**BRIEF CURRICULUM VITAE Professor Iain Stewart McGregor** MA (Oxon) PHD (Sydney)

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**RECENT POSITIONS**

2016-present Academic Director, Lambert Initiative for Cannabinoid Therapeutics, University of Sydney

2015-present Preclinical Director, Lambert Initiative for Cannabinoid Therapeutics, University of Sydney

2006-present Professor of Psychopharmacology, University of Sydney

2014-present NHMRC Professorial Research Fellow

2009-2013 ARC Professorial Fellow

**RESEARCH INTERESTS**

* + - * Medicinal cannabis and cannabinoids
      * Drug discovery in the treatment of anxiety, depression

and addiction

* + - * Prescription psychotropic drugs
      * Oxytocin, vasopressin and other neuropeptides in

relation to social behaviour

* + - * Novel emerging psychoactive drugs
      * Pheromones

**MEMBERSHIP OF PROFESSIONAL BODIES**

* + - * Australian Neuroscience Society
      * Fellow, International Behavioral Neuroscience Society (USA)
      * European Behavioral Pharmacology Society
      * American Chemical Society
      * International Cannabinoid Research Society

**CAREER HIGHLIGHTS**

* Appointment as Academic Director, The Lambert Initiative for Cannabinoid Therapeutics (University of Sydney) (2016)
* NHMRC Principal Research Fellowship (5 years), 2014-2018
* NHMRC Achievement Award (2007): top ranked project grant in Australia that year.
* Patent PCT/AU2016/050588: *Novel molecules for the remediation of social deficits and addictions* (2016)
* Patent 2009904810: *A Novel Therapy for Problem Drinking* (2010)
* More than 220 publications in peer-reviewed international journals
* Google Scholar metrics: H-index = 58, more than 30 publications with >100 citations
* Recent keynote/plenary talks: Rural Medicine Australia Conference, 2017 (RMA17); Biological Psychiatry Australia, 2017; International Association of Cannabis in Medicine, Cologne, 2017; International Cannabinoid Research Society, Montreal, 2017; Epilepsy Society of Australia, 2016.

**TEACHING AND SUPERVISION**

* + - * Supervisor or Associate Supervisor of 30 completed PhDs.
      * Current supervisor of 3 PhDs.
      * Supervisor of more than 70 Honours projects during career.
      * Alumni of McGregor lab include: A/Prof Jonathon Arnold (Uni of Sydney), A/Prof Jennifer Cornish (Macquarie Uni), Dr Dean Carson (postdoc Stanford), Dr Kelly Clemens (ARC DECRA fellow, UNSW).

**RECENT RESEARCH GRANTS**

* 2015-2024 *The Lambert Initiative for Cannabinoid Therapeutics*. Philanthropic gift for research into medicinal cannabinoids (with Dr David Allsop and Professor Nick Lintzeris) ($33,728,242).
* 2016-2019 *Oxytocin as a novel antagonist of the intoxicating and addictive effects of alcohol.* NHMRC Project Grant (with Prof M. Collins, Prof I. Neumann, Dr A. Clarkson and Dr M. Bowen) ($739,105)
* 2016-2018*The pharmacology and toxicity of synthetic cannabinoids.* NHMRC Project Grant (with Prof M. Kassiou and Prof Mark Connor) ($605,000)
* 2016-2018*Mechanisms underlying the repellent effects of predator odours in rodents.* ARC Discovery Project (with A/Prof M. Crowther, Prof M. Connor and Dr S. Banister) ($390,400)
* 2015-2017 *An RCT of cannabinoid replacement therapy (Sativex®) for the management of treatment-resistant cannabis dependent patients.* NHMRC Project Grant (with Prof N. Lintzeris, Dr D. Allsop, Prof J. Copeland, Dr M. Shanahan and A/Prof R. Bruno) ($762,711)
* 2015-2017*Novel therapeutics for the remediation of social deficits in psychiatric illness.* NHMRC Project Grant (with Prof M. Kassiou, A/Prof G. Hunt and Dr J. Cornish) ($579,492)
* 2014-2018 *Understanding Australia’s drug use.* NHMRC Career Award: PRF to Prof I.S. McGregor ($727,610).
* 2014-2016 *Randomised control trial of exercise for the management of cannabis withdrawal in adult humans.* NHMRC Project Grant (with Drs Lintzeris, Rooney, Allsop and Arnold) ($524,506).
* 2014-2016 *Alpha-4 containing GABA-A receptors as targets for gamma- hydroxybutyric acid (GHB)*. NHMRC Project Grant (with Dr M. Collins, A/Prof G. Hunt and Dr N. Absalom) ($590,558).

