

HST YEAR 2 RESEARCH DAY

Research Resources

The following resources have been compiled to assist HST Year 2 Trainees in the planning and conduct of research during their HST. Covering areas such as ethics, data protection, statistics, and publication, this list is not exhaustive but serves as a starting point for Trainees commencing their research journey.

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Resource List

Applying for Out of Clinical Programme Experience (OCPE)

Topic	Details
How to Apply	Trainees apply through their HST Programme Coordinator who liaises with the NSD. The NSD must approve all OCPE proposals. Applications for OCPE must be submitted a minimum of 6 months in advance.
Sourcing a Position	Trainees source their own OCPE opportunity. RCPI is involved in the application process for ICET and for some other fellowship opportunities, such as the Management and Healthcare Leadership Fellowships.
Location Options	OCPE may be completed abroad with formal NSD approval.
Types of Research	Formal (PhD, MD) or informal (research time which does not culminate in a formal qualification).
Supervision Requirements	Research must be carried out under a Supervisor / Principal Investigator (PI).
Application Form	https://www.rcpi.ie/Learn-and-Develop/Training-Programmes/Higher-Specialist-Training/Entry-Guidance-and-Advice#hst-policies-and-procedures
Frequently Asked Questions	https://www.rcpi.ie/Portals/0/Document%20Repository/OCPE%20form/OCPE%20FAQs%20August%202025%20FINAL.pdf?ver=imH8ayEToDnrJMUNtWat0Q%3d%3d

Finding a Supervisor/Principal Investigator

Topic	Details
ICAT Supervisors List	ICAT lists potential supervisors (good place to start): https://icatprogramme.org/supervisors/
Develop Relationships	Discuss research areas and develop relationships with more senior SpRs, Consultants etc.
Review Literature	Review what research is being conducted in Ireland and other relevant locations.
Career Alignment	Determine where you want your career to go and what research area will support this.
Research Question Formation	A research question will emerge from your interests and discussions with supervisors and senior SpRs—you will not do this alone.

Funding

Topic	Details
Supervisor Funding	Supervisors may have received grant funding covering research costs, including salary.
ICAT	https://icatprogramme.org/
ICET	https://www.rcpi.ie/Learn-and-Develop/Training-Programmes/Irish-Clinician-Educator-Training-programme/Overview
HRB	https://www.hrb.ie/
Research Ireland	https://www.researchireland.ie/
Strategic Academic Recruitment (StAR) MD	https://www.rcsi.com/dublin/research-and-innovation/research-careers/star-programme/star-md

Ethics

Topic	Details
Publication Requirements	Research Ethics Committee (REC) review and approval / “favourable opinion” is required to publish findings (conference abstracts, peer-reviewed journal articles, etc.); without it, findings can only be used internally.
RCPI Research Ethics Committee	https://www.rcpi.ie/Healthcare-Leadership/Research/Research-Ethics
HSE Site REC	Trainees working with patients/patient data require HSE site ethics approval: https://hseresearch.ie/research-ethics/
Clinical Trials / Medical Devices	National Research Ethics Committee: https://www.nrecoffice.ie/
Private Hospitals	Private hospitals may have their own REC.
Plan Early	The ethics form is substantial, and it takes time to complete each section—begin early. If in doubt about which REC is appropriate for your work, contact a HSE REC or the RCPI REC.

Data Protection / Consent

Topic	Details
GDPR Compliance	Research must comply with the General Data Protection Regulation (GDPR): https://gdpr-info.eu/ ; https://hseresearch.ie/data-protection-and-research/
Health Research Regulation Compliance	Research must comply with the Health Research Regulation: https://hrcdc.ie/who-we-are/
Consent Requirements	Patient/participant consent must be explicit; in some cases, a Consent Declaration may be obtained. If necessary, it will be required to complete the REC approval process (see RCR at the end of this table): https://hrcdc.ie/
Hospital DPO	For data protection queries, discuss with your hospital Data Protection Officer.
DPIA Requirements	REC applications may require a Data Protection Impact Assessment (DPIA). HSE screening tool determines if a project is low data risk or high data risk: https://hseresearch.ie/wp-content/uploads/2022/11/HSE-DPIA-Screening-Tool-Final-LP051022_071122.xlsx
Retrospective Chart Review (RCR)	Complete the DPIA tool. If the RCR is high data risk, you will need REC approval and a Consent Declaration, as appropriate. HSE guidance: https://hseresearch.ie/data-protection-and-research/#retrospective

Qualitative Analysis, including Surveys and Focus Groups

Topic	Details
Qualtrics	Contact research@rcpi.ie for set up as a Qualtrics user (this does not always work smoothly).
Qualitative analysis	Qualitative Methods in Health Care Research: https://pmc.ncbi.nlm.nih.gov/articles/PMC8106287/ ; Essentials of Qualitative Research: https://www.stjames.ie/media/GERRY%20HUGHES%20Winter%20School%20Qual%20Research.pdf ; Thematic Analysis (Braun & Clarke): https://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa
Coding themes	Coding can be done manually or using software packages such as NVivo: https://lumivero.com/products/nvivo/

