

PERSONAL DATA

Name, first name Thumann, Gabriele
 Professional address Département des Neurosciences Cliniques
 Service d'Ophtalmologie
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Languages French (fluent), English (fluent), German (first language)



CURRENT POSITION Head of the Department of Ophthalmology, Geneva University Hospitals (HUG), Geneva, CH

PROFESSIONAL BACKGROUND

2015-Present Head of the Dept. of Ophthalmology, HUG, Geneva, CH

2014-2015 Head of the Dept. of Ophthalmology *ad interim*, HUG, Geneva, CH

2013-2014 Deputy Head of the Dept. of Ophthalmology, HUG, Geneva, CH (Head: Prof. Dr. med. F. Hafezi)

2012-2014 Head of the Unit of Vitreoretinal Surgery, HUG, Geneva, CH (Head: Prof. Dr. med. F. Hafezi)

2012-2018 Coordinator of the EU FP7 grant "TargetAMD", consortium of 13 partners

2012-Present Research Group Leader of Experimental Ophthalmology, UNIGE, Geneva, CH

2012-Present Full Professor of the Medical Faculty, Dept. of clinical Neurosciences, UNIGE, Geneva, CH

2009-2012 Member of the Directors' Board, The Aachen Center of Technology Transfer in Ophthalmology, RWTH Aachen University, Aachen, DE

2009-2012 Full Professor of the Medical Faculty, Dept. of Ophthalmology, Group Leader of Experimental Ophthalmology, RWTH Aachen University, Aachen, DE (Head: Prof. Dr. med. P. Walter)

2007-2012 Director of the Central Research Laboratories, Interdisciplinary Center of Clinical Research (IZKF), RWTH Aachen University, Aachen, DE

2006-2012 Member of the Directors' Board, IZKF, RWTH Aachen University, Aachen, DE

2006-2012 Research Group Leader and Consultant, Dept. of Ophthalmology, RWTH Aachen University, Aachen, DE (Head: Prof. Dr. med. P. Walter)

2006-2012 Chief resident, Dept. of Ophthalmology, RWTH Aachen University, Aachen, DE (Head: Prof. Dr. med. P. Walter)

2005-2006 Clinical Fellow, Anterior Segment and Glaucoma, Dept. of Ophthalmology, University of Cologne, Cologne, DE (Head: Prof. Dr. med. B. Kirchhof)

2004-2006 Deputy of the Head of the Unit of the Posterior Segment, University of Cologne, Cologne, DE (Head: Prof. Dr. med. B. Kirchhof)

2003-2006 Consultant, Unit of the Posterior Segment and Vitreoretinal Surgery, Dept. of Ophthalmology, University of Cologne, Cologne, DE (Head: Prof. Dr. med. B. Kirchhof)

2001-2003 Clinical Fellow, Vitreoretinal Surgery, Dept. of Ophthalmology, University of Cologne, Cologne, DE (Head: Prof. Dr. med. G.K. Kriegelstein)

2001-2002 Specialist, Dept. of Ophthalmology, University of Cologne, Cologne, DE (Head: Prof. Dr. med. G.K. Kriegelstein)

1999-2001 Research Fellow with a DFG (*Deutsche Forschungsgemeinschaft*) grant to prepare the university habilitation, Laboratory of Cell and Molecular Biology, Dept. of Ophthalmology, University of Cologne, Cologne, DE (Head: Prof. Dr. med. G.K. Kriegelstein)

1997-1999 Research Fellow with a DFG research grant, Doheny Eye Institute, University of Southern California, Los Angeles, California, USA (Head: Prof. S.J. Ryan, MD)

1992-1997 Resident, Dept. of Ophthalmology, University of Cologne, Cologne, DE (Head: Prof. Dr. med. G.K. Kriegelstein)

DIPLOMA

2017	Fellow of the European Board of Ophthalmology (FEBO)
2014	Recognition as specialist in ophthalmic surgery, Berne, CH
2012	Recognition as specialist in ophthalmology, Berne, CH
2012	Recognition of medical diploma, Berne, CH
2001	University habilitation: "Transplantation of iris pigment epithelial cells to substitute for retinal pigment epithelial cells in age-related macular degeneration". University of Cologne, Cologne, DE (Head: Prof. Dr. med. G.K. Kriegelstein)
1997	Specialist in ophthalmology, Düsseldorf, DE
1994	MD thesis: "Hepatic Surgery in children", University of Cologne, Cologne, DE
1994	License to practice medicine (<i>Approbation</i>), University of Cologne, Cologne, DE

