

IDENTITY

NOVA Medical School

Faculdade de Ciências Médicas

Medal of Distinguished Service, grade "Gold" of the Ministry of Health in 2015

NOVA Medical School | Faculdade de Ciências Médicas (NMS/FCM) is a modern and innovative Medical School rooted on research. It was born 42 years ago and is a part of Universidade NOVA de Lisboa.

NAME

NOVA MEDICAL SCHOOL – www.nms.unl.pt

NOVA Medical School | Faculdade de Ciências Médicas (NMS | FCM) is the *Universidade NOVA de Lisboa's* (NOVA) medical school since 1977.

FOUNDATION

It was founded on November 15, 1977.

ADDRESS:

Main Building:

NOVA Medical School of NOVA
Campo dos Mártires da Pátria, 130
1169-056 Lisboa
Portugal
Site: www.nms.unl.pt

LIBRARY (Red Building):

NOVA Medical School of NOVA
Edifício da Biblioteca
Rua do Instituto Bacteriológico, n.ºs 3 e 3-A
1150-090 Lisboa
Portugal

RESEARCH POLE

Yellow Building:

NOVA Medical School of NOVA
Edifício CEDOC I
Rua do Instituto Bacteriológico, n.ºs 5, 5-A e 5-B
1150-190 Lisboa
Portugal

Site: cedoc.unl.pt

Grey Building:

NOVA Medical School of NOVA
Edifício CEDOC II
Rua Câmara Pestana, n.ºs 6, 6-A e 6-B
1150-082 Lisboa
Portugal

NMS|FCM BUILDINGS



NMS|FCM's Main Building



NMS|FCM's Research Buildings



CEDOC-NMS|FCM's yellow Building



CEDOC-NMS|FCM's grey Building



The Library's building



The Library of NMS|FCM

Foto: Fernando Guerra FG+SG

UNIVERSITY

The Universidade NOVA de Lisboa comprises the following Academic Units:

- Faculty of Sciences and Technology (www.fct.unl.pt)
- Faculty of Social Sciences and Humanities (www.fcsh.unl.pt)
- Nova School of Business and Economics (www.novasbe.unl.pt)
- NOVA Medical School (www.nms.unl.pt)
- Faculty of Law (www.fd.unl.pt)
- Institute of Hygiene and Tropical Medicine (www.ihmt.unl.pt)
- NOVA Information Management School (www.novaims.unl.pt)
- Institute of Chemical and Biological Technology António Xavier (www.itqb.unl.pt)
- National School of Public Health (www.ensp.unl.pt)

MANAGEMENT BOARD (NOVA Medical School):

- **Director**
Professor Jaime da Cunha Branco (jaime.branco@nms.unl.pt)
- **President of the Faculty Council:**
António José Teixeira
- **President of the Scientific Council / Vice-dean:**
Professor Miguel Xavier (miguel.xavier@nms.unl.pt)
- **President of the Pedagogic Council / Vice-Dean:**
Professor José Guimarães Consciência (jgc@nms.unl.pt)
- **Vice-Dean:**
Professor António Jacinto (antonio.jacinto@nms.unl.pt)
- **Vice-Dean:**
Professor Ana Isabel Moura Santos (aisantos@nms.unl.pt)
- **Administrator:**
Manuel Salvador Rodrigues Alves (manuel.salvador@nms.unl.pt)

PROTOCOLS OF COLLABORATION

Health institutions involved with the teaching of the academic units of the Integrated Master Degree in Medicine.

HOSPITALS

Centro Hospitalar de Lisboa Central, EPE

- Maternidade Dr. Alfredo da Costa (www.chlc.min-saude.pt)
- Hospital de Curry Cabral, EPE (www.hccabral.min-saude.pt)
- Hospital de Dona Estefânia (www.hdestefania.min-saude.pt)
- Hospital de Sta. Marta (www.hsmarta.min-saude.pt)
- Hospital de St. António dos Capuchos (www.chlc.min-saude.pt)
- Hospital de S. José (www.chlc.min-saude.pt)

Centro Hospitalar de Lisboa Ocidental, EPE

- Hospital de Egas Moniz (www.chlc.min-saude.pt)
- Hospital de Sta. Cruz (www.hsc.min-saude.pt)
- Hospital de S. Francisco Xavier (www.hsfxavier.min-saude.pt)

