

## MGM Course Format

### Year 1

#### Choice of taught modules

Students will meet with their supervisors to discuss courses of interest which can be selected from many options. This may include courses offered by the C2D3 Computational Biology Master of Philosophy in Computational Biology, Master of Advanced Study in Mathematics, Master of Philosophy in Epidemiology and those hosted by the Wellcome Sanger Institute.

#### Research Rotations

Each of the two rotations will involve a well-defined research project lasting eight weeks.

Rotations, and eventual PhD projects, must have two supervisors and be collaborative between labs emphasising quantitative/analytic work and those with an emphasis on biology. The different labs should be within different departments (where WSI counts as a department). Supervisors can be from the University of Cambridge and WSI **only**.

#### Current Supervisors

The MGM Programme has a pool of distinguished supervisors all of whom are experts in their fields. The full list can be found under the supervisors section on the left.

#### Assessment

A pass in the MRes is based on successful completion of year 1. This will include course and rotation reports and mandatory attendance at the seminar series, annual retreat and C2D3 Computational Biology Symposium.

Assessment may include, at the discretion of the Examiners, an oral examination on the work submitted by the candidate and on the general field of knowledge within which such work falls.

#### PhD research project

PhD project selection happens towards the end of the second research rotation, with a view to projects commencing at the start of year 2 (year 1 of the PhD). Students must proactively develop their project through discussions with prospective supervisors and also write a formal project proposal.

In order to progress to year 2 (year 1 of the PhD) students must submit a PhD research proposal for approval by Wellcome.

### Year 2-4

In year 1 of the PhD, students are probationary (NOTAF) and towards the end of the second year students will be evaluated by their host departments as part of the First Year PhD Assessment. The assessment involves submission of a Report and an oral examination. Students must pass this assessment in order to progress to year 2 of the PhD and in order to be registered for the PhD degree. At the end of year 3, students must submit a plan for their fourth and final year, outlining the time-frame for the remaining research activities and a skeleton outline of their thesis. Year 4 is deemed a 'writing-up' year.

## MGM Programme Events

### Seminar Days and Meetings

Once a term a 'seminar day' will be held consisting of student talks, workshops and external speakers. Students will also meet several times during term in the evening to discuss relevant topics relating to Mathematics, Genomics and Medicine in order to build a community within the programme and to share ideas, achievements and their research.

### MGM Annual Retreat

The Annual Retreat is held in May at DAMTP and offers the opportunity for students to give either oral or poster presentations about their work.

### C2D3 Computational Biology Symposium

The symposium is a one-day event which includes a wide range of Research Departments from Astronomy to Engineering, involving speakers from diverse backgrounds across the University and region.

## MGM Programme Statistics

### Recruitment

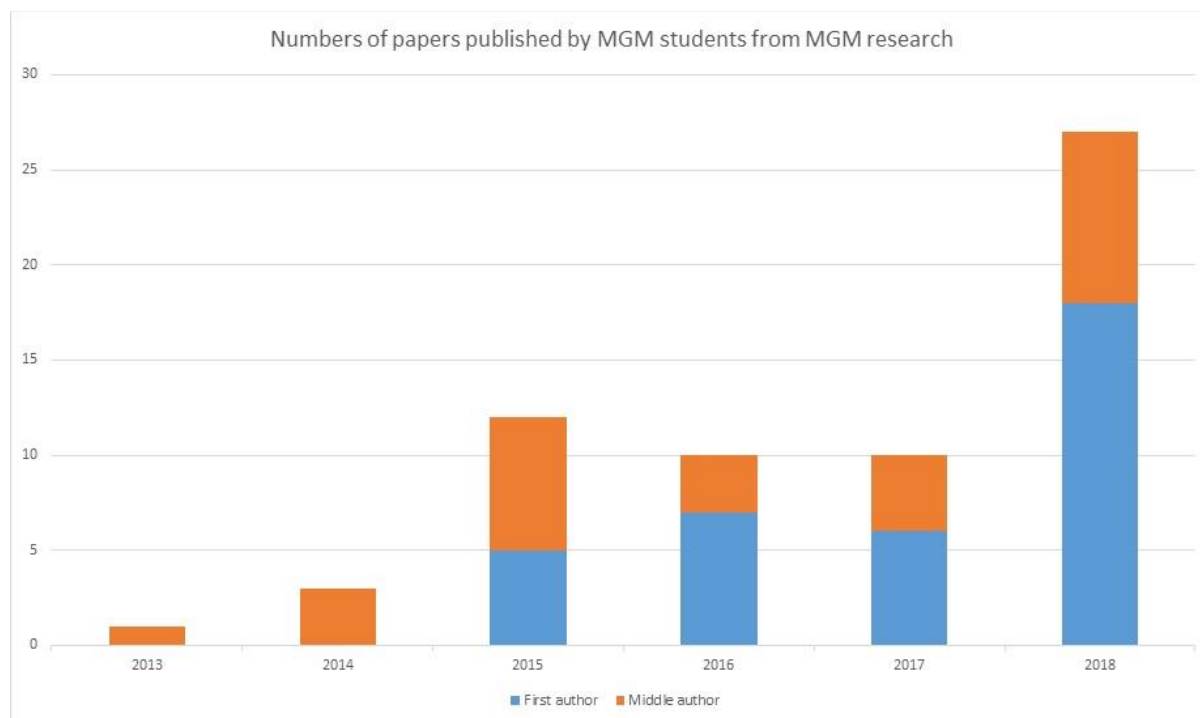
Gender of applicants, interviewees and accepted students, by entry cohort

