

Research Experience for Medical Students



DukeNUS
Medical School

Professor Thomas Coffman
Dean, Duke-NUS Medical School

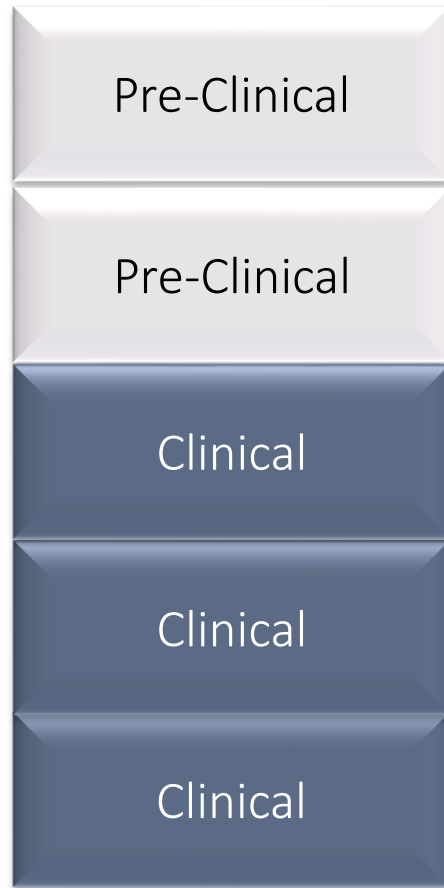


Origins of Duke-NUS

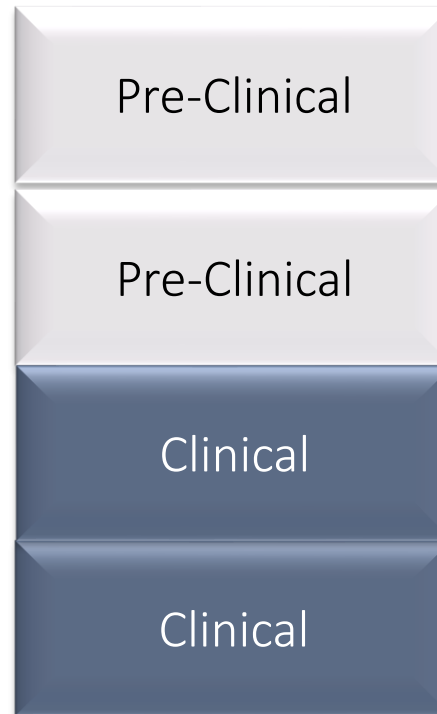


Undergraduate Medical Education

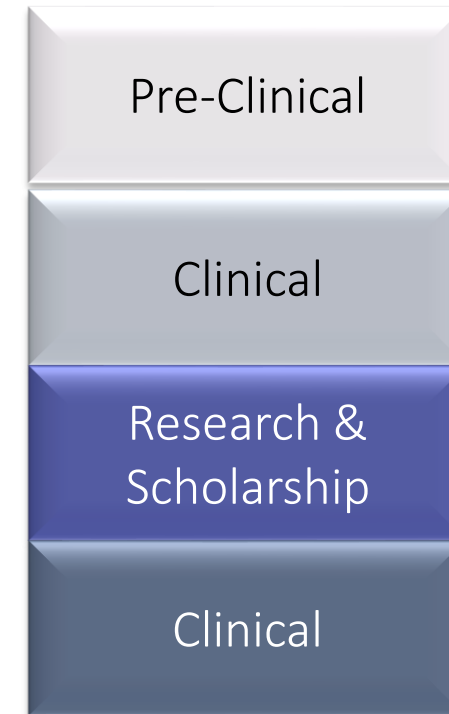
Curricular Models



Typical Undergraduate
Entry (MBBS)