UNDER-GRADUATE TRAINING

1988-1992	Studies in ophthalmology, Paris VI University, Hôpital des Quinze-Vingts, Paris, FR Studies in ophthalmic surgery, Paris V and VI Universities, Paris, FR Studies in internal medicine, NYU Medical School, New York, USA Studies in cardiology and intensive care, Paris XII University, Hôpital Henri Mondor, Paris, FR Studies in neonatology, Jackson Memorial Hospital, and studies in ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, USA
1990-1991	Medical School, University of Cologne, Cologne, DE
1989-1990	Medical School, Paris XIII University, Paris, FR
1985-1989	Medical School, University of Cologne, Cologne, DE

DISTINCTIONS AND AWARDS

August 2019	J Lloyd Hewett Outstanding Paper Award for the paper "Duncan JL, Richards TP, Arditi A, da Cruz L, Dagnelie G, Dorn JD, Ho AC, de Koo LCO, Barale PO, Stanga PE, Thumann G, Wang Y, Greenberg RJ: Improvements in vision-related quality of life in blind patients implanted with the Argus II Epiretinal Prosthesis. Clin Exp Optom 2017, 100(2):144-150"
August 2013	Nomination as Full Professor and Head of the Dept. of Ophthalmology, University of Würzburg, Würzburg, DE, <i>primo unico loco</i> (refused in Jan. 2014)
August 2012	Nomination as Full Professor of the Medical Faculty, UNIGE, Geneva, CH (accepted in Sep. 2012)
November 2010	2 nd place in the nomination procedure as Full Professor and Head of the Dept. of Ophthalmology, Heinrich-Heine University Dusseldorf, Dusseldorf, DE
October 2008	Nomination as Full Professor of Experimental Ophthalmology, RWTH Aachen University, Aachen, DE (accepted in Mar. 2009)
April 2008	Nomination as Head of the Dept. of Ophthalmology, Pius Hospital, Georg-August-Universität Göttingen, Göttingen, DE (refused in Aug. 2008)

TEACHING

2012-present	Lectures, seminars and practical classes for medical students, residents' training, and continuous medical training at the UNIGE, Geneva, CH
2006-2012	Lectures, seminars and practical classes for medical students, residents' training, and continuous medical training at the RWTH University Aachen, Aachen, DE
1992-2006	Lectures, seminars and practical classes for medical students, residents' training, and continuous medical training at the University of Cologne, Cologne, DE

POST-GRADUATE SUPERVISION (1992-PRESENT)

Supervision of 15 MD theses:

Ms Isabel Llopis	UNIGE	ongoing
Ms Anna Schröter	UNIGE	ongoing
Mr. Filip Slezak	UNIGE	ongoing
Mr. Andrea Maccari	UNIGE	ongoing
Ms Eleonora Riotto	UNIGE	ongoing
Mr. Robin van Verlooven	UNIGE	ongoing
Mr. Mateusz Kecik	UNIGE	ongoing
Ms Laura Schwerm	RWTH Aachen University	ongoing

Dr. Theresa Hubert	RWTH Aachen University	2021
Dr. Stéphan Tobalem	UNIGE	2021
Dr. Paul Bertram	RWTH Aachen University	2018
Dr. Shuwei Tian	UNIGE	2017
Dr. Katharina Morawa	RWTH Aachen University	2017
Dr. David Kürten	RWTH Aachen University	2016
Dr. Marion Meier	RWTH Aachen University	2016

Supervision of 1 MD-PhD thesis:

Dr. Arthur Hammer	UNIGE	2017
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Supervision of 3 PhD theses:

Dr. Nina Harmening	RWTH Aachen University	2016
Dr. Christine Haselier	RWTH Aachen University	2016
Dr. Anna Salz	RWTH Aachen University	2010

UNDER-GRADUATE SUPERVISION (1992-PRESENT)

Supervision of 4 Master works in life sciences and 1 Master work in medicine:

Mr. Mohit	UNIGE	ongoing
Mr. Trong-Tin Kevin Steve Vo	UNIGE	2022
Mr. Nathan Breuillard	UNIGE	2022
Ms Hajer Zedira	Grenoble-Alpes University	2019
Ms Christina Leroy-Ciocanea	Sorbonne University - Paris VI University	2016

Co-supervision of 2 Master works in medicine

Ms Idil Oezsahin	UNIGE	2022
Mr. Maximiliano Giro Larraz	UNIGE	2021

SOCIETIES

DOG, ARVO, Nordrhein-Westfälische Gesellschaft für Ophthalmologie, Club Jules Gonin, DRG, SOF, SSO, ESGCT, SSPH

