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Wednesday, 30 April 2025

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Professional Development Award is Officially Open!

We are excited to announce that applications for the ACDS Professional Development Award for 2025 is officially open!

We will be offering a \$2000 travel award for a PhD student or ECR to undertake national or international professional development-related activities!

Applications will **close at 5 pm (AEST) on June 6th**, and successful applicants will be announced in early July.

Be sure not to miss this opportunity! For more information on the award and how to apply, please click <u>here</u>.

ACDS Mentorship Program - Rapid Fire Workshop Series

Earlier this month, we were fortunate to have Dr. Kim Newton from Genentech to share her experience and insights on working in industry, in the first 'Rapid Fire' Professional Development Workshop!

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in the upcoming workshop on May 28th, 2025.

- ◆ Workshop 2: Conflict Resolution Prof. James Murphy, WEHI
- Wednesday, May 28th
- 2:00-2:30 AM AEDT

[This event is exclusive for members who have signed up for the Mentorship Programme]



Perspectives on navigating conflicts effectively within academic/workplace settings. Prof. James Murphy will discuss strategies for managing disagreements over project direction, resolving disputes when supervisors restrict conference participation, and dealing with difficult conversations surrounding authorship for publications. Topic in this session will help you to apply to other conflicting situations such as interpersonal challenges with lab members.

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International Cell Death Seminar



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Society in association with CDD press





Presenting live across Australia & Europe! 4:30 - 6:40pm AEST, 8:30 - 10:40am CEST

Join us on Zoom: https://latrobe.zoom.us/j/82387995734



Don't miss the first edition of our 2025 International Cell Death Seminar series, held in collaboration with the European Cell Death Organization (ECDO) and CDDpress on Wednesday 7th May, starting 4:30pm AEST / 8:30am CEST.

We have a fantastic lineup of the following speakers:

- Dr Kate Wickliffe, Genentech (USA)
- Dr Rebekka Lambrecht, University of Konstanz (DE) & Weizmann Institute of Science (IS)
- Prof Si-Ming Man, John Curtin School of Medical Research, Australian National University (AUS)
- Corinna König, Otto von Guericke University, Magdeburg (DE)

Join us on Zoom by clicking <u>here</u>. Hope to see you there!

Dr. Georgia Atkin-Smith wins the Early Career Research Award from the Biochemical Society!

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Heartiest congratulations to ACDS President Dr. Georgia Atkin-Smith for winning the Early Career Research Award from the Biochemical Society! With her expertise in high-resolution imaging techniques, Georgia continues to push the boundaries of cell death and cancer research. We are immensely proud of your achievement!

Featured Scientist: Dr. Pooranee Morgan

This month, we are featuring our very own ACDS Communications Officer for Social Media, Dr. Pooranee Morgan.

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Getting to know Pooranee

I am a postdoctoral researcher in the Haematopoiesis and Leukocyte Biology laboratory at the Baker Heart and Diabetes Institute (Melbourne), working under the mentorship of Prof. Andrew Murphy. I completed a Bachelor of Biomedicine at the University of Melbourne, followed by an Honours year at La Trobe University. In 2019, I commenced my PhD with a joint La Trobe—Baker Institute Scholarship under the supervision of Dr Graeme Lancaster and Prof. Murphy, investigating how lipid diversity influences immune cell fate during ferroptosis.

My research focuses on ferroptosis, a regulated form of lipid peroxidation-driven cell death, and how the unique lipid composition of immune cells determines their susceptibility to this process. I use a combination of approaches to address my research including in vitro and in vivo models, dietary interventions, flow cytometry, and mass spectrometry-based lipidomics. Through this work, I aim to develop lipid-targeting strategies to enhance immune cell survival in chronic inflammatory diseases and improve the durability of cell-based therapies, including those used in cancer.

