# MARK CEDRIC GILLIES

OPHTHALMOLOGIST

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# PROFILE

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Professor Mark Gillies directs the Macula Research Group (MRG), University of Sydney. He specializes in medical retina, emerging treatments for macular degeneration and diabetic eye disease. He pioneered steroids for diabetic retinopathy and conducted the first trial of intravitreal injections for any eye disease. He has also developed internet-based software to track outcomes of treatment of macular disease, the Fight Retinal Blindness! Project, which currently has hundreds of active contributors in ANZ, Europe and Asia. His lab studies outer retinal metabolism and Muller cell biology with a major interest in the pathogenesis of MacTel type 2. Professor Mark Gillies was the first Australian ophthalmologist to be awarded a PhD, which he received for his work on diabetic retinopathy at the Walter and Eliza Hall Institute. He has appeared on numerous occasions in national media (Evening News of all major networks, ABC radio as local expert, see also attached copy of article in The Australian) to lobby for Government support for Photodynamic Therapy around 2000-1 (granted 2002), public education on diabetic retinopathy and macular degeneration.

# **PROFESSIONAL QUALIFICATIONS**

- MB BS (Melb) 1975-1981
- PhD (Medical Biology) 1985-1987
- FRANZCO 1992

# PRESENT POSITIONS HELD

- Professorial Research Fellow (2021)
- Director of Research, Save Sight Institute 8 Macquarie St, Sydney (2014)
- Professor, Dept. Clinical Ophthalmology, The University of Sydney (2011)
- Director, Macula Research Group, Save Sight Institute (1998)
- Head, Medical Retina Unit, Sydney Eye Hospital, 8 Macquarie St, Sydney (1995)
- Deputy Chair, Ophthalmic Research Institute of Australia (2014)
- Director, Eye Associates-Level 4, 187 Macquarie Street, Sydney (1997)

# **ADVISORY / CONSULTENCY**

Member of National and International Ophthalmic (Retinal) Advisory Boards for:

- Allergan Pharmaceuticals
- Pfizer Pharmaceuticals
- Novartis Pharmaceuticals
- Bayer Pharmaceuticals

# MAJOR POSTS HELD

- Sydney Medical School Foundation Fellow (2011-2022)
- Chair, working group for the International Consortium for Health Outcomes Measurement (2014-2016)
- Chair Scientific Executive Committee, MacTel Project (www.mactelresearch.org), (2005-2013)
- Associate Professor, Dept. Clinical Ophthalmology, University of Sydney (2004-2008)
- Board Member and Chair of Medical Subcommittee, Fred Hollows Foundation (1994-2004)
- Chief Editor, Clinical and Experimental Ophthalmology (1995-2002)
- Co-Scientific Chair, Australian Visual and Ophthalmic Science Conference (1997-2003)
- Qualification and Education Committee, Royal Australian College of Ophthalmologists (1995-2002)
- Visiting Research Fellow, Prof. Alan Bird. Moorfields Eye Hospital, London (1994)

# MEMBERSHIP

- Macula Society
- Royal Australian New Zealand College of Ophthalmology
- Australian and New Zealand Retina Society
- Association for Research in Vision and Ophthalmology
- Society for Neuroscience
- International Society for Eye Research

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HIGHER DEGREE RESEARCH STUDENTS	
MACULA RESEARCH GROUP STAFF	

# **INVITATIONS, LAST 10 YEARS**

# 2022

- Presenter/Speaker, EURETINA 2022 Virtual, September 2022
- Speaker, SNEC Preceptorship, Singapore, November 2022

## 2021

- Presenter/Speaker, AOPT XV Biennial meeting virtual, Feb 2021.
- Presenter/Speaker, 125<sup>th</sup> Annual Meeting of the Japanese Ophthalmological Society, March 2021
- Presenter/Speaker, *Ophthalmology These days*, RANZCO WA Branch Meeting Rottnest May 2021
- Presenter/Speaker, EURETINA 2021 Virtual, September 2021
- Presenter/Speaker, American Academy of Ophthalmology, Virtual, November 2021
- Presenter/Speaker, 14<sup>th</sup> APVRS Congress, Congress of the Asia-Pacific Vitreo-retina Society, Virtual, December 2021

### 2020

- Presenter/Speaker, EURETINA Congress, Virtual, October 2020
- Speaker, RANZCO Annual Scientific Conference, Serine metabolism in the retina, Sydney, November 2020
- Speaker, American Academy of Ophthalmologists (AAO), Virtual, November, 2020
- Panellist, Brolucizumab- Global Symposium, Virtual October, 2020
- Speaker, 43<sup>rd</sup> Annual Macula Society Meeting, Conference, San Diego, USA, Febuary, 2019
- Speaker, MacTel Clinical Meeting, Conference, London, Febuary 2020
- Speaker, ARVO Conference, Baltimore, April 2020

### 2019

- Presenter/Speaker, EURETINA Congress, Paris, September 2019
- Speaker, RANZCO Annual Scientific Conference, Serine metabolism in the retina, Sydney, November 2019
- Speaker, American Academy of Ophthalmologists (AAO), New Orleans, USA, October, 2019
- Speaker, 16<sup>th</sup> conference of advanced retinal therapy in Vienna, 2019
- Speaker, ARVO Conference, Vancouver, South America, April 2019
- Speaker, Future Directions in Ophthalmology Symposium, Sydney, August 2019
- Speaker, International Retina, March, 2019

### 2018

- Presenter/Speaker, Allergan IRAB meeting in Vienna, September 2018
- Presenter/Speaker, EURETINA 2018 Congress, Vienna, September 2018
- Speaker, RIVAL Scientific Exchange, Vienna, September 2018
- Panelist/Faculty Speaker, Roudtable discussion "New Perspective for Your nAMD Patients", Vienna, September 2018
- Poster/Attendee, International Forum on Quality and Safety in Healthcare, Melbourne, September 2018
- Speaker, Novartis FDO Symposium, Melbourne, August 2018
- Speaker, Virtual Meeting in Eye Know Hot Topics 2018, South Africa, August 2018
- Panelist, SEH Biennial Alumni Meeting, Sydney, July 2018
- Speaker, Allergan Beyond Meeting, Sydney, Australia, July 2018
- Speaker, Bayer Global Retinal Network Program (GRNP), Sydney, Australia, June 2018
- Speaker, Spain Retinnova 5.0, Madrid, Spain, May 2018
- Poster/Attendee, Association for Research in Vision and Ophthalmology, Honolulu, Hawaii, May 2018
- Speaker, 43<sup>o</sup> Congress of the Brazilian Retina and Vitreous Society, Brazil, April 2018
- Speaker, "Anti VEGF therapy in wAMD in term of RIVAL interpretation" at Retina Summit, Seoul, March 2018

- Speaker, "Anti VEGF therapy in wAMD in term of RIVAL interpretation" at Retina Summit, Vietnam, March 2018
- Speaker, International Retina Auckland, February 2018
- Speaker, Macula Society Meeting Beverly Hills, February 2018
- Speaker, Diabetic Eye Complication Committee, Chinese Research Hospital Association, Beijing, February 2018

## 2017

- Speaker for 'RETINA LIVE' event, Kuala Lumpur, December 2017
- Speaker, American Academy of Ophthalmologists (AAO), New Orleans, USA, November 2017
- Speaker, RANZCO Annual Scientific Conference, Perth, November 2017
- Speaker for 'RETINA LIVE' event, Singapore and Beijing, October 2017
- Speaker at Future Directions Ophthalmology, Brisbane, September 2017
- Speaker at European Society of Retina Specialists Congress (EURETINA), Barcelona, Sept 2017
- Medical Instructor at Pacific Eye Institute, Fiji, August 2017
- Speaker at Queensland branch RANZCO, August 2017
- Invited Speaker, MaculArt Meeting, Paris, France, July 2017
- Speaker, The 40<sup>th</sup> Annual Macula Society Meeting, Singapore, June 2017
  - Invited Speaker, Macula Symposium
- Speaker, Association for Research in Vision and Ophthalmology, Baltimore, USA, May 2017
- Speaker, ASIA ARVO Conference, Brisbane, QLD, Feb 2017
  - $\circ$   $\,$  Chair, Translational Research Summit, Brisbane, QLD, Feb 2017  $\,$
- Invited Speaker, 'Save Sight Institute Lecture', Save Sight Institute & Sydney Eye Hospital Registrars' Conference and Teaching Course, Sydney NSW, Jan 2017