Hospital Beatriz Ângelo (Loures) (www.hbeatrizangelo.pt)

Hospital de Vila Franca de Xira (www.hospitalvilafrancadexira.pt)

Hospital Garcia de Orta, EPE (www.hgarciaorta.min-saude.pt)

Hospital Prof. Doutor Fernando Fonseca, EPE (www.hff.min-saude.pt)

Instituto Português de Oncologia de Lisboa Francisco Gentil, EPE (www.ipolisboa.min-saude.pt)

Hospital das Forças Armadas (www.emgfa.pt)

Hospital Pulido Valente

Centro Hospitalar Psiquiátrico de Lisboa (<http://www.chpl.min-saude.pt/>)

Santa Casa da Misericórdia de Lisboa (<http://www.scml.pt/>)

Grupo LUZ Saúde, S.A.

- Hospital da Luz (www.hospitaldaluz.pt)
- Hospital Residencial do Mar (www.hrmr.pt)

Grupo Lusíadas Saúde – AMIL e United Health

- Hospital de Cascais (www.hppcascais.pt)
- Hospital dos Lusíadas (www.hpplusíadas.pt)

Grupo José de Mello Saúde

- Hospital Cuf Infante Santo (www.cufinfantesanto.pt)
- Hospital Cuf Descobertas (www.cufdescobertas.pt)
- Hospital Cuf Cascais (www.cufcascais.pt)

OTHERS

Administração Regional de Saúde de Lisboa e Vale do Tejo (www.arslvf.min-saude.pt/)

Administração Regional de Saúde do Alentejo (www.chbalentejo.pt)

Centro Hospitalar do Barreiro-Montijo (www.chbm.min-saude.pt/)

Agrupamento dos Centros de Saúde de Oeiras (<https://bit.ly/2XbsAmM>)

Direção Regional de Saúde Açores (www.azores.gov.pt/Portal/pt/entidades/srs-drs/)

Ministério da Saúde (www.sg.min-saude.pt/sg/default.htm)

Estado-Maior do Exército (www.exercito.pt/pt)

Academia Militar (<https://academiamilitar.pt/>)

TEACHING AND RESEARCH AREAS

TEACHING AND RESEARCH AREAS	COORDINATOR
Surgery and Human Morphology	José Fragata, M.D.,PhD (jose.fragata@nms.unl.pt)
Clinical Medicine	Fernando Nolasco, M.D.,PhD (fernando.nolasco@nms.unl.pt)
Woman, Child and Teenager Medicine	Luis Pereira da Silva, M.D., PhD (luis.silva@nms.unl.pt)
Biomedicine	José Rueff, M.D., PhD (jose.rueff@nms.unl.pt)
Functional Science and Therapeutic Targets	Maria Emília Monteiro, M.D., PhD (emilia.monteiro@nms.unl.pt)
Populations Health	Miguel Xavier, M.D., PhD (miguel.xavier@nms.unl.pt)
Nutrition and Lifestyles	Conceição Calhau, M.D., PhD (ccalhau@nms.unl.pt)

INTEGRATED MASTER DEGREE IN MEDICINE (I AND II CYCLE OF STUDIES)

- **Coordinator:**
Professor Carlos Nunes Filipe
(carlos.filipe@nms.unl.pt)
Nr. of students enrolled: 1709
- **Programme:**

INTEGRATED MASTER DEGREE IN MEDICINE

1st Year	
Academic Unit	ECTS
Anatomy · semestral	13
Basic Life Support · semestral	0,5
Tissues, Cells and Molecules · semestral	13
Introduction to Medicine · semestral	3,5
Nutrition and Metabolism · semestral	11
Genetics · semestral	4
Physiology · semestral	12
Optional ⁽¹⁾ · semestral	3

2nd Year	
Academic Unit	ECTS
Pathology · semestral	10
General Pharmacology · semestral	4
Pathophysiology and Therapeutic Targets I · semestral	8
Principles of Neurosciences · semestral	8
Pathophysiology and Therapeutic Targets II · semestral	8
Clinical Imagiology Anatomy · semestral	8
Introduction to Clinical Practice · semestral	11
Optional ⁽¹⁾ · semestral	3