SCIENTIFIC ADVISORY BOARDS

B Braun, USA (Rheophoresis in AMD); Cell Cure Neurosci Ltd., Israel (Human embryonic stem cell transplantation); DSM Biomedical

APPOINTED REVIEWER

2021-2022	European Commission, Horizon programme, domaine "HORIZON-HLTH- 2021-DISEASE-04-04: Clinical validation of artificial intelligence (AI) solutions for treatment and care"
2021	Expert committee about medical devices, Euretina
2020-present	Swissmedic Medicines Expert Committee, Swissmedic, Berne, CH,
2012-present	Representative of the Dept. of <i>Neurosciences Cliniques</i> in the <i>Conseil Participatif</i> , UNIGE, Geneva, CH
2014	Swiss National Science Foundation (SNSF), Division Biology and Medicine
2015-2017	European Commission, Horizon 2020 programme, Area "Health, demographic change and well-being"

REVIEWER

Acta Ophthalmol (Copenhagen), Ann Anat, Biomaterials, Br J Ophthalmol, Clin Ophthalmol, Curr Eye Res, Graefes Arch Clin Exp Ophthalmol, IOVS, Ophthalmic Res, Langmuir, Prog Retin Eye Res

EDITOR

Current Genomics, Rare Disease and Orphan Drugs Journal, Biomedicines

FUNDING (1997-2021)

TOTAL = 11'048'816,14 CHF

Funding > 100'000 CHF within the period:

- Haas foundation**, "Incubateur pour la co-culture de cellules oculaires et de rétine sans utilisation de produits d'animaux, comme modèle pour tester l'efficacité et la toxicité des thérapies innovantes pour traiter la DMLA" and "Thérapie génique non-virale basée sur les cellules souches pour traiter la DMLA sèche avancée", private funding 174'197 CHF
- SNSF**, grant no. 310030_189341/1, 2019-2023, "Integrative, transposon-based vectors in ocular gene therapy – safety improvement and in-process quality control", national funding 572'000 CHF
- ProVisu Foundation**, 2017, "Funding of the clinical trial TargetAMD_IPE", and "Persistence of efficacy of tIPE: a validated GMP-grade cell-based gene therapy product to treat neovascular AMD, proved using high-sensitivity methods", private funding 400'000 CHF

4. **SNSF**, grant no. 31003A_160195/1, 2015-2018, "Transposon-based gene cell therapy in the treatment of dry macular degeneration", national funding 474'000 CHF
5. **FRM**, (*Fondation pour la Recherche Médicale*), 2014, private funding 200'000 CHF
6. **EU FP7**, grant no. 305134, 2012-2018, "Transposon-Based, Targeted *Ex Vivo* Gene Therapy to Treat Age-Related Macular Degeneration (AMD)", coordinated by Prof. Thumann (total budget 5.9 Mio EURO), international funding 1'869'653 CHF
7. **DSM Biomedical B.V.**, 2012–2013, "*In vivo* Ophthalmic Degradation and Biocompatibility of implanted PEA fibrils and PTE biomaterials", industrial funding 157'795 CHF
8. **DFG**, grant no. Paketantrag PAK 469/1, 2011-2014, TH 303/15-1, 2011-2014, "Bidirektionelle Netzhautstimulation (Teilantrag C)", national funding 308'273 CHF
9. **IZKF**, 2006-2012, "Regeneration of ocular tissue using biohybrid implants and modulation of extracellular matrix", institutional funding (RWTH Aachen University) 2'168'318 CHF
10. **Resorba Wound Care**, 2006-2007, "Corneal and subretinal transplantation of tissue engineered collagen-based constructs", industrial funding 106'226 CHF
11. **Viscofan Bioengineering**, 2009-2010, "Biocompatibility of bone collagen membranes for ocular implantation", contract with Naturin Viscofan Ltd., industrial funding 151'125 CHF
12. **Spintec Engineering**, 2008-2009, industrial funding 196'025 CHF
13. **DE Ministry of Economy & Technology**, 2009-2011, "Silk membranes as temporary prosthesis for corneal wounds", national funding 183'978 CHF
14. **BMWi ZIM**, 2009-2011, national funding 178'065 CHF
15. **Fonds Castier**, institutional funding (HUG) TOTAL = 2'421'338 CHF
24 projects, 2015-2020 from 14'482 to 310'000 CHF
16. **Fondation pour la Recherche Médicale**, 2012, « **DEVELOP ME8955** », private funding 200'000 CHF
17. **Fondation privée des HUG**, institutional funding (HUG) TOTAL = 508'050 CHF
4 projects, 2014-2016 from 28'000 to 140'000 CHF
18. **Donations** TOTAL = 197'145 CHF

PATENTS (co-inventor)

- Patent pending "Methods and compositions for improving eye health", US No: 10,780,068.
- Patent pending "Methods and composition for diagnosing and treating glaucoma", Continuation-in-part of the above application, No: 16/938, 628 and PCT / US2018 / 030988.
- February 2001 "Pigment epithelial cell of the eye, its production and use in therapy of an eye or CNS disease", DE No: 21.02.01 / DEA 101 084 12; US No: 22.02.01 / USP 270746.