**COMMUNITY AND PROFESSIONAL SERVICE**

* Invited Lecturer, HealthEd seminars for GPs, August-November 2017 on the topic of medicinal cannabis.
* More than 50 workshops given around to Australia: *Psychopharmacology for non-medical mental health professionals –* deliveredto organizations such as Disability Queensland, NSW Correctional Services, Directions ACT. We Help Ourselves, NSW Institute of Psychiatry, National Association of Drug and Alcohol Services.
* Member of Australian Psychological Society working party: *Prescription privileges for clinical psychologists.*
* Councilor representing Australasia, *International Behavioral Neuroscience Society*
* Reviewer: *Journal of Neuroscience, Neuropharmacology, Drug and Alcohol Review, Behavioral Neuroscience, Pharmacology Biochemistry and Behavior, Neuropsychopharmacology, Neuroscience, Psychopharmacology.*
* Grant reviewer: ARC, NHMRC, Irish, Dutch, UK, NZ and EEC granting schemes.
* PhD examiner: Monash, UWS, Universities of Adelaide, Queensland and Newcastle, UNSW.
* Recent media includes appearances on *ABC Lateline, ABC News, ABC 7.30 Report, Catalyst, Channel 7 news,* ABC radio (*702*, *JJJ*, *Health Report*), *Sydney Morning Herald*, *Time*, *New Scientist* and *The Australian*.
* Expert witness and consultant in numerous legal cases.

