

| Cycle  | Surname            | Name           | Research Topic  | Supervisor                 |
|--------|--------------------|----------------|---|----------------------------|
| XXXIII | Altay              | Ayça           | Effect of mannitol physico-chemical and solid-state characteristics on aerosolization performances of powders for inhalation  | Prof. Ruggero Bettini      |
| XXXIII | Angel Alarcon      | Diana Carolina | Design and development of innovative formulations with low environmental impact for to swine breeding   | Prof. Ruggero Bettini      |
| XXXIII | Bugatti            | Kelly          | New integrin-targeted small molecule peptidomimetics, their covalent conjugates and nanomaterials for therapeutic and diagnostic applications                                       | Prof. Lucia Battistini     |
| XXXIII | De Bei             | Omar           | <b>Complex between S. aureus hemophore and human hemoglobin as a target for novel antimicrobial agents against MRSA. From complex characterization to compounds identification.</b> | Prof. Barbara Campanini    |
| XXXIII | Ghidini            | Andrea         | Design and synthesis of novel NAPE-PLD inhibitors   | Prof. Daniele Piomelli     |
| XXXIII | Palese             | Luca           | New strategies for fast multimodal analgesia for the treatment of moderate-to-severe pain   | Prof. Cristina Padula      |
| XXXIII | Palese             | Simone         | Eph-ephrin modulation of intestinal inflammation: the role of the immune system   | Prof. Elisabetta Barocelli |
| XXXIII | Quarta             | Eride          | Inhalation drug products of loaded calcium phosphate nanoparticles for heart targeting  | Prof. Fabio Sonvico        |
| XXXIII | Ribeiro Bitencourt | Antonio Paulo  | Development of lecithin/chitosan nanoparticles decorated with glycyhrrizin for the treatment of breast cancer   | Prof. Alessandra Rossi     |
| XXXIV  | Bertocchi          | Laura          | Investigation of the influence of hyaluronic acid molecular weight on characteristics and behaviour of nanoparticles for pulmonary drug delivery                                    | Prof. Ruggero Bettini      |
| XXXIV  | Delfino            | Danila         | Human endogenous DNase as a potential therapy for pulmonary complications in cystic fibrosis patients   | Prof. Claudio Rivetti      |
| XXXIV  | Fantini            | Adriana        | Innovative strategies for non-invasive vaccines administration  | Prof. Patrizia Santi       |
| XXXIV  | Papotti            | Bianca         | Investigating the pathophysiological role of the proprotein convertase subtilisin/kexin type 9 (PCSK9) in inflammation and lipid metabolism   | Prof. Franco Bernini       |
| XXXIV  | Pavone             | Marialaura     | Synthesis and characterization of new enhancers for Antimicrobial therapy   | Prof. Gabriele Costantino  |
| XXXIV  | Ronca              | Annalisa       | Functionality of serum lipoproteins: from the characterization in genetic and metabolic disorders to the identification of a possible pharmacological target                        | Prof. Elda Favari          |
| XXXV   | Allodi             | Marika         | EphA/ephrin - A system in acute and chronic inflammation  | Prof. Simona Bertoni       |
| XXXV   | D'Angelo           | Davide         | Particle engineering applied for development of dry powders for inhalation containing biotechnological drugs  | Prof. Francesca Buttini    |
| XXXV   | Elisi              | Gian Marco     | Modelling the binding process for hydrophobic ligands of GPCRs  | Prof. Alessio Lodola       |
| XXXV   | Ghezzi             | Martina        | Tackling biological barriers using nanosystems  | Prof. Sara Nicoli          |
| XXXV   | Gonzalez Fernandez | Felipe Manuel  | Development of ex-vivo models for smart screening of novel colloidal ocular fomulations   | Prof. Silvia Pescina       |
| XXXV   | Marcantonio        | Enrico         | Development of new asymmetric vinyllogous reactions for the synthesis of biologically relevant heterocyclic chemotypes  | Prof. Franca Zanardi       |

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| XXXV   | Martina   | Maria Grazia | ORIGINALE CHEMIAE in antiviral strategy – evolution-inspired chemistry to develop new Broad Spectrum Antivirals  | Prof. Marco Radi          |
| XXXV   | Michielon | Annalisa     | L- e D- serine biosynthesis in the brain   | Prof. Stefano Bruno       |
