UNIVERSITY OF CAMBRIDGE : DEPARTMENT OF PATHOLOGY NATURAL SCIENCES TRIPOS PART II PATHOLOGY 2017-2018

CANCER & GENETIC DISEASES

Organisers: Dr Pier Paolo D'Avino (email: <u>cgd-organiser@path.cam.ac.uk</u>, telephone: 33712) or Dr Carole Sargent (email: <u>cgd-organiser@path.cam.ac.uk</u>, telephone: 65667)

Lectures will be given in the **Pathology Lecture Theatre** unless marked with * in which case they will take place in the **Seminar Room*** at Tennis Court Road and take place Tuesday, Thursday and Saturday at 9.00 am unless stated otherwise.

| | | | | | Cell and Tissue Biology | | |
|-------------------------------|-----|------------|----|---------|--|-----------|--|
| Wed | Oct | 4 | | 3:00 PM | Part II Introduction Talk | Kelly | |
| Thu | Oct | 5 | 1 | 9:00 AM | Cell morphology | D'Avino | |
| Fri | Oct | 6 | 2 | 2.00 PM | Tissue morphology | D'Avino | |
| Sat | Oct | 7 | 3 | 9:00 AM | Cell cycle regulation I | Laman | |
| Mon | Oct | 9 | | 9:00 AM | Data interpretation session for all options | Trotter | |
| Tue | Oct | 10 | 4 | 9:00 AM | Cell cycle regulation II | Laman | |
| Sat | Oct | 14 | 5 | 9:00 AM | Mechanics and control of cell division I | D'Avino | |
| Mon | Oct | 16 | 6 | 3:00 PM | Mechanics and control of cell division II | D'Avino | |
| Tue | Oct | 17 | 7 | 9:00 AM | Stem cells I | Rawlins | |
| Thu | Oct | 19 | 8 | 9:00 AM | Stem cells II | Rawlins | |
| Sat | Oct | 21 | 9 | 9:00 AM | Life and death of cells I | Watson | |
| Mon | Oct | 23 | 10 | 4:00 PM | Life and death of cells II | Watson | |
| Genomic Approaches to Disease | | | | | | | |
| | | | | Organ | isation and Mapping of the Genome | | |
| Thu | Oct | 26 | 11 | 9:00 AM | What makes a genome? | Skinner | |
| Sat | Oct | 28 | 12 | 9:00 AM | How do genomes evolve? | Skinner | |
| Tue | Oct | 31 | 13 | 9:00 AM | How do genomes differ? | Sargent | |
| Thu | Nov | 2 | 14 | 9:00 AM | What chromosome studies tell us about disease | Griffin | |
| Thu | Nov | 2 | 15 | 10 AM | Why chromosome position matters in disease | Griffin | |
| Sat | Nov | 4 | 16 | 9:00 AM | Mapping disease genes for simple disorders | Sargent | |
| Tue | Nov | 7 | 17 | 9:00 AM | Complex disorders: populations and pedigrees (I) | Sargent | |
| Tue | Nov | 7 | 18 | 10.00am | Complex disorders: populations and pedigrees (II) | Sargent | |
| Wed | Nov | 8 | 19 | 2.00 PM | Sex and the single Y: the rock'n'roll chromosome? | Ellis | |
| Wed | Nov | 8 | 20 | 3.30pm | Sex chromosome specialisation and disease | Ellis | |
| | | | | | Rare Diseases | | |
| Thu | Nov | 9 | 21 | 9:00 AM | Next generation sequencing approaches to rare diseases | Skinner | |
| | | | | Chri | omatin Regulation and Epigenetics | | |
| Tue | Nov | 14 | 23 | 9:00 AM | Chromatin structure and expression | Bannister | |
| Thu | Nov | 14 | 23 | 9:00 AM | Long-range regulation of gene transcription | Bannister | |
| Sat | Nov | 18 | 24 | 9:00 AM | Non-Mendelian inheritance | Quilter | |
| Tue | Nov | 21 | 25 | 9:00 AM | Epigenetic Disease | Quilter | |
| iue | NOV | Z I | 20 | 9.00 AW | Lhigenetic Disease | Quinter | |

MICHAELMAS TERM 2017

| Wed | Nov | 22 | 27 | 2.00 PM | The developmental origins of disease | Ozanne | | |
|-----|---------------------------|----|----|---------|---|-------------|--|--|
| Mon | Nov | 27 | 28 | 2.00 PM | DNA methylation and gene activity | Constancia | | |
| Mon | Nov | 27 | 28 | 3.00 PM | Genomic imprinting: lessons from mouse models | Constancia | | |
| | Neurodegenerative Disease | | | | | | | |
| Tue | Nov | 28 | 29 | 9:00 AM | The genetics of Parkinson's disease | Laman | | |
| Thu | Nov | 30 | 30 | 9.00 AM | Introduction to autophagy* | Rubinsztein | | |
| Thu | Nov | 30 | 31 | 10 AM | Autophagy and neurodegeneration* | Rubinsztein | | |

