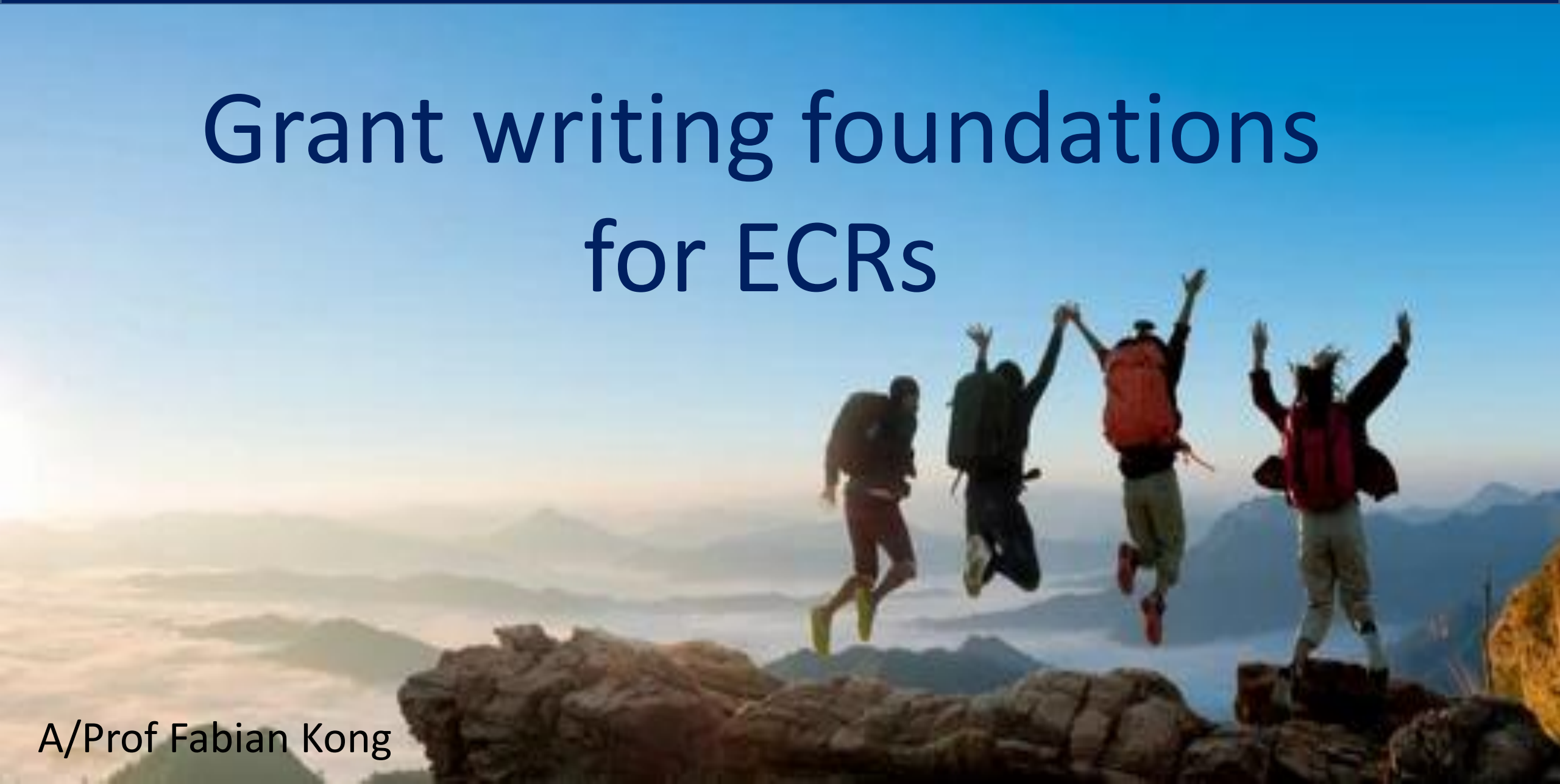
THE UNIVERSITY OF MELBOURNE
Faculty of Medicine, Dentistry and Health Sciences
Melbourne School of Population and Global Health

Grant writing foundations for ECRs



A/Prof Fabian Kong

Disclosure

- Received funds from Wintermute Biomedical
- Kong previously held consultancy with GSK

- NHMRC grants: Ideas and Investigator
- Context that reviewers spend limited time reading grant

NHMRC Funding (2024)

Ideas grants

- **10.1%** funding rate (223/2216)
- Funded CIA: 39% woman
- Mean value: **$1.23 mil**
- Mean duration: **3.7 years**

Research Area	Total funding ($mil)
Basic science	$ 199
Clinical Medicine and Science Research	$ 50
Health Services Research	$ 7
Public Health Research	$ 18

Investigator grants

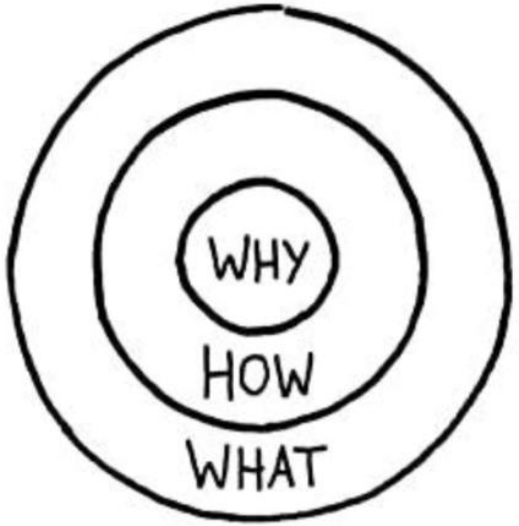
- **13.4%** funding rate (229/1715)
  - EL1 14% and EL2 12%
- Funded CIA (EL1/2): 14% / 12% female
- Grants award by research area

Research Area	% funded
Basic science	16 %
Clinical Medicine and Science Research	15 %
Health Services Research	6 %
Public Health Research	46 %

WHY are you doing the research?

The Power of Starting With WHY

https://www.youtube.com/watch?v=u4ZoJKF_VuA
Simon Sinek “start with why”



Aligns your beliefs to actions, decision you make and the story you tell (‘how’ and ‘what’)

- **Contribution**

“I want to reduce stigma..”

“I want to improve treatments for…

- **Impact**

“improve access to services”

“to cure more X”

MY VISION is to reduce oral gonorrhoea transmission and drug resistance in the population using effective, acceptable, and accessible topical preventative interventions.

Unmet need or gap?

Completeness

- Problem clearly stated
- Supporting evidence
  - Don't data dump
- Analysis of existing 'competition'
  - Where your idea sits
- Strong team

Persuasiveness

- *Patient-centric focus*
- Competitive edge
  - "Intervention cannot wait"
- Simple interventions (feasibility)
- Simple effective visuals
- Use analogies from daily life to enhance understanding e.g. targeted therapies = GPS

Impact - NHMRC

Table 1. Summary of one logic model for framing NHMRC's impact*

Impact pathway				
1. Inputs	2. Activities	3. Outputs	4. Outcomes	5. Impacts
• Financial • Material • Data and Information • Social • Corporate services	Investment	Grants for research and researchers across the health and medical research spectrum	• New knowledge, data assets, improved diagnoses, disease prevention, new treatments, building research capacity/ capability • Changes to public policy • Changes to practice – for example, clinical, environmental • Changes to health-related systems • New products and services • Improved ethical behaviour in health and medical research	• Knowledge • Health • Economy • Society
	Translation	• Involvement of end users • Evidence based guidelines and health advice • Accreditation of Research Translation Centres • Open access to NHMRC-funded research • Research Translation Symposium		
	Integrity	• Integrity frameworks • Guidance documents		

*All stages in this model can provide feedback to earlier stages.