## 2016

- Speaker, American Academy of Ophthalmologists (AAO), Chicago, USA, Oct 2016
- Speaker, Oceania Retinal Association Meeting (ORA), Berkeley River, WA, Aug 2016
- ICHOM Scientific Meeting, London, UK, May 2016
- Poster/Attendee, Association for Research in Vision and Ophthalmology, Seattle, USA, May 2016
- Medical Instructor at Pacific Eye Institute, Fiji, APR 2016
- Keynote Speaker, Malaysian Ophthalmological Society, Malaysia, March 2016
- Invited Speaker, East Coast Retina Society, New York, USA, JAN 2016
- Keynote Speaker, Paris Macula Meeting, Paris, France, JAN 2016

# 2015

- Speaker, American Academy of Ophthalmologists (AAO) Retina Day, Plenary Presentation, Las Vegas, USA, Nov 2015
- Speaker, RANZCO Annual Scientific Conference, Wellington NZ, November 2015
- Keynote Speaker, Singapore National Eye Institute Medical Retina Preceptorship program, Singapore, Oct 2015
- Speaker, Oceania Retinal Association Meeting (ORA), Uluru, NT, Aug 2015
- Speaker, Maculart Meeting, Paris, France, Jun 2015
- Speaker, Lebanese Ophthalmological Society, Beirut, Lebanon, Jun 2015
- Speaker, Association for Research in Vision and Ophthalmology, Denver, USA, May 2015
- Speaker, Brisbane Alzheimers and Parkinson's disease symposium, Queensland Brain Institute, Brisbane QLD, APR 2015
- Speaker, Asia Pacific Academy of Ophthalmology, Guangzhou, China, Apr 2015
- Macular Society, Arizona, USA, Feb 2015

# 2014

- Speaker, RANZCO Annual Scientific Conference ,Brisbane, November 2014
- Speaker, American Academy of Ophthalmologists (AAO), Chicago, USA, Oct 2014
- Speaker, European Society of Retina Specialists Congress (EURETINA), London, UK, Sept 2014

- Speaker, International Congress of Eye Research (ISER), San Francisco, USA, July 2014
- Keynote Speaker, RANZCO NZ branch meeting, Auckland, New Zealand, May 2014
- Association for Research in Vision and Ophthalmology, Orlando, USA, May 2014
- Speaker, World Ophthalmology Congress, Tokyo, Japan, April 2014
- World Conference of Controversies in Ophthalmology, Lisbon, Portugal, March 2014 Symposium sponsored by Bayer

# 2013

- Invited Speaker, 10<sup>th</sup> Asia Pacific Vitreo Retinal Society, Nagoya Japan, December 2013
- Speaker, RANZCO Annual Scientific Conference ,Hobart, November 2013
- Speaker, European Congress of Ophthalmology, Copenhagen, Denmark, June 2013
- Speaker, ANZ Retina Society, Sydney, June 2013
- Speaker, Association for Research in Vision and Ophthalmology, Seattle, USA, May 2013 "Prospective audit of outcomes of treatment of exudative age related macular degeneration: The Fight Retinal Blindness! Project"
- Speaker, The 36<sup>th</sup> Annual Macular Society Meeting, Dana Point, USA, March 2013
- Invited Speaker and Member of Program Committee for Medical Retina, Asia Pacific Academy of Ophthalmology, Hyderabad, India, January 2013

# 2012

- Invited and Keynote Speaker, RANZCO Annual Scientific Conference: Council Lecture, Melbourne, November 2012
- Invited Speaker, Beijing Tongren Eye Centre 10<sup>th</sup> Anniversary Symposium, China, September 2012
- Speaker, The 35<sup>th</sup> Annual Macular Society Meeting, Israel, June, 2012
- Invited Speaker, Association for Research in Vision and Ophthalmology, Florida USA, May 2012 mini symposium on Translational Medicine
- Invited Speaker, World Ophthalmology Conference, Abu Dhabi, February 2012 Symposium on anti-vascular endothelial growth factor therapy

# 2011

- Visiting Professor, Centre for Eye Research Australia, Melbourne, September 2011
- Organising Committee and plenary speaker, Pfizer Ophthalmology Forum, Melbourne, July 2011
- Moderator, Poster Session, Macular Disease II, ARVO Fort Lauderdale, May 2011

# 2010

- Invited Speaker, International Society for Ocular Pharmacology and Therapeutics, December 2010, Macau (4 oral presentations)
- Keynote Speaker, Evidence-based Ophthalmology meeting, Flinders University, Adelaide, August 2010
- Invited Speaker, Australian School of Advanced Medicine (ASAM), Macquarie University, Sydney, July 2010
- Invited speaker, World Congress of Ophthalmology, Berlin, June 2010
- Asia Pacific Academy of Ophthalmology, Beijing August 2010
  - Chair and Pacific rim coordinator, Laboratory Science program
- Organising Committee and plenary speaker, Pfizer Ophthalmology Forum, Sydney, June 2010
- Moderator, Paper Session, Diabetic Retinopathy IV: ARVO Fort Lauderdale, May 2010
- Organiser, SIG Idiopathic Macular Telengiectasia Type 2, ARVO Fort Lauderdale, May 2010

# 2009

- Invited speaker, Atlantic Coast Retina Society, New York, January 2009
- Invited speaker, Macula '09, New York, September 2009
- "Neil Della Lecture" Brisbane 2009
- Invited speaker, XIV Congress of Chinese Ophthalmological Society, Chongqing, September 2009
- Asia Pacific Congress of Ophthalmology, Bali August 2009
  - o Chair and Pacific rim coordinator, Laboratory Science program

# **MEDIA, AWARDS & CONFERENCE ORGANIZATION**

Professor Mark Gillies has appeared on numerous occasions in national media (Evening News of all major networks, ABC radio as local expert, see also attached copy of article in *The Australian*) to lobby for Government support for Photodynamic Therapy around 2000-1 (granted 2002), public education on diabetic retinopathy and macular degeneration, most recently to announce results of successful clinical trial of IVTA for diabetic retinopathy

## AWARDS

- Rewarding Research Success Award 2022 University of Sydney, Faculty of Medicine and Health
- Invited Faculty member at Association for Research in Vision and Ophthalmology Grant Writing Educational Symposium
- Gerard Crock trophy best paper at the RANZCO Annual Scientific Meeting 2015
- American Academy of Ophthalmology, Achievement Award 2015
- Asia Pacific Academy of Ophthalmology, Achievement Award 2014
- Gerard Crock trophy best paper at the RANZCO Annual Scientific Meeting 2013
- Secretariat Award: Recognised for distinct contributions to the American Academy of Ophthalmology and to the profession of Ophthalmology, 2011
- Report for TDMO "Intravitreal triamcinolone for refractory diabetic macular edema: two-year results of a doublemasked, placebo-controlled, randomized clinical trial" was listed among the ten most cited articles in Ophthalmology, the leading clinical journal in the field, in the last 5 years in 2011.
- Inducted to the Macular Society 2007, an exclusive international society of around 300 members, mostly
  academics, that inducts 10 new fellows from around the world per year. There are only 3 Australian members
- Presentations of the results of RCTs of IVTA were nominated in 2002, 2003 and 2015 by Association for Research in Vision and Ophthalmology Program Committee (the major meeting in the field) among the top 50 abstracts reporting the newest and most innovative research (of around 6,500) (i.e. top 1% internationally since ARVO is the leading meeting in the field)
- Paper reporting the RCT of triamcinolone for macular degeneration nominated one of the three most significant articles published by Archives of Ophthalmology in 2003.