LENT TERM 2018

| | Molecular and Cell Biology of Cancer | | | | | | | |
|----------------------------------|--------------------------------------|----|----|---------|---|---------|--|--|
| Oncogenes and Tumour Suppressors | | | | | | | | |
| Tue | Jan | 16 | 32 | 9:00 AM | Tumour suppressors | Laman | | |
| Thu | Jan | 18 | 33 | 2.00 PM | Oncogenic pathways I | Watson | | |
| Sat | Jan | 20 | 34 | 9:00 AM | Oncogenic pathways II | Watson | | |
| Mon | Jan | 22 | | 2.00 PM | Tutorial session on MT topics* | | | |
| Tue | Jan | 23 | 35 | 9:00 AM | Cell senescence and telomeres | Narita | | |
| | | | | | The Cancer Genome | | | |
| Thu | Jan | 25 | 36 | 9:00 AM | Investigating the cancer genome | Edwards | | |
| Sat | Jan | 27 | 37 | 9:00 AM | What mutations drive carcinomas? | Edwards | | |
| Tue | Jan | 30 | 38 | 9.00 AM | Transcription factors and transcription | Carroll | | |
| | | | | | networks in cancer | | | |
| Tue | Jan | 30 | 39 | 10 AM | Nuclear receptors in cancer | Carroll | | |
| Thu | Feb | 1 | 40 | 9:00 AM | Epigenetics in cancer I | Vire | | |
| Sat | Feb | 3 | 41 | 9:00 AM | Epigenetics in cancer II | Vire | | |
| Tue | Feb | 6 | 42 | 9:00 AM | Micro RNAs in cancer | Murray | | |
| Thu | Feb | 8 | 43 | 9:00 AM | Genomic instability I | D'Avino | | |
| Sat | Feb | 10 | 44 | 9:00 AM | Genomic instability II | D'Avino | | |
| Tue | Feb | 13 | 45 | 9:00 AM | Genomic instability III | D'Avino | | |
| | | | | | Cancer Examples and Models | | | |
| Thu | Feb | 15 | 46 | 9:00 AM | Models of Cancer I | Turner | | |
| Sat | Feb | 17 | 47 | 9:00 AM | Models of Cancer II | Turner | | |
| Tue | Feb | 20 | 48 | 9:00 AM | Hereditary Cancer I | Maher | | |
| Thu | Feb | 22 | 49 | 9:00 AM | Hereditary Cancer II | Maher | | |
| Sat | Feb | 24 | 50 | 9:00 AM | Stem cells and cancer | Huntly | | |
| Tue | Feb | 27 | 51 | 9:00 AM | The tumour microenvironment | Shields | | |
| | | | | | | | | |
| Mon | Mar | 5 | 52 | 2:00 PM | Inter and Intra-tumour heterogeneity | Bruna | | |
| Tue | Mar | 6 | 53 | 9:00 AM | Paediatric Cancer I | Coleman | | |
| | | | 54 | 10 AM | Paediatric Cancer II | Coleman | | |
| Thu | Mar | 8 | 55 | 9:00 AM | Oesophageal adenocarcinoma | Contino | | |
| Sat | Mar | 10 | 56 | 9:00 AM | Haematopoietic cancers: Lymphoma | Du | | |
| Tue | Mar | 13 | 57 | 9:00 AM | Invasion and Metastasis | Bruna | | |

EASTER TERM 2018

| Thu | u Apr | 26 | 10.00 AM | Project Presentations (Single Subject) | D'Avino |
|-----|-------|-----|----------|--|---------|
| | | | | | Sargent |
| Tue | e Ma | / 8 | 9.00 AM | Data Handling Session | Sargent |

Bibliographic IT training will be available on multiple dates at the start of Michaelmas Term. Students need only to attend one of the sessions. Please complete the form available here to select the session you will attend <u>https://www.surveymonkey.co.uk/r/PathPartII-2017</u>

Updates to the information on this timetable will appear on the Departmental Web Server: <u>www.path.cam.ac.uk</u>, click on Undergraduate Teaching, then Third Year (part II teaching), then Part II Timetables (or go directly to

<u>http://www.path.cam.ac.uk/undergraduate/third_year/timetables</u>). It is also available online to print or export to your personal timetable <u>www.timetable.cam.ac.uk</u>.

Paper Presentation Sessions for all students and Data Handling Seminars for single subject students only will be held in LT. (Dates TBC)