- 2. Swetha Jinson, Ziyang Zhang, Graeme I Lancaster, Andrew J Murphy, **Pooranee K Morgan**, Iron, lipid peroxidation, and ferroptosis play pathogenic roles in atherosclerosis, Cardiovascular Research, Volume 121, Issue 1, January 2025, Pages 44–61, https://doi.org/10.1093/cvr/cvae270
- 3. **Morgan PK**, Huynh K, Pernes G, Miotto PM, Mellett NA, Giles C, Meikle PJ, Murphy AJ, Lancaster GI. Macrophage polarization state affects lipid composition and the channeling of exogenous fatty acids into endogenous lipid pools. J Biol Chem. 2021 Dec;297(6):101341. doi: 10.1016/j.jbc.2021.101341. Epub 2021 Oct 23. PMID: 34695418; PMCID: PMC8604758.

We asked Pooranee a few questions about her research career

What motivates you to get into the lab?

Honestly? Sometimes it's just the promise of random coffee chats with my lab mates and the hope that my cells haven't died overnight—and in some experiments, the hope is that they've died (haha). But in all seriousness, I genuinely love the problem-solving side of science - the little puzzle pieces that slowly start to make sense. It's weirdly satisfying when an experiment finally works after weeks of troubleshooting (and the occasional mild existential crisis).

What has been the biggest obstacle/hurdle you've overcome in your career, and what advice would you give to up-and-coming cell death researchers?

One of the biggest hurdles I've faced has been learning how to communicate effectively—both in presenting my science and in speaking up during challenging conversations. Early in my career, I found public speaking incredibly intimidating. Whether it was giving talks at lab meetings or presenting at seminars and conferences, I often felt anxious and underprepared, convinced that everyone else seemed more confident and articulate. Over time, though, I've made progress by practising consistently and deliberately putting myself in uncomfortable situations - like signing up for conference presentations. I won't say I'm 100% confident now (haha), but I'm definitely in a better place than I was.

At the same time, I also struggled with one-on-one communication. As a

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I've come to realise that clarity, confidence, and open dialogue are essential—not just for career growth, but for building supportive, trusting relationships. I've been lucky to work with supervisors who encouraged open communication, but it took time (and a few awkward conversations) to understand that they can't help if they don't know what's going on.

My advice? Treat communication like any other skill - it improves with practice. Put yourself in uncomfortable situations: sign up for talks, ask questions at seminars, or volunteer for presentations. It might feel awkward at first, but growth rarely happens inside your comfort zone. And don't wait for the "perfect" idea or time to speak up, clarity often comes after you start the conversation, not before.

What is your favourite form of cell death and why?

Ferroptosis. Hands down. It's moody, dramatic, and totally misunderstood... some researchers don't even believe it's real. What's not to love? It's not your "classic" form of cell death. No caspases. No neat apoptotic packaging. Instead, it's all about oxidative chaos, lipid peroxidation, and iron-fuelled drama. Sure, it can be a bit annoying at times as there are so many antioxidative mechanisms that might be playing a role, but that's part of the fun—figuring out what's helping and what's hurting. And honestly, as someone who works with lipids, it was always going to be ferroptosis.

What do you enjoy doing for fun or in your spare time?

Outside the lab, in my spare time, I'm a big fan of doing absolutely nothing and just lazing around with my dog. After a typical workday, you'll often hear me say, "I need to go home to walk my dog"—it's become a running joke in our lab, haha. I also love catching up with friends over exercise and food, going for long walks (mostly for the snacks at the end), and unwinding with some trashy reality TV to give my science brain a break. And in all of this, if it involves outdoor seating, my dog is always there too.

ACDS Member Publications

Published a cell death paper recently? Let us know and we'll list it here

Payne NL, Pang SHM, **Freeman AJ**, **Ozkocak DC**, Limar JW, Wallis G, Zheng D, Mendonca S, **O'Reilly LA**, **Gray DHD**, **Poon IKH**, **Heng TSP**. Proinflammatory cytokines sensitise mesenchymal stromal cells to apoptosis. Cell Death Discov. 2025 Mar 28;11(1):121. doi: 10.1038/s41420-025-02412-0. PMID: 40148285; PMCID: PMC11950399.