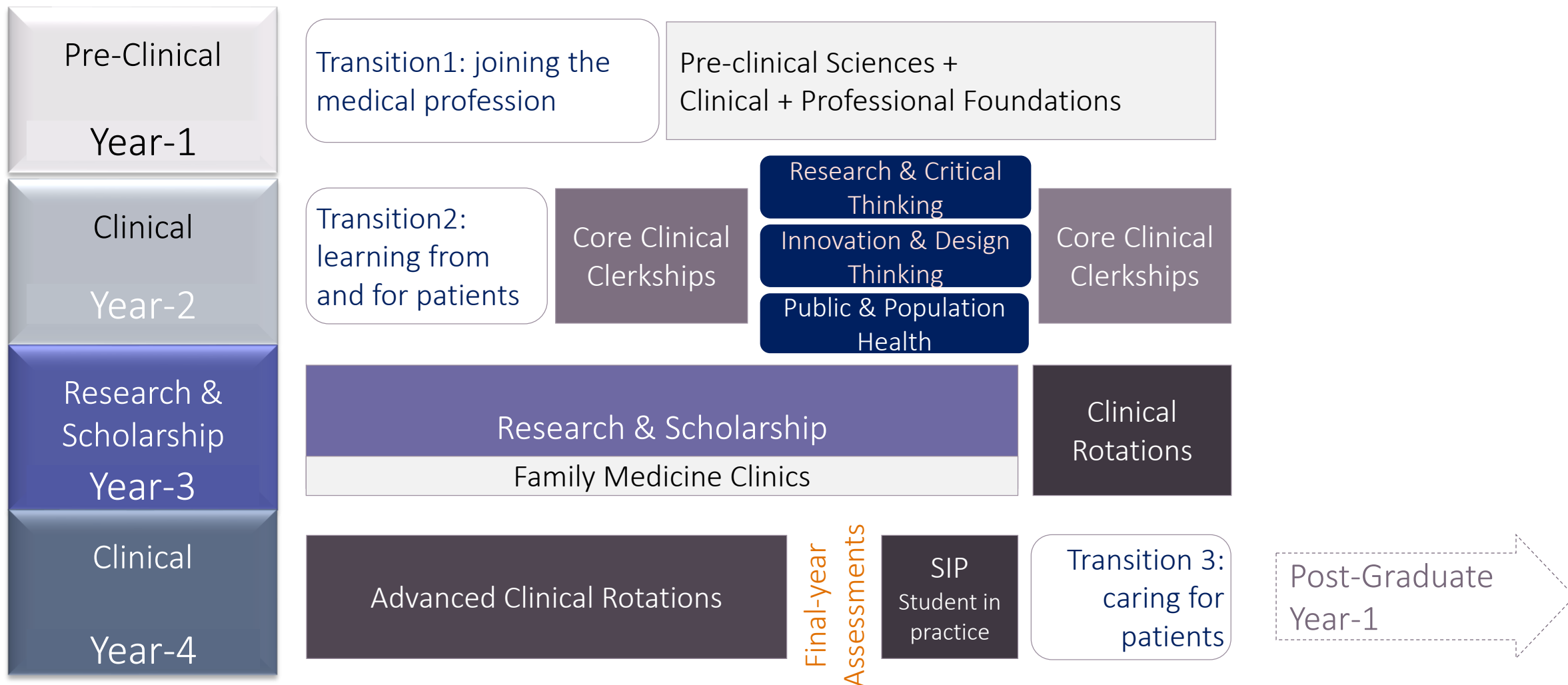
Typical Graduate
Entry (MD)