Statistics

Topic	Details
SPSS	Trainees have access to SPSS for the duration of training (annual license renewal required). https://help.rcpi.ie/support/solutions/articles/43000621683-statistical-package-for-the-social-sciences-spss-access ; SPSS course mandatory for Public Health HST but optional for others: https://courses.rcpi.ie/product?catalog=An-Introduction-to-Data-Analysis-Using-SPSS
Coursera free courses	https://www.coursera.org/search?query=statistics
University free courses	https://www.open.edu/openlearn/science-maths-technology/medical-statistics?active-tab=description-tab ; https://pll.harvard.edu/subject/statistics
UCD (paid) courses	https://www.cstar.ie/ (useful when you have already gathered your data)
R / R Studio	Use of R or other coding-based tools is not required, as standard statistical software performs the same analyses. Coding does not enhance statistical interrogation or output; dedicated statistical packages (such as SPSS, GraphPad Prism, Minitab) are typically more efficient and timesaving.
Sample size	Sample size calculation for health researchers: https://pmc.ncbi.nlm.nih.gov/articles/PMC10000262/ ; Qualtrics sample size calculator: https://www.qualtrics.com/articles/strategy-research/calculating-sample-size/ ; Free G*Power software: www.gpower.hhu.de
Statistical Support Providers	Young Irish Statistical Association statisticians available for research support. https://istat.ie/n2020/young-isa/ ; Contact: young.istat@gmail.com
Relative Risk, Odds Ratios etc.	Article explaining these terms: https://www.psychiatrist.com/wp-content/uploads/2021/02/18511-understanding-relative-risk-odds-ratio-related-terms.pdf ; Dr Greg Martin (RCPI Public Health) educational YouTube videos: Risk, Rate and Odds: https://www.youtube.com/watch?v=dWtzaKYFg00
Other statistical packages	GraphPad (particularly useful for generating graphs after completing analysis in GraphPad): https://www.graphpad.com/features Minitab: https://www.minitab.com/en-us/
Pilot Studies	Useful articles on pilot-study sample size: https://www.bmj.com/content/bmj/390/bmj-2024-083405.full.pdf ; Overview of pilot studies and sample size: https://www.sciencedirect.com/science/article/pii/S0015028224000815 ;

Publishing

Topic	Details
PRISMA guidelines	https://www.prisma-statement.org/
Developing a publication strategy	https://www.kau.se/en/research-handbook/step-6-share-your-research/step-6-publication-strategy#:~:text=To%20plan%20how%20research%20results%20should%20be%20disseminated%2C,and%20reformulated%20during%20the%20course%20of%20the%20project
Enhancing visibility	https://www.wiley.com/en-us/publish/editor-insights/enhance-your-article-s-visibility-a-guide-to-seo/

Submission Guidelines	Each journal has its own submission guidelines / instructions for authors. Example: https://link.springer.com/journal/12032/submission-guidelines
Reference Manager (use a reference manager from the very start of writing)	Ensure the chosen software has "cite while you write" capability. EndNote: https://endnote.com/ ; Endnote Web may be sufficient (reduced functionality compared to full EndNote programme): https://web.endnote.com/login?returnUrl=%2Flibrary%2Fmy-library%2Fgroups%2Fall-references%2Fpreferences%2Fall ; AI reference manager: https://consensus.app/home/features/reference-manager/ ; Mendeley: https://www.mendeley.com/

Miscellaneous Resources

Topic	Details
Audit (not research)	RCPI Audit course: https://courses.rcpi.ie/product?catalog=Performing-Audit ; HSE Clinical Audit guide: https://assets.hse.ie/media/documents/HSE_National_Centre_for_Clinical_Audit_-_A_Practical_Guide_booklet_2025.pdf ; Audit toolkit: https://www2.healthservice.hse.ie/organisation/ncca/clinical-audit-toolkit/ ; NOCA: https://www.noca.ie/ ; Sample audit data collection form (University of Bristol): https://www.uhbristol.nhs.uk/media/2978986/05_how_to_sample_data_collection_form_v5.pdf
Research	HSE: How to get the most from your research: https://hseresearch.ie/wp-content/uploads/2021/04/How-to-get-the-most-from-your-research.pdf
Research Directorate	HSE Research Directorate MidWest: https://medicalresearch.ie/
Clinical Trials	CONSORT pilot RCT guidelines: https://www.bmj.com/content/355/bmj.i5239 ; Online tool COBWEB for structuring CONSORT reports: https://cobweb.clinicalepidemiology.fr/
Retrospective Chart Review	Methodological considerations: https://synapse.koreamed.org/articles/1148900 ; Guidance on Retrospective Chart Review in Ireland: https://www.lenus.ie/entities/publication/05354546-9457-4a50-a32c-fdd0d32eb787
Pilot studies	Defining feasibility and pilot studies: https://link.springer.com/article/10.1186/1745-6215-16-S2-O87
Literature databases	PubMed: https://pubmed.ncbi.nlm.nih.gov/ ; Embase (requires organisation license): https://www.embase.com/landing?status=grey ; AI powered literature searching: https://consensus.app/
RCPI Research Governance Policies	https://www.rcpi.ie/Healthcare-Leadership/Research/Research-Governance/Research-Policies
Post-CSCST Fellowship	Aspire Fellowship: https://www.rcpi.ie/Learn-and-Develop/Training-Programmes/Post-CSCST-Fellowships#hse-aspire-fellowships ; Healthcare Leadership Fellowship: https://www.rcpi.ie/Learn-and-Develop/Training-Programmes/Post-CSCST-Fellowships