

**Professor José-Alain SAHEL**  
Date of birth: 1955/07/12 Tlemcen (Algeria)  
[j.sahel@quinze-vingts.fr](mailto:j.sahel@quinze-vingts.fr).  
[j.sahel@gmail.com](mailto:j.sahel@gmail.com)  
Medical license: 75/67740

**Centre Hospitalier National d'Ophtalmologie des Quinze-Vingts**  
28, rue de Charenton, 75557 Paris Cedex 12. FRANCE  
Phone: +33 (0)1 53 46 25 04 Fax: +33 (0)1 53 46 25 05

## EDUCATION

1979-1980 Ophthalmology residency at A. Rothschild Foundation, Paris  
1980-1984 Residency Louis Pasteur University Hospital (Neurology, Neurosurgery, Ophthalmology), Strasbourg  
1980 Medical Degree-Paris University Medical School (Jury congratulations, Thesis medal)  
1981 Oto-Neuro-Ophthalmologic Radiology University Degree  
1984 Ophthalmology Degree – National Board

### Post-doctoral studies

1984-1988 Clinical fellow (Assistant), Department of Ophthalmology, Louis Pasteur University Hospital, Strasbourg  
1984-1988 Chef de Clinique des Universités - Louis Pasteur University Medical School, Strasbourg  
1986-1987 Research Fellow in Ophthalmology (Pr D.M Albert)- Massachusetts Eye and Ear Infirmary - Harvard Medical School, Boston, USA  
Visiting Scholar in Biology (Pr J.E. Dowling) - The Harvard Biological Laboratories - Department of Cellular and Developmental Biology – Harvard University, Cambridge, Massachusetts, USA

## UNIVERSITY POSITIONS

1987-1992 Visiting Lecturer in Ophthalmology - Department of Ophthalmology - Harvard Medical School, Boston, Massachusetts, USA  
1988-2002 University Professor of Ophthalmology – Strasbourg University (1st class since 1999)  
1993-1995 Visiting Professor - Department of Ophthalmology and Visual Sciences, University of Wisconsin - Madison – USA  
2001- Honorary Professor - Institute of Ophthalmology - University College London  
2001- Cumberlege Chair: Professor of Biomedical Sciences - Institute of Ophthalmology-University College London  
2002- Class) University Professor of Ophthalmology – Paris (VI) Pierre and Marie Curie University Medical School (Exceptional  
2012-2015 Visiting Professor: Hebrew University of Jerusalem, Israel

## HOSPITAL POSITIONS

1988-2001 Hospital full time staff, Ophthalmology - Ophthalmological Clinic – Strasbourg University Hospital  
09/2001- Hospital staff, Ophthalmology – Quinze-Vingts National Ophthalmology Hospital, Paris  
Chairman Department of Ophthalmology – Quinze-Vingts National Ophthalmology Hospital, Paris  
Chairman Department of Ophthalmology and Vitreo-retinal Diseases – Ophthalmology Foundation A. de Rothschild

## HOSPITAL AND UNIVERSITY ACTIVITIES

1988-2002 Director of the Eye Pathology Laboratory -Louis Pasteur University-Strasbourg  
1994-2001 In charge of the Functional Unit "Segment postérieur et Oncologie" Ophthalmological Clinic – Strasbourg University Hospital  
01/2005- Head of the Clinical Investigation Centre – CIC 503 INSERM Quinze-Vingts National Ophthalmology Hospital  
11/2005- Director National Reference Centre for Inherited Retinal Dystrophies/CIC/ Quinze-Vingts National Ophthalmology Hospital