# **CONFERENCE ORGANIZATIONS**

- Australian Visual and Ophthalmic Science Conference: Co-Scientific Chair (1997-2003): meeting grew to 170 delegates, published conference papers in Clin Exp Ophthalmol, attendance subsequently slumped
- Member, Local Organizing Committee, International Society for Eye Research, Sydney 2004
- Managed the organization of the *MacTel Project* annual meetings in Los Angeles 2006-2011 (approx. 100 attendees), and MacTel Project mid-term meetings: London 2007-2008, Sydney 2009, London 2010-2011, Sydney 2012 (approx. 50)

### PEER REVIEW

- NHMRC Panels 2006, 2007, 2010, 2013
- NHMRC Development Grant Panel 2016

# **CLINICAL TRIALS**

# AS CHIEF INVESTIGATOR / PRINCIPLE INVESTIGATOR

## NHMRC FUNDED

- 1. Intravitreal triamcinolone for exudative age-related macular degeneration 1997-9 (IVTAS, NHMRC-funded)
- 2. Chorioretinal venous anastomsis for non-ischaemic central retinal vein thrombosis (CVBS) A 18 month, prospective, multicenter, randomized clinical trial, NHMRC-funded.2004-2005
- 3. A randomised clinical trial of intravitreal triamcinolone for refractory diabetic macular oedema (TDMO study). 2002-2005
- 4. TDMX study NHMRC project grant # 402573 : An open label extension of a the TDMO study 2006-2008
- 5. Thunderbird study-NHMRC project grant # 352312: A multicentre randomised clinical trial of laser treatment plus intravitreal triamcinolone for diabetic macular oedema: 2005-2008
- 6. Genetic risk factors in Diabetic Retinopathy Study, NHMRC project grant #.595918, 2010-2016
- 7. BEVORDEX Study NHMRC Project grant # 632667: A multicentre randomised clinical trial of intravitreal bevacizumab (Avastin<sup>®</sup>) versus intravitreal dexamethasone (Ozurdex<sup>™</sup>) for persistent diabetic macular oedema. Phase 2. 2010-2014
- 8. NHMRC Investigator Grants 2021 project grant # APP1195021 Fighting Retinal Blindness: learn from the past, improve the present and explore the future of treatments for Macular diseases.
- 9. Targeting a novel pathogenic glia-neuronal pathway in retinal diseases. NHMRC ideas grant 2020 2023 # APP1188332 (\$661,000)

### OTHER

- 1. Intravitreal Triamcinolone versus laser for macular oedema secondary to Retinal Vein occlusion (ITARVO). A 1year, prospective, multi-centre, randomised, placebo-controlled trial in patients with branch retinal vein occlusion to assess whether intravitreal triamcinolone was superior to laser treatment.
- 2. The efficacy and safety of treatment with intravitreal ranibizumab in patients with branch retinal vein occlusion). Multi-centre, randomised, masked, sham-controlled clinical trial. Ongoing
- 3. Novartis: A randomized, double-masked, multicenter, phase I/II study of the safety of PTK787 administered in conjunction with photodynamic therapy with Visudyne<sup>®</sup> to patients with predominantly classic , minimally classic or occult with no classic subfoveal choroidal neovascularization secondary to age-related macular degeneration. 2005
- 4. Lucentis BRVO: The Efficacy and Safety of Treatment with Intravitreal Ranibizumab in Patients with Branch Retinal Vein Occlusion. Phase 4. 2008-2012
- 5. TAREDS: Clinical trial of Ranibizumab for Diabetic Macular Oedema resistant to Intravitreal Triamcinolone -IVTA resistant DMO STUDY. Phase 4. 2009-2011
- 6. SAMTel Study: Sub-study of Mactel Typw 2: Sleep Apnoea and Macular Telangiectasia (SAMTel) pilot Study, 2012-2013
- 7. PERT Study: Patient Experience in Retinal Trials (PERT) study. 2012-2013

- 8. Reasons for consequences of long –term discontinuation of ranibizumab treatment for wet age-related macular degeneration. 2012-2013
- 9. NIRD Trial: Near infrared light photobiomodulation treatment for diabetic macular oedema. 2014-2018
- 10. A Two-Year, Three-Arm, Randomized, Double-Masked, Multicenter, Phase III Study Assessing the Efficacy and Safety of Brolucizumab versus Aflibercept in Adult Patients with Visual Impairment due to Diabetic Macular Edema (KESTREL). 2018-2021
- 11. An Eighteen-Month, Two-Arm, Randomized, Double- Masked, Multicenter, Phase III Study Assessing the Efficacy and Safety of Brolucizumab versus Aflibercept in Adult Patients with Visual Impairment due to Macular Edema secondary to Central Retinal Vein Occlusion (RAVEN). 2019-2021
- 12. A 56-week phase IIIb/IV, open-label, one-arm extension study to assess the efficacy and safety of brolucizumab 6 mg in a Treat-to-Control regimen with maximum treatment intervals up to 20 weeks for the treatment of patients with neovascular age-related macular degeneration who have completed the CRTH258A2303 (TALON) study. 2020-2025

## INDUSTRY SPONSORED

- 1. EOP1003: A Phase II/III, randomized, double-masked, controlled, dose ranging, multi-center comparative trial, in parallel groups, to establish the safety and efficacy of Intravitreal injections of EOP001 given every 6 weeks for 54 weeks, in patients with exudative age-related macular degeneration (AMD). 2002-2005
- EOP1005: A phase II randomized, controlled, double-masked, dose-finding, multi-center, comparative trial, in parallel groups, to establish the safety and preliminary efficacy of intravitreal injections of EYE001 (Anti-VEGF Pegylated Aptamer), given every 6 weeks for 12 to 30 weeks to patients with clinically significant diabetic macular edema (CSME) involving the center of the macula. 2002-2005
- 3. EOP1011: A phase II randomized, dose ranging, double masked, multi-centre trial, in parrallel groups, to determine the safety and efficacy of intravitreous injections of pegaptanib sodium compared to sham injections for 30 weeks in patients with recent vision loss due to macular oedema secondary to CRVO. 2005-2006
- 4. Phase 3 study involving oral Ruboxistaurin in Reduction in Occurrence of Centre-Threatening Diabetic Macular Edema. (Protocol B7A–MC-MBDL-sponsored by Lilly) 2004-2009
- 5. EOP1010: An open label, non-comparative protocol for the use of pegaptanib sodium injection every 6 weeks in patients with exudative age-related macular degeneration (AMD). 2005-2008
- 6. ANCHOR: A Phase III, multicentre, randomized, double-masked, active treatment-controlled study of the efficacy and safety of RhuFab V2 (Ranibizumab) compared with Verteporfin Photodynamic Therapy in subjects with predominantly classic subforeal neovascular age-related macular degeneration. 2004-2006
- 7. POSURDEX RVO; A six-month phase 3, multicentre, masked, randomised, sham-controlled trial (with sixmonth open-label extension) to assess the safety and efficacy of 700µg and 350µg dexamethasone Posterior Segment Drug Delivery System (DEX PS DDS Applicator System) in the treatment of macular swelling at the back of the eye following retinal vein occlusion 2004-2008
- 8. A Phase II, Randomised, Masked, Single and Multiple- Dose, Sequential Dose Escalation Study of AG-013958 Compound to determine the efficiency and ocular and systemic safety of AG-013958 for 13 weeks following a single administration of ST injection and for 104 weeks following multiple ST injections in subjects with age related macular degeneration. 2006
- 9. A randomised, double-masked, multi-centred, phase I/II study of the safety of PTK787 administered in conjunction with photodynamic therapy with Visudyne to patients with predominantly classic, minimally classic or occult with no classic subfoveal choroidal neovascularization secondary to age-related macular degeneration. 2006-2008
- A Natural History of Macular Telangiectasia The Mactel Study: This natural history study, sponsored by the MacTel Foundation, will characterise the clinical features of type IIa idiopathic juxtafoveal telangiectasia (MacTel) and follow how they change over time. 2006-