**PUBLICATIONS (2016-2018 only)**

1. Lintzeris N, Driels J, Elias N, Arnold JC, McGregor IS, Allsop DJ.  (in press) Findings from the Cannabis as Medicine Survey (CAMS-16): an online survey of medical cannabis use in Australia. *Medical Journal of Australia.*
2. Gamage TF, Farquhar CE, Lefever TW, Marusich JA, Kevin RC, McGregor IS, Wiley JL, and Thomas BF. (in press). Molecular and behavioural pharmacological characterization of abused synthetic cannabinoids MMB- and MDMB-FUBINACA, MN-18, NNEI, CUMYL-PICA, and 5-fluoro-CUMYL-PICA. *Journal of Pharmacology and Experimental Therapeutics*.
3. Banister SD, Adams A, Macdonald C, Glass M, Boyd R, Connor M, Kevin RC, McGregor IS, Havel CM, Bright SJ, Ventura Mireia, Gil C, Barratt MJ, and Gerona RR. (in press) Detection, synthesis, and pharmacology of synthetic cannabinoid 5F-CUMYL-P7AICA, a scaffold hopping analogue of 5F-CUMYL-PICA and 5F-CUMYL-PINACA. *Drug Testing and Analysis.*
4. Banister, S. D., Olson, A., Winchester, M., Stuart, J., Edington, A. R., Kevin, R. C., ... & Gerona, R. R. (2018). The chemistry and pharmacology of synthetic cannabinoid SDB‐006 and its regioisomeric fluorinated and methoxylated analogues. *Drug testing and analysis*.
5. Everett, N. A., McGregor, I. S., Baracz, S. J., & Cornish, J. L. (2018). The role of the vasopressin V1A receptor in oxytocin modulation of methamphetamine primed reinstatement. *Neuropharmacology*.
6. Lovell, M. E., Bruno, R., Johnston, J., Matthews, A., McGregor, I., Allsop, D. J., & Lintzeris, N. (2018). Cognitive, physical, and mental health outcomes between long-term cannabis and tobacco users. *Addictive behaviors*, *79*, 178-188.
7. RussellJ, Maguire S, Hunt GE, Kesby A, Suraev A, Stuart J, Booth J and McGregor IS (2018) Intranasal oxytocin in the treatment of anorexia nervosa: Randomized controlled trial during re-feeding. *Psychoneuroendocrinology 87*, 83-92.
8. Kevin RC, Lefever TW, Snyder RW, Wiley JL, McGregor IS, Thomas BF. (2018) Kinetic and metabolic profiles of synthetic cannabinoids NNEI and MN-18. *Drug Testing and Analysis 10*(1), 137-147.
9. Parsons, M. H., R. Apfelbach, P. B. Banks, Cameron EZ, Dickman CR, Frank ASK, Jones ME, McGregor IS, McLean S., Muller-Schwarze D, Sparrow EE and Blumstein DT. (2018) Biologically meaningful scents: a framework for understanding predator-prey research across disciplines. *Biological Reviews 93*(1), 98-114.
10. Kevin RC, Lefever TW, Snyder RW, Wiley JL, McGregor IS, Thomas BF. (2017) *In vitro* and *in vivo* pharmacokinetics and metabolism of synthetic cannabinoids CUMYL-PICA and 5F-CUMYL-PICA. *Forensic Toxicology* 35: 333-347.
11. Longworth M, Banister SD, Boyd R, Connor M, McGregor IS, Kassiou M. (2017) Pharmacology of Cumyl-Carboxamide Synthetic Cannabinoid New Psychoactive Substances (NPS) CUMYL-BICA, CUMYL-PICA, CUMYL-5F-PICA, CUMYL-5F-PINACA, and Their Analogues. *ACS Chemical Neuroscience* *8*(10), 2159-2167.
12. Bakas T, van Nieuwenhuijzen PS, Devenish SO, McGregor IS, Arnold JC, Chebib M. (2017) The direct actions of cannabidiol and 2-arachidonoyl glycerol at GABAA receptors. *Pharmacological Research* 119:358-370.
13. Suraev AS, Todd L, Bowen MT, Allsop DJ, McGregor IS, Ireland C, Lintzeris N. (2017) An Australian nationwide survey on medicinal cannabis use for epilepsy: History of antiepileptic drug treatment predicts medicinal cannabis use. *Epilepsy and Behavior* 70: 334-340.
14. Kevin RC, Wood KE, Stuart J, Mitchell AJ, Moir M, Banister SD, Kassiou M and McGregor IS (2017). Acute and residual effects in adolescent rats resulting from exposure to the novel synthetic cannabinoids AB-PINACA and AB-FUBINACA. *Journal of Psychopharmacology* 31:757-769.
15. Peters ST, Bowen MT, Bohrer K, McGregor IS, Neumann ID (2017). Oxytocin inhibits ethanol consumption and ethanol-induced dopamine release in the nucleus accumbens. *Addiction Biology* 22: 702-711
16. Kevin RC, Allsop DJ, Lintzeris N, Dunlop AJ, Booth J, McGregor IS (2017) Urinary cannabinoid levels during Nabiximols (*Sativex*®)-medicated inpatient cannabis withdrawal. *Forensic Toxicology 35*(1), 33-44.
17. Arnold, J., Allsop, D., Lintzeris, N., McGregor, I. (2016). *Evidence Check: Pharmacological actions and associated therapeutic levels of phytocannabinoids*, (pp. 1 - 81). Sydney, Australia: The Sax Institute.