## RESEARCH ACTIVITIES

1999-2002 Head of INSERM EMI 99-18 – UPRES EA 24-10:Cellular and Molecular Physiopathology of the retina –Louis Pasteur University, Strasbourg  
2002- Head of UMR INSERM-UPMC 592: Cellular and Molecular Physiopathology of the retina, St-Antoine Hospital, Paris  
2003- Co-founder of European Vision Institute, EEIG  
2004-2007 Scientific Director of the Scientific Interest Group-VISION, Paris  
2005-2007 Coordinator of the Vision Research National Program (Inserm).(Sensory organs since 2007).  
2005-2008 Scientific director of the Vision Institute project – CHNO des Quinze-Vingts  
2006- Director of the “Seeing and Hearing” Institut Carnot (Vision Institute in conjunction with the Department of Neurosciences Chaired by Christine Petit at Institut Pasteur)  
2006- Director of the “Seeing and Hearing” Scientific Cooperation Foundation  
2007-2017 Coordinator of the Foundation Fighting Blindness Paris Research Centre  
2009- Director of the Research Centre Vision Institute, UMR S 968 Inserm/Université Pierre et Marie Curie and UMR 7210 CNRS  
2011- Director of the Laboratory of Excellence "LIFESENSES: senses for a lifetime"

## **EUROPEAN RESEARCH PROGRAMS**

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2000-2003	Coordinator of the concerted action NeuroPROtection in the RETina/PRORET/FP5 (QLK6-CT-2000-00569)
2001-2004	Coordinator of the R&D program PROtection against AGEing in the RETina/PRO-AGE-RET/FP5 (QLK6-CT-2001- 00385)
2005-2009	Coordinator of the Integrated project Functional GENOmic of the RETina-EVI-GENORET, the largest Vision Project ever funded by EU (FP6- 512036)
2010-2013	Coordinator of the RdCVF program (orphan drug/rare diseases), (FP7 HEALTH-F2-2010-241683)
2010-2014	Deputy Coordinator of the European research network Treatrash (FP7 HEALTH-F2-2010-242013)
2014-2020	Coordinator of the European Research Council Synergy Grant "HELMHOLTZ"

## **PRIZES and AWARDS**

Thesis medal (**1980**), IPSEN Foundation International Prize (**1985**), Fondation pour la recherche thérapeutique (**1986**), Research To Prevent Blindness International Scholar Award (**1990**), Research Prize of the French Society of Ophthalmology (**1990**), Prix de Parrainage de la Fondation Alsace (**1994**), Ophthalmologist of the Year 1998 (Abstract Ophthalmo, Paris) (**1998**), Mérite Typhlophilie Gold Medal (fight against blindness) (**2001**), Foundation Bettencourt Schueller 'Coups d'élan pour la Recherche Française' Prize (**2002**), Knight of the National Order of Merit (**2003**), Foundation Fighting Blindness (FFB) Trustee Award (**2005**), Emilia Valor Grand Prix of the French Academy of Sciences (**2005**), The Institut de France's Foundation NRJ Grand Prix scientifique (**2006**), Alcon Research Institute Alumni Award for Excellence in Vision Research (**2006**), The Altran Foundation Innovation Award (**2007**), Quebec Vision Research Network's Prize (Canada) (**2007**), Gold Medal of the University Pierre et Marie Curie (**2008**), Knight of the Legion of Honor (**2008**), Honoris Causa Doctorate from the University of Geneva (**2010**), Coscas Medal, Retina 2012, Rome (**2012**), Jules Gonin lecture, Prize of the Retina Research Foundation, Reykjavik (**2012**), CNRS Medal of Innovation (**2012**), Officer of the National Order of Merit (France) (**2012**), ARVO Silver Fellow (**2013**), Prix La Recherche (**2013**), Prix Inter-Optiques de la Filière de la Vision (**2014**), Prix Chaptal of the French Industry (**2014**), Special Recognition Award Retina International (**2014**), Foundation Fighting Blindness (FFB) Llura Liggett Gund Award (**2015**), Prix Opecst-Inserm (**2015**), Prix Alfred Monnier (**2015**)

**Elected to** the European Academy of Ophthalmology (**2006**), the Academia Ophthalmologia Internationalis (**2007**), the Academy of Sciences-Institut de France (**2007**), the German National Academy of Sciences Leopoldina (**2014**)