- 11. SUSTAIN: A Phase III, Open Label, Multi-centre 12 month study to evaluate the safety, tolerability and efficacy of Ranibizumab (0.3mg) in patients with subfoveal choroidal neovascularisation secondary to age related macular degeneration. 2006-2008
- 12. SIRIUS Study: A 2-year, Multicenter, Randomized, Controlled, Masked, Dose-Finding Trial to Assess the Safety and Efficacy of Multiple Intravitreal Injections of AGN 211745 in Patients with Subfoveal Choroidal Neovascularization Secondary to Age-Related Macular Degeneration 2007-2010
- 13. Posurdex AMD (019): A 26-Week, Open-Label Study to Assess the Safety and Efficacy of 700μg Dexamethasone Posterior Segment Drug Delivery System Applicator System as Adjunctive Therapy to Lucentis<sup>®</sup> in the Treatment of Subjects with Choroidal Neovascularization Secondary to Age-Related Macular. Phase 2. 2009-2010
- 14. Posurdex DME VE (018): A 26-Week, Open-Label Study to Assess the Safety and Efficacy of 700μg Dexamethasone Posterior Segment Drug Delivery System Applicator System in the Treatment of Vitrectomized Subjects with Diabetic Macular Edema. Phase 2. 2009-2010
- 15. Brimo DDS A Multicenter, Masked, Randomized, Sham-controlled, Paired-eye Comparison, 12-Month (Plus 12-Month Extension) Study to Evaluate the Safety and Effects on Retinal Structure and Visual Function of Brimonidine Tartrate Posterior Segment Drug Delivery System (Brimonidine Tartrate PS DDS) Applicator System in Patients with Geographic Atrophy from Age-related Macular Degeneration. 2008-2011
- 16. Posurdex DME (010): A Three-Year Phase 3, Multicenter, Masked, Randomized, Sham-Controlled Trial to Assess the Safety and Efficacy of 700 µg and 350 µg Dexamethasone Posterior Segment Drug Delivery System (DEX PS DDS) Applicator System in the Treatment of Patients with Diabetic Macular Edema Protocol Number 206207-010. 2008-2012
- 17. Restore Study: A Randomized, Double-Masked, Multicenter, Laser Controlled Phase III Study Assessing the Efficacy and Safety of Ranibizumab (Intravitreal Injections) as Adjunctive and Mono-Therapy in Patients with Visual Impairment due to Diabetic Macular Edema. 2008-2010
- 18. Restore Extension study: A open-label, multicenter, 24-month extension study to evaluate the safety of ranibizumab as symptomatic treatment for visual impairment visual impairment due to diabetic macular edema in patients who have completed the RESTORE trial. 2010-2012
- 19. GATE Study: The Safety and Efficacy of AL-8309B Ophthalmic Solution for the treatment of Geographic Atrophy (GA) Secondary to Age-Related Macular Degeneration (AMD). 2009-2011
- 20. View 2 study, VEGF Trap-Eye: A randomized, double masked, active controlled, phase 3 study of the efficacy, safety, and tolerability of repeated doses of intravitreal VEGF Trap-Eye in subjects with neovascular age-related macular degeneration (AMD). 2009-2011.
- 21. GALILEO VEGF Trap-Eye: A randomized, double-masked, sham-controlled phase 3 study of the efficacy, safety, and tolerability of repeated intavitreal administration of VEGF Trap-Eye in subjects with macular edema secondary to central retinal vein occlusion (CRVO). 2009-2012
- 22. WALTZ study: RTKi on Wet AMD: A Dose-Escalation Study of AL-39324 Intravitreal Suspension versus Lucentis<sup>™</sup> for the Treatment of Exudative Age-Related Macular Degeneration. 2010-2011
- 23. Study 852:, A Phase 2b Dose-Ranging Study of Pazopanib Eye Drops versus Ranibizumab Intravitreal Injections for the Treatment of Neovascular Age-Related Macular Degeneration. 2010-2012
- 24. RVO BDP Study: A 12-Month, Multicenter, 2-stage (Open Label, Dose-Escalation, Followed by Masked, Randomized), Single Dose Study of the Safety and Efficacy of AGN-208397, in Patients with Macular Edema (ME) Associated with Retinal Vein Occlusion (RVO). 2011-2013
- 25. VIVID Study: A Randomized, Double-Masked, Active Controlled, phase III Study of the Efficacy and Safety of Repeated Doses of Intravitreal VEGF Trap-Eye in Subjects with Diabetic Macular Edema. 2011-2016
- 26. Brimo 33D study: A Multicenter, Patient-Masked, Safety Extension Study to Evaluate the Biodegradation of the Brimonidine Tartrate Posterior Segment Drug Delivery System. 2012-2013
- FOVEA Study: A 6-month, Phase II, Double-masked, Multicenter, Randomized, Placebo-controlled, Parallel Group Study to Assess the Safety and Efficacy of Topical Administration of Two Concentrations of FOV2304 (1% and 2%) Twice Daily for the Treatment of Center-involving Clinically Significant Macular Edema Associated with Diabetic Retinopathy. 2012-2013.

- 28. Luminous Study: Study to observe the effectiveness and safety of LUCENTIS through individualized patient treatment and associated outcomes. 2012-2018
- 29. MacTel CNTF Study: A Phase 2 Multicenter Randomized Clinical Trial of Ciliary Neurotrophic Factor (CNTF) for Macular Telangiectasia Type 2 (MacTel) (Protocol NTMT02), 2013-2016
- 30. MacTel Study: A natural study of macular telangiectasia The MacTel study. 2005-2015
- 31. RIVAL Study: Development of new geographic atrophy in patients with neovascular (wet) age-related macular degeneration: a comparison of ranibizumab and aflibercept. 2014-2017
- 32. CHROMA GX29176 Study: A Phase III, Multicenter, randomized, double-masked, sham-controlled study to assess the efficacy and safety of Lampalizumab administered Intrtacitreally to patients with Geographic Atrophy secondary to Age-Related Macular Degeneration. 2014-2016
- 33. ARIES BAY86-5321/17508 Study: Managing neovascular age-related macular degeneration (nAMD) over 2 years with a Treat and Extend (T&E) regimen of 2 mg intravitreal (IVT) aflibercept a randomized, open-label, active-controlled, parallel-group phase IV/IIIb study (ARIES). 2016-
- 34. OMASPECT: A Phase IIIb, Multicenter, open-label extension study to evaluate the long term safety and tolerability of Lampalizumab in patients with geographic atrophy secondary to age-related macular degeneration who have completed a Roche-sponsored study. 2016-2018
- 35. CNTF Extension: Extension Study of NT-501 Ciliary Neurotrophic Factor (CNTF) Implant for Macular Telangiectasia (MacTel) ongoing
- 36. RENEXUS PhIII: A Phase III Multicenter, Randomized, Sham-Controlled Study to determine the safety and efficacy of Renexus in Macular Telangiectasia Type 2 2017-current
- 37. KESTREL: Two-Year, Three-Arm, Randomized, Double-Masked, Multicenter, Phase III Study Assessing the Efficacy and Safety of Brolucizumab versus Aflibercept in Adult Patients with Visual Impairment due to Diabetic Macular Edema 2018-current