LIST OF PUBLICATIONS (1995-2022)*(As listed in Web of Science with 53 additional publications and 15 invited talks)*

Citation Report (Web of Science)

Number of articles in total	198
Number of total citations	2215
Number of total citations without auto-citations	2023
H Index	28

Peer reviewed articles

- Ramke J, Evans JR, Habtamu E, Mwangi N, Silva JC, Swenor BK, Congdon N, Faal HB, Foster A, Friedman DS, Gichuhi S, Jonas JB, Khaw PT, Kyari F, Murthy GVS, Wang N, Wong TY, Wormald R, Yusufu M, Taylor H, Resnikoff S, West SK, Burton MJ; **Grand Challenges in Global Eye Health study group**²: Grand Challenges in global eye health: a global prioritisation process using Delphi method. *Lancet Healthy Longev.* 2022 Jan, 3(1):e31-e41. doi: 10.1016/S2666-7568(21)00302-0. [IF 26.763]
- Bascuas T, Zedira H, Kropp M, Harmening N, Asrih M, Prat-Souteyrand C, Tian S, **Thumann G**: Human retinal pigment epithelial cells overexpressing the neuroprotective factors PEDF and GM-CSF to treat retinal neurodegeneration. *Current Gene Therapy* 2022, 22(2):168-183. DOI: 10.2174/1566523221666210707123809. [IF 4.391]
- Kecik M, Prod'hom S, Giannotti F, **Thumann G**, Malclès A: Simultaneous intraocular and orbital involvement of NK/T-cell lymphoma. *J Fr Ophtalmol* 2021, 44(10):e.595. [IF 0.818]
- Kecik M, Pajic B, Le Quoy O, **Thumann G**, Massa H: The SWISS IOL Technique (Small-Width Incision Scleral Suture): A Mini-Invasive Technique. *J Ophthalmol* 2021, 21(3):ID 8448996. [IF 1.909]
- Vasseneix C, Najjar RP, Xu X, Tang Z, Loo JL, Singhal S, Tow S, Milea L; Ting D S W SW, Liu Y, Wong TY, Newman NJ, Bioussé V, Milea D, BONSAI group, **Thumann G**¹: Accuracy of a Deep Learning System for Classification of Papilledema Severity on Ocular Fundus Photographs. *Neurology* 2021, 97(4):e369-e377. [IF 9.910]
- Solomos L, Bouthour W, Malclès A, **Thumann G**, Massa H: Meibomian gland dysfunction: Intense pulse light therapy in combination with low-level light therapy as rescue treatment. *Medicina* 2021, 57(6):619. [IF 2.430]
- Tobalem* S, Kecik* M, Midroit M, Scaldino D, Tardy S, Bascuas T, Harmening N, Scapozza L, **Thumann G**, Kropp M: Functional and anatomical characterization of atrophic Age-related macular degeneration in an aged mouse model. *J Ophthalmol & Res* 2021, 4(2):128-152. [IF 1.200]
- Thumann G**, Sorgente N. AQP-9, KCNJ11 and ABCC8 gene variants in open angle glaucoma: A hypothesis. *J Ophthalmol & Res* 2021, 4(2):161-173. [IF 1.200]
- Thumann G**, Sorgente N, Kropp M, Jonescu-Cuypers C: Tolbutamide eye drops increase aqueous humor outflow and lower intraocular pressure: A proof of concept for glaucoma treatment. *J Ophthalmol & Res* 2021, 4(2):114-127. [IF 1.200]
- Johnen S, Harmening N, Marie C, Scherman D, Izsvák Z, Ivics Z, Walter P, **Thumann G**: Electroporation-based genetic modification of primary human pigment epithelial cells using the sleeping beauty transposon system. *JoVE* 2021, Feb 4, 168:e61987, doi: 10.3791/61987. [IF 1.355]
- Bascuas* T, Kropp* M, Harmening N, Wong BM, Johnen S, Izsvák Z, **Thumann G**: Isolation, Culture, and Genetic Engineering of Mammalian Primary Pigment Epithelial Cells for Non-Viral Gene Therapy. *JoVE* 2021, Feb. 26, 168:p. e62145, doi:10.3791/62145. [IF 1.355]
- Schroeter A, Kropp M, Cvejic Z, **Thumann G**, Pajic B: Comparison of femtosecond laser-assisted and ultrasound-assisted cataract surgery with focus on endothelial analysis. *Sensors* 2021, 21(3):996-1013. [IF 3.576]
- Bascuas T, Kropp M, Harmening N, Asrih M, Izsvák Z, **Thumann G**: Induction and analysis of oxidative stress in sleeping beauty transposon-transfected human retinal pigment epithelial cells. *JoVE* 2020, Dec 11, 166: doi: 10.3791/61957. [IF 1.355]
- Bioussé V, Newman NJ, Najjar RP, Vasseneix C, Xu X, Ting DS, Milea LB, Hwang JM, Kim DH, Yang HK, Hamann S, Chen JJ, Liu Y, Wong TY, Milea D, BONSAI Study Group, **Thumann G**¹: Optic Disc Classification by Deep Learning versus Expert Neuro-Ophthalmologists. *Ann Neurol* 2020, 88: 785–795. [IF 10.422]
- Milea D, Najjar RP, Zhuho J, Ting D, Vasseneix C, Xu X, Aghsaei Fard M, Fonseca P, Vanikieti K, Lagrèze WA, La Morgia C, Cheung CY, Hamann S, Chiquet C, Sanda N, Yang H, Mejico LJ, Rougier M-B, Kho R, Thi Ha Chau T, Singhal S, Gohier P, Clermont-Vignal C, Cheng C-Y, Jonas JB, Yu-Wai-Man P, Fraser CL, Chen JJ, Ambika S, Miller NR, Liu Y, Newman NJ, Wong TY, Bioussé V, BONSAI Group, **Thumann G**¹: Artificial Intelligence to Detect Papilledema from Ocular Fundus Photographs. *N Engl J Med* 2020, 382(18):1687-1695. [IF 91.245]
- Tbalem S, Weinberger A, Kropp M, Malclès A, Jonescu-Cuypers C, Souteyrand G, **Thumann G**: Chorioretinal toxicity of the perfluorooctane ALA® OCTA: Results from 48 surgical procedures in