**More than 300 invited lectures, including the Wilmer lecture (Johns Hopkins, 2003), The Leopold lecture (Irvine, Ca, 2007), The Euretina lecture (Vienna, 2008), ARVO (and pre-ARVO) symposia, the Leopoldina Academy (2009), College de France, Pasteur Institute, Hadassah University, the German, French, Israeli societies for Neuroscience, NIHR (UK), ISOPT, ISOCB, ISER, ESF, Jules Gonin Lecture of the Retina Research Foundation, Reykjavik (2012), Brain Prize meetings lectures (2012, 2014), FENS (2014), Stanford University (2015), From Neural Circuitry to Neurotechnology (AAAS, Riken Institute, Tokyo, 2015), Keynote XVIIth International Meeting on Retinal Degeneration , Kyoto, Japan,...**

## **SCIENTIFIC ADVISORY BOARD**

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1999-2003	Vice-Chairman of the Neuroscience Commission – CSS4 Inserm
2000-	Member of the Scientific Advisory Board Foundation Fighting Blindness – (FFB), ESAB member since 2012
2002-2006	Member of the Scientific Advisory Board Neurotech
2002-	Member of the Scientific Advisory Board - Fédération des Aveugles et handicapés Visuels de France (FAF)
2003-	Member of the Steering Committee - European Vision Institute (EVI EEIG)
2004-	Member of the Steering Committee - European Vision Institute- Clinical Trials – Sites of excellence (EVI-CT-SE), Chairman since 2011
2003-2007	Member of the Scientific Advisory Board AP-HP
2003-2007	Member of the Scientific Advisory Board - Génopoles
2004-2007	Member of the Scientific Advisory Board - AGF Athena
2004-	Ad hoc Consultant by Alcon, Sanofi, Novartis, Pfizer
2005-	Chairman of the Scientific Advisory Board - Fovea pharmaceuticals
2006-	Chairman of the Scientific Advisory Board - Genesignal
2007-2008	Member of the Scientific Advisory Board - Bourse Lavoisier
2007-2009	Responsable Thématique Neurosciences- Pôle de compétitivité Medicen
2007-2009	Member of the Scientific Advisory Board ERAB Allergan
2007-	Chairman of the Scientific Advisory Board - Fédération des Aveugles et Handicapés Visuels de France (FAF)
2007-	Member of the recruitment committee (Commission des effectifs de la) faculté de Médecine Pierre et Marie Curie
2007-2013	Member of Scientific Advisory Board - Faculté de Médecine Pierre et Marie Curie University
2007-	Coordinator Expert Committee « Retina » and Scientific Section « Retina » - EVI-CT-SE
2008-2011	Member of the Scientific Advisory Board, Alcon Research Institute
2008-	Member of the Scientific Advisory Board Euretina
2008-	Honorary Member of the Deutsche Ophthalmologische Gesellschaft (DOG)
2008-	Member of the Scientific Advisory Board - Ville de Paris
2009-	Member of the Scientific Advisory Board - Optic 2000 Foundation

2009	Member of the Scientific Advisory Board - E-Sidor
2009- 2010	Member of the Scientific Advisory Board - Cellectis
2009-2010	Member of the Scientific and Medical Advisory Board - Mutualité Française
2010-2011	Member of the Scientific Committee – Fondation pour la Recherche Médicale
2010-2013	Member of the Scientific Committee – ARIIS (Alliance pour la Recherche et l’Innovation des Industries de Santé)
2010	Chairman of the Scientific Advisory Board – Optimalia
2010-	Member of the Scientific Committee – L’Association Française de l’Eclairage (AFE)
2012-	Member of the Scientific Committee “ArguSanté” Institut de France
2012-	Member of the Group of Experts "Regional and national system of transfer and innovation at the Minister of education and research
2013-	Member of the Innovation 2030 national committee
2013-	Member of the Steering Committee of the Translational Research Program in Health (The French National Research Agency)
2014-	Member of the Scientific Advisory Board of the Choroideremia Research Foundation
2014-	Member of the Scientific Advisory Board of the Fondation NRJ de l’Institut de France 2014- Member of the Scientific Advisory Board, Vision Medicines
2014-	Member of the Steering Committee for development of a series of Coursera (digital) courses around the brain in cooperation among Israeli, French, Swiss and Portuguese institutions
2015-	Chairman of the Scientific Advisory Board - Group Point Vision