Indicate which of the following research impact types you would like to be considered in the assessment of your application (select one or more impact types):

Knowledge impact

X Health impact

☐ **Economic impact**

☐ **Social impact**

Knowledge impact
New knowledge demonstrates benefits emerging from adoption, adaptation or use of new knowledge to inform further research, and/or understanding of what is effective.

Health impact
Improvements in health through new therapeutics, diagnostics, disease prevention or changes in behaviour; or improvements in disease prevention, diagnosis and treatment, management of health problems, health policy, health systems, and quality of life.

Economic impact
Improvements in the nation's economic performance through creation of new industries, jobs or valuable products, or reducing health care costs; improving efficiency in resource use, or improving the welfare/ well-being of the population within current health system resources. An economic impact may also contribute to social or health impacts, including human capital gains and the value of life and health.

Social impact
Improvements in the health of society, including the well-being of the end user and the community. This may include improved ability to access health care services; to participate socially (including empowerment and participation in decision making) and to quantify improvements in the health of society.

Impact - NHMRC

CATEGORY	Research Quality (35%)	Innovation & Creativity (25%)	Significance (20%)	Capability (20%)
7 Exceptional	The project aims and proposed research plan: are extremely well aligned to scheme objectives and expected outcomes are supported by an extremely well justified hypothesis/rationale are focused, well-defined, extremely coherent and have a flawless study design and approach would be extremely competitive with the best, similar research proposals internationally have extremely well identified and managed scientific and technical risks.	Relative to the research field, the planned research demonstrates extremely innovative project aims, which will result in an extremely substantial shift in the current paradigm, and/or lead to an extremely substantial breakthrough or impact in the research area.	The planned research, relative to the research field: will address an issue of critical importance to advance the research or health area (not prevalence or magnitude of the issue) will result in extremely significant outcomes in the science, knowledge, practice or policy underpinning human health issues will lead to extremely significant research outputs (intellectual property, publications, products, services, conferences, teaching aids, consulting, contract research, spin-offs, licensing etc.).	The CIA demonstrates a very strong capability to lead the team in achieving the project aims. The CI applicant team overall: has exceptional capability to execute the project and deliver outcomes. has access to exceptional technical resources, infrastructure, equipment and facilities and, if required, additional support personnel (Associate Investigators) necessary for the project. has an extremely appropriate balance of integrated expertise, experience and training that specifically targets all aspects of the proposed research, in both depth and breadth.

Focus on one main story

- Hard to describe many things & feasibility issues
- Have an endpoint: *"at the end of the grant I will have ….."*
- Simple language
  - Reviewers' may not know your topic
- Which assessment panel? Basic Sci / Clin Med Sci / Public Health / Health Services
- Submitted impact type

Indicate which of the following research impact types you would like to be considered in the assessment of your application (select one or more impact types):

Knowledge impact

X Health impact

☐ **Economic impact**

☐ **Social impact**

MY RESEARCH HAS 3 WORKPLANS:

1) **Development** of a lab-based, human like, 3D-model of oral NG infection to investigate the infection dynamics of NG in the mouth.
2) **Identification** of new non-toxic compounds that prevent oral NG in the 3D model.
3) **Feasibility and acceptability** of incorporating compounds into a topical intervention (e.g., chewing gum) to prevent oral NG among high prevalence populations such as gay men.

OUTCOME: At the end of 5 years, my program will have developed a validated model of oral NG infection to understand NG's infection dynamics and used it to identify compounds that can be used topically (e.g., a chewing gum) before and after sex to prevent oral NG infection. This work will inform the manufacture of a topical product and the design of a clinical trial to evaluate the product's effectiveness against oral NG in the population (post-investigator grant).

Impact

Use of CAPITALS for differentiation
- You can't bold/underline in SAPPHIRE

Optimising/informing treatments for STI project…

Translating the data into practice. We will convene a treatment symposium at the International Society of STD Research Congress, the key international STI conference, to discuss implementing the PK data into treatment guidelines. CIs and AIs will disseminate the results and inform guidelines in our roles on national and international committees – Fairley is involved the development and review of Australia treatment guidelines. Hocking is on the Expert Advisory Group updating the USA CDC chlamydia treatment guidelines; Unemo is involved with the WHO and European STI guidelines, Kong provides advise to the British STI guidelines; Kong, Hocking, Fairley and Unemo have undertaken consultancies for the USA National Institute for Health (NIH) to improve STI treatments through improving study design including PK data. Therefore, any important finding can be rapidly disseminated for discussion and incorporated into treatment guidelines.

Commercialisation ($$$$)…

OUTCOMES AND SIGNIFICANCE: My workplan will yield significant research, translation, and commercialisation outputs. At the end of 5 years, I will have validated a 3D, human oral tissue model of oral NG infection and used it to identify compounds for a topical intervention that can be trialled to prevent oral NG at the population level. If effective, this topical intervention could dramatically reduce NG transmission and antimicrobial resistance in the population and be a new, innovative primary prevention strategy. My 3D model has been confirmed by the University to be **patented**.

Azithromycin has been widely recommended for treating sexually transmitted infections (STIs) including chlamydia, gonorrhoea & M. genitalium, but concerns have been raised regarding its effectiveness & development of resistance. My program of work examined the effectiveness of azithromycin leading to changes in global STI treatment guidelines & practice including those of the World Health Organisation reducing global azithromycin use for STIs.

My meta-analysis of GENITAL chlamydia treatment (1; FWCI=3.8) found doxycycline should replace azithromycin as 1st line treatment & was adopted in policy & guidelines to improve cure rates (to >95%) in 4 countries (France, USA, Germany, Canada) & USA CDC treatment guidelines (2).
My meta-analysis of RECTAL chlamydia treatment (3; FWCI=4.6) also found doxycycline should replace azithromycin as 1st line treatment & changed guidelines to improve cure rates by 20% in UK (4; FWCI=6.5), Europe (5; FWCI=13.4) & WHO (6) guidelines. My rectal chlamydia RCT (7 [NEJM]; FWCI=7.0) changed AUS (8) & US guidelines (2) with doxycycline replacing azithromycin as 1st line treatment to improve cure rates by 20%. My development of a new assay to measure azithromycin levels in self-collected rectal swabs supported dosing recommendations in US Guidelines (2).

