| Year | Investigators | Title | About the project | Amount funded | Duration of the project |
|---|---|---|---|---|---|
| 2010 | Prof Ben Canny, Monash University<br>Prof Wayne Hodgson, Monash University<br>Dr Margaret Hay, Monash University<br>A/Prof Sally Carless, Monash University<br>Prof Ian Puddey, The University of Western Australia<br>A/Prof Annette Mercer, The University of Western Australia | A comparison of aptitude tests in predicting the performance of medical students | Primary Aim: To compare the predictive validity of UMAT vs GAMSAT vs ISAT in medical student performance at i) the transition from campus-based to clinic-based learning, and ii) end of course assessment.<br>Secondary Aim: To compare these predictive validities with those of scholastic performance and interview performance at i) the transition from campus-based to clinic-based learning, ii) end of course assessment, and iii) overall course assessment. | $25,000 + $90,000 from the UMAT Consortium | 2 years |
| 2010 | A/Prof Diann Eley, The University of Queensland<br>Prof David Wilkinson, The University of Queensland<br>Prof Malcolm Parker, The University of Queensland<br>A/Prof Raymond Peterson, The University of Queensland<br>Dr Jianzhen Zhang, The University of Queensland<br>A/Prof Raymond Tedman, Griffith University<br>Prof Simon Broadley, Griffith University<br>Dr Victoria Brazil, The University of Queensland<br>A/Prof Hamish Coates, ACER | Extending GAMSAT: Enhancing scope and validity | This project proposes to extend and enhance the understanding of the GAMSAT, its relationship to other criterion variables and its role in student selection. The study has two aims. The first aim is to establish GAMSAT as a benchmark to correlate with other measures of student academic achievement and performance. The second aim is prospective and integral to the first aim as it will establish the longitudinal tracking study and comprehensive database to allow us to test the predictive ability of the GAMSAT in conjunction with other the selection tool(s) or procedures , with criterion measures such as academic performance and professional performance throughout medical school and performance in internship and residency. | $99,525 | 3 years |
| 2012 | Dr Ruth Sladek, Flinders University<br>A/Prof Malcolm Bond, Flinders University | The Validity of Common Selection Criteria in Predicting Academic and Clinical Performance in Medicine | The proposed retrospective cohort study will evaluate the criterion related predictive validity of GAMSAT within one graduate entry medical school (Flinders University). The current entry criteria at Flinders University involve a consideration of (1) GAMSAT score, (2) grade point average (GPA), and (3) performance at a semi-structured panel interview that assesses decision making, communication, learning style, pro-social attitude, motivation, and self-management.<br>The research question to be posed is "which combination of GAMSAT, GPA and interview performance best predicts academic and/or clinical performance across the four years of our medical course"? | $54,980 | 18 months |
| 2012 | Dr Luc Le, ACER<br>Mr Sam Hambur, ACER<br>Dr Sean Pywell, ACER | GAMSAT Section 3 Sub-component Structure | The major aim of this project is to investigate Section 3 items to identify and examine those that show different psychometric properties when used in one-, two- and three-scale modes, and by doing this consider the feasibility of separating sub-components to form two or three psychometrically valid reported scales. | $22,945 | 4 months |

| 2012 | A/Prof Diann Eley, The University of Queensland<br>Prof Jill Thistlethwaite, The University of Queensland<br>A/Prof Christopher Roberts, The Universityof Sydney<br>Prof Malcolm Parker, The University of Queensland<br>Dr Mavourneen Casey, The University of Queensland<br>Ms Koshira Kumar, The University of Sydney<br>Dr Emma Bartle, The University of Queensland<br>Prof David Wilkinson, The University of Queensland | GAMSAT – beyond predictive validity: an exploration of political validity, acceptability, and educational impact | This proposal takes an innovative interpretative approach to exploring the acceptability, political validity, and educational impact of the GAMSAT from the perspective of students and other stakeholders such as medical school faculty and professional colleges. This approach proposes an alternative but robust method of exploring the validity of GAMSAT which locates selectionwithin a gate keeping role in preparing a workforce to provide safe, equitable and effective health care provision. Roberts and Prideaux (2010) have highlighted the socio-cultural considerations of using standardised tests like the GAMSAT. These considerations are recognised by most universities and are evident in their policies, for example concerning standards for rural and underserved students. Such policies raise questions about the validity itself of requiring set numerical standard for entry but then applying a calculation to promote wider access to medical school by certain groups. While this is socially and arguably even morally appropriate and necessary to broaden the opportunities for entry into medicine, it prompts discussion about the meaningfulness of performance on a test as proof of being worthy to study to be a doctor. | $99,726 | 3 years |
