Pablo De Gracia

Director of Research

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Experience

- 2023 Now Director of Research & Associate Professor, University of Detroit Mercy, School of Optometry, Novi, Michigan.
- 2021 2022 Associate Professor, Midwestern University, Chicago College of Optometry, Chicago, Illinois.
- 2016 2021 Assistant Professor, Midwestern University, Chicago College of Optometry, Chicago, Illinois.

Education

- 2017 Business for Scientist and Engineers, Kellogg School of Management, Northwestern University, Chicago, Illinois.
- 2013 2016 Post-Doctoral Training (Bisgrove Scholar) in optical design and fixational eye movements, Barrow Neurological Institute, Phoenix, Arizona.
- 2008 2013 Doctor of Philosophy: Optics, Optometry, and Vision, Spanish National Research Council and Complutense University of Madrid.

 Extraordinary Award: best Ph.D. Thesis defended in the academic year 2013/2014.
 - 2013 BSc. Fundamental Physics, School of Physics, Complutense University of Madrid.
- 2006 2008 MSc. Optics and Optometry, School of Optics and Optometry, Complutense University of Madrid.
 - 2004 BSc. Optics and Optometry, School of Optics and Optometry, Complutense University of Madrid.

Consultant Activities

- 2021 2023 Mark'ennovy, Spain.
- 2019 2022 Lentechs, Columbus, Ohio.
- 2017 2018 AcuFocus, Irvine, California.
- 2015 2018 Bausch & Lomb, Rochester, New York.
 - 2014 Khawarizmi International College, Abu Dhabi, United Arab Emirates.

Peer Review Articles

Published articles can be downloaded by clicking their title.

- 2023 "Fourier Tools for the Evaluation of Commercial Multifocal Designs", Pablo De Gracia, Under Review. Scientific Reports.
- "A Bibliometric Analysis of Ophthalmology Journals Compared to Medicine and Surgery: Self-Citation and International Collaboration", Todd D. Whitescarver, Casey L. Anthony, Annette K. Hoskin, James K Aden, Scott E. Gardner, Pablo De Gracia, Rupesh Agrawal, Fasika Woreta, Grant A. Justin, The Open Ophthalmology Journal.
- "Changes in optical quality induced by tilt and decentration of a trifocal and a novel extended depth of focus IOLs in eyes with corneal myopic ablation.", Javier Ruiz-Alcocer, Irene Martinez-Alberquilla, Laureano A. Rementeria-Capelo, Pablo De Gracia, Amalia Lorente-Velazquez, Journal of Refractive Surgery.
- "Optical performance of a trifocal and a novel extended depth of focus (EDoF) intraocular lenses combined with di erent corneal profiles", Javier Ruiz-Alcocer, Amalia Lorente-Velazquez, Jose Luis Hernandez-Verdejo, Pablo De Gracia, David Madrid-Costa, Journal of Refractive Surgery.
- 2020 "Optical Tolerance to Rotation of Trifocal Toric IOLs as a function of the cylinder power", Javier Ruiz-Alcocer, Amalia Lorente-Velazquez, Pablo De Gracia, David Madrid-Costa, European Journal of Ophthalmology.
- 2020 "Evaluation of Two Strategies for Alleviating the Impact on the Circadian Cycle of Viewing Smartphone Screens at Near Distances", Emiliano Teran, Cristo-Manuel Yee-Rendon, Jesus Ortega-Salazar, Pablo De Gracia, Efrain Garcia-Romo, Russell L. Woods, Optometry and Vision Science.
- 2019 "Dry Eye Disease and Refractive Corrections", David Madrid-Costa, James S. Wol S2rR,

