

Pavel Mozgunov
Group Leader – MRC Biostatistics Unit, University of Cambridge
Statistical Consultant – Saryga



Pavel Mozgunov is a statistical methodologist with extensive experience of developing innovative adaptive clinical trial designs, and quantitative decision-making tools and supporting their implementation in practice. His main areas of expertise include: adaptive designs, dose-finding, Bayesian methods, master protocol, MAMS designs, precision medicine, and quantitative benefit-risk assessment. Pavel leads the statistical design of several publicly and privately funded trials, including the National UK platform AGILE for novel COVID-19 treatments. Pavel consults a number of pharmaceutical and biotech companies on the development of novel statistical methods and support their implementations.

EDUCATION

10/15 - 08/18	Ph.D. in Statistics , <i>Adaptive designs for complex dose finding studies</i> Department of Mathematics and Statistics, Lancaster University, UK (Marie Curie PhD Fellow)
09/10 - 06/14	BA in Economics (Major: Statistics and Data Analysis, With Distinction, Top 1 of the Cohort) Department of Statistics, Higher School of Economics, Russia

EMPLOYMENT

10/22 -	Programme Leader Track , MRC Biostatistics Unit (BSU), University of Cambridge, UK
04/21 - 09/22	Research Fellow in Medical Statistics , MRC BSU, University of Cambridge, UK
07/20 - 06/25	NIHR Advanced Fellow , Personal Award, National Institute of Health and Care Research, UK
01/19 - 03/21	Lecturer in Statistics , Dept of Mathematics & Statistics, University of Lancaster (UoL), UK
10/18 - 01/19	Senior Research Associate in Statistics , Dept of Mathematics & Statistics, UoL
10/15 - 09/18	3-Months Placements : Gustave Roussy (France), Politecnico of Turin (Italy), Roche Ltd (UK)
10/15 - 09/18	Early Stage Researcher, Marie Curie PhD Fellow , Dept of Mathematics & Statistics, UoL
09/13 - 09/15	Research Assistant , Laboratory of Stochastic Processes, Higher School of Economics, Russia

SELECTED FUNDING:

To date, Pavel has been an applicant on 12 successful grants, led 3 industry-academic projects, and established collaboration agreements with 2 Clinical Trial Units. In 2020, Pavel was awarded a highly-prestigious personal 5-year NIHR Advanced Fellowship (£685k). All of these total to £14,296k external funding and £1,881k for which Pavel is responsible for.

2025 – 2028	Co-I: Rosetree Trust . <i>Treating behaviours in syndromes associated with frontotemporal lobar degeneration</i> . Role: development and implementation of basket design; £708k,
2024 – 2028	Co-I: Australian MRC . <i>DISCERN - Evaluating Personalised Care with Innovative Trials</i> . Role: supervision of PDRA, setting research objectives; £2,558k
2024 – 2027	Co-I: British Heart Foundation . <i>Azacytidine Treatment Effect on hypertrophic Cardiomyopathy</i> . Role: development and implementation of dose-finding design; £464k
2024 – 2025	PI: Industry-funded project: Phastar (UK). <i>Adding doses to ongoing dose-finding studies</i> . Role: setting directions for the Phastar's senior statistician, providing expert advice;
2024 – 2029	Co-I: MRC . <i>Core Unit Funding</i> . Role: co-leading setting research priorities, supervising PDRA's, writing publications, securing further funding; £18,182k (£3,642k for Theme)
2023 – 2026	Co-I: Cancer Research UK . <i>Phase I/IIa trial of HTL0039732, as mono and in combo in solid tumours</i> . Role: development and implementation of the dose-finding design; £82k
2023 – 2026	PI: MRC . <i>TMRP Studentship: Seamless Phase I/II Designs for Precision Medicine Trials</i> . Role: supervision on the PhD student; £43.5k
2023 – 2026	PI: Collaboration with Southampton CTU. <i>Developing Bayesian designs for real trials</i> . Role: methodology lead for prospective innovative trials, implementation oversight; £75.1k
2022 – 2024	PI: Collaborations with Cambridge CTU [cancer & non-cancer]: <i>Efficient Bayesian designs</i> . Role: support with design development, PDRA supervision; £52k
2021 – 2025	PI: Industry-funded project: Merck KGaA (Germany). <i>Complex Dose-Finding Designs</i> . Role: develop designs for ongoing trials, PDRA's supervision;

2020 – 2025	Co-I: MRC & Wellcome Trust. <i>AGILE: Seamless Phase I/IIa Platform for COVID-19 treatments.</i> Role: Methodology lead for 6 candidates; £5,696k
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RESEARCH SUPERVISION AND MENTORSHIP