- Geneva. *Am J Ophthalmol* 2020, 218:28-39. [IF 5.258]
17. Keis AJ, Guirou N, Coulibaly S, Bakayoko S, Sugnanam K, Jonescu-Cuypers C, **Thumann G**, Resnikoff S, Solomon AW: Challenges in addressing post-operative trachomatous trichiasis. *Eye (Lond)* 2020, 34(11):2131-2132. [IF 3.775]
 18. Rbaux PG, Britan A, **Thumann G**, Delie Salmon F, Petignat P, Cohen M-B: Malignant ascites: a source of therapeutic protein against ovarian cancer? *Oncotarget* 2019, 10(57):5894-5905. [IF 5.168]
 19. Hernandez M, Recalde S, Garcia-Garcia L, Bezunartea J, Miskey C, Johnen S, Diarra S, Sebe A, Rodriguez-Madoz JR, Pouillot S, Marie C, Izsvák Z, Scherman D, Kropp M, Prosper F, **Thumann G**, Ivics Z, Garcia-Layana A, Fernandez-Robredo P: Preclinical Evaluation of a Cell-Based Gene Therapy Using the Sleeping Beauty Transposon System in Choroidal Neovascularization. *Mol Ther Methods Clin Dev* 2019, 15:403-417. [IF 6.698]
 20. Cnsigli A, Papanastasiou A, Roquelaure D, Wuarin R, Roy S, **Thumann G**, Chronopoulos A: Changes in Retinal Vascular Caliber after Intravitreal Aflibercept Treatment for Diabetic Macular Oedema. *Klin Monatsbl Augenheilkd* 2019, 236(11):1318-1324. [IF 0.700]
 21. Prod'hom S, Weinberger A, **Thumann G**, Malcles A: Lipemia retinalis: contribution of ultra-widefield imaging and spectral domain OCT. *J Fr Ophthalmol* 2019, 42(8):940-943. [IF 0.818]
 22. Villard F, **Thumann G**, Malcles A: Bilateral Loss of Vision a Few Hours After a Motor Vehicle Crash. *JAMA Ophthalmol* 2019, 137(9):1080-1081. [IF 7.389]
 23. Warin R, Kakkassery V, Consigli A, Roquelaure D, Papanastasiou A, Schutz JS, **Thumann G**, Chronopoulos A: Combined Topical Anti-inflammatory and Oral Acetazolamide in the Treatment of Central Serious Chorioretinopathy. *Optom Vis Sci* 2019, 96(7):500-506. [IF 1.973]
 24. Correia M, Brunner D, Sharma M, Andrade V, Magno J, Muller A, Pereira BM, **Thumann G**, Verma N, Bangert M, Kreis AJ, Solomon AW: A search for trachoma in Timor-Leste: no evidence to justify undertaking population-based prevalence surveys. *Ophthalmic Epidemiol* 2018, 25:131-137. [IF 1.648]
 25. Pastor M, Johnen S, Harmening N, Quiviger M, Pailloux J, Kropp M, Walter P, Ivics Z, Izsvák Z, **Thumann G**, Scherman D, Marie C: The Antibiotic-free pFAR4 Vector Paired with the Sleeping Beauty Transposon System Mediates Efficient Transgene Delivery in Human Cells. *Mol Ther Nucleic Acids* 2018, 11:57-67. [IF 8.886]
 26. Hselier C, Biswas S, Rosch S, **Thumann G**, Muller F, Walter P: Correlations between specific patterns of spontaneous activity and stimulation efficiency in degenerated retina. *PLoS One* 2017, 12(12):16. [IF 3.240]