## ORGANIZATION OF INTERNATIONAL CONFERENCES

April 2002	Consensus Conference (Foundation Fighting Blindness, Inserm, AFM) “Clinical Trials Orphan Retinal Degenerations”, Paris, France
April 2005	“Ophthalmic Pan-European Clinical Trials and the Impact of EU Directive” Royal Society of Medicine, London, UK
July 2007	“Hearing and seeing: Fighting sensory disabilities” Collège de France, Paris, France
January 2008	2nd European eAccessibility Forum “Accessible e-books: an opportunity for the disabled”, Paris, France
December 2008	Fondation Singer-Polignac/“Seeing and Hearing” Foundation/Institute of Ophthalmology UCL/Institut de la Vision Symposium “Fighting blinding diseases: towards a joint endeavour” Paris, France
November 2009	ESF-UB Conference in Biomedicine in association with Eurovisionnet and Fondation Voir et Entendre “Rare Diseases II: Hearing and sight loss”, Sant Feliu de Guixols, Spain
April 2014	Symposium “Stem Cell and Gene Therapy”, World Ophthalmology Congress, Tokyo, Japan
July 2014	Symposium "Cell and Gene Therapy Approaches in Retinal Degenerations", FENS Forum, Milan Italy
July 2015	Symposium “Gene Therapy”, ISOPT Clinical meeting, Berlin, Germany

## JOURNAL EDITORIAL BOARDS

The Journal of Clinical Investigation  
 Science Translational Medicine  
 Progress in Retinal and Eye Research  
 Journal Français d’Ophtalmologie  
 Orphanet Journal of Rare Diseases  
 Survey of Ophthalmology  
 JAMA Ophthalmology  
 Chinese Journal of Clinicians  
 Intractable & Rare Diseases Research (Co-Editor-in Chief)  
 Translational Vision Science and Technology  
 Ophthalmology and Therapy

## PUBLICATIONS, REVIEWS, EDITORIALS, BOOKS

### PUBLICATIONS

2015

Schmitz-Valckenberg S, **Sahel JA**, Danis R, Fleckenstein M, Jaffe GJ, Wolf S, Prunte C, Holz FG. Natural History of Geographic Atrophy Progression Secondary to Age-Related Macular Degeneration (Geographic Atrophy Progression Study). *Ophthalmology*. 2015 Nov 3. [Epub ahead of print]

Bizet AA, Becker-Heck A, Ryan R, Weber K, Filhol E, Krug P, Halbritter J, Delous M, Lasbennes MC, Linghu B, Oakeley EJ, Zarhrate M, Nitschké P, Garfa-Traore M, Serluca F, Yang F, Bouwmeester T, Pinson L, Cassuto E, Dubot P, Elshakhs NA, **Sahel JA**, Salomon R, Drummond IA, Gubler MC, Antignac C, Chibout S, Szustakowski JD, Hildebrandt F, Lorentzen E, Sailer AW, Benmerah A, Saint-Mezard P, Saunier S. Mutations in TRAF3IP1/IFT54 reveal a new role for IFT proteins in microtubule stabilization. *Nat Commun.* 2015 Oct 21;6:8666.

Léveillard T, Van Dorsselaer A, **Sahel JA**. [Altruism in the retina: sticks feed cones]. *Med Sci (Paris)*. 2015 Oct;31(10):828-30.