| --- | --- | --- | --- | --- | --- |
| 2012 | Dr Karen D'Souza, School of Medicine, Deakin University<br>A/Prof David Garne, University of Wollongong<br>Dr Ian Kerr, Griffith University | Who they are, how they fare, and where they go – a multi-centre review of selection process; medical student assessment; and location of junior doctor employment by regional post-graduate entry medical schools | The medical and lay communities are of the opinion that selection processes for entry into medical school should be capable of detecting (and excluding) students with 'major character flaws' (Rosenfeld 2012), and should choose applicants likely to be 'responsive to community needs'. However, there exists a possible paradox that 'socially acceptable selection processes (considering disadvantaged, rural or Indigenous background) may select people with lower chances of academic "success"' (Sen Gupta, Murray & Ray 2012). In this letter, Sen Gupta issued the challenge that selection processes should be capable of managing such tensions and 'count what actually counts'. Wilson (Wilson et al. 2012b) thereafter proposed that an important area for further research is to describe and quantify a school's success in meeting the health needs of its local community. This project has been designed to address such gaps in current literature. | $40,000 | 3 years |
| 2013 | Dr Ruth Sladek, Flinders University<br>A/Prof Malcolm Bond, Flinders University<br>Dr Kirsty Prior, Flinders University<br>A/Prof Annette Mercer, The University of Western Australia | Geographical reshuffling and its impact: understanding applicants' medical school preferences, interstate relocation and homesickness. | This exploratory study will investigate medical student wellbeing among successful GEMSAS applicants who relocate interstate to commence their medical education. It aims to:<br>(1) describe the potential and eventual interstate relocation using applicants' school preference data and GEMSAS place offer data;<br>(2) identify the prevalence, intensity and predictors of homesickness;<br>(3) understand the association between homesickness and psychosocial adjustment. | $82,978 | 18 months |

| 2013 | Dr Eduardo Cascallar, Assessment Group International<br>Ms Marita MacMahon Ball, ACER | Development of a predictive system to identify and select the best medical professionals using artificial neural networks | Universities are generally satisfied with their admission decision-making processes in relation to the academic capacity of the students admitted to medical school. There is however the potential to maximise the utility factor of the information universities use to select students and a growing international desire to focus on assessing, beyond the information gained in an interview, the non-cognitive skills of students admitted to a medical course. The proposed study has as its focus the use of a predictive system, a machine learning approach known as artificial neural network analysis (ANN), to identify patterns of data corresponding to "appropriate" and "inappropriate" medical school applicants. | $40,000 | 3 years |
| --- | --- | --- | --- | --- | --- |
| 2015 | A/Profr Agnes Dodds, The University of Melbourne<br>Dr Kate Reid, The University of Melbourne<br>A/Prof Annette Mercer, The University of Western Australia<br>Prof Ian Puddey, The University of Western Australia | Predicting achievement in medical school: The role of selection measures and student characteristics | To undertake the research, data on selection measures, student characteristics and course achievement will be obtained for students entering a graduate medical course at one of the nine universities named above from 2010 to 2015. This timeframe has been chosen to allow analyses of at least three complete cohorts of students. GEMSAS holds comprehensive application data (selection scores and student characteristics) for participating universities from 2009, including the pilot years of 2009 and 2010. Assessment data will be collected from the individual medical schools which agree to participate. Content and format of these data will be negotiated with the members of the Steering Committee at the initial meeting. Decisions on outcome measures will be made based on the assessment data available from each university. | $283,350.25 | 3 years |