	Male	Female	Total
Accepted students, 2011/12-2016/17	27 (79%)	7 (21%)	34
Accepted students, 2017/18-2019/20	9 (56%)	7 (44%)	16
Interviewees, 2017/18-2019/20	31 (61%)	20 (39%)	51
Applicants, 2017/18-2019/20	126 (64%)	70 (36%)	196

Nationality of applicants

	UK	EU, non UK	International, non EU
Accepted students, 2011/12-2016/17	11	12	11
Accepted students, 2017/18-2019/20	6	5	5
Interviewees, 2017/18-2019/20	18	16	17
Applicants, 2017/18-2019/20	38	50	108

## Publications



## MGM Supervisors

MGM Supervisor	<u>Affiliation</u>
Professor Julie Ahringer	<a href="#">Gurdon Institute; Department of Genetics</a>
Dr Carl Anderson	<a href="#">Wellcome Trust Sanger Institute</a>
Professor Stephen Bentley	<a href="#">Wellcome Trust Sanger Institute</a>
Professor James Brenton	<a href="#">CRUK Cambridge Institute (CRUK CI)</a>
Professor Kevin Brindle	<a href="#">Department of Biochemistry; CRUK CI</a>
Professor Carlos Caldas	<a href="#">CRUK CI</a>
Professor Peter Campbell	Wellcome Trust Sanger Institute
Dr Jason Carroll	<a href="#">CRUK CI</a>
Dr Emma Davenport	<a href="#">Wellcome Trust Sanger Institute</a>
Professor Richard Durbin	<a href="#">Department of Genetics, Wellcome Trust Sanger Institute</a>

<a href="#">Professor Stephen Eglén</a>	C2D3 Computational Biology; <a href="#">Department of Applied Mathematics and Theoretical Physics (DAMTP)</a>
Professor Zoubin Ghahramani	<a href="#">Department of Engineering</a>
Professor Julia Gog	<a href="#">DAMTP</a>
Professor Berthold Gottgens	<a href="#">CIMR</a> ; <a href="#">Department of Haematology</a>
Professor Greg Hannon	<a href="#">CRUK CI</a>
Dr Florian Hollfelder	<a href="#">Department of Biochemistry</a>
Professor Matthew Hurles	<a href="#">Wellcome Trust Sanger Institute</a>
Professor Francis Jiggins	<a href="#">Department of Genetics</a>
Paul DW Kirk	<a href="#">MRC Biostatistics Unit</a>
Professor Kathryn Lilley	<a href="#">Department of Biochemistry</a>
Professor Pietro Lio	<a href="#">Computer Laboratory</a>
Dr Adrian Mander	<a href="#">MRC Biostatistics Unit</a>
Professor Andrea Manica	<a href="#">Department of Zoology</a>
Dr John Marioni	<a href="#">European Bioinformatics Institute (EBI)</a> ; <a href="#">CRUK CI</a>
Dr Florian Markowetz	<a href="#">CRUK CI</a>
Professor Hugh Markus	<a href="#">Department of Clinical Neurosciences</a>
Dr Hilary Martin	<a href="#">Wellcome Trust Sanger Institute</a>
<a href="#">Professor Gos Micklem</a>	C2D3 Computational Biology; <a href="#">DAMTP</a> ; <a href="#">Department of Genetics</a>
<a href="#">Professor Eric Miska</a>	<a href="#">Gurdon Institute</a> ; <a href="#">Department of Genetics</a>
Professor Elizabeth Murchison	<a href="#">Transmissible Cancer Group</a> ; <a href="#">Department of Veterinary Medicine</a>
Dr Masashi Narita	<a href="#">CRUK CI</a>
Dr Leopold Parts	<a href="#">Wellcome Trust Sanger Institute</a>

<b>Dr Dirk Paul</b>	<a href="#">Cardiovascular Epidemiology Unit</a>
<b>Professor Sylvia Richardson</b>	<a href="#">MRC Biostatistics Unit</a>
<b>Dr Oscar Rueda</b>	<a href="#">CRUK CI</a>
<b>Dr Shamith Samarajiwa</b>	<a href="#">MRC Cancer Unit</a>
<b>Professor Richard Samworth</b>	<a href="#">Statistical Laboratory</a>
<b>Dr Aylwyn Scally</b>	<a href="#">Department of Genetics</a>
<b>Professor Ben Simons</b>	<a href="#">Cavendish Laboratory (Department of Physics), Gurdon Institute</a>
<b>Professor Ken Smith</b>	<a href="#">Department of Medicine</a>
<b>Professor Sir Michael Stratton</b>	<a href="#">Wellcome Trust Sanger Institute</a>
<b>Professor Jussi Taipale</b>	<a href="#">Department of Biochemistry</a>
<b><a href="#">Dr Sarah Teichmann</a></b>	<a href="#">Wellcome Trust Sanger Institute</a> ; EBI
<b>Professor Marc Tischkowitz</b>	<a href="#">Academic Department of Medical Genetics</a>
<b>Dr Ernest Turro</b>	<a href="#">Department of Haematology</a>
<b><a href="#">Professor Mihaela van der Schaar</a></b>	DAMTP, Public Health & Primary Care, Department of Engineering
<b>Professor Michele Vendruscolo</b>	<a href="#">Department of Chemistry</a>
<b><a href="#">Dr Chris Wallace</a></b>	Department of Medical Genetics, <a href="#">MRC Biostatistics Unit</a>
<b>Dr James Wason</b>	<a href="#">MRC Biostatistics Unit</a>
<b>Dr Lorenz Wernisch</b>	<a href="#">MRC Biostatistics Unit</a>
<b>Dr Qingyuan Zhao</b>	<a href="#">Department of Pure Mathematics and Mathematical Statistics (DPPMS)</a>