



**School of  
Specialization  
in  
Hospital  
Pharmacy in  
Italy**

Prof. Carlo Polidori

# University of Camerino



## Hospital pharmacy courses







**Hospital pharmacy school building  
and main class**



# 1<sup>st</sup> Year

## Nutrition I

General concepts in nutrition.

## General Pathology

Immunotherapy and target therapy in cancers and transplantation.

## Biopharmaceutics

Biopharmaceutic factors affecting dissolution, absorption and/or bioavailability of drug in dosage forms.

## Budget Management in the hospital pharmacy

Italian health system organization. Health technology assessment. Hospital financial assessment.

## Hospital training

# 2<sup>nd</sup> Year

## Nutrition II

Nutrients, formulations and their chemical stability in hospital enteral/parenteral nutrition formulations. Pediatric nutrition formulations.

## Microbiology in hospital settings

Infections and risk prevention (physical, chemical, and biological) in hospital environment.

## Methods in plasma drug determination

Methods for drugs determination into the blood (HPLC-MS).

## Pharmacokinetics

Methods for calculating and adjusting plasma drug concentrations. Bioequivalence studies.

## Hospital training

# 3<sup>rd</sup> Year

## Bioetics

Bioetics and CRO organizations.

## Oncological therapies and radiopharmacy

Infusion bags preparations for anticancer drugs. Apotheca robot management experience.

## Antibiotic, antiviral and heart disease drugs

Chemistry of novel drugs and their therapeutical use.

## Clinical Therapeutic Management

Clinical management of cardiovascular drugs.

## Hospital training

# 4<sup>th</sup> year

## Hospital «orange book», medical devices and galenic preparations

Signing contract for buying drugs and medical devices.

## Hospital drug monitoring

Monitoring of drug usage and expenses in the hospital.

## Off label and right prescriptions

Recording of drugs used as off label and in labels.

## Surveillance in Urban Drug prescriptions

Monitoring of drug use and expenses in the urban pharmacies.

## Hospital training