18. Luckett T, Phillips J, Lintzeris N, Allsop D, Lee J, Solowij N, Martin J,Lam L, Aggarwal R, McCaffrey N, Currow D, Chye R, Lovell M, McGregor IS, Agar M (2016) Clinical trials of medicinal cannabis for appetite-related symptoms from advanced cancer: A survey of preferences, attitudes and beliefs among patients willing to consider participation. *Internal Medicine Journal 46*(11), 1269-1275*.*
19. Baracz SJ, Parker LM, Suraev AS, Everett NA, Goodchild AK, McGregor IS, Cornish JL (2016) Chronic methamphetamine self-administration dysregulates oxytocin plasma levels and oxytocin receptor fibre density in the nucleus accumbens core and subthalamic nucleus of the rat. *Journal of Neuroendocrinology* 28.
20. Hicks C, Cornish JL, Baracz SJ, Suraev A, McGregor IS (2016) Adolescent pre-treatment with oxytocin protects against adult methamphetamine-seeking behavior in female rats. *Addiction Biology* 21: 304-315.
21. Karanges EA, Ramos L, Dampney B, Suraev AS, Li KM, McGregor IS, Hunt GE (2016) Contrasting regional Fos expression in adolescent and young adult rats following acute administration of the antidepressant paroxetine. *Brain Research Bulletin* 121: 246-54.
22. Brzozowska N, Li KM, Wang XS, Booth J, Stuart J, McGregor IS, Arnold JC (2016) ABC transporters P-GPand BCRP do not limit the brain uptake of the novel antipsychotic and anticonvulsant drug cannabidiol in mice. *PeerJ* 4: e2081.
23. Clarke DJ, Stuart J, McGregor IS, Arnold JC (2016) Endocannabinoid dysregulation in cognitive and stress-related brain regions in the NRG1 mouse model of schizophrenia. *Progress in Neuropsychopharmacology and Biological Psychiatry* 72: 9-15.
24. Too LK, Li KM, Suarna C, Maghzal GJ, Stocker R, McGregor IS, Hunt NH (2016) Deletion of TDO2, IDO-1 and IDO-2 differentially affects mouse behavior and cognitive function. *Behavioural Brain Research* 312: 102-17.
25. Too LK, Mitchell AJ, McGregor IS, Hunt NH (2016) Antibody-induced neutrophil depletion prior to the onset of pneumococcal meningitis influences long-term neurological complications in mice. *Brain Behavior and Immunity* 56: 68-83.
26. Banister SD, Longworth M, Kevin R, Sachdev S, Santiago M, Stuart J, Mack JB, Glass M, McGregor IS, Connor M, Kassiou M (2016) Pharmacology of valinate and tert-leucinate synthetic cannabinoids 5F-AMBICA, 5F-AMB, 5F-ADB, AMB-FUBINACA, MDMB-FUBINACA, MDMB-CHMICA, and their analogues. *ACS Chemical Neuroscience* 7: 1241-54.
27. Baracz SJ, Everett NA, McGregor IS, Cornish JL (2016) Oxytocin in the nucleus accumbens core reduces reinstatement of methamphetamine-seeking behaviour in rats. *Addiction Biology* 21:316-325.
28. Monds L, Paterson H, Ali S, Kemp R, Bryant R, McGregor IS (2016). Cortisol response and psychological distress predict susceptibility to false memories for a trauma film. *Memory* 24, 1278-86.
29. Too LK, McGregor IS, Baxter AG, Hunt NH (2016). Altered behavior and cognitive function following combined deletion of Toll-like receptors 2 and 4 in mice. *Behavioural Brain Research* 303, 1-8.
30. Kashem MA, Ahmed S, Sultana N, Ahmed EU, Pickford R, Rae C, Sery O, McGregor IS, Balcar VJ (2016) Metabolomics of neurotransmitters and related metabolites in post-mortem tissue from the dorsal and ventral striatum of alcoholic human brain. *Neurochemical Research* 41: 385-97.
31. Hicks, C., Ramos, L., Dampney, B., Baracz, S. J., McGregor, I. S., & Hunt, G. E. (2016). Regional c-Fos expression induced by peripheral oxytocin administration is prevented by the vasopressin 1A receptor antagonist SR49059. *Brain research bulletin*, *127*, 208-218.
32. Ramos, L., Hicks, C., Caminer, A., Couto, K., Narlawar, R., Kassiou, M., & McGregor, I. S. (2016). MDMA (‘ecstasy’), oxytocin and vasopressin modulate social preference in rats: a role for handling and oxytocin receptors. *Pharmacology Biochemistry and Behavior*, *150*, 115-123.
33. Jones, M. E., Apfelbach, R., Banks, P. B., Cameron, E. Z., Dickman, C. R., Frank, A., McGregor, IS... & Sparrow, E. (2016). A nose for death: integrating trophic and informational networks for conservation and management. *Frontiers in Ecology and Evolution*, *4*, 124.