My research of azithromycin pharmacokinetics in rectal tissue (9; FWCI=1.5) & my comprehensive review of how to optimise its effectiveness using pharmacokinetics (10; FWCI=3.3) showed the importance of including drug pharmacokinetics as a critical component in clinical drug trial design (11). My work was adopted by the WHO in their gonorrhoea treatment guidelines (12; FWCI=9.2) with a shift away from using azithromycin in dual therapy (13) to prevent drug resistance & preserve its effectiveness into the future. It led to an invited editorial for Lancet ID on the lack of treatments for oral gonorrhoea (14) mirrored by my meta-analysis (15)

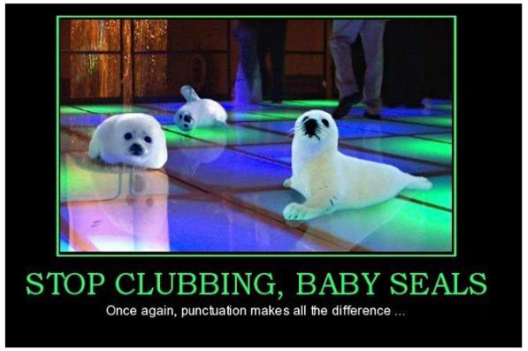
My meta-analysis for a UK govt consultancy found that a high dose, 5-day regimen of azithromycin for M. genitalium was more effective & less likely to cause resistance than a single 1g dose (16; FWCI=4.4) & changed treatment guidelines in 10 countries, including Europe (17) and UK (18).

*1st author; **national/global treatment guidelines
1) *PMID24729507 cites=119
2) **CDC PMID34292926 (ref 561, 748, 870) c=570
3) *PMID25637520 c=107
4) **UK PMID26538553 (ref 111,114); c=121
5) **Europe PMID26608577 (ref 168, 179) c=201
6) **WHO PMID27559553 (pg40)
7) *NEJM PMID34161706 c=31 (1st author my PhD student)
8) **AUS PMID36356948 (Ref 15,16,17)
9) *PMID28350806 c=42
10) *PMID30649333 c=50

Use layman's language

Simple language – pitch: dinner chat with high school cousin

- Reviewers' may not know about your topic
- Technical info in brackets - balancing act
- Get people(s) who don't know your research to read it
- Ask someone just to check grammar only
- Don't repeat sentences – make every word count



Key activities & methodologies: Summary of methods as follows for each of the 5 cell types: (1) measure NG **numbers** (CFUs) using automated colony counter (Scan®1200); (2) use confocal microscopy & fluorescent probes/tags [FLoid™ Cell Imaging Station using fluorescent probes (PrestoBlue™)] to **visualise** if NG infects inside oral cells or are sitting outside on the surface, and; (3) assess NG or oral cell **viability** using culture and MTS CellTiter 96® respectively. *Model validation:* We will **validate the 2D model in all 5 cell types** to ensure the infection model is behaving as expected in a human mouth by: (1) testing drugs we know kill (e.g., azithromycin, ceftriaxone and cefixime) and don't kill (e.g., gentamicin) oral NG in clinical practice,[32] and; (2) assessing whether NG is infecting parts of the mouth we expect it to infect. While there are uncertainties about which cells NG infects in the mouth, a previous study in humans showed harmless (non-pathogenic) *Neisseria* species (i.e. commensals or bacteria that normally live in the mouth) do not infect human cheeks cells.[33] This will be used as a negative control as we will expect it will not infect cheeks cells in our model. Developing and validating the 2D model is the first step in progressing to a validated 3D model.

***Outcomes*: The primary outcomes** are (1) PK parameters of each drug in blood, tissue and saliva by site of infection: concentrations (total and protein unbound where relevant), peak concentrations (Cmax), time to reach Cmax (Tmax), clearance, area under the concentration-time curve (first 24 hours: AUC_{0-24}; total: $AUC_{0-\infty}$), volume of distribution (Vd), and half-life ($T_{1/2}$). **Secondary outcomes** (1) Pharmacodynamic (PD) measures of efficacy: fraction of time of the AUC relative to MIC (*f*T>MIC) or (*f*AUC/MIC) (2) pH of the tonsils and saliva (3) MIC for each bacteria by site of infection (4) Intracellular-to-extracellular concentration ratio for each antibiotic by site of infection

Simple, clearly described figures/tables

- Descriptive text in figures/tables

WHAT I did

Impact / leadership

Funds

Figure 1: My STI treatment research trajectory

PhD <2018	Current 2018-2024	Investigator grant 2025-2029
Changing treatment guidelines • Work **adopted in STI treatment guidelines** in 5 countries, for WHO[15], EU[14], UK[15], US[17], AUS[21] • **STI treatment consultant** for UK[16], WHO[18]	**Novel methods to collect oral drug/PK data** • Collect **world's most complete oral PK data** on oral NG drugs[20] • **New methods** to collect oral data & blood at home vs at clinic[20]	**Human oral tissue culture model** • Develop world's 1st **lab model to screen for new treatments** oral NG.[11] The 3D model will be **patented.**
Advancing methods for studying drug PK & improving STI treatment cure		
• Azithromycin research: Ranked top **0.04% globally** in; **top** in **Australia** • Developed **new drug/PK methods** for rectal drug levels[19] • Global **leader in STI treatment research** using PK (ranked 0.1% globally)	• STI treatment consultant for CDC[17] • **ASHM** STI treatment advisor[23] • **Board member:** STI Journal & STI International Society • **Promoted to Deputy Head** • **Partner** with industry (Pharma) & academia to **fight AMR**	• Create oral product (e.g., gum) to **prevent oral NG** • **Apply oral PK methods** from human PK trial on phase 3 drugs through AMR Hub
Funding ($125K): -PhD scholarship -Endeavour Award	***Funding (>$2.7M)*** - NHMRC Ideas (CIA) - C.R Roper Fellowship - NHMRC Large equipment grant - ARC AMR Hub	***Funding:*** - NHMRC Investigator - ARC AMR Hub