Tick S, Wolff B, Tilleul-Hatwell V, **Sahel JA**, Cohen SY. Inner Retinal Refractile Lesions in Type 1 Neurofibromatosis. *Retina*. 2015 Oct 16. [Epub ahead of print]

Levy O, Lavalette S, Hu SJ, Housset M, Raoul W, Eandi C, **Sahel JA**, Sullivan PM, Guillonneau X, Sennlaub F. APOE Isoforms Control Pathogenic Subretinal Inflammation in Age-Related Macular Degeneration. *J Neurosci*. 2015 Oct 7;35(40):13568-76.

Roubeix C, Godefroy D, Mias C, Sapienza A, Riancho L, Degardin J, Fradot V, Ivkovic I, Picaud S, Sennlaub F, Denoyer A, Rostene W, **Sahel JA**, Parsadaniantz SM, Brignole-Baudouin F, Baudouin C. Intraocular pressure reduction and neuroprotection conferred by bone marrow-derived mesenchymal stem cells in an animal model of glaucoma. *Stem Cell Res Ther*. 2015 Sep 16;6:177.

Audo I, Gocho K, Rossant F, Mohand-Saïd S, Loquin K, Bloch I, **Sahel JA**, Paques M. Functional and high-resolution retinal imaging monitoring photoreceptor damage in acute macular neuroretinopathy. *Graefes Arch Clin Exp Ophthalmol*. 2015 Sep 7. [Epub ahead of print]

Arteni AA, Fradot M, Galzerano D, Mendes-Pinto MM, **Sahel JA**, Picaud S, Robert B, Pascal AA. Structure and Conformation of the Carotenoids in Human Retinal Macular Pigment. *PLoS One*. 2015 Aug 27;10(8):e0135779.

Azoulay L, Chaumet-Riffaud P, Jaron S, Roux C, Sancho S, Berdugo N, Audo I, **Sahel JA**, Mohand-Saïd S. Threshold Levels of Visual Field and Acuity Loss Related to Significant Decreases in the Quality of Life and Emotional States of Patients with Retinitis Pigmentosa. *Ophthalmic Res*. 2015 Jul 29;54(2):78-84. [Epub ahead of print]

Bendali A, Rousseau L, Lissorgues G, Scorsone E, Djilas M, Dégardin J, Dubus E, Fouquet S, Benosman R, Bergonzo P, **Sahel JA**, Picaud S. Synthetic 3D diamond-based electrodes for flexible retinal neuroprostheses: Model, production and in vivo biocompatibility. *Biomaterials*. 2015 Jul 14;67:73-83.

Dominguez E, Raoul W, Calippe B, **Sahel JA**, Guillonneau X, Paques M, Sennlaub F. Experimental Branch Retinal Vein Occlusion Induces Upstream Pericyte Loss and Vascular Destabilization. *PLoS One*. 2015 Jul 24;10(7):e0132644.

Cahuzac A, Scemama C, Mauget-Faÿsse M, **Sahel JA**, Wolff B. Retinal arterial macroaneurysms: clinical, angiographic, and tomographic description and therapeutic management of a series of 14 cases. *Eur J Ophthalmol*. 2015 Jul 2:0. doi: 10.5301/ejo.5000641. [Epub ahead of print]

Ho AC, Humayun MS, Dorn JD, da Cruz L, Dagnelie G, Handa J, Barale PO, **Sahel JA**, Stanga PE, Hafezi F, Safran AB, Salzmann J, Santos A, Birch D, Spencer R, Cideciyan AV, de Juan E, Duncan JL, Elliott D, Fawzi A, Olmos de Koo LC, Brown GC, Haller JA, Regillo CD, Del Priore LV, Arditì A, Geruschat DR, Greenberg RJ; Argus II Study Group. Long-Term Results from an Epiretinal Prosthesis to Restore Sight to the Blind. *Ophthalmology*. 2015 Aug;122(8):1547-54. doi: 10.1016/j.ophtha.2015.04.032. Epub 2015 Jul 8.