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110111 discovery to drug development. Celi Death Differ. 2023 Apr. 9. doi. 10.1036/541416-023 01481-z. Epub ahead of print. PMID: 40204952.

Xiong L, Diwakarla S, Chatzis R, Artaiz O, Macowan M, Zhang S, Garnham A, **Morgan PK**, Mellett NA, Meikle PJ, Lancaster GI, Marsland BJ, Nutt SL, Seillet C. Acute exposure to high-fat diet impairs ILC3 functions and gut homeostasis. Immunity. 2025 Apr 9:S1074-7613(25)00136-0. doi: 10.1016/j.immuni.2025.03.017. Epub ahead of print. PMID: 40233759.

Jinson S, Zhang Z, Lancaster GI, **Murphy AJ**, **Morgan PK**. Iron, lipid peroxidation, and ferroptosis play pathogenic roles in atherosclerosis. Cardiovasc Res. 2025 Apr 15;121(1):44-61. doi: 10.1093/cvr/cvae270. PMID: 39739567.

Roeck BF, Lotfipour Nasudivar S, Vorndran MRH, Schueller L, Yapici FI, Rübsam M, von Karstedt S, Niessen CM, **Garcia-Saez AJ**. Ferroptosis spreads to neighboring cells via plasma membrane contacts. Nat Commun. 2025 Mar 26;16(1):2951. doi: 10.1038/s41467-025-58175-w. PMID: 40140422; PMCID: PMC11947162.

Umargamwala R, Nicolson S, Manning J, Carosi JM, **Kumar S**, **Denton D**. Identification of new candidates regulating autophagy-dependent midgut degradation in Drosophila melanogaster. Cell Death Discov. 2025 Apr 16;11(1):181. doi: 10.1038/s41420-025-02474-0. PMID: 40240351; PMCID: PMC12003636.

Ivanisenko NV, **König C**, Hillert-Richter LK, Feoktistova MA, Pietkiewicz S, Richter M, Panayotova-Dimitrova D, Kaehne T, Lavrik IN. Oligomerised RIPK1 is the main core component of the CD95 necrosome. EMBO J. 2025 Apr 16. doi: 10.1038/s44318-025-00433-0. Epub ahead of print. PMID: 40240880.

Thomas BJ, Kan-O K, Gantier MP, Simpson I, Chitty JG, Lam M, Dousha L, **Gottschalk TA**, **Lawlor KE**, **Tate MD**, Ruwanpura S, Seow HJ, Loveland KL, Deshpande S, Li X, Hamza K, King PT, Elias JA, Vlahos R, Bourke JE, Bardin PG. Pirfenidone Mitigates TGF-β-induced Inflammation Following Virus Infection. Am J Respir Cell Mol Biol. 2025 Apr 16. doi: 10.1165/rcmb.2024-0433OC. Epub ahead of print. PMID: 40239009.

Spaan AN, Boisson B, Masters SL. Primary disorders of polyubiquitination: Dual roles in autoinflammation and immunodeficiency. J Exp Med. 2025 May 5;222(5):e20241047. doi: 10.1084/jem.20241047. Epub 2025 Apr 15. PMID: 40232244; PMCID: PMC11998746.

Hall-Younger E, Tait SW. Mitochondria and cell death signalling. Curr Opin Cell Biol. 2025 Apr 10;94:102510. doi: 10.1016/j.ceb.2025.102510. Epub ahead of print. PMID: 40215948.