Figure 4: Preliminary 3D model

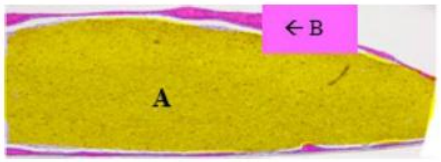
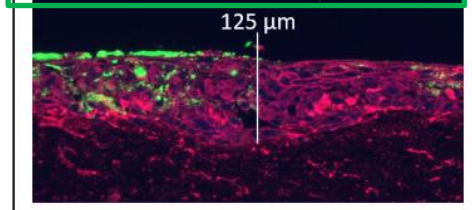
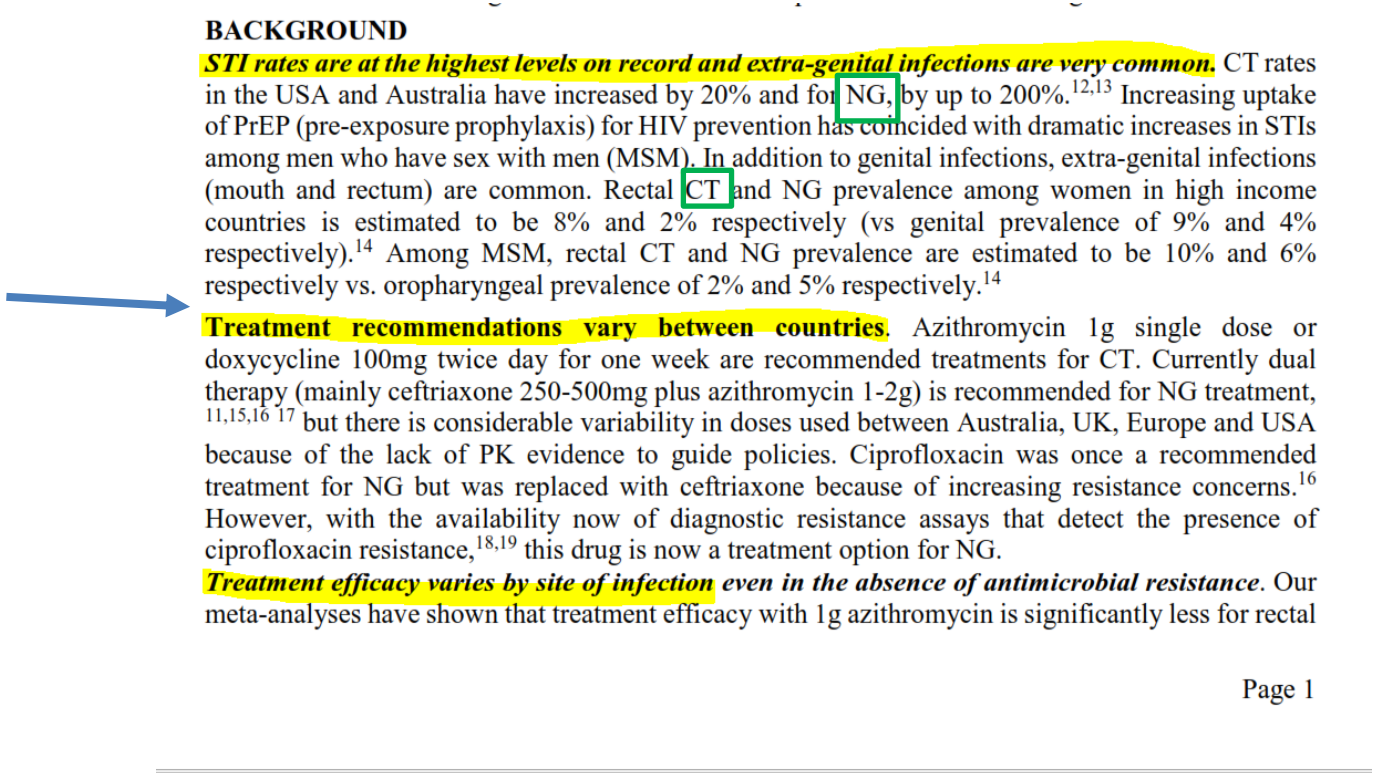


Figure 5: Invasion of NG (green) in the 3D model (pink = labelled B in Fig 4)



models have been used widely in drug delivery: to examine (1) oral delivery of treatments for herpes,[38] SARS-Cov2, nicotine and asthma;[34] (2) oral HIV transmission[39] and (3) the oral mucosa as a barrier to antimicrobials.[40] The only progression needed is to successfully grow NG in a standard 3D oral model. We have done this and **now have a preliminary 3D model.** As this adapted model is being **patented**, I cannot publicly share any methods. Instead, I show an example of our 'floor-of-mouth' (FOM) model. In the mouth, cells are tougher on the top/surface than those beneath it. Our 3D model has 2 distinct layers (Fig 4): the yellow section (labelled 'A') is the main 'body' made of several oral cell types ([redacted]). This is covered by the top pink layer with inconsistent thickness (labelled 'B') comprising another cell type ([redacted]). *Key activities: refine and validate the model:* We will refine our methods to achieve **uniform** and **correct** thickness in the top layer, which should be 125µm thick (as in the human mouth)[41] but ours is currently 71µm thick. Fig 5 shows successful infection in our model, with superficial invasion of NG into the top layers of tissue, which is what we expect in normal human infection.[24] *Model validation*: I will validate as described above for the 2D model.

Make all headings strong, informative, related



BACKGROUND

STI rates are at the highest levels on record and extra-genital infections are very common. CT rates in the USA and Australia have increased by 20% and for NG, by up to 200%.[12,13] Increasing uptake of PrEP (pre-exposure prophylaxis) for HIV prevention has coincided with dramatic increases in STIs among men who have sex with men (MSM). In addition to genital infections, extra-genital infections (mouth and rectum) are common. Rectal CT and NG prevalence among women in high income countries is estimated to be 8% and 2% respectively (vs genital prevalence of 9% and 4% respectively).[14] Among MSM, rectal CT and NG prevalence are estimated to be 10% and 6% respectively vs. oropharyngeal prevalence of 2% and 5% respectively.[14]

Treatment recommendations vary between countries. Azithromycin 1g single dose or doxycycline 100mg twice day for one week are recommended treatments for CT. Currently dual therapy (mainly ceftriaxone 250-500mg plus azithromycin 1-2g) is recommended for NG treatment, [11,15,16 17] but there is considerable variability in doses used between Australia, UK, Europe and USA because of the lack of PK evidence to guide policies. Ciprofloxacin was once a recommended treatment for NG but was replaced with ceftriaxone because of increasing resistance concerns.[16] However, with the availability now of diagnostic resistance assays that detect the presence of ciprofloxacin resistance,[18,19] this drug is now a treatment option for NG.

Treatment efficacy varies by site of infection ***even in the absence of antimicrobial resistance***. Our meta-analyses have shown that treatment efficacy with 1g azithromycin is significantly less for rectal

Page 1

GRANT PROPOSAL – IDEAS GRANTS FUNDING COMMENCING 2020

Application ID: APP1181057

CIA Surname: KONG

CT than genital infection (83% vs 95%).[20,21] For NG, meta-analysis has shown considerably lower treatment efficacy for oropharyngeal infections than genital infections (79% vs 96%).[7]

Antimicrobial resistance is an urgent global threat for STIs. WHO has declared NG AMR as an urgent global threat with NG now resistant to several classes of antimicrobials. [6] As concern for global

Avoid abbreviations

- 1-2 maybe that are directly related to the title of the project
- Include **white space** to assist reading

Publications – who loved your work?

Countries citing your work

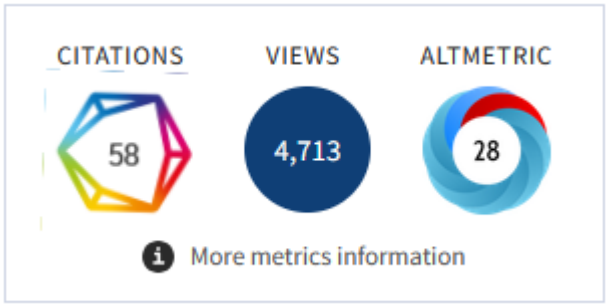
Countries: Scopus
- Click on paper
- '*cited by*'
- '*search results format*'
- Countries on left

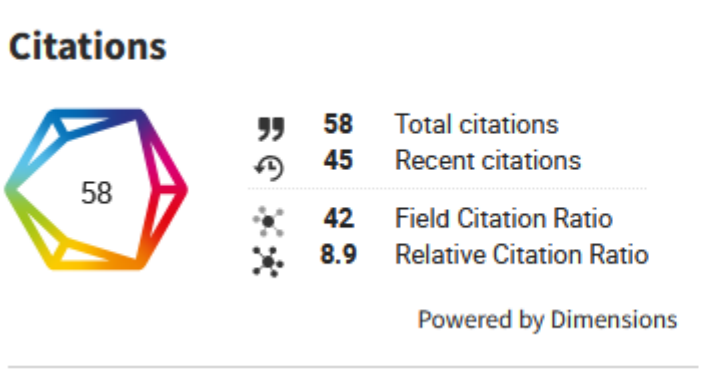
Citation: FABIAN YS KONG, Sepehr N Tabrizi, Christopher K Fairley, Lenka A Vodstrcil, Willahelmina M Huston, Marcus Chen, Catriona Bradshaw, Jane Hocking. The Efficacy of Azithromycin & Doxycycline for Treatment of RECTAL CHLAMYDIA Infection: A Systematic Review & Meta-Analysis; J ANTIMICROB CHEMO 2015 May;70(5):1290-7. doi: 10.1093/jac/dku574. Epub 2015 Jan 29. (PMID25637520)
Explanation:

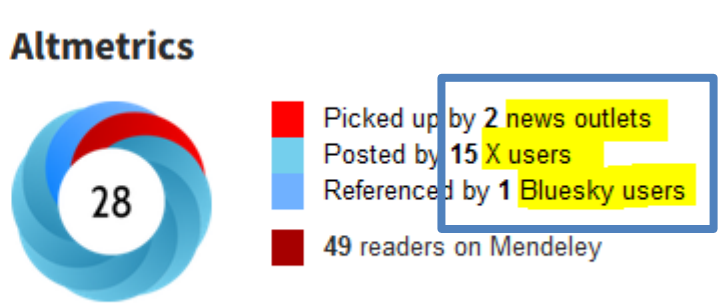
1st author, FWCI=4.6, cites=107 (Scopus; 96th %centile) in 25 countries; Q1 ranked.

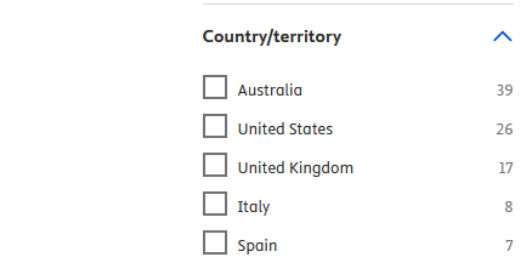
Role: I conceptualised & undertook the 1st meta-analysis of RECTAL chlamydia treatment to determine whether the recommended treatment at the time (azithromycin) was effective at treating rectal chlamydia. A meta-analysis is original research that summarises the evidence of the effectiveness of treatments to inform policy & practice. I identified observational studies only (no RCTs) & found that azithromycin was likely to fail in ~20% of rectal chlamydia cases. Given the absence of RCT evidence, this led to the world 1st rectal chlamydia treatment RCT (Paper#1).

Impact: This shaped CT treatment guidelines in the UK (PMID26538553) & Europe (PMID26608577) & was cited by WHO (PMID27559553), calling for a RCT prior to paper#1. I was invited to present these results at USA conference (2015). Cited in international media Reuters (https://healthylivingmagazine.us/Articles/7738/).









Referencing can have impact notes

*1st author; **national/global treatment guidelines

1) *PMID24729507 cites=119
2) **CDC PMID34292926 (ref 561, 748, 870) c=570
3) *PMID25637520 c=107
4) **UK PMID26538553 (ref 111,114); c=121
5) **Europe PMID26608577 (ref 168, 179) c=201
6) **WHO PMID27559553 (pg40)
7) *NEJM PMID34161706 c=31 (1st author my PhD student)
8) **AUS PMID36356948 (Ref 15,16,17)
9) *PMID28350806 c=42
10) *PMID30649333 c=50
11) *CDC consultancy PMID31538646 c=11
12) **WHO PMID33121366 (Ref 117, acknowledgements) c=83
13) *Invited paper PMID31654792 c=6
14) *Lancet ID, invited paper PMID35065062
15) *PMID32747940 c=20
16) UK govt consultancy PMID28717050 c=61
17) **Europe PMID35182080 (Ref 69) c=45
18) **UK PMID31280688 (Ref 48) c=12

Publications can describe your program of work

Arrange publication by themes

- E.g. "*optimal treatments for STIs and explain reasons for treatment failures*"

Publications ..

1-3: Informing **treatment guidelines** (meta-analyses) – **rectal and genital**

  – NEJM paper, work by PhD student (leadership) 1st - first impressions

4-7: Why **treatment failure** occurs

  – Unlikely due to low drug concentration at site of infection
  – High organism load
  – Tissue pH
  – Review of PK (avoid too many review)

8-10: **oral** infections

  – Protocol of future work (clinical pharmacokinetic trial)
  – Meta-analysis of treating oral infections
  – Quality of online testing websites (PhD student – leadership)

Benchmarks	Research
	Original, path-setting research of international and national significance and wide-ranging contributions to the advancement of fields of study that are informed and enhanced by engagement practices and partnerships.

Activity
Indicators of the range and volume of academic activities, inputs and outputs.
	• Publications
	  ○ Conference papers
	  ○ Journal articles
	  ○ Book chapters
	  ○ Books
	  ○ Creative outputs
	  ○ Commissioned reports and other publications
	  ○ Judicial judgements
	• Research grants & external research income (emphasis on competitive, international and peer-reviewed)
	• RHD supervision
	• Editorships and curatorships
	• Patent disclosures submitted, patent filings

Engagement Indicators of the nature and role of engagement with communities, industry and government embedded within teaching, research, leadership and service.	• Engagement with disciplinary communities and government, business, professional and community organisations (for example, influential roles within scholarly societies or professional organisations) • Public engagement efforts embedded in research proposals • Engagement grants and other engagement income (internal, external) • Significant media contributions (for example, invited opinion pieces) • Publications for government, professional and community bodies • Collaborative development of cross-disciplinary research programs with national and international partnerships beyond the academy • External research-based consultancies (international, national) • Start-up companies, including student start-ups, and evidence of uptake/adoption • Licenses executed, license income received
Quality and impact Indicators of academic excellence, originality and recognition. Indicators of demonstrable impact and influence, within and beyond the academy, of teaching, research and leadership.	• Publication standing (peer reviewed, national, international, sole/lead author) • H index (as appropriate to discipline) • RHD supervision (completion rates, candidate publications, graduate outcomes and achievements) • Invitations to review • Invited keynotes (international, national) • Patents issues • Awards and prizes for research and/or technology transfer (international, national) • Translation and adoption of research • Development of valued-added practices and approaches in communities, industries and government through engaged research projects • Influential leadership of major cross-disciplinary research projects with external partners, leadership of research teams, mentoring of less experienced researchers

Research benchmarking

	Leadership and service
Benchmarks	**Leadership and citizenship for sustained change and improved capability within departments, faculties and the University overall, leadership of community, industry and policy engagement of significant public value.**
Activity Indicators of the range and volume of academic activities, inputs and outputs.	• Active engagement with leadership and coordination roles within faculties and departments • Membership of committees (department, school, faculty, University) • Expert panel and committee recommendations, reports and submissions • Compliance with University policy and procedural requirements • Continuing professional development activities (internally, externally) • Leadership in development of national and international institutional partnerships and networks • Formal senior leadership roles (for example, Head of Department, Associate Dean)
Engagement Indicators of the nature and role of engagement with communities, industry and government embedded within teaching, research, leadership and service.	• Membership of committees of enquiry and expert panels • Leadership in development and maintenance of community, industry and cultural partnerships • Leadership in external professional and disciplinary communities (nationally and internationally, including policy development) • Leadership and engagement with advancement programs and projects that develop alumni relations and fundraising • Leadership of major engagement projects and leadership of engagement teams (internal and external stakeholders) • Major submissions to government enquiries • Membership of company boards or equivalent
Quality and impact Indicators of academic excellence, originality and recognition. Indicators of demonstrable impact and influence, within and beyond the academy, of teaching, research and leadership.	• Influential contributions to the vision, aspirations and state of the University • Effective demonstration and promotion of the Values of the University, consistent with the principles of justice, equity and the pursuit of excellence • Positive engagement in learning and career development of self and others • Provision of meaningful, constructive and timely feedback to colleagues • Collection of, attention to and action on feedback from a variety of sources • Effective membership of committees (department, school, faculty, University)Effective promotion of diversity and cultural awareness that reflects the University's cosmopolitan character • Effective promotion of a University culture that values high achievement by staff and students • Effective leadership across the University • Awards and prizes for leadership and service (international, national) • Leadership of short- and long-term engagement programs that create social, cultural and economic value • Public intellectual contributions to the advancement of culture and society