3rd Year	
Academic Unit	ECTS
Infection: Etiology, Pathogenesis and Therapeutical Basis · semestral	7
Internal Medicine · semestral	15
General Surgery · semestral	15
Medicine and Society · semestral	4
Public Health, Epidemiology and Biostatistics · semestral	8
Immunology · semestral	4
Laboratory Medicine · semestral	8
Optional ⁽¹⁾ · semestral	3

4th Year	
Academic Unit	ECTS
Medical Psychology and Behavioural Medicine · semestral	3
Obstetrics and Gynecology · semestral	8
Surgical and Medical Specialities I · semestral	15
The Patient with Infection · semestral	4
Surgical and Medical Specialities II · semestral	15
Introduction to Pediatrics and Adolescence Health · semestral	8
The Elderly Patient · semestral	4
Optional ⁽¹⁾ · semestral	3

5th Year	
Academic Unit	ECTS
Molecular disease mechanisms · semestral	3
Psychiatry · semestral	12
General and Family Medicine · semestral	12
Rational Prescription Medicines · semestral	3
Pediatrics · semestral	9
Surgical and Medical Specialities III · semestral	15
The Patient with Cancer · semestral	3
Optional ⁽¹⁾ · semestral	3

6th Year	
Academic Unit	ECTS
Professional Internship ⁽²⁾	
Surgery (parcelar internship) · teaching by blocks	8
Obstetrics and Gynecology (parcelar internship) · teaching by blocks	6
Medicine (parcelar internship) · teaching by blocks	9
General and Family Medicine (parcelar internship) · teaching by blocks	6
Pediatrics (parcelar internship) · teaching by blocks	7
Mental Health (parcelar internship) · teaching by blocks	6
Final Report · N.A.	12
Preparation for the Clinical Practice: Knowledge Integration · semestral	3
Optional ⁽¹⁾ · semestral	3

- **Coordinator:**
Professor Conceição Calhau (ccalhau@nms.unl.pt)
- **Nr. of students enrolled:** 42
- **Programme**

Curricular unit	ECTS
1st year	
Molecular and Cellular Biology	5,5
Nutrition and Metabolism I	5
Sociology and History of Food	3
Primary Food Production	5,5
Food Chemistry	5,5
Human Feeding	5,5
Nutrition and Metabolism II	5
Biostatistics I	3
Morphology I	5
Genetics	3
Human Nutrition	6
Health Communication	5
Optional	3
2nd year	
Immunology	4
Nutritional Epidemiology	4
Physiology	9
Morphology II	5
Basic Microbiology	4
Food technology and new products	4
Biopathology	5
Pathophysiology	5
Food Microbiology	4
Bromatology	4
Public health	4
Gastrothenea	5
Food and Nutrition Marketing	3
3rd year	
Research Methods	5
Pharmacology	4
Food Toxicology	5
Food Safety	4
Food Management Tools	3
Maternal and Pediatric Nutrition	5
Nutrition Assessment	4
Nutrition in Sports	4
Nutrition in Geriatrics	4
Food Quality and Management Systems	4
Psychology and Nutrition	5
Diet Therapy I	6
Community Nutrition	4
Ethics and Professional Deontology	3
4th year	
Research project	5
Biostatistics II	4
Collective Feeding and Management	6
Diet therapy II	6
Artificial nutrition	5
Nutrition Policy	4
Internship	30

MASTER DEGREES (II CYCLE OF STUDIES)

- **Coordinator:**
Professor Fernando Pimentel dos Santos (pimentel.santos@nms.unl.pt)
- **Nr. of students enrolled:** 124
- **Courses List**
 - **NOVA Biochemistry for Health** - in collaboration with ITQB-NOVA and FCT-NOVA
 - **Musculoskeletal Physiotherapy** - in collaboration with Escola Superior de Saúde at Instituto Politécnico de Setúbal and ENSP-NOVA
 - **Nutritional Phytotechnology for Human Health** - in collaboration with FCT-NOVA
 - **Clinical Research Management** - in collaboration with Universidade de Aveiro, ENSPNOVA and NOVA IMS (MEGIC)
 - **Biomedical Research (NBR)**
 - **Primary Care Mental Health**
 - **Metabolism and Human Nutrition**
 - **Medical Microbiology** – in collaboration with FCT-NOVA, IHMT-NOVA, ITQB-NOVA
 - **Epidemiology, Biostatistics and Health Research** – in collaboration with ENSP-NOVA
 - **One Health – Human and Animal Public Health** - in collaboration with Universidade de Évora