Cases O, Joseph A, Obry A, Santin MD, Ben-Yacoub S, Pâques M, Amsellem-Levera S, Bribian A, Simonutti M, Augustin S, Debeir T, **Sahel JA**, Christ A, de Castro F, Lehéryc S, Cosette P, Kozyraki R. Foxg1-Cre Mediated Lrp2 Inactivation in the Developing Mouse Neural Retina, Ciliary and Retinal Pigment Epithelia Models Congenital High Myopia. *PLoS One*. 2015 Jun 24;10(6):e0129518.

Boulanger-Scemama E, El Shamieh S, Démontant V, Condroyer C, Antonio A, Michiels C, Boyard F, Saraiva JP, Letexier M, Souied E, Mohand-Saïd S, **Sahel JA**, Zeitz C, Audo I. Next-generation sequencing applied to a large French cone and cone-rod dystrophy cohort: mutation spectrum and new genotype-phenotype correlation. *Orphanet J Rare Dis*. 2015 Jun 24;10(1):85.

Launay PS, Godefroy D, Khabou H, Rostene W, **Sahel JA**, Baudouin C, Melik Parsadaniantz S, Reaux-Le Goazigo A. Combined 3DISCO clearing method, retrograde tracer and ultramicroscopy to map corneal neurons in a whole adult mouse trigeminal ganglion. *Exp Eye Res.* 2015 Jun 11; pii: S0014-4835(15)00196-7.

Cberman-Thibault H, Augustin S, Lechauve C, Ayache J, Ellouze S, **Sahel JA**, Corral-Debrinski M. Nuclear expression of mitochondrial ND4 leads to the protein assembling in complex I and prevents optic atrophy and visual loss. *Mol Ther Methods Clin Dev.* 2015 Feb 25;2:15003.

Orhan E, Dalkara D, Neuillé M, Lechauve C, Michiels C, Picaud S, Léveillard T, **Sahel JA**, Naash MI, Laval MM, Zeitz C, Audo I. Genotypic and phenotypic characterization of P23H line 1 rat model. *PLoS One.* 2015 May 26;10(5):e0127319.

Orieux G, Slembrouck A, Bensaïd M, **Sahel JA**, Goureau O. The protein tyrosine phosphatase interacting protein 51 (PTPIP51) is required for the differentiation of photoreceptors. *Neuroscience.* 2015 Aug 6;300:276-85.

Neuillé M, Morgans CW, Cao Y, Orhan E, Michiels C, **Sahel JA**, Audo I, Duvoisin RM, Martemyanov KA, Zeitz C. LRIT3 is essential to localize TRPM1 to the dendritic tips of depolarizing bipolar cells and may play a role in cone synapse formation. *Eur J Neurosci.* 2015 May 22. doi: 10.1111/ejn.12959. [Epub ahead of print]

Ait-Ali N, Fridlich R, Millet-Puel G, Clérin E, Delalande F, Jaillard C, Blond F, Perrocheau L, Reichman S, Byrne LC, Olivier-Bondini A, Bellalou J, Moyse E, Bouillaud F, Nicol X, Dalkara D, van Dorsselaer A, **Sahel JA**, Léveillard T. Rod-derived cone viability factor promotes cone survival by stimulating aerobic glycolysis. *Cell.* 2015 May 7;161(4):817-32.

Hu SJ, Calippe B, Lavalette S, Roubeix C, Montassar F, Housset M, Levy O, Delarasce C, Paques M, **Sahel JA**, Sennlaub F, Guillonneau X. Upregulation of P2RX7 in Cx3cr1-Deficient Mononuclear Phagocytes Leads to Increased Interleukin-1 $\beta$  Secretion and Photoreceptor Neurodegeneration. *J Neurosci.* 2015 May 6;35(18):6987-96.

Vacca O, El Mathari B, Darche M, **Sahel JA**, Rendon A, Dalkara D. Using Adeno-associated Virus as a Tool to Study Retinal Barriers in Disease. *J Vis Exp.* 2015 Apr 19;(98). doi: 10.3791/52451.