Leadership benchmarking

Get organised – summarising citations

#	1st auth	2nd author	Snr author	invited	INT author	DOI	PMID	citations	FWCI	Tx effica	Authors	short author	Title	Publication	Quart	Year	vol	No	page
30			1			10.1093/jac	3E+07	3	0.31	1	Lo Fiona, Kong FYS, Hocking JS	Lo F, Kong FYS, H	Treatment Efficacy for Rectal Neisseria gonorrhoeae – a Systematic Review and Meta-Analysis c	J Antimic Chemo	1	2021	76	12	3111-24
31						10.1136/sex	3E+07				Gan, Joscelyn; Kularadhan, Varsicka; Chow, Eric PF;	Gan J, Kularadhar	What do young people in high-income countries want from STI testing services? A systematic re	Sex Trans Infect	1	2021	97	8	574-583
32		1				10.1056/nej	3E+07	22	6.72	1	Lau, Andrew; Kong, Fabian YS; Fairley, Christopher K	Lau A, Kong FYS	Azithromycin or Doxycycline for Asymptomatic Rectal Chlamydia trachomatis	N Eng J Med	1	2021	##	25	2418-2427
33	1				1	10.1071/SH	3E+07	0	0	1	Kong, Fabian YS; Woutersen, Jacqueline; Kroone, M	Kong FYS et al.	Factors associated with rectal pH among men who have sex with men	Sex Health	3	2021	18	2	140-146
34		1				10.1080/136	3E+07				Coombe, Jacqueline; Kong, Fabian; Bittleston, Helen	Coombe J, Kong F	Contraceptive use and pregnancy plans among women of reproductive age during the first Austr	Eur J Contracept Reprod Health C	4	2021	26	4	265-71
35		1			1	10.1136/sex	3E+07		3.4	1	Xu, Xianglong; Chow, Eric PF; Ong, Jason J; Hoebe, (	Xu X, Chow EPF, J	Modelling the contribution that different sexual practices involving the oropharynx and saliva hav	Sex Trans Infect	1	2021	97	3	183-189
36						10.1136/sex	3E+07		8.9		Coombe, Jacqueline; Kong, Fabian Yuh Shiong; Bittl	Coombe J, Kong F	Love during lockdown: findings from an online survey examining the impact of COVID-19 on the S	Sex Trans Infect	1	2021	97	5	357-362
37	1					10.1093/jac	3E+07	10	0.46	1	Kong, Fabian YS; Hatzis, Christina L; Lau, Andrew; W	Kong FYS et al.	Treatment efficacy for pharyngeal Neisseria gonorrhoeae: a systematic review and meta-analysi	J Antimic Chemo	1	2020	75	11	3109-3119
38		1				10.1071/SH	3E+07				Doi, Catriona; Kong, Fabian YS; Lewis, David A; Hock	Doi C, Kong FYS	Prevalence of sexually transmissible infections and HIV in men attending sex-on-premises venu	Sex Health	3	2020	17	2	135-148
39		1				10.1097/OL	3E+07			1	Lau, Andrew; Kong, Fabian YS; Fairley, Christopher K	Lau A, Kong FYS	Factors associated with early resumption of condomless anal sex among men who have sex with	Sex Trans Dis	3	2020	47	6	389-394
40						10.1128/JCN	3E+07			1	Phillips, Tiffany R; Fairley, Christopher K; Maddaford, I	Phillips TR, Fairley	Bacterial load of Chlamydia trachomatis in the posterior oropharynx, tonsillar Fossae, and saliva a	J Clin Micro	1	2020	58	1	e01375-19
41	1			1		10.1016/j.cm	3E+07	6	0.6	1	Kong, FYS; Hocking, JS; Fairley, CK;	Kong FYS et al.	Is there a future for the ongoing use of azithromycin for the treatment of Neisseria gonorrhoeae?	Clin Micro Infect	1	2020	26	2	137-139
(5y) 2020-2024 42					1	10.1093/cid	3E+07	6	0.21	1	Hook III, Edward W; Newman, Lori; Drusano, George; E	Hook III EW, Newm	Development of new antimicrobials for urogenital gonorrhea therapy: clinical trial design conside	Clin Infect Dis	1	2020	70	7	1495-1500
43		1				10.1136/sex	3E+07		2.4	1	Lau, Andrew; Kong, Fabian Yuh Shiong; Huston, Will	Lau A, Kong FYS	Factors associated with anorectal Chlamydia trachomatis or Neisseria gonorrhoeae test positivity	Sex Trans Infect	1	2019	95	5	361-367
44	1				1	10.1093/jac	3E+07	34	3.31	1	Kong, Fabian Yuh Shiong; Horner, Patrick; Unemo, M	Kong FYS et al.	Pharmacokinetic considerations regarding the treatment of bacterial sexually transmitted infectio	J Antimic Chemo	1	2019	74	5	1157-1166
post PhD (2018+) 45					1	10.1136/sex	3E+07	44	4.41	1	Horner, Patrick; Ingle, Suzanne M; Garrett, Frederick;	Horner P, Ingle SM	Which azithromycin regimen should be used for treating Mycoplasma genitalium? A meta-analys	Sex Trans Infect	1	2018	94	1	14-20
46						10.1007/s10	3E+07				Danielewski, JA; Phillips, S; Kong, FYS; Smith, KS; Hc	Danielewski JA, P	A snapshot of Chlamydia trachomatis genetic diversity using multilocus sequence type analysis i	Eur J Clin Microbiol Infect Dis	2	2017	36	7	1297-1303
47						10.1371/jour	3E+07			1	Vodstrcil, Lenka A; Rupasinghe, Thusitha WT; Kong,	Vodstrcil LA, Rupa	Measurement of tissue azithromycin levels in self-collected vaginal swabs post treatment using li	PloS One	1	2017	12	5	e0177615
48					1	10.1097/OL	3E+07	6	0.19	1	Leeyaphan, Charussri; Ong, Jason J; Chow, Eric PF;	Leeyaphan C, On	Treatment outcomes for rectal lymphogranuloma venereum in men who have sex with men using	Sex Trans Dis	3	2017	44	4	245-248