DOUTORAL PROGRAMMES (III CYCLE OF STUDIES)

- **Nr. of students enrolled:** 185
- **Courses list**
 - **Health Sciences**
 - **Biomedicine** - in collaboration with Universidade de Aveiro

NON DEGREE POSTGRADUATE PROGRAMMES

- **Nr. of students enrolled:** 171
- **Courses list**
 - Critical Appraisal of the Scientific Literature in Medicine
 - Lisbon Lab Hands-On Endoscopic Lumbar Spine Surgery
 - Hand Surgery
 - Human Cadaveric Advanced Laparoscopic Urology
 - Communication in Family Medicine consultation
 - Emergency and Intensive Care Medicine
 - Answering Clinical Questions
 - Practical Course on Laboratory Animal Science
 - Genetics and Genomics for Clinicians
 - Glycobiology & Glycochemistry International E-learning Course
 - Lisbon International Learning Program on Mental Health Policy and Services
 - Neurodevelopment of Children and Adolescents
 - NOVA-BMJ Research to Publication Program
 - Urgency and Emergency

FACULTY

Category	Quantity
Full Professor	10
Full Invited Professor	3
Full Visiting Professor	1
Associate Professor	9
Associate Invited Professor	9
Assistant Professor	28
Assistant Invited Professor	122
Assistant Visiting Professor	5
Invited Assistant	433
TOTAL	622

NON FACULTY STAFF

Category	Quantity
Administrator	1
Head of Division	5
Coordinator	12
Advisor, Consultant, Auditor	4
Senior Technician	79
Treinee	1
Technical coordinator	5
Technical Assistant	21
Operational Assistant	6
IT Specialist, Degree 3, Level 2	1
IT Technician	1
Principal Diagnostic and Therapeutic Technician	7
Total	142

RESEARCHERS

Category	Quantity
Research Coordinator	1
Principal investigator	4
Auxiliary Researcher	2
Specialized Researcher hired	3
FCT Researcher	56
Doctoral Researcher	39
Total	105

SOURCE: DRH

RESEARCH

One of the strategic goals of NOVA Medical School | Faculdade de Ciências Médicas is the development of internationally competitive research by promoting research of excellence in the fields of medical sciences and health. The CEDOC - Chronic Diseases Research Centre brings together all the research developed at the Faculty, which focuses on 2 distinct and complementary areas: the fundamental and translational biomedical research and the clinical research, epidemiology and service studies. CEDOC manages research, innovation and development activities carried out by NMS | FCM researchers.

Coordinator: Professor Paulo Pereira (paulo.pereira@nms.unl.pt)

CEDOC integrates 3 I&D Units:

- **iNOVA4Health** - translational medicine programme in collaboration with iBET¹, IPOLFG² and ITQB-NOVA³.
Coordinator: Professor António Jacinto (antonio.jacinto@nms.unl.pt)
- **CHRC** - *Comprehensive Health Research Centre* - focused on epidemiology and population health in collaboration with ENSP⁴, Hospital de Santo Espírito, LIGMH⁵, Universidade de Évora.
Coordinator: Professor Helena Canhão (helena.canhao@nms.unl.pt)
- **TOXOMICS** – Centre for Toxicogenomics and Human Health in collaboration with INSA⁶.
Coordinator: Professor José Rueff (jose.rueff@nms.unl.pt)

NMS also participates on the R&D Unit: **Center for Health Technology and Services Research (CINTESIS)**, of which Professor Conceição Calhau coordinates Thematic Line 1 - Preventive Medicine & Societal Challenges (ccalhau@nms.unl.pt).