Duke-NUS (MD)
*Modelled after Duke University
School of Medicine*

Duke-NUS MD Program

Conceptual overview



“Research & Critical Thinking” Course

Longitudinal applied Data Analytics Skills

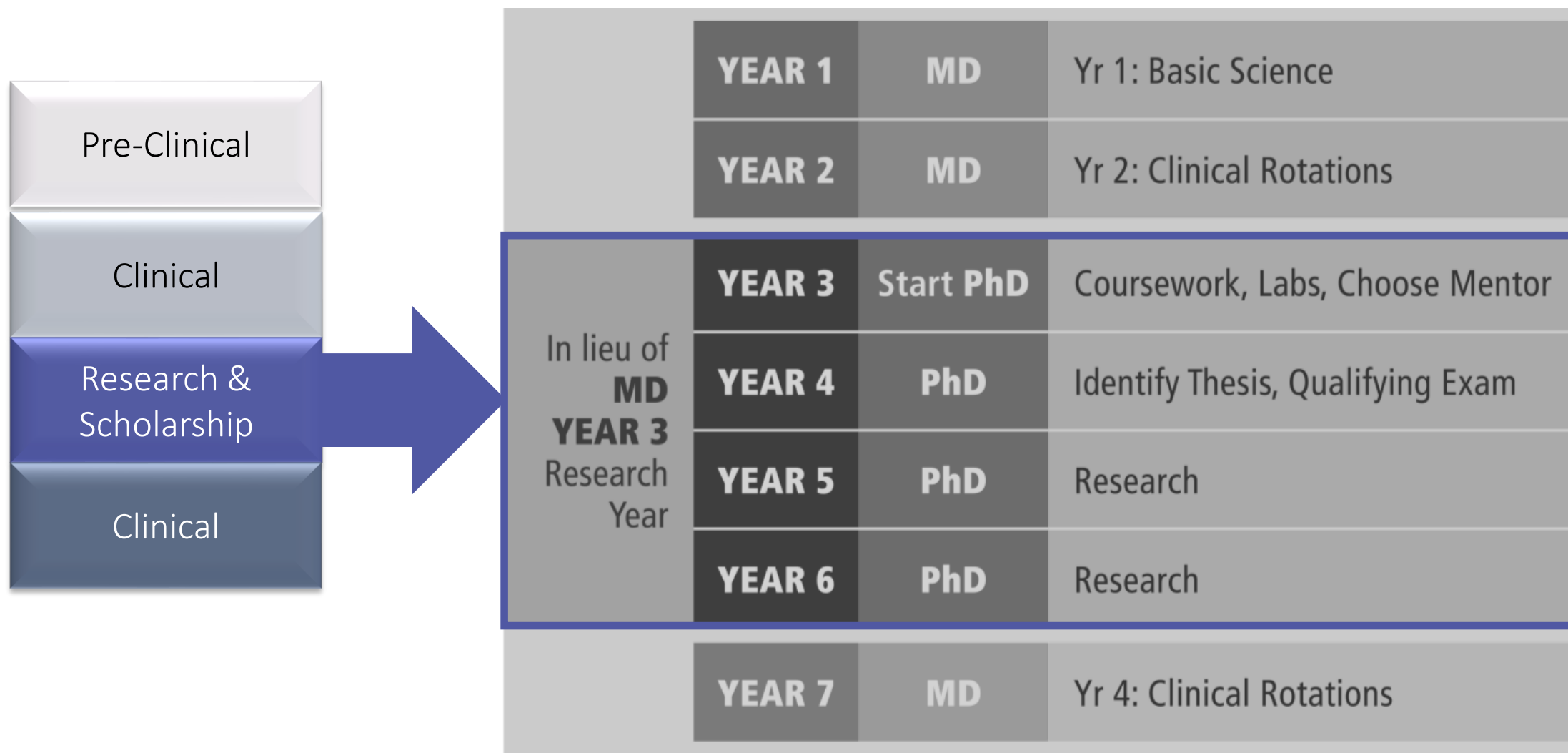
Session No.	TOPIC
1	Introduction to Research
2	Understanding Statistical Inference
3	Populating the Analytic Toolbox: The Chi-squared Test
4	Populating the Analytic Toolbox: The t-test
5	Populating the Analytic Toolbox: Analysis of Variance
6	Populating the Analytic Toolbox: Correlation
7	Embracing Complexity: Simple Linear Regression
8	Embracing Complexity: Multivariable Linear Regression
9	Embracing Complexity: Simple Logistic Regression
10	Embracing Complexity: Multivariable Logistic Regression
11	Special Topics: Time to Event Analysis
12	Special Topics: Proportional Hazards / Cox Regression



Roger Vaughn, PhD
 Director, Centre for
 Quantitative Medicine

We are integrating “AI” education as part of this thread, starting with AI Ethics in year-1

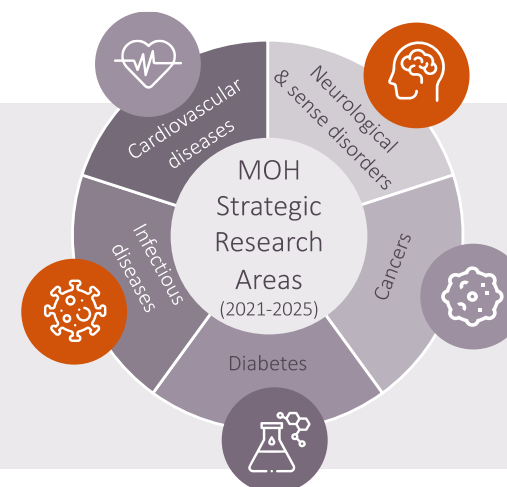
Duke-NUS MD-PhD Pathway



Duke-NUS PhD Programs

Integrated Biology & Medicine (IBM)