Ros U, Martinez-Osorio V, Valiente PA, Abdelwahab Y, Gojkovic M, Shalaby R, Zanna S, Saggau J, Wachsmuth L, Nemade HN, Zoeller J, Lottermoser H, Chen YG, Ibrahim M, Kelepouras K, Vasilikos L, Bedoya P, Espiritu RA, Müller S, Altmannova V, Tieleman DP, Weir J, Langer J, Adam M, Walczak H, Wong WW, Liccardi G, Mollenhauer M, Pasparakis M, Peltzer N, **García-Sáez AJ**. MLKL activity requires a splicing-regulated, druggable intramolecular interaction. Mol Cell. 2025 Apr 17;85(8):1589-1605.e12. doi: 10.1016/j.molcel.2025.03.015. Epub 2025 Apr 9. PMID: 40209701.

Gong JN, **Djajawi TM**, **Moujalled DM**, Pomilio G, Khong T, Zhang LP, Fedele PL, Low MS, Anderson MA, Riffkin CD, **White CA**, Lan P, **Lessene G**, **Herold MJ**, **Strasser A**, Spencer A, Grigoriadis G, Wei AH, **van Delft MF**, Roberts AW, **Huang DCS**. Re-appraising assays on permeabilized blood cancer cells testing venetoclax or other BH3 mimetic agents selectively targeting pro-survival BCL2 proteins. Cell Death Differ. 2025 Apr 9. doi: 10.1038/s41418-025-01487-7. Epub ahead of print. PMID: 40204951.

Wang XS, Jiou J, Cerra A, Cobbold SA, Jochem M, Mak KHT, Corcilius L, **Silke J**, Payne RJ, Goddard-Borger ED, Komander D, Lechtenberg BC. The RBR E3 ubiquitin ligase HOIL-1 can ubiquitinate diverse non-protein substrates in vitro. Life Sci Alliance. 2025 Apr 1;8(6):e202503243. doi: 10.26508/lsa.202503243. PMID: 40169258; PMCID: PMC11962058.

Lancaster Gl, **Murphy AJ**. GPX4 methylation puts a brake on ferroptosis. Nat Cell Biol. 2025 Apr;27(4):556-557. doi: 10.1038/s41556-025-01640-x. PMID: 40119200.

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Lancaster GI, **Murphy AJ**. Do physiological changes in fatty acid composition alter cellular ferroptosis susceptibility and influence cell function? J Lipid Res. 2025 Apr;66(4):100765. doi: 10.1016/j.jlr.2025.100765. Epub 2025 Feb 26. PMID: 40021010; PMCID: PMC11981815.

Smarduch S, Moreno-Velasquez SD, Ilic D, Dadsena S, Morant R, Ciprinidis A, Pereira G, Binder M, **García-Sáez A**J, Acebrón SP. A novel biosensor for the spatiotemporal analysis of STING activation during innate immune responses to dsDNA. EMBO J. 2025 Apr;44(7):2157-2182. doi: 10.1038/s44318-025-00370-y. Epub 2025 Feb 21. PMID: 39984755; PMCID: PMC11962129.

Champion O, Maïga S, Antier C, Dousset C, Moreau-Aubry A, Bellanger C, Guillonneau F, Descamps G, Moreno JA, Kwon O, Lilli NL, Moreau P, Chiron D, Pellat-Deceunynck C, Touzeau C, **Gomez-Bougie P**. VDAC2 primes myeloma cells for BAK-dependent apoptosis and represents a novel therapeutic target. Leukemia. 2025 Apr;39(4):995-1000. doi: 10.1038/s41375-025-02523-8. Epub 2025 Feb 6. PMID: 39915649.

Hsu AT, Bugajev V, **Gottschalk TA**, Demkova L, Potuckova L, Draberova L, Bambouskova M, Hagemann P, O'Brien CA, Riecan M, Kuda O, Tsantikos E, Draber P, Wright MD, van Spriel AB, Hibbs ML, Halova I. Tetraspanin CD53 Promotes Inflammation but Restrains Mucus Production in a Mouse Model of Allergic Airway Inflammation. Allergy. 2025 Apr;80(4):1127-1131. doi: 10.1111/all.16426. Epub 2024 Dec 9. PMID: 39651606; PMCID: PMC11969303.