49	1					10.1371/jour	3E+07	35	1.49	1	Kong, Fabian YS; Rupasinghe, Thusitha W; Simpson,	Kong FYS et al.	Pharmacokinetics of a single 1g dose of azithromycin in rectal tissue in men	PLoS One	1	2017	12	3	e0174372
50		1				10.1186/s12	3E+07			1	Lau, Andrew; Kong, Fabian; Fairley, Christopher K; D	Lau A, Kong FYS	Treatment efficacy of azithromycin 1 g single dose versus doxycycline 100 mg twice daily for 7 da	BMC Infect Dis	2	2017	17	1	1-9
51					1	10.3201/eid	3E+07	23	0.51	1	Leeyaphan, Charussri; Ong, Jason J; Chow, Eric PF;	Leeyaphan C, On	Systematic review and meta-analysis of doxycycline efficacy for rectal lymphogranuloma venere	Emerg Infect Dis	1	2016	22	10	1778
52	1					10.1017/S0S	3E+07	27	1.24	1	Kong, FYS; Tabrizi, SN; Fairley, CK; Phillips, S; Fehler	Kong FYS et al.	Higher organism load associated with failure of azithromycin to treat rectal chlamydia	Epid Infect	2	2016	##	12	2587-2596
BOOK	1					https://doi.c	BOOK				Kong, FYS	Kong FYS et al.	Sex and Sport: An Australian Rules Football-Based Chlamydia Screening Initiative	In: Conrad D., White A. (eds) Sports-Based H		2015			
53						10.1071/SH	3E+07				Garrett, Cameryn C; Williams, Henrietta; Keogh, Louis	Garrett CC, Williar	Is there a role for practice nurses in increasing the uptake of the contraceptive implant in primary	Sex Health	3	2016	13	3	241-247
54						10.1093/cid	3E+07			1	Lau, Andrew; Bradshaw, Catriona S; Lewis, Dyani; Fa	Lau A, Bradshaw	The efficacy of azithromycin for the treatment of genital Mycoplasma genitalium: a systematic re	Clin Infect Dis	1	2015	61	9	1389-1399
55		1				10.1186/s12	3E+07			1	Craig, AP; Kong, FY; Yeruva, L; Hocking, JS; Rank, R	Craig AP, Kong F	Is it time to switch to doxycycline from azithromycin for treating genital chlamydial infections in w	BMC Infect Dis	2	2015	##	15	505
56	1					10.1093/jac	3E+07	93	4.57	1	Kong, Fabian Yuh Shiong; Tabrizi, Sepehr N; Fairley,	Kong FYS et al.	The efficacy of azithromycin and doxycycline for the treatment of rectal chlamydia infection: a sy	J Antimic Chemo	1	2015	70	5	1290-1297
57		1				10.1093/jac	3E+07			1	Hocking, Jane S; Kong, Fabian YS; Timms, Peter; Hu	Hocking JS, Kong	Treatment of rectal chlamydia infection may be more complicated than we originally thought	J Antimic Chemo	1	2015	70	4	961-964
(10y) 2015-2024 58	1			1		10.1186/s12	2.6E+07			1	Kong, Fabian Yuh Shiong; Hocking, Jane Simone;	Kong FYS et al.	Treatment challenges for urogenital and anorectal Chlamydia trachomatis	BMC Infect Dis	2	2015	15	1	1-Jul
59	1					10.1093/cid	2E+07	97	3.83	1	Kong, Fabian Yuh Shiong; Tabrizi, SN; Law, Matthew;	Kong FYS et al.	Azithromycin versus doxycycline for the treatment of genital chlamydia infection: a meta-analysi	Clin Infect Dis	1	2014	59	2	193-205
60						10.1136/sex	2E+07				Bowring, Anna L; Gouillou, Maelenn; Guy, Rebecca; I	Bowring AL, Gouil	Missed opportunities—low levels of chlamydia retesting at Australian general practices, 2008-20	Sex Trans Infect	1	2012	88	5	330-334
61	1					10.5694/j.13	2E+07		11.9		Kong, Fabian YS; Guy, Rebecca J; Hocking, Jane S;	Kong FYS et al.	Australian general practitioner chlamydia testing rates among young people	Med J Aus	1	2011	##	5	249-252
62			1								Boyle, Douglas; Kong, Fabian;	Boyle D, Kong FY	A systematic mechanism for the collection and interpretation of display format pathology test res	Electron J Health Inform		2011	6	2	18
63		1					2E+07				Guy, Rebecca J; Kong, Fabian; Goller, Jane; Franklin	Guy RJ, Kong FYS	A new national chlamydia sentinel surveillance system in Australia: evaluation of the first stage of	Commun Dis Intell Q Rep	4	2010	34	3	319-328
64	1					10.1071/SH	2E+07				Kong, Fabian YS; Hocking, Jane S; Link, Chris Kyle; C	Kong FYS et al.	Sex and sport: sexual risk behaviour in young people in rural and regional Victoria	Sex Health	3	2010	7	2	205-211
BOOK	1		1			ISBN-10: 03	BOOK				Hellard,M; Kong Fabian YS	Hellard M, Kong FYS	Adefovir Dipivoxil (Book Chapter)	In: Grayson, ML. Kucers' The Use of Antibioti		2010			
65	1					10.1186/147	2E+07				Kong, Fabian YS; Hocking, Jane S; Link, Chris K; Che	Kong FYS et al.	Sex and sport: chlamydia screening in rural sporting clubs	BMC Infect Dis	2	2009	9	1	1-5
66	1										Kong, FYS; Guy, R; Bergeri, I; Boyle, DJ; Hocking, JS;	Kong FYS et al.	Chlamydia testing rates in general practices across Australia: the Australian Collaboration for Chl	Sex Health	3	2009	6	4	367-367
67	1										Kong, Fabian;	Kong FYS.	Haemaccel (Polygeline) Reactions: Anaphylaxis or Anaphylactoid?	Aus J Hosp Pharm	4	2000	30	3	107-108
68	1										Kong, Fabian;	Kong FYS.	Unanswered Questions	Aus J Hosp Pharm	4	2000	30	6	289-289
	68																		