El Mathari B, Sene A, Charles-Messance H, Vacca O, Guillonneau X, Grepin C, Sennlaub F, **Sahel JA**, Rendon A, Tadayoni R. Dystrophin Dp71 gene deletion induces retinal vascular inflammation and capillary degeneration. *Hum Mol Genet.* 2015 Apr 21. pii: ddv132. [Epub ahead of print]

Martins J, Kolomiets B, Caplette R, **Sahel JA**, Castelo-Branco M, Ambrósio AF, Picaud SA. Sildenafil acutely decreases visual responses in ON and OFF retinal ganglion cells. *Invest Ophthalmol Vis Sci.* 2015 Mar 26. pii: IOVS-14-15964. doi: 10.1167/iovs.14-15964. [Epub ahead of print]

Duebel J, Marazova K, **Sahel JA**. Optogenetics. *Curr Opin Ophthalmol.* 2015 May;26(3):226-32. (review)

El Shamieh S, Boulanger-Scemama E, Lancelot ME, Antonio A, Démontant V, Condroyer C, Letexier M, Saraiva JP, Mohand-Saïd S, **Sahel JA**, Audo I, Zeitz C. Targeted next generation sequencing identifies novel mutations in RP1 as a relatively common cause of autosomal recessive rod-cone dystrophy. *Biomed Res Int.* 2015;2015:485624.

Berger A, Lorain S, Joséphine C, Desrosiers M, Peccate C, Voit T, Garcia L, **Sahel JA**, Bemelmans AP. Repair of rhodopsin mRNA by spliceosome-mediated RNA trans-splicing: a new approach for autosomal dominant retinitis pigmentosa. *Mol Ther.* 2015 May;23(5):918-30.

Magnain C, Castel A, Boucneau T, Simonutti M, Ferezou I, Rancillac A, Vitalis T, **Sahel JA**, Paques M, Atlan M. Holographic laser Doppler imaging of microvascular blood flow. *J Opt Soc Am A Opt Image Sci Vis.* 2014 Dec 1;31(12):2723-35.

Errera MH, Levinson RD, Fardeau C, Thomas D, Cohen D, Navarro A, Héron E, Paques M, Pavesio C, **Sahel JA**, Westcott MC, Gaudric A, LeHoang P, Bodaghi B. Late posterior segment relapses in a series of Vogt-Koyanagi-Harada disease. *Acta Ophthalmol.* 2015 Sep;93(6):e509-10.

Levy O, Calippe B, Lavalette S, Hu SJ, Raoul W, Dominguez E, Housset M, Paques M, **Sahel JA**, Bemelmans AP, Combadiere C, Guillonneau X, Sennlaub F. Apolipoprotein E promotes subretinal mononuclear phagocyte survival and chronic inflammation in age-related macular degeneration. *EMBO Mol Med.* 2015 Jan 20;7(2):211-26.

Elachouri G, Lee-Rivera I, Clérin E, Argentini M, Fridlich R, Blond F, Ferracane V, Yang Y, Raffelsberger W, Wan J, Bennett J, **Sahel JA**, Zack DJ, Léveillard T. Thioredoxin rod-derived cone viability factor protects against photooxidative retinal damage. *Free Radic Biol Med.* 2015 Apr;81:22-9.

Dalkara D, Duebel J, **Sahel JA**. Gene therapy for the eye focus on mutation-independent approaches. *Curr Opin Neurol.* 2015 Feb;28(1):51-60. (review)

Manes G, Guillaumie T, Vos WL, Devos A, Audo I, Zeitz C, Marquette V, Zanlonghi X, Defoort-Dhellemmes S, Puech B, Said SM, **Sahel JA**, Odent S, Dollfus H, Kaplan J, Dufier JL, Le Meur G, Weber M, Faivre L, Cohen FB, Béroud C, Picot MC, Verdier C, Sénéchal A, Baudoin C, Bocquet B, Findlay JB, Meunier I, Dhaenens CM, Hamel CP. High Prevalence of PRPH2 in Autosomal Dominant Retinitis Pigmentosa in France and Characterization of Biochemical and Clinical Features. *Am J Ophthalmol.* 2015 Feb;159(2):302-14.