Davies LT, **Ganesen R**, Toubia J, Hong SH, **Kumar Kc S**, Oehler MK, Ricciardelli C, Szili EJ, **Robinson N**, Pitman MR. Plasma-activated media selectively induces apoptotic death via an orchestrated oxidative stress pathway in high-grade serous ovarian cancer cells. Mol Oncol. 2025 Apr;19(4):1170-1187. doi: 10.1002/1878-0261.13768. Epub 2024 Dec 3. PMID: 39626867; PMCID: PMC11977661.

Reygaerts T, Gray PE, **Masters SL**. Comment on: Pyrin variant E148Q potentiates inflammasome activation and the effect of pathogenic mutations in cis: reply. Rheumatology (Oxford). 2025 Apr 1;64(4):2329-2330. doi: 10.1093/rheumatology/keae510. PMID: 39292601.

Monson EA, **Loterio RK**, Roby JA, Adhikari A, Bull RA, Carr JM, Chatzileontiadou DSM, Cheng CX, Coulibaly F, Davis SK, Deerain JM, Douglas MW, Drummer HE, Eyre NS, Freppel W, Gowripalan A, Grant EJ, Gras S, Guthmiller JJ, Herrero LJ, Hesping E, Horsburgh BA, Hyde JL, Koutsakos M, Mackenzie JM, Mahar JE, McCoullough LC, McMillan CLD, Modhiran N, Parry RH, Purcell DFJ, Rawle DJ, Slonchak A, Speck PG, Tachedjian G, Tu T, Moseley GW, Fraser JE, **Tate MD**. Twelfth scientific biennial meeting of the Australasian Virology Society: AVS12 2024. J Virol. 2025 Apr 25:e0225524. doi: 10.1128/jvi.02255-24. Epub ahead of print. PMID: 40277357.

Hos NJ, Fischer J, Murthy AMV, Hejazi Z, Krönke M, Hos D, **Robinson N**. P62 inhibits IL-1β release during *Salmonella* Typhimurium infection of macrophages. Front Cell Infect Microbiol. 2025 Apr 10;15:1495567. doi: 10.3389/fcimb.2025.1495567. PMID: 40276384; PMCID: PMC12018378.

Hsu AT, O'Donoghue RJJ, Tsantikos E, **Gottschalk TA**, **Borger JG**, Gherardin NA, Xu C, Koay HF, Godfrey DI, Ernst M, Anderson GP, Hibbs ML. An unconventional T cell nexus drives HCK-mediated chronic obstructive pulmonary disease in mice. EBioMedicine. 2025 Apr 16;115:105707. doi: 10.1016/j.ebiom.2025.105707. Epub ahead of print. PMID: 40245497.

Jeznach A, Sidor-Dzitkowska K, Bandyszewska M, Grzanka M, Popławski P, Marszalik A, Domagała-Kulawik J, Stachowiak R, Hoser G, **Skirecki T**. Sepsis-induced inflammasome impairment facilitates development of secondary *A. baumannii* pneumonia. Emerg Microbes Infect. 2025 Dec;14(1):2492206. doi: 10.1080/22221751.2025.2492206. Epub 2025 Apr 22. PMID: 40202049; PMCID: PMC12016274.

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The Cold Spring Harbor Asia conference on Cell Death and Innate Immunity will be held in Suzhou, China, located approximately 60 miles west of Shanghai. The conference will begin on the evening of Monday May 12th, and will conclude on Friday May 16th, 2025 Find out more



The 14th European Workshop On Cell Death

EWCD meetings are held bi-annually and have proved increasingly successful among the international cell death research community. Each one is held in a different European location, which is selected for its unique atmosphere. The EWCD is a broad spectrum scientific conference focussing on all aspects of cell death and lasts for four days in the spring/summer of every second year. Tjis years meeting will be held at Fuiggi, Italy from May 11th to May 16th, 2025. Find out more





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