PDRAs	A Ollier (21–23), A Serra (22–24), G Caruso (23–), J Willard (24–), L Daniells (24–)
PhDs	A Serra (19–22), P Greenstreet (20–23), L Daniells (20–24), X Chen (21–), W Chen (22–), M Ratta (22–), Z Cao (23–)
Mentees	Y Ni (23–, Oxford), E Van Vogt (23–, Imperial), L Rondano (24–, Turin), E Bourmpaki (24–, UCL), M Rajai (24–, Manchester), M George (24–, Phastar), R Cooper (25–, Liverpool)

SELECTED PROFESSIONAL ACTIVITIES

2024	Member of the Faculty of Experts for MRC Malaria Vaccine Implementation Studies in Africa
2023 –	Oversight committee member for Cambridge Clinical Trial Unit
2023 – 2024	NIHR Academy Future Focused Leadership Programme
2023 – 2024	Steering Committee Member for NIHR Development Schemes
2023	Invited Panel Member for the French Cancer Institute
2022 –	Panel Member for the Medical Research Council, Developmental Pathway Funding Scheme
2022 –	Founder and Director of Internship Programme, Biostatistics Unit, University of Cambridge
2022 –	Advisory board for PhD in Statistics Programme, Polytechnic University of Turin, Italy
2020 –	Section Committee Member of NIHR Statistics Group (Early Phase Clinical Trials)

SELECTED TEACHING ACTIVITIES

2024	<i>External Course:</i> Historical data for trial design, Italy Biostatistics Group, Parma (50 attendees)
2024	<i>MRes Module</i> on dose-escalation designs, Experimental Medicine, University of Manchester
2023	<i>External Course:</i> Bayesian Borrowing Methods, BayesPharm 2023, Utrecht (100 attendees)
2023, 2024	<i>BSU-hosted Course:</i> Adaptive designs in biomedical research (2 courses, 20-30 attendees each)
2023, 2025	<i>BSU-hosted Course:</i> Bayesian methods for clinical trials, (2 courses, 30 attendees each)
2023	<i>External Course:</i> Efficient clinical trial designs, Italy Biostatistics Group, Italy (30 attendees)
2022, 2023	<i>BSU-hosted Course:</i> Dose-escalation designs for Phase I (2 courses, 20-40 attendees each)
2019	<i>External Course:</i> Designs for Early Phase Trials, French Stat Society, France (40 attendees)
2019 – 2021	<i>MSc Module:</i> Statistics in Practice, MSc in Statistics, University of Lancaster, UK
2019	<i>MSc Module:</i> Bayesian methods in practice, MSc in Statistics, University of Lancaster, UK

SELECTED INVITED TALKS

2024	CFE-CMStatistics, Computational methods in dose-finding, King’s College, UK (25 attendees)
2024	Annual Forum of Italian Biostatistics Group, Parma, Italy (100 attendees)
2024	Introduction to platform trials, Ecraid Training Modules on Adaptive Designs (350 participants)
2024	8th International Early Phase Adaptive Clinical Trials Workshop. NYC, USA (50 attendees)
2024	Statistical designs to empower biomarker-driven clinical trials, Bath, UK (70 attendees)
2024	16th Annual Conference on Statistical Issues in Clinical Trials, UPENN, USA (100 attendees)
2024	ESMO Targeted Anticancer Therapies Congress 2024, Paris, France. (200 attendees)
2024	Platform Trials in Anaesthesia, Workshop for Clinicians, Birmingham University (50 attendees)
2023	UKCRC Statistics Meeting: Adaptive design and their implementation (40 CTUs, 60 attendees)
2019	Forum of Italian Biostatistics Group, Milan, Italy (80 attendees).
2019	PSI Conference 2019, London, UK (100 attendees)
2018	6th Early Phase Adaptive Trials Workshop, Los Angeles, USA (50 attendees)
2018	PSI Meeting on Bayesian Methods for Dose Finding, London, UK (100 attendees)
2017	Symposium on Early Phase Dose Finding Methodology, University of Virginia (60 attendees)

ORGANISATION OF SCIENTIFIC MEETINGS AND OUTREACH

2023	Adaptive designs in real trials, MRC BSU, UK, (>100 online, 50 in-person attendees)
2023	UKCRC Statistics Meeting, jointly with Papworth CTU, MRC BSU, UK (60 attendees)

2023	Public Outreach: Animation “What are adaptive clinical trials?” YouTube (>2.8k views)
2022	7th Early Phase Adaptive Trials Workshop, University of Cambridge, UK (60 attendees)
2020	Invited blog on the benefits of response-adaptive designs, YoungStats

List of Publications

Total publications: 46. First Author: 18; (Co-)senior author: 17.