| XXXV   | Picchi    | Elena        | The role of MST in drug discovery of protein kinases inhibitors  | Prof. Marco Mor           |
| XXXV   | Remaggi   | Giulia       | Liquid chromatography-mass spectrometry proteomics for screening of endocrine disruptors effects on in-vitro 2D and 3D thyroid models  | Prof. Lisa Elviri         |
| XXXVI  | Bergamo   | Diletta      | Design and Synthesis of antimicrobial peptidomimetic membranolytic compounds   | Prof. Marco Pieroni       |
| XXXVI  | Bua       | Emanuela     | NMR in drug design: an innovative toolbox to guide conformational analysis of free ligands in solution   | Prof. Marco Mor           |
| XXXVI  | Cozzi     | Monica       | Proteins involved in <i>Staphylococcus aureus</i> iron assimilation pathway: characterization and targeting for the development of new molecules with antimicrobial activity or adjuvants of antimicrobial therapy | Prof. Stefano Bettati     |
| XXXVI  | Giulio    | Luca         | Innovative strategies for non-invasive treatment of non-melanoma skin cancers (NMSCs)  | Prof. Patrizia Santi      |
| XXXVI  | Guidetti  | Lorenzo      | Design and synthesis of new EphA2 receptor antagonists   | Prof. Alessio Lodola      |
| XXXVI  | Ogliari   | Chiara       | Design and development of microparticulate/nanoparticulate inhalable dry powders of antimicrobial peptides for MDR <i>Esophage</i> pathogens causing pulmonary infections  | Prof. Alessandra Rossi    |
| XXXVI  | Palumbo   | Marcella     | Evaluation of functional serum lipid profile and its modulation in clinical settings linked to high cardiovascular risk  | Prof. Francesca Zimetti   |
| XXXVI  | Sorgi     | Daisy        | Innovative drug delivery strategies for innate immunity stimulation  | Prof. Ruggero Bettini     |
| XXXVII | Barbieri  | Francesca    | Design and synthesis of new compounds for cystic fibrosis and related diseases   | Prof. Marco Radi          |
| XXXVII | Bazzoli   | Gianluca     | New inhalation drug delivery systems for the treatment of pulmonary fibrosis   | Prof. Ruggero Bettini     |
| XXXVII | Bova      | Stefania     | Protein labeling for interaction studies with drugs and biomolecules   | Prof. Luca Ronda          |
| XXXVII | Galvani   | Francesca    | A computational platform for multiscale simulations and machine learning in drug discovery   | Prof. Alessio Lodola      |
| XXXVII | Giaccari  | Roberta      | Polyunsaturated fatty acids of antarctic diatoms: metabolic biodiversity and sustainable production  | Prof. Stefano Bruno       |
| XXXVII | Giannessi | Lisa         | The 12 principles of green chemistry applied to the development of innovative lipid-lowering drugs targeting PCSK9   | Prof. Marco Radi          |
| XXXVII | Guareschi | Fabiola      | Nanoparticles formulations for the nose-to-brain delivery of peptide drugs   | Prof. Fabio Sonvico       |
| XXXVII | Maglie    | Luigi        | New formulation approaches for reducing the environmental impact of artificial insemination in pig farming   | Prof. Ruggero Bettini     |
| XXXVII | Restori   | Margherita   | Development of new integrin-targeted peptidomimetics and conjugates for selective imaging and drug delivery  | Prof. Franca Zanardi      |
| XXXVII | Spaggiari | Chiara       | Investigation of plant derived secondary metabolites as Ahr modulators   | Prof. Gabriele Costantino |

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| XXXVII  | Zaccarelli   | Alessandro       | Sustainable optimization of Alfalfa biorefinery operations for high-quality multiple end-products  | Prof. Lisa Elviri            |
| XXXVII  | Zappia       | Alfonso          | Pharmacological characterization of new compounds aimed at inhibiting Eph-ephrin interaction in glioblastoma   | Prof. Massimiliano Tognolini |
| XXXVIII | Boraschi     | Marianna         | Novel antibiotic-based dry powder system targeting pulmonary infections in non-cystic fibrosis bronchiectasis  | Prof. Alessandra Rossi       |
| XXXVIII | Buoli Comani | Valeria          | Fighting antimicrobial resistance: <i>Staphylococcus aureus</i> hemophores as new antibiotic targets   | Prof. Serena Faggiano        |
| XXXVIII | Caraua       | Georgeta         | Innovative airway targeted drug delivery strategies for respiratory viral infections treatment   | Prof. Fabio Sonvico          |