 27. Garcia-Garcia L, Recalde S, Hernandez M, Bezunartea J, Rodriguez-Madoz JR, Johnen S, Diarra S, Marie C, Izsvák Z, Ivics Z, Scherman D, Kropp M, **Thumann G**, Prosper F, Fernandez-Robredo P, Garcia-Layana A: Long-Term PEDF Release in Rat Iris and Retinal Epithelial Cells after Sleeping Beauty Transposon-Mediated Gene Delivery. *Mol Ther Nucleic Acids* 2017, 9:1-11. [IF 8.886]
 28. Jcquier P, Massa H, Chronopoulos A, **Thumann G**, Souteyrand G: Vitreous hemorrhage, persistent fetal vasculature and Incontinentia Pigmenti. *J Fr Ophthalmol* 2017, 40(10):E397-E399. [IF 0.818]
 29. Jcquier P, Wuarin R, Chizzolini C, **Thumann G**, Steffen H, Chronopoulos A: Case Report: Masquerading Large-vessel Giant Cell Arteritis. *Optom Vis Sci* 2017, 94(12):1159-1164. [IF 1.973]
 30. Atheriou MC, Malcles A, Spinelli A, **Thumann G**: Corneal complications of a case of vernal keratoconjunctivitis. *J Fr Ophthalmol* 2017, 40(8):719-720. [IF 0.818]
 31. Chronopoulos A, Hoogewoud F, Steffen H, **Thumann G**: Parainfectious optic neuritis with macular infiltrate in Neisseria meningitidis B meningitis. *Ophthalmologie* 2017, 114(10):945-949. [IF 1.059]
 32. Tbaem S, **Thumann G**, Chronopoulos A: Uncomplicated massive central retinal artery embolism. *J Fr Ophthalmol* 2017, 40(4):345-345. [IF 0.818]
 33. **Thumann G**, Harmening N, Prat-Souteyrand C, Marie C, Pastor M, Sebe A, Miskey C, Hurst LD, Diarra S, Kropp M, Walter P, Scherman D, Ivics Z, Izsvák Z, Johnen S: Engineering of PEDF-Expressing Primary Pigment Epithelial Cells by the SB Transposon System Delivered by pFAR4 Plasmids. *Mol Ther Nucl Acids* 2017, 6:302-314. [IF 8.886]
 34. Dncan JL, Richards TP, Arditi A, da Cruz L, Dagnelie G, Dorn JD, Ho AC, de Koo LCO, Barale PO, Stanga PE, **Thumann G**, Wang YZ, Greenberg RJ: Improvements in vision-related quality of life in blind patients implanted with the Argus II Epiretinal Prosthesis. *Clin Exp Optom* 2017, 100(2):144-150. [IF 2.742]
 35. Dagnelie G, Christopher P, Arditi A, da Cruz L, Duncan JL, Ho AC, de Koo LCO, Sahel JA, Stanga PE, **Thumann G**, Wang YZ, Arsiero M, Dorn JD, Greenberg RJ, Argus II Study Groupe: Performance of real-world functional vision tasks by blind subjects improves after implantation with the Argus® II retinal prosthesis system. *Clin Exp Ophthalmol* 2017, 45(2):152-159. [IF 4.207]
 36. De Massougnes S, Malcles A, Souteyrand G, Massa H, **Thumann G**, Steffen H: Retinal astrocytic hamartoma: Multimodal imaging. *J Fr Ophthalmol* 2017, 40(1):84-86. [IF 0.818]
 37. Chronopoulos A, Roquelaure D, Souteyrand G, Seebach JD, Schutz JS, **Thumann G**: Aqueous humor polymerase chain reaction in uveitis - utility and safety. *BMC Ophthalmol* 2016, 16:7. [IF 2.209]
 38. Roquelaure D, Harbarth S, Schutz JS, **Thumann G**, Chronopoulos A: Epstein-Barr virus associated acute retinal necrosis. *Ophthalmologie* 2016, 113(10):864-866. [IF 1.059]
 39. Gruschat DR, Richards TP, Arditi A, da Cruz L, Dagnelie G, Dorn JD, Duncan JL, Ho AC, de Koo LCO,