	1st	2nd	Snr/last	invited	INT	1st and Snr	Tx efficacy
N	21	13	16	7	20		42
%	31%	19%	24%	10%	29%	54%	62%

Q1	41	60%
2	8	12%
3	13	19%
4	5	
	68	

Authorship (1st and last), International collaborations, %Q1

**Invited

	Conference	Year	Invited	Int / national	country
1	**Australian Sexual and Reproductive Health Conference, Adelaide Australia, 16-18 September 2025** 1. 2D and organotypic models for oropharyngeal gonorrhoea. *Kong FYS, Hamza SA,* Paolini R, Moore C, Hamza SA, McCullough M, Mayfosh A, Rau A, Unemo M, Hocking JS, Celentano A 2. Co-chair - Discovery and Translational Science Session 3. Essentials for Grant Success for ECRs Session	2025	Y[21]	N	Australia
2	**STI & HIV 2025 World Congress, Montreal, July 26-30, 2025** **1.** Chow E, Kong FYS, McLaughlin S, Williams E, Wolffs P, Huston W. **Symposium co-chair: Swallowing the evidence about the throat for oropharyngeal gonorrhoea. [symposium]** **2.** *Hamza SA,* Paolini R, Moore C, Hamza SA, McCullough M, Mayfosh A, Rau A, Unemo M, Hocking JS, Celentano A, Kong FYS. **Screening Antimicrobial Fatty Acids for Treating Oral Gonorrhoea Using a Validated 2D Human Oral Cell Model [oral]** 3. Do K, Unemo M, Kenyon C, Hocking JS, Kong FYS. **Tetracycline-resistant *Neisseria gonorrhoeae* global estimates - impacts on doxyPEP implementation and monitoring. [poster]** **4.** Ludwick T, Cardwell ET, Vo T, Chow EPF, Riley B, Hocking JS, Grace D, Kong FYS. **Are Clinicians Open to Less Asymptomatic STI Testing for Chlamydia and Gonorrhoea in Men Who Have Sex With Men (MSM) and the Possibility of Not Treating Positive Diagnoses? a Qualitative Study From Australia [oral]**	2025	N	I[11]	Canada
3	British Columbia Centers for Disease Control Grand Rounds, 20 November 2024, Vancouver ***From testing to treatment of STIs: new research from Australia - Maintaining treatments in the pipeline for oral gonorrhoea*** https://nexuswebcast.mediasite.com/mediasite/Showcase/bc-cdc-showcase/Presentation/6bc4d74c92884861a8e290d64692775a1d/Channel/21886a45d62d405cb601c40ffe7e52df5f	2024	Y[20]	I[10]	Canada
4	International Pharmaceutical Federation (FIP). Use of doxycycline for the prevention of bacterial sexually transmitted infections (STIs) (DoxyPEP): Supporting evidence and the challenge of antimicrobial resistance (AMR) meeting. Presented "Important consideration and public health implications of DoxyPEP" Dec 5, 2024 https://events.fip.org/previous-fip-digital-events/?event=1284	2024	Y	I	online
	Mfonobong Timothy Mfonobong@fip.org is Practice Development and Transformation Projects Coordinator at the International Pharmaceutical Federation (FIP). The International Pharmaceutical Federation (FIP) is the global body representing over 4 million pharmacists and pharmaceutical scientists. It has had official relations with the World Health Organization since 1948. https://us02web.zoom.us/webinar/register/9317327986401/WN_J1-T-WVIQk6ffKkFIcECRw#/registration				
5	*Hamza SA,* Paolini R, Moore C, Hamza SA, McCullough M, Unemo M, Hocking JS, Celentano A, Kong FYS. *Development of an in-vitro 2D human oral cell model to explore antimicrobial resistance in Neisseria gonorrhoeae* *BacPath 2024, 13 Nov 2024, New South Wales, Australia*	2024			
6	IUSTI World Congress, 17-20 September 2024, Sydney Australia 1. Kong, F. Thinking differently – Identifying new antimicrobials in new in-vitro models, Public-private partnerships to deliver antimicrobial stewardship innovations symposium	2024	Y		

Commercialisation and business case

Total Addressable Market (TAM)

- Total revenue opportunity if a product/service achieved **100% market share**.

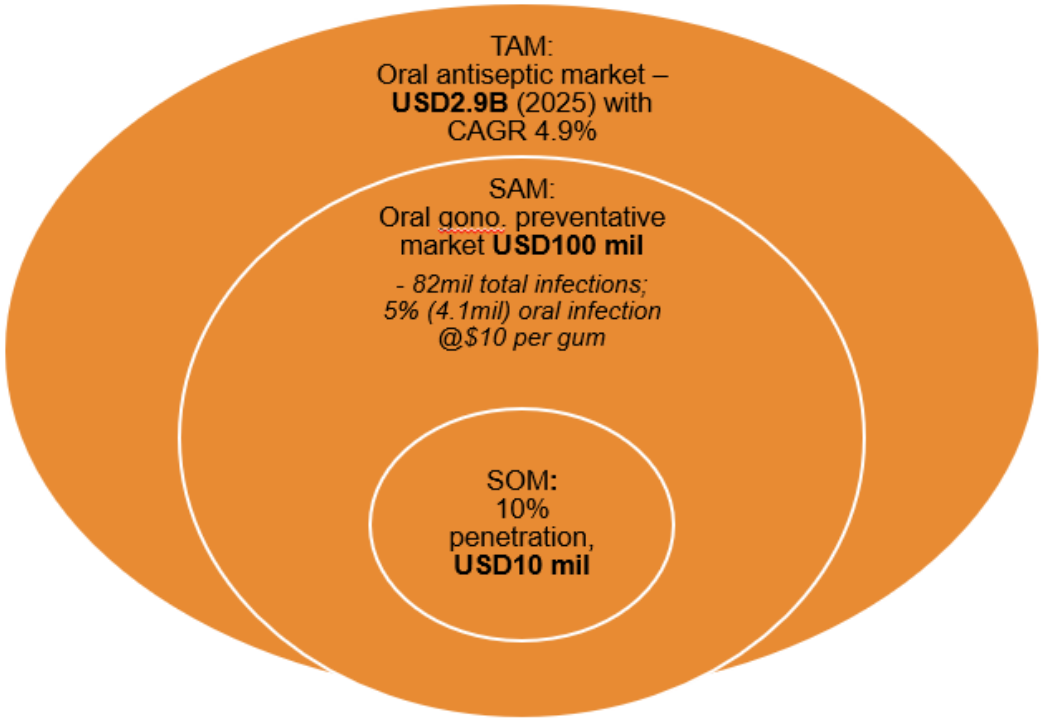
Serviceable Available Market (SAM)

- **Target** segment of the TAM you are

Serviceable Obtainable Market (SOM)

- Portion of SAM you can **realistically capture**, considering **competition** and resources.

Gum to prevent oral gonorrhoea



Using AI to calculate business case

Top-down approach

- Broad sector data and industry reports to estimate market size and trends e.g. IBISWorld, Statista, WHO, OECD

Perplexity AI: *"Applying the **top-down** approach to size Australia's pharmacy retail market for a digital medication tool"*

Bottom-up approach (more conservative and realistic)

- Estimates potential users, spend and use

Perplexity AI: "What is the ***bottom-up*** *market sizing for …xxx "*

****check the references because you can't trust AI***

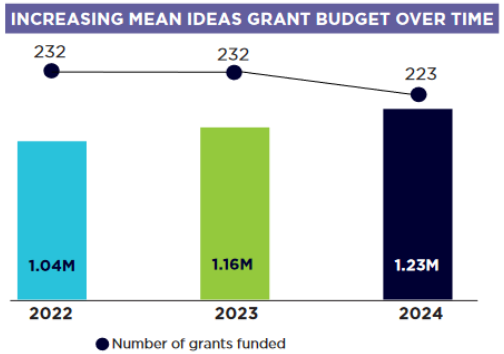
Summary – simple, feasible, human-centric

PLANNING

- Start with a **vision** (*WHY*) to create a story line.
- Think about your assessment panel and impact type are you claiming?

GRANT (Story)

- Tells **one story** - Your vision is translated in the text, each paragraph relates to one before and after it.
- Human-centric focus
- Is feasible: sufficient budget and timelines e.g. Ideas grant is 3yrs vs 5yrs
- Fills a gap among your 'competition' and solves an unmet need?
- Uses **simple** language and **clear** visuals.
- Avoids opportunities for criticisms (break in story) e.g. technical jargon, detailed methods.
- Get people(s) outside your field to read it and check grammar



2024: 10.1% funded rate (223/2216)

You're amazing even though you don't get funded!

GOOD LUCK!

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