- "Automatic method for counting glial cells in healthy and glaucomatous mice retinas", Pablo De Gracia, Beatriz I. Gallego, Blanca Rojas, Ana I. Ramirez, Rosa de Hoz, Juan J. Salazar, Alberto Trivino, Jose M. Ramirez, PLoS ONE.
- 2013 "Multiple zone multifocal phase designs", Pablo De Gracia, Carlos Dorronsoro and Susana Marcos, Optics Letters.
- 2013 "Astigmatism Impact on Visual Performance: Meridional and Adaptational E ects", Maria Vinas, Pablo De Gracia, Carlos Dorronsoro, Lucie Sawides, Gildas Marin, Martha Hernández and Susana Marcos, Optometry and Vision Science.
- 2013 "Experimental simulation of simultaneous vision", Pablo De Gracia, Carlos Dorronsoro, Alvaro Sanchez-Gonzalez, Lucie Sawides, Susana Marcos, Investigative Ophthalmology and Vision Science (IOVS).
- 2012 "Perceptual adaptation to the correction of natural astigmatism", Maria Vinas, Lucie Sawides, Pablo De Gracia, Susana Marcos, PLoS ONE.
- "Dependence of subjective image focus on the magnitude and orientation of High Order Aberrations", Lucie Sawides, Carlos Dorronsoro, Pablo De Gracia, Maria Vinas, Michael Webster, Susana Marcos, Journal of Vision.
- "Vision is adapted to the natural level of blur present in the retinal image", Lucie Sawides, Pablo De Gracia, Carlos Dorronsoro, Michael Webster, Susana Marcos, PLoS ONE.
- "Contrast sensitivity benefit of adaptive optics correction of ocular aberrations", Pablo De Gracia, Ankit Mathur, Susana Marcos, David Atchison, Journal of Vision.
- 2011 "Adapting to blur produced by ocular high order aberrations", Lucie Sawides, Pablo De Gracia, Carlos Dorronsoro, Michael Webster, Susana Marcos, Journal of Vision.
- "Visual acuity under combined astigmatism and coma: Optical and neural adaptation e ects", Pablo De Gracia, Carlos Dorronsoro, Enrique Gambra, Gildas Marin, Martha Hernández, Susana Marcos, Journal of Vision.
- 2010 "Combining coma with astigmatism can improve retinal image over astigmatism alone", Pablo De Gracia, Carlos Dorronsoro, Enrique Gambra, Gildas Marin, Martha Hernández, Susana Marcos, Vision Research.
- 2009 "Experimental test of simulated retinal images using adaptive optics", Pablo De Gracia, Carlos Dorronsoro, Lucie Sawides, Enrique Gambra and Susana Marcos. Frontiers in Optics 2009, San Jose, California, USA, OSA Technical Digest, CD, Optical Society of America, paper JWB4.

Articles in preparation

"Descriptions of the foveal pit and the internal layers of the macula for patients with axial refractive errors", Emiliano Teran, Abel Ramos, Silvia Paz, Carla Angulo-Rojo, Efrain Romo, Pablo De Gracia, in preparation.

Grants

2019 Intramural Research Funding, Midwestern University, "Spatiotemporal Control of Entrance Pupils", \$3,292.

Role: PI

2018 Intramural Research Funding, Midwestern University, "Visual Performance under Presbyopia with Multifocal Solutions", \$6,473.

Role: PI

2017 Intramural Research Funding, Midwestern University, "Optimal Orientation of Presbyopic Designs and Relationship between Refractive Error Development and Ocular Movements", \$15,000.

Role: PI

2017 Intramural Research Funding, Midwestern University, "Visual Performance of a Multifocal versus a Soft Contact Lens in Established Presbyopes Utilizing Lens Power Profiles", \$8,000.

Role: PI

2013-2016 Bisgrove Post-Doctoral Grant, Science Foundation of Arizona, "Multifocal Designs for Presbyopia Correction", Phoenix, USA, \$200,000.

Role: PI

Grants Submitted but not Funded

2020 Translational Research Award, CooperVision, "Role of Fixational Eye Movements in Myopia Progression", scored in the top 5%, \$399,821.

Role: PI

2017 Career Development Award, American Academy of Optometry, "Comprehending myopic and presbyopic eyes", scored, \$197,146.

Role: PI

Patents

23-12-2008 Title: "A method for providing a spectacle ophthalmic lens by calculating or selecting a design", Authors: Marin Gildas, Martha Hernandez, Pablo De Gracia, Susana Marcos, Carlos Dorronsoro,

Patent Owner: Essilor International (COMPAIGNE GENERALE D'OPTIQUE)

Pub.No.: WO/2010/072820

International Application No.: PCT/EP2009/067876

Publication Date: 01.07.2010

International Filing Date: 23.12.2009.