# AS ASSOCIATE INVESTIGATOR

# INDUSTRY SPONSORED

- 190342-031D: A multi-center, masked, randomized, sham-controlled, parallel-group, 3 month study with a 9month safety extension to evaluate the safety and efficacy of brimonidine tartrate posterior segment drug delivery system (Brimonidine Tartrate PS DDS<sup>®</sup>) applicator system in improving visual function in patients with a previous rhegmatogenous macula-off retinal, 2010-2011
- 2. ProMEtheus Study: A 12-month, randomized, double-masked, sham-controlled, multicenter study to evaluate the efficacy and safety of 0.5 mg ranibizumab intravitreal injections in patients with visual impairment due to vascular endothelial growth factor (VEGF) driven choroidal neovascularization (CNV), 2013-2015
- 3. Minerva Study: A 12-month, randomized, double-masked, sham-controlled, multicenter study to evaluate the efficacy and safety of 0.5 mg ranibizumab intravitreal injections in patients with visual impairment due to vascular endothelial growth factor (VEGF) driven choroidal neovascularization (CNV) 2013-2015
- 4. REACH Study: Single Dose Study of the Safety and Efficacy of AGN-150998 in Patients with Exudative Agerelated Macular Degeneration. 2012-2013
- 5. BRIGHTER Study: A 24-month, phase IIIb, open-label, randomized, activecontrolled, 3-arm, multicenter study assessing the efficacy and safety of an individualized, stabilization-criteria-driven PRN dosing regimen with 0.5-mg ranibizumab intravitreal injections applied as monotherapy or with adjunctive laser photocoagulation in comparison to laser photocoagulation in patients with visual impairment due to macular edema secondary to branch retinal vein occlusion (BRVO). 2012-2015
- 6. CRYSTAL Study: A 24-month, phase IIIb, open-label, single arm, multicenter study assessing the efficacy and safety of an individualized, stabilization criteria-driven PRN dosing regimen with 0.5-mg ranibizumab intravitreal injections applied as monotherapy in patients with visual impairment due to macular edema secondary to central retinal vein occlusion (CRVO). 2012-2015
- 7. DARAPLADIB Study: A phase 2, multi-national, multi-centre, double masked, randomised, placebo controlled, parallel-group study to investigate the safety, tolerability, pharmacokinetics, pharmacodynamics and efficacy

of darapladib administered for 3 months to adult subjects with diabetic macular edema with centre involvement. 2012-2013

- ESBA OWL Microvolume Study: A Prospective, Two Cohort, Single-Masked Study to Evaluate the Effect of ESBA1008 Applied by Microvolume Injection or Infusion in Subjects with Exudative Age-Related Macular Degeneration. 2013-2015
- HAWK Study: A Two-year, Randomized, Double-Masked Multicenter, Three-Arm Study Comparing the Efficacy and safety of RTH258 versus Aflibercept in Subjects with Neovascular Age-Related Macular Degeneration. 2015-2016
- Filly (Apellis) Study: A Phase II, Multicenter, Randomized, Single-Masked, Sham-Controlled Study of Safety, Tolerability and Evidence of Activity of Intravitreal APL-2 Therapy in Patients with Geographic Atrophy (GA) – FILLY. 2016-
- 11. SEQUOIA Study: 150998-006: Safety and Efficacy of Abicipar Pegol (AGN-150998) in Patients With Neovacular Age-related Macular Degeneration. 2016-2018
- 12. QUARK NAION: QRK-207 : A Phase 2/3, Randomized, Double-Masked, Sham-Controlled Trial of QPI-1007 Delivered by Single or Multi-Dose Intravitreal Injection(s) to Subjects with Acute Nonarteritic Anterior Ischemic Optic Neuropathy (NAION). 2017-2019.
- 13. SAPPHIRE: Randomized, masked controlled trial to study the safety and efficacy of suprachoroidal injection in conjunction with intravitreal aflibercept (Eylea<sup>®</sup>) in subjects with retinal vein occlusion
- 14. IONIS: Placebo-Controlled, Double-Masked Study to Assess Safety and Efficacy of ISIS 696844, an Antisense Inhibitor of Complement Factor B, in Patients with Geographic Atrophy Secondary to Age-Related Macular Degeneration (AMD)
- 15. TOPAZ: Randomized, masked controlled trial to study the safety and efficacy of suprachoroidal injection in conjunction with anti-VEGF agent in subjects with retinal vein occlusion
- 16. OAKS: A Phase III, Multi-Center, Randomized, Double-Masked, Sham-Controlled Study to Compare the Efficacy and Safety of Intravitreal APL-2 Therapy with Sham Injections in Patients with Geographic Atrophy (GA) Secondary to Age-Related Macular Degeneration (AMD)
- 17. RHINE: Phase III, multicenter, randomized, double-masked, active comparator controlled study to evaluate the efficacy and safety of RO6867461 in patients with diabetic macular oedema
- 18. Conbercept Chengdu: A Multicenter, Double-Masked, Randomized, Dose-Ranging Trial to Evaluate the Efficacy and Safety of Conbercept Intravitreal Injection in Subjects with Neovascular Age-related Macular Degeneration

# **INVESTIGATOR INITIATED**

- Switch DMO study: A multicentre clinical trial of switching between intravitreal bevacizumab (Avastin<sup>®</sup>) and intravitreal dexamethasone (Ozurdex<sup>™</sup>) for persistent diabetic macular oedema. 2013-2015
- 2. Speed IOP Study: A randomised clinical trial of slow versus fast intravitreal injection of ranibizumab (lucentis<sup>®</sup>) and its impact on intraocular pressure. 2012-2013
- LADAMO: A Phase IV randomised clinical trial of laser therapy for peripheral retinal ischaemia combined with intravitreal aflibercept (Eylea®) versus intravitreal aflibercept monotherapy for diabetic macular oedema. 2015-2018
- 4. RADAR: Registry of Advanced DiAbetic Retinopathy. 2016 -
- 5. L-BRVO: The efficacy and Safety of Treatment with Intravitreal Ranibizumab in Patients with Branch Retinal Vein Occulsion. 2007

# **GOOD CLINICAL PRACTICE (GCP) TRAINING**

- 27 November 2017 through INC Research
- 23 October 2020 through The Global Health Network ICH GCP E6 (R2)

# **PUBLICATIONS**

# **JOURNAL ARTICLES**

- Wang N, Hunt A, Nguyen V, Shah J, Fraser-Bell S, McAllister I, Barthelmes D, Gillies MC, Squirrel D. One-year real-world outcomes of bevacizumab for the treatment of macular oedema secondary to retinal vein occlusion. Clinical Exp Opthalmol 2022;50:1038-1046.
- Chen Y, Zhang T, Zeng S, Xu R, Jin K, Coorey NJ, Wang Y, Wang K, Lee SR, Yam M, Zhu M, Chang A, Fan X, Zhang M, Du J, Gillies MC, Zhu L. Transketolase in human Müller cells is critical to resist light stress through the pentose phosphate and NRF2 pathways. Redox Biol 2022.
- 3. Hunt A, Nguyen V, Arnold J, McAllister IL, Mehta H, Invernizzi A, Ponsioen T, Gabrielle PH, O'Toole L, Kusenda P, Alforja S, Barthelmes D, **Gillies MC.** Hemiretinal vein occlusion 12-month outcomes are unique with vascular endothelial growth factor inhibitors. Data from the Fight Retinal Blindness! registry. Br J Ophthalmology 2022.
- 4. Kandel H, Nguyen V, Piermarocchi S, Ceklic L, Teo K, Arnalich-Montiel F, Miotto S, Daien V, **Gillies MC**, Watson SL. Quality of life impact of eye diseases: a Save Sight Registries study. Clin Exp Ophthalmol 2022.
- Gabrielle PH, Nguyen V, Creuzot-Garcher C, Arnold JJ, Mehta H, Duran MA, Bougamha W, Carreño E, Viola F, Squirrell D, Barthelmes D, Gillies MC. Three-year treatment outcomes of aflibercept versus ranibizumab for diabetic macular edema: data from the Fight Retinal Blindness! registry. Retina 2022.
- 6. Chong Teo KY, Nguyen V, Cheung CMG, Arnold JJ, Chen FK, Barthelmes D, **Gillies MC**. The impact of disease activity on 5-year outcomes in patients undergoing treatment for Neovascular Age-related Macular Degeneration. Retina 2022;42:95-106.
- 7. Chen Y, Coorey NJ, Zhang M, Zeng S, Madigan MC, Zhang X, **Gillies MC**, Zhu L, Zhang T. Metabolism Dysregulation in Retinal Diseases and Related Therapies. Antioxidants (Basel) 2022;11:942.
- 8. Gabrielle PH, Nguyen V, Arnould L, Viola F, Zarranz-Ventura J, Barthelmes D, Creuzot-Garcher C, **Gillies MC**. Incidence, Risk Factors, and Outcomes of Rhegmatogenous Retinal Detachment after Intravitreal Injections of Anti-VEGF for Retinal Diseases: Data from the Fight Retinal Blindness! Registry. Ophthalmol Retina 2022.
- 9. Bhandari S, Nguyen V, Hunt A, Gabrielle PH, Viola F, Mehta H, Manning L, Squirrell D, Arnold J, McAllister IL, Barthelmes D, **Gillies M**C. Changes in 12-month outcomes over time for age-related macular degeneration, diabetic macular oedema and retinal vein occlusion. Eye (Lond). 2022;4:1-10.
- 10. Gabrielle PH, Maitrias S, Nguyen V, Arnold JJ, Squirrell D, Arnould L, Sanchez-Monroy J, Viola F, O'Toole L, Barthelmes D, Creuzot-Garcher C, Gillies MC; Fight Retinal Blindness! Study Group. Incidence, risk factors and outcomes of submacular haemorrhage with loss of vision in neovascular age-related macular degeneration in daily clinical practice: data from the FRB! registry. Acta Ophthalmol; 2022.
- Shah J, Nguyen V, Hunt A, Mehta H, Romero-Nuñez B, Zarranz-Ventura J, Viola F, Bougamha W, Barnes R, Barthelmes D, Gillies MC, Fraser-Bell S. Characterization of Poor Visual Outcomes of Diabetic Macular Edema: The Fight Retinal Blindness! Project. Ophthalmol Retina. 2022;6:540-547.
- 12. Simunovic MP, **Gillies MC**. Impairments of L Cone/M-Cone AND S-Cone-Mediated Color Discrimination In Macular Telangiectasia Type II. Retina. 2022;42:576-580.
- 13. Simunovic MP, Hess K, **Gillies MC.** Impairments in Cone Pigment Regeneration and Absolute Threshold in Macular Telangiectasia Type 2. Retina. 2022;42:569-575.
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# **BOOK CHAPTERS**

