 2013-2015. 10192,21€.

-Desarrollo de nuevos algoritmos de ablación para el tratamiento de la presbicia mediante cirugía refractiva laser (P07-FQM-02663). IP: González Anera, Rosario. 2008-2012. 141978€. Supervised the Doctoral Thesis of Aixa Alarcón, PhD student of this project, who is currently working in industry abroad as principal R & D Scientist (Johnson & Johnson Vision, Netherlands).

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any.

Anera has participated in and led various contracts with companies in the optometric and ophthalmological sectors. Holder of two patents: 1) Eikonometer with associated phoria correction system; 2) Laser calibration procedure. She has also participated in the development of a proprietary software for measuring halos (visual quality). More recently, she has participated in a contract with the company Shamir Optical Industry LTD (2024) to assist in the use of Halo v.1.0 software. Principal Investigators: José J Castro Torres and Sonia Ortiz Peregrina. Total amount: 3.000€.