- Sahel JA, Stanga PE, **Thumann G**, Wang VZ, Greenberg RJ: An analysis of observer-rated functional vision in patients implanted with the Argus II Retinal Prosthesis System at three years. *Clin Exp Optom* 2016, 99(3):227-232. [IF 2.742]
40. Cronopoulos A, Roquelaure D, Jacquier P, Souteyrand G, Matter M, **Thumann G**: The management of diabetic retinopathy and diabetic macular edema; joint forces fight for sight. *RMS* 2015, 11(499):2381-2387. [IF 0.130]
 41. Souteyrand G, Chronopoulos A, **Thumann G**: Drug-induced toxicity and ophthalmology. *RMS* 2015, 11(499):2374-2380. [IF 0.130]
 42. Bhar-Cohen F, **Thumann G**: L'œil, aux carrefours de l'humain. *RMS* 2015, 11(499):2359. [IF 0.130]
 43. Cnsigli A, Roquelaure D, Souteyrand G, Chizzolini C, **Thumann G**, Chronopoulos A: Diagnostic Dilemma in Sequential Branch Retinal Vein and Artery Occlusion. *Optom Vis Sci* 2015, 92(11):E404-E408. [IF 1.973]
 44. Mttal R, **Thumann G**, Souteyrand G, Kuerten D, Coupland SE: Retinochoroidal toxoplasmosis in a patient with cerebral post-transplant lympho-proliferative disease of Hodgkin's type: a diagnostic challenge. *J Ophthal Inflamm Infect* 2015, 5:4. [Cite score 2.500]
 45. Kuerten D, Johnen S, Harmening N, Souteyrand G, Walter P, **Thumann G**: Transplantation of PEDF-transfected pigment epithelial cells inhibits corneal neovascularization in a rabbit model. *Graefes Arch Clin Exp Ophthalmol* 2015, 253(7):1061-1069. [IF 3.117]
 46. **Thumann G**, Perdikomati-Dahmen M, Izsvák Z, Ivics Z, Garcia-Layana A, Ronchetti M, Petrovski G, Scherman D, Aranda P, Pouillot S, Binder S, Johnen S, Van den Berg J, TargetAMD Consortium: Transposon-Based, Targeted Ex Vivo Gene Therapy to Treat Age-Related Macular Degeneration (TargetAMD). *Hum Gene Ther Clin Dev* 2015, 26(2):97-100. [IF 5.032]
 47. Chronopoulos A, Varga Z, Steinfeld PA, Dahlmann R, Jukic T, Walter P, **Thumann G**: Unusual IOL Calcification following Vitreoretinal Surgery with Silicone Oil Endotamponade. *Klin Monatsbl Augenheilkd.* 2015, 232(6):779-784. [IF 0.700]
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Book Chapters