- 1. Sutter FKP, **Gillies MC**, Helbig H. Diabetic Macular Edema: Current Treatments. In Holz, FG, Spaide RF eds., Medical Retina. Springer-Verlag Berlin 2007
- 2. Mohamed Q, **Gillies MC**, Wong TY. Management of Diabetic Retinopathy: A Systematic Review. In: Scott IU, Flynn HW, Smiddy WE eds. Diabetes and Ocular Disease (Monograph 14), Second Edition, The Foundation of the American Academy of Ophthalmology. San Francisco 2008.
- 3. **Gillies MC**. The role of intravitreal steroids in the management of diabetic retinopathy. In Duh E ed, Diabetic retinopathy, Humana. 2009

# NON-PEER REVIEWED AND LAY-PRESS

- Intravitreal Triamcinolone for AMD appears promising, but more studies needed. Ophthalmology Times July 1 2002
- 2. Treatments of Retinopathy. Diabetes Management Journal 2002;8:8
- 3. Until guidelines emerge, surgeons urge caution in emplying triamcinolone for AMD. Ocular Surgery News May 2003
- 4. Intravitreal Triamcinolone for DME shows lasting efficacy. Diabetic Microvascular Complications Today 2005;2:28-29
- 5. Steroids trial beats diabetes blindness. The Weekend Australian September 9-10, 2006, p22 (Health)
- 6. New Developments in the management of Diabetic Retinopathy. Diabetes Management Journal 2007:19:10

# GRANTS COMPETITIVE

 <u>Researchers</u>: Gillies MC, Zhu L, Zhang T <u>Title</u>: Mactel Research Project – EXTENSION <u>Source</u>: Lowy Medical Research Institute: \$216,662

- <u>Researchers</u>: Zhu L, Gillies MC, Zhang T. <u>Title</u>: Targeting Nrf2-MAFF pathway in Müller cells to treat macula degeneration <u>Source</u> ORIA: \$49,856.00
- <u>Researchers</u>: Gillies MC, Zhu L, Shen W, Du J <u>Title</u>: Targeting the de novo serine synthesis pathway in macular disease. <u>Source</u>: NHMRC project grant 2020 # APP1145121 (\$209,000)
- <u>Researchers</u>: Gillies MC, Zhu L, Fan X, Zhang T, Fernando N, Zhou F <u>Title</u>: Targeting a novel pathogenic glia-neuronal pathway in retinal diseases <u>Source</u>: NHMRC ideas grant 2020 - 2023 # APP1188332 (\$661,000)
- <u>Researchers</u>: Gillies, MC <u>Title</u>: Fighting Retinal Blindness: learn from the past, improve the present and explore the future of treatments for Macular diseases. <u>Source</u>: NHMRC Investigator Grant 2020 (\$2,039,951)
- <u>Researchers</u>: Gillies MC, Zhu L, Chrzanowski W <u>Title</u>: NanoVision Project. <u>Source</u>: USYD Nano Institute Kickstarter 2017 (\$50,000)
- <u>Researchers</u>: Gillies MC, Shen W <u>Title</u>: Targeting the Notch Signalling Pathway to Prevent Retinal Fibrosis <u>Source</u>: ORIA research grant 2020 (\$50,000)
- <u>Researchers</u>: Gillies MC <u>Title</u>: Targeting the Notch Signalling Pathway to Prevent Retinal Fibrosis <u>Source</u>: CDIP Grant, The University of Sydney, 2020 (\$50, 000)
- <u>Researchers</u>: Gillies MC, Shen W, Chung SH <u>Title</u>: Inhibiting Notch signalling to prevent subretinal fibrosis <u>Source</u>: CDIP Fund, the University of Sydney 2017 (\$35,000)
- <u>Researchers:</u> Gillies MC, Shen W, Chung SH <u>Title:</u> Differentiation of Muller glial cells from human stem cells for therapeutic use by promoting the Notch signalling pathway. <u>Source:</u> CDIP Grant, The University of Sydney, 2016 (\$35,000)
- 11. <u>Researchers:</u> Gillies MC <u>Title:</u> Clinical Trials and Registries to prevent blindness for Macular Disease <u>Source:</u> NHMRC Practitioner Fellowship Grant: 2016-20
- 12. <u>Researchers:</u> Gillies MC

<u>Title:</u> How to get the best outcomes of treatment of neovascular age-related macular degeneration with vascular endothelial growth factor inhibitors: Real World Evidence <u>Source:</u> Macular Disease Foundation Australia Research Grant: 2016-18

 <u>Researchers:</u> Chung SH, Gillies MC <u>Title:</u> Use patient-derived stem cells to model macular telangiectasia type 2 in a dish. <u>Source:</u> ORIA New Investigator Grant: 2016 (\$49500) 14. <u>Researchers:</u> Gillies MC

<u>Title:</u> An Observational Study of the Outcomes of Treatment of Neovascular Age-Related Macular Degeneration with ranibizumab and aflibercept. <u>Source:</u> Bridging Support Grant, The University of Sydney 2015 (\$30000)

15. Researchers: Gillies MC

<u>Title:</u> Comparison of Müller cells isolated from the human macula and peripheral retina. <u>Source</u>: Ophthalmic Research Institute of Australia 2015 (\$50 000)

16. <u>Researchers:</u> Gillies MC

<u>Title:</u> University of Sydney Equipment Grant, *NGC QUEST 10 plus Chromatography System* <u>Source</u>: Equipment Grant, The University of Sydney 2015 (\$74,679)

17. Researchers: Gillies MC, Zhu L

<u>Title:</u> The novel treatment of retinal diseases targeting at Retinol Binding Protein 3 dysregulation. <u>Source</u>: Ophthalmic Research Institute of Australia 2014 (\$50 000)

18. Researchers: Gillies MC

<u>Title:</u> The contribution of Muller cell dysfunction to retinal neuronal and vascular pathology <u>Source:</u> Bridging Support Grant, The University of Sydney Jan 2014-Dec 2014 (\$30,000)