Teaching Experience (Course Director)

2018 - 2020 "Capstone Project: Study Design", Course Director, Chicago College of Optometry, Midwestern University, course developed from scratch.

Average of the student evaluations: 4.67 (2019),4.40 (2020) on a 5 point scale

- 2016 2022 "Geometrical Optics", Course Director, Chicago College of Optometry, Midwestern University, course developed from scratch.
 - Average of the student evaluations: 4.63 (2017), 4.89 (2018), 4.77 (2019), 4.64 (2020), 4.72 (2021), 4.77 (2022) on a 5 point scale
- 2016 2021 "Physiological Optics", Course Director, Chicago College of Optometry, Midwestern University, course developed from scratch.
 - Average of the student evaluations: 4.21 (2018), 4.77 (2019), 4.49 (2020), 4.42 (2021) on a 5 point scale
- 2016 2021 "Visual Optics", Course Director, Chicago College of Optometry, Midwestern University, course developed from scratch.
 - Average of the student evaluations: 4.47 (2018), 4.55 (2019), 4.58 (2020), 4.52 (2021) on a 5 point scale

Administrative Experience

- 2023 Now Director of Research, School of Optometry, University of Detroit Mercy.
- 2021 2022 "Curriculum Committee, CCO", Committee Member.
- 2020 2022 "University Research Committee, MWU", Committee Member.
- 2019 2022 "Midwestern University Faculty Senate", Senator representing CCO.
- 2018 2019 "University Research Committee, MWU", Committee Member.
- 2020 2021 "Faculty Development Committee, CCO", Committee Chair.
- 2018 2020 "Faculty Development Committee, CCO", Committee Member.
- 2019 2022 "Capstone Committee, CCO", Committee Member.
- 2018 2022 "Tenure and Promotion Committee, CCO", Committee Member.
- 2017 2019 "Capstone Committee, CCO", Chair.
- 2017 2018 "Admissions Committee, CCO", Committee Member.
- 2016 2022 "Research Committee, CCO", Committee Member.
- 2016 2017 "Curriculum Committee, CCO", Committee Member.

Awards and honors

- 2023 Diplomate Cornea, Contact Lenses, and Refractive Technologies, American Academy of Optometry.
- 2022 Research Academy, American Academy of Optometry, The Ohio State University Campus, Columbus, US.
- 2020 National Eye Institute Travel Grant, Association for Research on Vision and Ophthalmology, ARVO, Baltimore, Maryland, US.
- 2019 Faculty of the Year, Class of 2022, Chicago College of Optometry, Midwestern University.
- 2017 President's Circle Member, American Academy of Optometry.
- 2015 Extraordinary Doctoral Award, Pablo De Gracia, conceded by the University Complutense of Madrid to the best doctoral thesis defended at the School of Optics and Optometry during the academic year 2013/2014. Madrid, Spain.
- Bisgrove Scholar Award, conceded by the Arizona Science Foundation this distinction consist in \$200,000 extended during two years and a half for the development of a project as post-doc.

- 2012 Fellow of the American Academy of Optometry, FAAO.
- 2012 Mike Daley William C. Ezell Fellow, this award is given by the American Academy of Optometry to doctoral students with an outstanding performance in the field of Vision Science, \$9,500.
- 2012 SPIE Scholarship in Optics and Photonics, this award is given by the International Society for Optics and Photonics to doctoral students with the potential to outreach during their carreers on the field of optics, \$2,000.
- 2011 Irvin M. Borish William C. Ezell Fellow, this award is given by the American Academy of Optometry to doctoral students with an outstanding performance in the field of Vision Science, \$9,500.
- 2010 Associate Founders Award at XI Wavefront and Presbyopic Refractive Corrections Meeting, to the presentation with title: "Using Adaptive Optics to test the spatial neural adaptation to blur", Co-author.
- 2008 Best academic record of the 2006-2008 promotion of the MSc in Optics, Optometry and Vision Science, 40 students, Complutense University of Madrid.
- 2008 Award to the best communication presented in "III Jornadas Complutenses y II Congreso Nacional de Investigación para Alumnos de Pregrado en Ciencias de la Salud", to the presentation with title: "Application of polarimetric technics to determine the transmission in optical materials".
- 2006 Award to the second best communication presented in "I Jornadas de Investigación de Alumnos de Pregrado en Ciencias de la Salud", to the presentation with title: "Stereopsis and anisometropy: Performance of two test".
- 06/04-08/04 Undergraduate Summer Fellowship Program in Vision