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Invited speaker (since 2013)

131. **Thumann, G:** Gene delivery using the non-viral Sleeping Beauty SB100X transposon system to treat retinal degeneration. 20th Congress of Croatian Ophthalmological and Optometric Society. May 14 to 17, 2020, Pula, Croatia.
132. **Thumann, G:** Gene Transfer to the eye using transposons. New Developments in Particles, Transfer Methods and Vectors for Gene Delivery symposium. 23rd Annual Meeting of the American Society of Gene & Cell Therapy (ASGCT). May 12 to 15, 2020, Boston MA, USA.
133. **Thumann G:** Antibiotic-resistance-free Sleeping Beauty transposon plasmids to treat neovascular AMD - The TargetAMD Project. May 2018, Croatia.
134. **Thumann G,** TargetAMD consortium: Transposon-based, targeted *ex vivo* gene therapy to treat age-related macular degeneration – a summary of the pre-clinical data. 25th European Society of Gene and Cell Therapy (ESGCT) and Deutsche Gesellschaft für Gentherapie (DG-GT) annual congress. Oct 17 to 20, 2017, Berlin, Germany.
135. **Thumann G:** Le projet européen TargetAMD – Thérapie Génique pour traiter la DMLA (Das EU Projekt TargetAMD – Eine Gentherapie zur Behandlung von AMD). 108th Congress of the Swiss Society of Ophthalmology (SSO-SGO). August 26 to 28, 2015, Fribourg, Switzerland.
136. **Thumann G:** Stammzelltherapie: Dr Jekyll oder Mr Hyde? 113th Annual Meeting of the Deutsche Ophthalmologische Gesellschaft. Oct, 2015, Berlin, Germany.
137. **Thumann G:** Retinal diseases – The importance of educated and active patients. World Health Organization (WHO). Oct, 2015, Geneva, Switzerland.
138. **Thumann G:** TargetAMD – Recherche européenne sur la Thérapie génique. Journée des ophtalmologues romands. Nov, 2015, Neuchâtel, Switzerland.
139. **Thumann G:** Future strategies to treat neurodegenerative diseases. Keynote lecture, European Society of ophthalmology (SOE), Jan 2015, Portoroz, Slovenia.
140. **Thumann G:** Gentherapie statt Avastin und Co. Innsbruck Medical School. Nov, 2014, Innsbruck, Austria.
141. **Thumann G:** Traitement des œdèmes maculaires par anti-VEGF. Continuous training, La Colline Clinic. Nov, 2014, Geneva, Switzerland.
142. **Thumann G:** Diabetic Retinopathy. United Nation Organization (UNO), Nov, 2014, Geneva, Switzerland.
143. **Thumann G,** Target AMD consortium: Transposon-based, targeted, *ex-vivo* gene therapy to treat age-related macular degeneration. Hum Gene Ther 2013, 24(12):A31. Meeting Abstract: Inv104.
144. **Thumann G:** Age-related macular degeneration, United Nation Organization (UNO). Oct, 2013, Geneva, Switzerland.
145. **Thumann G:** Non-viral gene therapy to treat ocular diseases, European Society of ophthalmology (SOE). Jun 2013, Copenhagen, Denmark.

Other articles, theses and proceedings

146. Kropp M, Harmening N, Conti A, Sealy G, Breuillard N, Mohit M, Maccari A, Bascuas-Castillo T, **Thumann G:** A transposon-based gene therapy approach to treat avascular Age-Related Macular Degeneration (AMD) using mRNA transposase: results of the *in vivo* local and systemic toxicity study. 29th annual Congress of the European Society of Gene and Cell Therapy (ESGCT), 11-14 Oct. 2022, Edinburgh, UK. Meeting abstract (submitted).
147. Maccari A, Kropp M, Harmening, Bascuas-Castillo, Breuillard N, Mohit M, Sealy G, **Thumann G:** Safety study for a non-viral gene therapy approach to treat dry AMD: *In vitro* exclusion of tumorigenicity of IPE cells transfected with the genes coding for PEDF and GM-CSF. 29th annual Congress of the European Society of Gene and Cell Therapy (ESGCT), 11-14 Oct. 2022, Edinburgh, UK. Meeting abstract (submitted).
148. Yüzgeç Ö, Gloria Y, Bayer L, Asadian A, Kropp M, **Thuman G,** Kecik, M, Maccari A, Schwartz S, Huber D. Pupil size indicates distinct brain states in human sleep. FENS Forum 2022, Paris, Fr. Meeting abstract, poster.
149. Breuillard N, Bascuas T, Harmening N, Sealy G, Mohit M, **Thumann G,** Kropp M: Efficiency analysis of a gene therapy approach for AMD in non-virally transfected IPE cells from human, pig and rabbit comparing long-term gene and protein expression. 115th Annual Meeting of SSO-SGO: 24 -26 Aug. 2022, Basel, Switzerland. Meeting abstract, poster: 8442.
150. Mohit M, Breuillard N, Harmening N, Bascuas T, Conti A, Sealy G, **Thumann G,** Kropp M: Up-scaling and humanization of retinal organotypic culture as a model for intraocular efficiency and toxicity analyses. ARVO annual meeting. 2022, Denver, USA / Virtual. Poster: 3161-F0435.
151. Breuillard N, Bascuas T, Harmening N, Sealy G, Mohit M, **Thumann G,** Kropp M: Comparison of long-term gene expression and protein secretion of non-virally transfected Retinal Pigment Epithelial (RPE) cells from human, pig and rabbit for preclinical efficiency analyses. ARVO annual meeting. 2022, Denver, USA / Virtual. Poster: 3173 – F0447.
152. **Thumann G,** Harmening N, Bascuas T, Breuillard N, Mohit M, Sealy G, Conti A, Kropp M: Safety and

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