Bujakowska KM, Zhang Q, Siemiatkowska AM, Liu Q, Place E, Falk MJ, Consugar M, Lancelot ME, Antonio A, Lonjou C, Carpentier W, Mohand-Saïd S, den Hollander AI, Cremers FP, Leroy BP, Gai X, **Sahel JA**, van den Born LI, Collin RW, Zeitz C, Audo I, Pierce EA. Mutations in IFT172 cause isolated retinal degeneration and Bardet-Biedl syndrome. *Hum Mol Genet.* 2015 Jan 1;24(1):230-42.

Macé E, Caplette R, Marre O, Sengupta A, Chaffiol A, Barbe P, Desrosiers M, Bamberg E, **Sahel JA**, Picaud S, Duebel J, Dalkara D. Targeting Channelrhodopsin-2 to ON-bipolar Cells With Vitreally Administered AAV Restores ON and OFF Visual Responses in Blind Mice. *Mol Ther.* 2015 Jan;23(1):7-16.

## 2014

Clérin E, Yang Y, Forster V, Fontaine V, **Sahel JA**, Léveillard T. Vibratome sectioning mouse retina to prepare photoreceptor cultures. *J Vis Exp.* 2014 Dec 22;(94).

Law AL, Parinot C, Chatagnon J, Gravez B, **Sahel JA**, Bhattacharya SS, Nandrot EF. Cleavage of Mer Tyrosine Kinase (MerTK) from the Cell Surface Contributes to the Regulation of Retinal Phagocytosis. *J Biol Chem.* 2014 Dec 23. [Epub ahead of print]

Fort PE, Darche M, **Sahel JA**, Rendon A, Tadayoni R. Lack of dystrophin protein Dp71 results in progressive cataract formation due to loss of fiber cell organization. *Mol Vis.* 2014 Nov 4;20:1480-90.

Mora P, Ghirardini S, Héron E, Sedira N, Olcelli F, Gandolfi S, **Sahel JA**, Errera MH. Ocular tuberculosis: experience of an Italian and French cohort. *Acta Ophthalmol.* 2014 Dec 9. [Epub ahead of print]

Byrne LC, Dalkara D, Luna G, Fisher SK, Clérin E, **Sahel JA**, Léveillard T, Flannery JG. Viral-mediated RdCVF and RdCVFL expression protects cone and rod photoreceptors in retinal degeneration. *J Clin Invest.* 2014 Nov 21. [Epub ahead of print]

Sabbah N, Authié CN, Sanda N, Mohand-Said S, **Sahel JA**, Safran AB. Importance of Eye Position on Spatial Localization in Blind Subjects Wearing an Argus II Retinal Prosthesis. *Invest Ophthalmol Vis Sci.* 2014 Nov 20;55(12):8259-66.

Boillot T, Rosolen SG, Dulaurent T, Goulle F, Thomas P, Isard PF, Azoulay T, Lafarge-Beurlet S, Woods M, Lavillegrand S, Ivkovic I, Neveux N, **Sahel JA**, Picaud S, Froger N. Determination of morphological, biometric and biochemical susceptibilities in healthy Eurasier dogs with suspected inherited glaucoma. *PLoS One.* 2014 Nov 7;9(11):e111873.

Szikra T, Trenholm S, Drinnenberg A, Jüttner J, Raics Z, Farrow K, Biel M, Awatramani G, Clark DA, **Sahel JA**, da Silveira RA, Roska B. Rods in daylight act as relay cells for cone-driven horizontal cell-mediated surround inhibition. *Nat Neurosci.* 2014 Dec;17(12):1728-35.

**Sahel JA**, Marazova K, Audo I. Clinical Characteristics and Current Therapies for Inherited Retinal Degenerations. *Cold Spring Harb Perspect Med.* 2014 Oct 16. pii: a017111. [Epub ahead of print]

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