- <u>Researchers</u>: Gillies MC, Shen W, McAvoy J, Zhu L <u>Title</u>: The contribution of aberrant Wnt signalling to neuronal and vascular pathology in retinal disease <u>Source</u>: NHMRC Project Grant # APP1050373: 2013-2015 (\$541,967)
- <u>Researchers</u>: Gillies MC, Shen W, Barnett N. <u>Title:</u> Glial-Neuronal-Vascular Interactions In A Novel Transgenic Model Of Muller Cell Dysfunction <u>Source</u>: NHMRC Project Grant #APP1028393: 2012-2014 (\$605,355)
- 21. <u>Researchers</u>: Gillies MC <u>Title:</u> Practitioner Fellowship - PF Level 1 <u>Source:</u> NHMRC Practitioner Fellowship: 2011-2015 (\$428,869)
- <u>Researchers:</u> Gillies MC <u>Title:</u> Role of Muller glial dysfunction in retinal diseases <u>Source:</u> DVC Research/Bridging Support Grant, The University of Sydney APP#1008872: Jan 2011-Dec 2011 (\$50,000)
- <u>Researchers:</u> Gillies MC, McAllister I, Morlet N and Keeffe J. <u>Title:</u> Ongoing prospective audit using high quality data and database linkage to improve the outcomes of macular disease. Source: NHMRC Project Grant #632663: 2010-2012 (\$813,550)
- 24. <u>Researchers:</u> Gillies MC, Kaines A and Fraser-Bell S. <u>Title:</u> Clinical trial of intravitreal injections of dexamethasone vs bevacizumab in diabetic foveal oedema resistant to laser. <u>Source:</u> NHMRC Project Grant #632667: 2010-2012 (\$324,375)
- <u>Researchers:</u> Gillies MC and Shen WY.
   <u>Title:</u> Regulation of bone marrow derived progenitor cells for diabetic retinopathy. <u>Source:</u> NHMRC Project Grant #632839: 2010-2012 (\$427,175)

- <u>Researchers:</u> Burdon K, Craig J, Gillies MC, Petrovsky N,Daniell M and Charlesworth J. <u>Title:</u> A genome-wide association scan to identify genetic risk factors for sight threatening diabetic retinopathy. Source: NHMRC Project Grant #595918.2010-2012 (\$952,688)
- <u>Researchers</u>: Shen W and Gillies MC <u>Title</u>: The use of a digital retinal camera to monitor vascular repair by bone marrow progenitor cells in diabetic retinopathy <u>Source</u>: Rebecca L. Cooper Medical Research Foundation 2007 (\$20 000).
- 28. <u>Researchers:</u> Gillies MC, Zhu M <u>Title</u>: Extension of a clinical trial of intravitreal triamcinolone for diabetic macular oedema (TDMX study) Source: NHMRC Project Grant #402573 :2006 - 2008 (\$164,288)
- 29. <u>Researchers</u>: Gillies MC, Wong TY, McAllister I <u>Title</u>: A multicentre randomised clinical trial of laser treatment plus intravitreal triamcilone for diabetic macular oedema <u>Source</u>: NHMRC Project grant #352312 : 2005 – 2008 (\$512,500)
- <u>Researchers:</u> Gillies MC, Windsor M, Hunyor A, Len A <u>Title:</u> The role of wnt signaling in the pathogenesis of diabetic retinopathy <u>Source</u>: Ophthalmic Research Institute of Australia 2007 (\$40 000)
- 31. <u>Researchers:</u> Gillies MC, Windsor M, Hunyor A, Len A <u>Title</u>: Proteomic analysis of a library of vitreous samples to study abnormal protein profiles in eyes with diabetic retinopathy <u>Source</u>: Ophthalmic Research Institute of Australia 2006 (\$40 467)
- 32. <u>Researchers:</u> Gillies MC, Larsson J, Windsor M <u>Title</u>: In vivo studies of intravitreal triamcinolone acetonide (IVTA) treatment of retinopathy in the diabetic rat <u>Source</u>: Ophthalmic Research Institute of Australia/Royal Australian and New Zealand College of Ophthalmologists Eye Foundation 2005 (\$32 500)
- 33. <u>Researcher</u>: Gillies MC
   <u>Equipment</u>: HRA2 fundus camera
   <u>Source</u>: Sydney Eye Hospital Foundation 2006 (\$160 000)
- <u>Researcher</u>: Gillies MC <u>Title</u>: A randomized clinical trial of intravitreal Triamcinolone for diabetic macular oedema <u>Source</u>: Ophthalmic Research Institute of Australia 2004 (\$30 000)
- <u>Researchers</u>: Gillies MC, Sutter F <u>Title</u>: A randomized clinical trial of intravitreal Triamcinolone for diabetic macular oedema <u>Source</u>: Juvenile Diabetes Research Foundation (#1-2003-767) 2003-2005 (US\$110 000)
- 36. <u>Researchers</u>: Gillies MC and Sutter F <u>Title</u>: Triamcinolone for diabetic macular oedema study <u>Source</u>: Sydney Eye Hospital Foundation 2003 (\$30 000)

37. <u>Researchers</u>: van Reyk D and Gillies MC

<u>Title</u>: Oxidative stress, tyrosine phosphorylation and vascular permeability in diabetic retinopathy. <u>Source</u>: Diabetes Australia Research Trust 2002 (\$38 526)

- <u>Researcher</u>: Gillies MC <u>Title</u>: The effect laser treatment on retinal vascular permeability <u>Source</u>: Ophthalmic Research Institute of Australia 2002 (\$41 000)
- <u>Researcher</u>: Gillies MC <u>Equipment</u>: Optical Coherence Tomographer <u>Source</u>: Sydney Eye Hospital Foundation 2002 (\$95 000)
- <u>Researchers</u>: Gillies MC, Wyndham J, Collier S <u>Title</u>: The effect matrix metalloproteinases on the permeability of retinal vascular endotheial cells in vitro <u>Source</u>: Ophthalmic Research Institute of Australia 2001 (\$34 000)
- <u>A1.</u> <u>Researchers</u>: Eutick M, Penfold P, Gillies MC, Bilson F <u>Title</u>: Development of intravitreal triamcinolone for ARMD <u>Source</u>: COMET (ref #243) Australian Federal Government Commerce Development Scheme 2000 (\$100 000)
- 42. <u>Researchers</u>: Gillies M, Luo W <u>Title</u>: Data analysis of the intravitreal triamcinolone study <u>Source</u>: Sydney Eye Hospital Foundation 2000 (\$48 000)
- 43. <u>Researchers</u>: Gillies MC

<u>Title</u>: The effect of retinal laser treatment on the permeability of retinal capillary endothelial cells in vitro. <u>Source</u>: University of Sydney Research Grants Scheme 2000 (\$20 000)

- 44. <u>Researcher</u>: Gillies MC <u>Title</u>: The effect of retinal laser treatment on the permeability of retinal capillary endothelial cells in vitro. <u>Source</u>: Diabetes Australia Research Trust 2000 (\$34 000)
- <u>Researchers</u>: McAllister I, Mitchell P, Gillies MC <u>Title</u>: Chorioretinal anastamosis for central retinal vein occlusion <u>Source</u>: NHMRC 2000-2002 (\$24 000)
- <u>Researcher</u>: Gillies MC <u>Title</u>: Blood-retinal barrier permeability and tyrosine phosphorylation of junctional complexes <u>Source</u>: NHMRC 1997-1999 (\$143 597)
- <u>Researchers</u>: Gillies MC, Hunyor A, Billson F, Penfold P, Simpson J <u>Title</u>: Intravitreal triamcinolone for exudative age-related macular degeneration <u>Source</u>: PHRDC 1997-1999 (\$140 325)
- <u>Researcher</u>: Gillies MC <u>Title</u>: The role of protein kinase C activation in diabetic retinopathy Source: Ophthalmic Research Institute of Australia 1997 (\$46 000)
- 49. <u>Researcher</u>: Gillies MC <u>Title</u>: The role of protein kinase C activation in diabetic retinopathy <u>Source</u>: Diabetes Australia Research Foundation 1997 (\$15 000)