- Studying disease mechanisms & translational concepts
- Joint Duke and NUS degree
- 5 Signature Research Programmes (SRP) + 62 mentors
- 15-20 students per year (including ~4 MD/PhD)
- Tuition benefits + monthly stipends



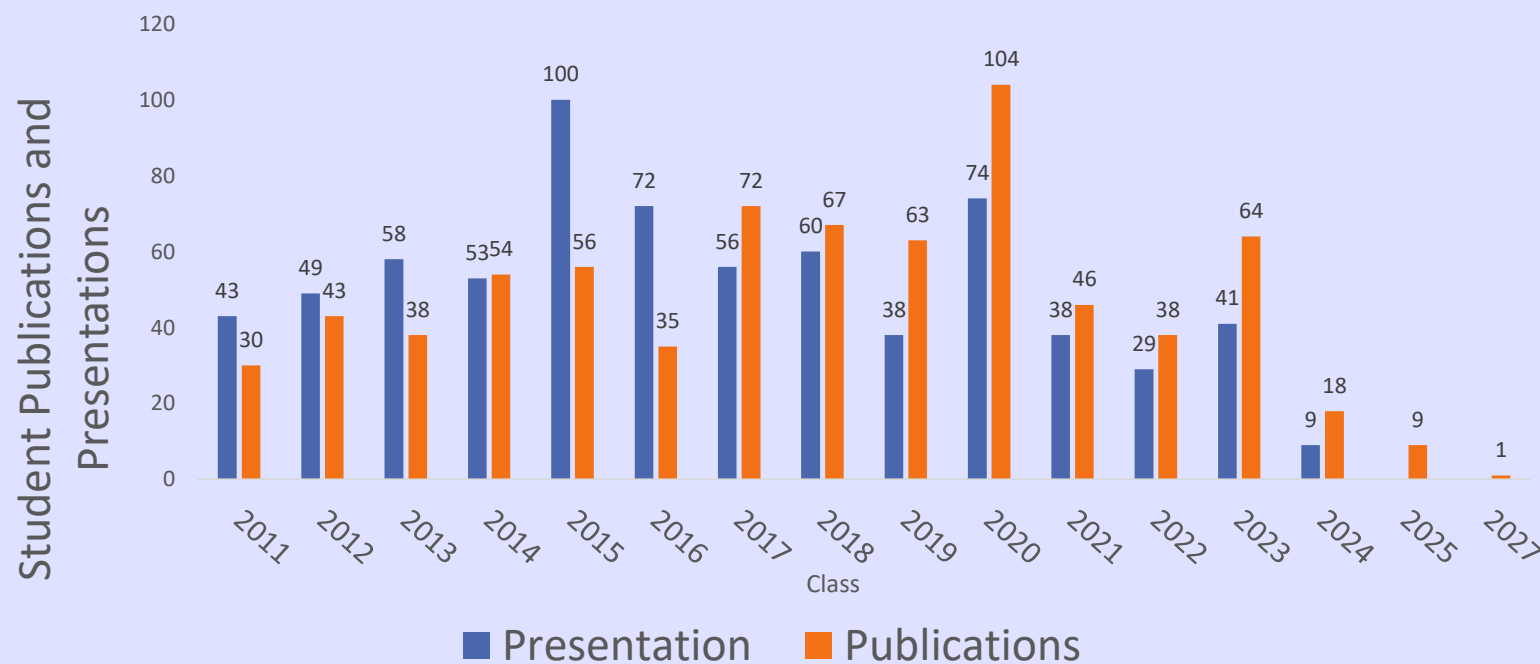
Quantitative Biology & Medicine (QBM)

- Applying computational & statistical tools to answer questions in biology and medicine
- 4 students per year
- Concentrations: 1) Biostatistics & Health Data Science, 2) Computational Biology
- Embedded in: 1) Centre for Quantitative Medicine, 2) Centre of Computational Biology
- Tuition benefits + monthly stipends

Clinical and Translational Sciences (CTS)

- Leading multi-disciplinary translational and patient-oriented research in partnership with basic/quantitative science and industry collaborators
- 4-5 per year (self-funded)
- Targeting clinicians across health professions (and biomedical researchers)

Duke-NUS Medical Student Research Outputs



Doctor's Career Journey