In methodology journals: 38; In applied journals: 8

Total publication since 2022: 23. First Author: 3; (Co-)senior author: 14.

h-index: 14; i10-index: 17; total citations: 734 (February 2025)

Source: <https://scholar.google.co.uk/citations?user=nj0wzIUAAAAJ>

References

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- [2] L Daniells, **P Mozgunov**, H Barnett, A Bedding, and T Jaki. How to add baskets to an ongoing basket trial with information borrowing. *Statistical Methods in Medical Research*, Accepted, 2025.
- [3] A Ollier and **P Mozgunov**. On inclusion of covariates in model based dose finding clinical trial designs. *Statistics in Medicine*, 44(3-4):e10337, 2025.
- [4] P Greenstreet, T Jaki, A Bedding, and **P Mozgunov**. Preplanned multi-stage platform trial for discovering multiple treatments with control of FWER. *Biometrical Journal*, 67(1):e70025, 2024.
- [5] T Jaki, H Barnett, A Titman, and **P Mozgunov**. A seamless phase i/ii platform design with a time-to-event efficacy endpoint for potential covid-19 therapies. *Statistical Methods in Medical Research*, page Epub, 2024.
- [6] P Greenstreet, T Jaki, A Bedding, C Harbron, and **P Mozgunov**. A multi-arm multi-stage platform design that allows preplanned addition of arms while still controlling the family-wise error. *Statistics in Medicine*, 43(19):3613–3632, 2024.
- [7] H Barnett, M George, D Skanji, G Saint-Hilary, T Jaki, and **P Mozgunov**. A comparison of model-free phase i dose escalation designs for dual-agent combination therapies. *Statistical Methods in Medical Research*, 33(2):203–226, 2024.
- [8] K Kasianova, M Kelbert, and **P Mozgunov**. Response-adaptive randomization for multiarm clinical trials using context-dependent information measures. *Biometrical Journal*, 65(8):2200301, 2023.
- [9] L Daniells, **P Mozgunov**, A Bedding, and T Jaki. A comparison of bayesian information borrowing methods in basket trials and a novel proposal of modified exchangeability-nonexchangeability method. *Statistics in Medicine*, 42(24):4392–4417, 2023.
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- [11] A Serra, **P Mozgunov**, G Davies, and T Jaki. Determining the minimum duration of treatment in tuberculosis: An order restricted non-inferiority trial design. *Pharmaceutical Statistics*, 22(5):938–962, 2023.
- [12] T Jaki, A Burdon, X Chen, **P Mozgunov**, H Zheng, and R Baird. Early phase clinical trials in oncology: Realising the potential of seamless designs. *European Journal of Cancer*, 189:112916, 2023.
- [13] S Khoo, R FitzGerald, G Saunders, C Middleton, S Ahmad, C Edwards, D Hadjiyiannakis, L Walker, **P Mozgunov**, R Lyon, V Shaw, et al. Molnupiravir versus placebo in unvaccinated and vaccinated patients with early SARS-CoV-2 infection in the uk (AGILE CST-2): a randomised, placebo-controlled, double-blind, phase 2 trial. *The Lancet Infectious Diseases*, 23(2):183–195, 2023.
- [14] A Serra, **P Mozgunov**, and T Jaki. A bayesian multi-arm multi-stage clinical trial design incorporating information about treatment ordering. *Statistics in Medicine*, 42(16):2841–2854, 2023.
- [15] **P Mozgunov**, X Paoletti, and T Jaki. A benchmark for dose-finding studies with unknown ordering. *Biostatistics*, 23(3):721–737, 2022.
- [16] **P Mozgunov**, T Jaki, I Gounaris, T Goddemeier, A Victor, and M Grinberg. Practical implementation of the partial ordering continual reassessment method in a phase i combination-schedule dose-finding trial. *Statistics in Medicine*, 41(30):5789–5809, 2022.
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- [19] T Menzies, G Saint-Hilary, and **P Mozgunov**. A comparison of various aggregation functions in multi-

criteria decision analysis for drug benefit–risk assessment. *Statistical Methods in Medical Research*, 31(5):899–916, 2022.

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- [26] G Griffiths, R FitzGerald, T Jaki, A Corkhill, H Reynolds, S Ewings, S Condie, **P Mozgunov**, E Tilt, L Johnson, M Radford, et al. Agile: a seamless phase i/ia platform for the rapid evaluation of candidates for covid-19 treatment: an update to the structured summary of a study protocol for a randomised platform trial letter. *Trials*, 22:1–5, 2021.
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