50. <u>Researcher</u>: Gillies MC

<u>Title</u>: Effect of tyrosine phosphorylation of tight junction associated proteins on the permeability of retinal capillary endothelial cells in vitro <u>Source</u>: Ophthalmic Research Institute of Australia 1996 (\$31000)

51. Researcher: Gillies MC

<u>Title</u>: Effect of high glucose on an in vitro model of the blood-retinal barrier <u>Source</u>: Ophthalmic Research Institute of Australia 1995 (\$14 500)

- 52. <u>Researcher</u>: Gillies MC <u>Title</u>: Effect of high glucose on an in vitro model of the blood-retinal barrier Source: Kellion and Diabetes Australia Research Foundation 1995 (\$30 500)
- 53. <u>Researchers</u>: Taylor HR and Gillies MC <u>Title</u>: The effect of topical interferon alpha 2b on fibrosis after excimer laser photorefractive keratectomy in humans <u>Source</u>: Schering Plough Corporation 1994 (\$30 000)
- 54. <u>Researchers</u>: Gillies MC, Goldberg I, Brookes A <u>Title</u>: The effect of subconjunctival interferon alpha 2b on fibrosis after glaucoma surgery in humans <u>Source</u>: Schering Plough Corporation 1994 (\$100 000)
- 55. <u>Researchers</u>: Gillies MC, Morlet N, Maloof A. <u>Title</u>: The effect of topical interferon alpha 2b on fibrosis after excimer laser photorefractive keratectomy in rabbits <u>Source</u>: Schering Plough Corporation 1993 (\$20 000)
- <u>Researcher</u>: Gillies MC <u>Title</u>: An in vitro model of the blood-retinal barrier <u>Source</u>: Centenary Foundation, Eastern Area Health Service 1992 (\$14 000)
- 57. Researcher: Gillies MC

<u>Title</u>: Effect of high glucose on an in vitro model of the blood-retinal barrier. <u>Source</u>: Mather Trust Fund UNSW 1992 (\$8 000)

- <u>Researcher</u>: Gillies MC <u>Title</u>: The effect of interferon alpha 2 on ocular fibroblast proliferation in vitro <u>Source</u>: Schering Plough Corporation 1992 (\$15 000)
- 59. <u>Researcher</u>: Gillies MC <u>Title</u>: An in vitro model of the blood-retinal barrier <u>Source</u>: Juvenile Diabetes Foundation Australia 1991 (\$24 000)
- 60. <u>Researchers</u>: Su T and Gillies MC

<u>Title</u>: In vitro culture of bovine and human retinal capillary endothelium and pericytes <u>Source</u>: Ely Lily Post Graduate Medical Research Fellowship 1990 (\$30,000) EQUIPMENT GRANTS - Awarded to SSI since 2000, applicant was a CI on each

# University of Sydney Major Equipment scheme

2001 - Molecular Biology Workstation, \$55,000

- 2002 Confocal Microscope, \$98,600
- 2003 Tissue Processor and Embedding Centre, \$36,500
- 2006 MALDI TOF Mass Spectrometer, \$147,000
- 2007- New Laboratory Construction (top floor central block), \$200,000

### NHMRC equipment grants

- 2002 Rotary and Manual Microtomes, \$16,040
- 2004 Inverted Fluorescence Microscope Workstation, \$31,694
- 2005 High Pressure Liquid Chromatography (HPLC) system, \$72,790
- 2007 Tecan Infinite M200 monochromator microplate reader and detector plus software, \$47,628

### Sydney Eye Hospital Foundation

- 2002 Confocal Microscope, \$33,780
- 2004 Inverted Fluorescence Microscope Workstation, \$24,588
- 2006 MALDI TOF Mass Spectrometer, \$85,000

### Ramaciotti Foundations

- 2002 Confocal Microscope, \$15,000
- 2004 Tissue Processor and Embedding Centre, \$30,000

### Honda Foundation

2004 - Inverted Fluorescence Microscope Workstation, \$13,302

Lions NSW-ACT Save Sight Foundation

- 2001 Molecular Biology Workstation, \$46,861
- 2006 Syngene gel documentation system, \$80,000

# **Rebecca Cooper Foundation**

2004 - Factors involved in vascularisation, \$12,894

- 2005 MALDI TOF Mass Spectrometer, \$15,000
- 2006 Proteomics based investigations, \$20,000

**Trust Foundation Ltd** 

2007 - Sorvall WX90 floor standing ultracentrifuge, \$20,000

### **HIGHER DEGREE RESEARCH STUDENTS**

Mariana Tretiach Svetlana Cherepanoff Sook Chung Nathan Coorey Narelle Jay Goff Quin Xinyuan Zhang Daniel Barthelmes Hemal Metha (MD) Martin Lee (Masters) Ling Zhu (PostDoc) Ting Zhang (PostDoc) Vincent Daien (PostDoc)

### MACULA RESEARCH GROUP STAFF

Director: Professor Mark C Gillies MB BS, PhD, FRANZCO

#### Fight Retinal Blindness! (FRB!) Project Team

	1
Dymow Barbosa Jr.	Project Manager
BInfoSys (SoftEng), PMP,	, ,
Vincent Daien	International
MD Ophthalmology, PhD Epidemiology	Collaborator (France)
Marco Garcia	Software Engineer
BInfoSys (SoftEng), MIT	Software Engineer
Robert Medynski	Project Officer
BScIT	
Suzanne Habjan	Project Officer
BSc (Hons), PhD	in oject onicer
Myra Cheng	Research Administration
LLB, MHL	Officer

Vuong Nguyen	Biostatistician/Data
BSc, PhD (Biology)	Analyst

# Clinical Trials/Research Unit

	Clinical Research
BSc (Applied Vision Sciences, Orthoptics)	Orthoptist
Dr Elisa Cornish	Medical Retina Fellow
BMedSci (Hons), MBBS, FRANZCO	Neulcal Neulla Fellow
Dr Michael Chilov	Medical Retina Specialist
BOptom (Hons), MBBS (Hons), MPH (Hons), FRANZCO	
A/Prof Samantha Fraser-Bell	Medical Retina Specialist
MBBS BSc (Med), MHA, MP, FRANZCO,	
Dr Alex Hunyor	Vitreoretinal Surgeon
MBBS (Hons), FRANZCO	
Ms Sharon McKenzie	Clinical Research Nurse
Registered Nurse	
Ms Liza Shilpakar	Clinical Research Nurse
Registered Nurse	
A/Prof Matthew Simunovic	Vitreoretinal Surgeon
MB BChir, PhD, FRANZCO	
Dr Richard Symes	Medical Retina Specialist
BMedSci (Hons), MB BS, FRCOphth, FRANZCO	
Prof Stephanie Watson	Corneal Specialist
BScMed (Hons), MBBS (Hons), PhD, FRANZCO	
Dr Shaan Wryasaputra	Medical Retina Fellow
MBBS, FRCSEd Ophthal,	

<b>Ms Maria Williams</b> RN BN BA GDipN (Acute Care), MBA	Clinical Research Unit Manager / Clinical Research Nurse
Ms Clara Wongso	Clinical Research
BSc (Applied Vision Sciences, Orthoptics)	Orthoptist
<b>Ms Stella Xu</b>	Clinical Research
BHSc, MCVS	Orthoptist
<b>Ms Winnie Zhang</b> BSpHLSc, MOrth	Clinical Research Unit Team Leader / Clinical Research Orthoptist

# Laboratory Research Unit

Weiyong Shen	Senior Research Fellow
MD, PhD	Senior Research renow
Ling Zhu	Postdoctoral Research
PhD	Fellow
Ting Zhang	Postdoctoral Research
MD, PhD	Associate
Jiawen Fan	Visiting Scholar
MD, PhD	
So-Ra Lee	Research Assistant
BSc	
Ashish Easow Mathai	Research Assistant
BSc (Hons)	
Rui Zhang	PhD Candidate
MD	
Xiaoxue Zeng	Visiting Postgraduate Student
	Student

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**Professor Mark Gillies** Director, Macula Research Group Save Sight Institute University of Sydney