¹ Instituto de Biologia Experimental e Tecnológica

² Instituto Português de Oncologia de Lisboa Francisco Gentil

³ Instituto de Tecnologia Química e Biológica da Universidade Nova de Lisboa

⁴ Escola Nacional de Saúde Pública da Universidade Nova de Lisboa

⁵ *Lisbon Institute of Global Mental Health*

⁶ Instituto Nacional de Saúde Dr. Ricardo Jorge

RESEARCH UNITS	RESEARCH AREAS	RESEARCH GROUPS
CHRC	Epidemiology and Populations	Allergy, Immunodeficiencies and Translational Immunology
		EpiDoc Unit - Epidemiology of Chronic Diseases
		Integrated Pathophysiological Mechanisms
		Person Centred Care Research
		Psychiatric Epidemiology and Liaison Psychiatry
		Mental Health Needs and Interventions
iNOVA4Health	Oncobiology	Cancer and Microenvironment Metabolism
		Computational and Experimental Biology
		DNA breaks
		Integrative Biomedicine
		Membrane traffic in infection and disease
		Regulation of Stem Cell Proliferation
		Morphogenesis and tissue repair
		Morphological patterns of disease and tumor microenvironment
	Neurological and Vision Diseases	Cellular and molecular neuroscience
		Cell death and disease
		Cellular and system neurobiology
		DYSBRAIND: Dysmetabolism of Brain Diseases
		Gene therapy
		Immune Response and Vascular Disease
		Inflammation and neurodegeneration
		Molecular mechanisms of disease
		Molecular Nutrition and Health
		Neurogenetics of Locomotion
		Neurology: stroke and dementia
		Neuronal Growth and Plasticity
	Cardio-Metabolic Diseases	Neuronal traffic in Aging
		Proteostase and Proteolytic Signaling
		Regulation of eyelashes and disease
		Immunobiology and Pathogenesis
		Lysosomes in Chronic human pathologies and infection
		Measure: Metabolic Disorders
		Neuronal Control of Metabolic Disorders: Therapeutic Strategies
		Rheumatic Diseases
	Stem Cells and Development	
	ToxOmics	Toxicogenomic and Human Health
Drug Response and Resistance		
Xenobiotic Metabolism		
Cancer Nanomedicine		
CINTESIS	Preventive Medicine & Societal Challenges	ProNutri

CEDOC has strategic collaborations with several national and international entities, and maintains partnerships with some Research Networks such as PTCRIN⁷, ECRIN⁸, CONGENTO⁹ and PPBI¹⁰.

NMS and CEDOC has a diverse and growing community of researchers, in the following proportion:

	PhD Students	PhD holders
Researchers from CHRC (CEDOC)	23	44
Researchers from INOVA4Health (CEDOC)	91	105
Researchers from ToxOmics (CEDOC)	1	9
Researchers from CINTESIS (NMS)	9	8

	CHRC	INOVA4HEALTH	TOXOMICS	CINTESIS
RESEARCHERS GROUPS @ NMS	6	29	4	1

NMS research relies on various support infrastructures:

- **Rodents Facility**

Scientific coordinator: Professor José Belo (jose.belo@nms.unl.pt)

Executive manager: Sara Marques (sara.marques@nms.unl.pt)

The Rodents Facility is used by 100 researchers, including teachers, clinicians and post-doc researchers and PhD students, 47 of which are PhD holders.

- **Fish Facility**

Scientific coordinator: Professor Susana Lopes, PhD (susana.lopes@nms.unl.pt)

Executive manager: Dr. Petra Pintado (petra.pintado@nms.unl.pt)

Specialized manager: Fábio Valério, (fabio.valerio@nms.unl.pt)

The Fish Facility has 500 fish tanks with a capacity for more than 12 000 animals, which is fundamental for research in the areas of regeneration and embryonic development. Various Research Groups use the zebra-fish model in fundamental and translational research. The facility has a total of 24 users, including technicians, researchers and students. The zebra-fish is the preferential model for 6 post-doc researchers, 9 PhD students and 4 MD students.

- **Flies Facility**

Scientific coordinator: Professor Catarina Homem, PhD (catarina.homem@nms.unl.pt)

Executive manager: Ângela Dias (angela.dias@nms.unl.pt)

The Fly facility occupies a 41 m². The facility serves 5 research groups and has between 30 and 35 active users. More than 4500 fly stocks are maintained in this facility. The fly

⁷ Rede Portuguesa de Infraestruturas para a Investigação Clínica

⁸ European Clinical Research Infrastructures Network

⁹ Consortium for Genetically Tractable Organisms

¹⁰ Portuguese Platform of Bioluminescence

room is equipped with: 8 stereomicroscopes, 1 fluorescence stereomicroscope, 4 incubators with controlled temperature and humidity and 8 CO₂ stations.

