



università di ferrara
DA SEICENTO ANNI GUARDIAMO AVANTI.

Title of the programme

"Normal and abnormal growth of tissues and organs",

Discipline

Hematology - Oncology

Period

12 June – 7 July 2017

Teaching language

English

Maximum number of students

10 +10

Programme co-ordinators

Overall teaching planning and Istitutional tasks
Antonio Cuneo (Hematology), Giovanni Lanza (Pathology)

Practical teaching
Paolo Carcoforo (Surgery),
Gian Matteo Rigolin (Hematology)
Francesco Cavazzini (Laboratory)
Massimo Negrini (Molecular Oncology)

Ferrara University, ITALY

Contactperson

Prof Reinhold Stockbrugger (rstockbrugger635@gmail.com)
Prof Antonio Cuneo (cut@unife.it)
Prof Giovanni Lanza (giovanni.lanza@unife.it)

Participating departments/institutes

Hematology – Pathology - Oncology – Molecular genetics – Surgery

Background information: Main Topics

- Basic principles of normal and abnormal cell growth,
- Invasion, metastasis and immune response
- The revolution in cancer treatment: understanding genetic lesions and target therapy
- Practical approach to the patient with tumor
- The tumor in the surgical room: the paradigm of breast cancer

Learning goals

Pathophysiology of Cancer

- normal and abnormal cell cycle
- angiogenesis and metastasis
- the cell and its defence
- sequential development of genetic lesions

Approach to the patient

- visiting a patient with tumor
- communication skills
- recognize tumor cells
- principles of modern medical treatment
- principles of surgical treatment

Outline of the programme

Two case/problem-based tutorials per week

Three lectures by basic and clinical specialists per week

Practicals in the field

- Laboratory hematology and oncology: identifying leukemia cells and tumor cells
- Laboratory genetics: basic molecular genetic techniques
- Patient with tumor in the ward and in the DH setting
- Patient with breast cancer and surgery

International health themes (ITM major / minor)

English is THE language!

Required knowledge

Basic knowledge of cell biology, anatomy, biochemistry and physiology;

Interest in laboratory activities

Motivation to meet patients and understand their needs

Feedback

The Ferrara Dept.s involved have a long tradition in PBL and PB Teaching

Way of assessment and Final assessment

Activity in the practical training; final multiple choice test

All teaching activities will be hold at the University Hospital in Cona unless otherwise specified

Week 1 June 12-16 Basic principles of normal and cancer cell biology	Subject	Teacher and venue
June Mon 12 9.00	Registration of the external students	University, Office International Affairs Dott. C. Argnani; Ferrara, Via Cairoli, 30, 1. piano, Ufficio 24, Ferrara
15.00 -15.30	General Introduction to the course Introduction to the course "cell growth"	Cuneo Aula 5 Cona
Tue 13 11.00 – 12.00 12.00 – 13.00 15.00 – 16.00 16.00 – 17.30	Lecture 1 "Molecular cell biology" Lecture 2: Cell & Cyclus Lecture 3: Classification of hemopoietic neoplasms Case 1 (discussion)	M. Negrini Aula 5 Cona Francesco Vieceli, M. Tognon, Paola Rizzo Aula 5 Cona A. Cuneo Aula 5 Cona Tutors: L. Formigaro; E. Lista; M Cavallari; M. Ciccone) Aula 5 Cona Hospital (Cona)
Wdn 14 14.00 – 15.00	Lecture 4 Invasion and metastasis a) biologic mechanisms excluding angiogenesis	F. Di Virgilio Aula specializzandi 3.35.08 – 1B3 Cona
Thu 15 12.00 – 13.00 15.30	Practical: Molecular genetic techniques Reporting Case 1. Discussion Case 2.	M. Negrini (Cubo – FE) Tutors: (E Lista; L. Formigaro; M Cavallari; M. Ciccone) Aula 4 Cona Hospital (Cona)
Fri 16 11.00 – 13.00	Self studies	

Week 2 June 19-23 Cancer cell growth and interaction with the host	Subject	Teacher and venue
Mon 19	Self studies	
Tue 20 12.00 – 13.00 15.00-16.00 16.30	Lecture 6: Invasion and metastasis c) how and where metastatic spread occurs Lecture 7: "The cell and its defence" Reporting case 2 Discussion case 3	G. Lanza Aula 5 Cona F. Di Virgilio Aula 5 Cona Tutors: (E. Lista L. Formigaro; M Cavallari; M. Ciccone) – Aula 5 Cona Hospital (Cona)
Wdn 21 9.00 – 11.00	Practical: Visiting patients with hemopoietic neoplasms	<u>5 students</u> <u>Hematology ward 1B3</u>
Thu 22 9.00-11.00 11.00 – 12.30 14.00-15.00	Practical: Visiting patients with hemopoietic neoplasms Practical: identifying tumor cells in tissue sections (1) Lecture 8 Sequential development of genetic lesions: the example of colorectal and breast cancer Reporting case 2 Discussion case 3	<u>5 students</u> <u>Hematology ward 1B3</u> G. Lanza, Dr. R Gafà and co-workers Pathology Institute G. Lanza Aula 5 Cona Tutors: (E. Lista, L. Formigaro; M Cavallari; M. Ciccone) Aula 5 Cona Hospital (Cona)
Fri 23	Self studies	

Week 3 June 26 -30 Cancer in the clinic	Subject	Teacher and venue
Mon 26		
Tue 27 12.30 -13.30 13.30 - 14.30 15.30	Lecture 9 The breast cancer model: from bed to bench and back Lecture 10 Surgical approach to cancer treatment Reporting case 4 Discussion case 5	A. Frassoldati Aula 5 Cona P. Carcoforo Aula 5 Cona Tutors: (E. Lista L. Formigaro; M Cavallari; M. Ciccone) Aula 5 Cona Hospital (Cona)
Wdn 28 9.00 - 13.00 15.00-16.00	Practical: surgery Lecture 11 Medical approach to cancer treatment: from the genetic lesion to target therapy	P. Carcoforo Surgery department F. Cavazzini Aula 5 Cona
Thu 29 12.00-13.00 15.30	Lecture 12/training: "Communication skills" Reporting Case 5 Discussion Case 6	R. Stockbrugger Aula 5 Cona Tutors: (E. Lista; L. Formigaro; M Cavallari; M. Ciccone) Aula 5 Cona Hospital (Cona)
Fri 30	Self studies	

Week 4 July 3-7 Cancer in the clinic	Subject	Teacher(s)
Mon 3 July	Self studies	
Tue 4 14.00 – 15.30	Reporting case 6	Tutors: (E. Lista; L. Formigaro; M Cavallari; M. Ciccone) Aula 5 Cona
Wdn 5 9.00 – 13.00 (to be defined)	Practical: surgery	<u>P. Carcoforo</u> Surgery department
Thu 6	Self study	
Fri 7 09.00 – 12.00	Exam (multiple choice and task) and course evaluation.	Prof. R. Stockbrugger Aula 5 Cona

The rooms (Aule) are located at the Hospital in Cona.