- 2018 Association for Research on Vision and Ophthalmology, ARVO, Role: Paper Session Moderator, "Lens Optics and IOLs".
- 2017 Association for Research on Vision and Ophthalmology, ARVO, Role: Poster Session Moderator, "Anterior Segment imaging and optics".
- 2014 5.**Q9**/le40/3**TV**di(sion)**T8//T**.1_1 1 Tf()Tj/T1_9091 141.[(P)28 (ostj/T1_3 1e3se_1 1

Neural Regeneration Research.

Optica Applicata.

Eye and Vision.

Medicines.

Vision.

Journal of Clinical and Experimental Ophthalmology.

Invited Lectures

- October 2022 "Understanding Multifocal Contact Lenses: Presbyopia and Myopia Control", Pablo De Gracia, New England College of Optometry, Research Lecture Series, Boston, Massachusetts, USA.
- October 2021 "Understanding Multifocal Contact Lenses: Presbyopia and Myopia Control", Pablo De Gracia, The Ohio State College of Optometry, Columbus, Ohio, USA.
 - June 2019 "Vision in a blurred world: object motion, eye movements, and optical blur", Pablo De Gracia, Schnurmacher Institute for Vision Research, SUNY College of Optometry, New York, USA.

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Mentored Students in Research Activities

Lilliana Lopez, Todd Whitescarver, Chelsea Des Rosiers, Brian Helmetag, Ashley Coots, Keyur Savla, Matthew McGee, Maryam Ali, Jourdan Valkner, Michael Tran, Zachary Goodman, Garrett Pashak, Nicole Purrier, Andrew Marcell, Sara Javidinejad, Tylar Dickson, Daman Singh, Sara Javidinejad, Hiral Patel, Emily Ong, Azra Wazir, Francisco Costela, Alvaro Sanchez-Gonzalez.

PhD Thesis Committees

2018-pez

Nov 2021 "Through Focus Microsaccade Characteristics when using Multifocal Contact Lenses in Myopes and Emmetropes", Brian Helmetag, Emily Ong,

- May 2020 "Disk Diameter of the Foveal Pit as a Biomarker for Refractive Error", Emiliano Teran-Bobadilla, Pablo De Gracia, Silvia Paz-Camacho, Efrain Romo-Garcia, Association for Research and Vision in Ophthalmology, Baltimore, Maryland, USA.
- October 2019 "Microsaccades in Emmetropic, Myopic, and Hyperopic Patients", Ashley Coots, Chelsea Des Rosiers, Brian Helmetag, Nicole Purrier, Pablo De Gracia, American Academy of Optometry Meeting, Orlando, USA.
- October 2019 "Measurement of Microsaccades when Using Multifocal Contacts", Brian Helmetag, Chelsea Des Rosiers, Ashley Coots, Nicole Purrier, Pablo De Gracia, American Academy of Optometry Meeting, Orlando, USA.
- October 2019 "Ocular Complications of Myopia Control Methods During VDT Use", Chelsea Des Rosiers, Brian Helmetag, Ashley Coots, Nicole Purrier, Pablo De Gracia, American Academy of Optometry Meeting, Orlando, USA.
- October 2019 "Morphological Descriptions of the Foveal Pit as a Function of the Ax/T1_1 1 T

May 2018 "Prevalence of myopia in German kids and teenagers over a period of 30 years",

May 2014 "Visual testing of segmented bifocal corrections

June 2011 "Adaptive optics as a tool to study changes in the perceived neutral point after correction of astigmatism", Maria

April 2006 "Stereopsis and anisometropy: Performance of two di erent test", I Jornadas Complutenses,