- **Molecular Biology Platform**

Coordinator: Dr. José Ramalho (jose.ramalho@nms.unl.pt)

The Molecular Biology Platform offers researchers a personalized service. It has an established simplified process that is capable of generating a huge variety of DNA vectors, viral and non-viral. Among the services provided are cloning / subcloning, targeted mutagenesis, production of recombinant viruses, etc. This platform also offers a service for the production of recombinant proteins (prokaryotic and mammalian systems).

- **Flow Cytometry Unit**

Scientific coordinator: Professor Gabriela Silva (gabriela.silva@nms.unl.pt)

Executive manager: Cláudia Andrade (claudia.andrade@nms.unl.pt)

The Flow Cytometry Unit provides a variety of services in the areas of cell separation and analysis, through flow cytometry technologies to all internal research groups, as well as external groups belonging to different Institutes and Research Centers, through services provision. Comprised of two flow cytometers and a cell separator, this Unit offers consultancy in all stages of planning and analyzing experiences in the area.

- **Cell Culture Unit**

Scientific Coordinator: Professor Duarte Barral (duarte.barral@nms.unl.pt)

Executive manager: Ana de Oliveira Valadas (ana.oliveira@nms.unl.pt)

The Cell Culture Unit has 5 culture rooms dedicated to the culture of primary cells, cell lines and stem cells, as well as viral infection, offering fully equipped infrastructures to more than 200 users. Each of the rooms in the unit has different equipment, including biological safety chambers, level 2, incubators, microscopes, water baths and centrifuges. The unit also stands out for having semiannual based equipment review and certification programs, manuals of good practices, standard procedure guides, certified decontamination procedures and mycoplasma detection and cell authentication programs. These infrastructures and services are available to the entire scientific community, both internally and externally.

- **Histology Unit**

Scientific Coordinator: Professor Teresa Barona (teresa.barona@nms.unl.pt)

Executive manager: Ana Farinho (ana.farinho@nms.unl.pt)

The Histology Unit provides scientific assistance and technical work with the creation and optimization of scientific projects in the areas of histology, immunohistochemistry and electron microscopy. This Unit also offers services, instruments and training to facilitate the production of high quality samples, both for animal models and for translational research.

- **Microscopy Unit**

Scientific coordinator: Professor Cláudia Almeida (claudia.almeida@nms.unl.pt)

Executive manager: Dr. Telmo Pereira (telmo.pereira@nms.unl.pt)

The Microscopy Unit offers assistance in all areas of acquisition and processing of microscopy images to its more than 140 users. The unit's services include: initial project planning, design and optimization of experiments, help with sample preparation, operation of microscopes and data analysis. The unit has several microscopes, including two confocal microscopes, two motorized wide-field fluorescence microscopes and two fluorescence magnifiers, among others of smaller size. All of them are available to the entire scientific community, both internal and external.

- **CRISPR Unit**

Coordinator: Professor Vasco Barreto (vasco.barreto@nms.unl.pt)

The CRISPR Unit adopted CRISPR-Cas9 as the preferred technology for editing genes to manipulate the genome. In parallel, it is developing ways to improve it.

INTERNATIONALIZATION

Internationalization is a strategic goal of NOVA Medical School | Faculdade de Ciências Médicas.

NMS | FCM annually receives an increasing number of students from all over Europe and Brazil and has a wide range of agreements with European and South American universities, including:

- 72 Erasmus+ agreements
- 9 agreements with Brazil
- 1 agreement with Switzerland
- 1 agreement with Peru
- 1 agreement with Uruguay
- 2 agreements with Argentina

In terms of graduate education, there are currently several mobility programmes in place at NMS | FCM and we are proud to have a high level of approval among international students.

NMS FCM Mobility	2018/2019	
	IN	OUT
Erasmus+ Programme	78	71
Cooperation Agreements	17	17
Almeida Garrett Programme	9	2
Freemovers and IFMSA	0	73

The NMS | FCM is gradually be stated itself in and outside of Portugal, attracting education and investigation professionals.

The postgraduate training offer is directed increasingly to solve not only Portuguese but also foreign students' needs.

That is why internationalization is today a reality of NMS | FCM.