| XXXVIII | Castagnini   | Francesco        | Physico-chemical properties evaluation in early drug discovery   | Prof. Marco Mor              |
| XXXVIII | De Angelis   | Davide           | Additive manufacturing of API formulations tailoring oral administration for preclinical research purposes   | Prof. Alessandra Rossi       |
| XXXVIII | De Nardis    | Ilaria           | Characterization of structure and dynamics of target proteins and the effects of macro- and micromolecular interactors by spectroscopic and spectrometric techniques                                     | Prof. Stefano Bruno          |
| XXXVIII | Ferrari      | Francesca Romana | Pharmacological characterization of new compounds aimed at inhibiting Eph-ephrin interaction   | Prof. Massimiliano Tognolini |
| XXXVIII | Germani      | Saveria          | Development of nanobodies-based inhalation powders for therapeutic immune response in the lungs  | Prof. Ruggero Bettini        |
| XXXVIII | Glieca       | Stefania         | Drug delivery platforms for the inhalation of biologics research plan  | Prof. Francesca Buttini      |
| XXXVIII | Guazzetti    | Debora           | Innovative, asymmetric synthesis routes in the quest for bioactive, chiral heterocyclic compounds  | Prof. Claudio Curti          |
| XXXVIII | Signorini    | Sara             | Innovative strategies for the delivery of neuroprotective compounds to the posterior segment of the eye  | Prof. Sara Nicoli            |
| XXXVIII | Spagnoli     | Marco            | High resolution mass spectrometry in the clinical laboratory: targeted methods and untargeted screening  | Prof. Federica Vacondio      |
| XXXVIII | Ugolotti     | Martina          | Impact of lipid metabolism derangement and its pharmacological modulation in neurodegenerative disorders: in vitro and in vivo studies   | Prof. Francesca Zimetti      |
| XXXVIII | Viglioli     | Martina          | LC-HRMS-based metabolomics for drug discovery and development  | Prof. Silvia Rivara          |
| XXXVIII | Yamukujje    | Clementine       | Search for Plant-Derived Secondary Metabolites and Synthesis of Natural Products Mimics for the treatment and management of inflammatory diseases through NLRP3/Caspase-1/IL-1 $\beta$ signaling pathway | Prof. Gabriele Costantino    |
| XXXIX   | Chiara       | Maria Linda      | Development and characterization of an <i>in vitro</i> human model of intestinal inflammation  | Prof. Elisabetta Barocelli   |
| XXXIX   | Dalla Lana   | Sofia            | Deformable nanocarriers for the treatment of ocular complications associated with diabetes   | Prof. Sara Nicoli            |
| XXXIX   | Davolio      | Ilaria           | Formulation and delivery strategies for ophthalmic administration of statins   | Prof. Silvia Pescina         |
| XXXIX   | Lippolis     | Sara             | Development and characterization of drug delivery systems for site-specific and multi-kinetic release of one or more drugs in combination for oral administration  | Prof. Alessandra Rossi       |
| XXXIX   | Mandrioli    | Diletta          | Development of inhalation powders for the treatment of chronic cough and their use in an animal model  | Prof. Francesca Buttini      |
| XXXIX   | Mattina      | Beatrice         | Inhibition of PCSK9 as a novel strategy to counteract the neurodegeneration  | Prof. Ilaria Zanotti         |

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| XXXIX | Patterlini | Virginia  | <i>In vitro</i> , <i>ex vivo</i> and <i>in vivo</i> advanced characterization of inhaled product pharmacokinetics focused on PK/PD correlations - new approaches for innovative precision treatments. | Prof. Fabio Sonvico   |
| XXXIX | Polichetti | Miriam    | A rational approach to protein-containing dry powders for inhalation  | Prof. Ruggero Bettini |
| XXXIX | Rocca      | Edoardo   | Synthesis of innovative modulators of the endo/para cannabinoid system  | Prof. Marco Mor       |
| XXXIX | Rubini     | Daniele   | Development of new broad-spectrum antiviral agents targeting host proteins for a rapid response to future epidemics   | Prof. Marco Radi      |
| XXXIX | Scarano    | Antonio   | Targetting catalytic cysteines of metabolic enzymes for anti-cancer activity  | Prof. Stefano Bruno   |
| XXXIX | Tamburini  | Maddalena | Innovative artificial insemination formulations for more sustainable pig production   | Prof. Ruggero Bettini |