

ANNUAL SCIENTIFIC
REPORT

2022



Instituto de Investigación Sanitaria
Gregorio Marañón

Executive Summary
SCIENTIFIC REPORT
2022

Executive Summary SCIENTIFIC REPORT 2022



Instituto de Investigación Sanitaria
Gregorio Marañón



Hospital General Universitario
Gregorio Marañón

uc3m

Universidad
Carlos III
de Madrid



UNIVERSIDAD
COMPLUTENSE
MADRID



FUNDACIÓN INVESTIGACIÓN BIOMÉDICA
HOSPITAL GREGORIO MARAÑÓN



CONSEJERÍA DE SANIDAD
Comunidad de Madrid
Dirección General de Investigación
y Docencia

Cover photo: Carla Gómez Oro



**FONDO EUROPEO DE
DESARROLLO REGIONAL**
Una manera de hacer Europa

FONDO SOCIAL EUROPEO
El FSE invierte en tu futuro

Unión Europea

Report prepared by the Biomedical Research Foundation of Hospital Gregorio Marañón and the Health Research Institute of Hospital Gregorio Marañón.

INDEX

1. PRESENTATION	7
2. INTRODUCTION	11
3. HIGHLIGHTS	15
4. EXECUTIVE SUMMARY	19
• Global analysis	21
• Organizational structure of IISGM	39
1. Organizational Chart	39
• Structure of research areas and groups	41
• Research Support Services (RSSs)	45
• Innovation, knowledge transfer, and translation to practice	47
• Interventional and non interventional clinical studies	51
• Funding of IISGM	53
• List of active projects in 2022 by area of research	59
• Scientific publications	63
• Training: courses, seminars, and meetings	89
• Clinical Practice Guidelines	93
• Doctoral theses defended	95
• Cooperative Research Structures	97
Partners Companies	99



1

PRESENTATION

Photography: Miguel Ángel Cano

PRESENTATION

We are pleased to introduce the 2022 Scientific Report from the **Institute for Health Research of the Hospital General Universitario Gregorio Marañón (IiSGM)**. Our primary aim is to disseminate the research and innovative initiatives conducted within our institution to various stakeholders and the wider community. Furthermore, we wish to acknowledge the **exceptional dedication exhibited by the researchers** within each Research Group.

The research activity conducted has shown remarkable growth over recent years. Regardless of the results of 2021, which were expected to be artificially increased by the change in the quantification of the Impact Factor, the results of 2022 exceed in 18% compared to those of 2020, resulting in a total of **7,731 impact factor points** in 2022. It is crucial to emphasize the rigorous evaluation process for publications affiliated with IiSGM, underscoring the reliability of this indicator. Additionally, it's worth noting that 45% of publications were led by IiSGM researchers, showcasing a high level of international collaboration in various publications. Furthermore, 45% of our research outputs were published in first decile or first quartile journals.

The innovation efforts of IiSGM are also noteworthy, with a diverse portfolio of innovative assets, including three successful spin-offs (Corify Care, Telara Pharma, ThyTech) tailored to the evolving needs of the healthcare system. Approximately 50% of our patents have been licensed to the market, demonstrating considerable potential for future growth and attracting interest from productive and industrial sectors.

This impressive research and innovation activity owes its success to the **exceptional ability of our researchers to secure competitive funding** for projects and human resources. The latter is particularly vital, as it forms the foundation for the renewal of the center's researchers in successive generations. We must highlight the commitment of IiSGM groups to **researcher training**, as evidenced by the substantial number of

doctoral theses defended in 2022 and the ambitious Training Plan with up to 13 accredited courses, overseen by the IiSGM Training Commission.

The managing body of IiSGM, the **Foundation for Biomedical Research of the Hospital Gregorio Marañón (FIBHGM)**, continuously strives to enhance internal processes and maintain a commitment to ongoing quality improvement. Notable achievements include receiving the European Excellence Award in human resources management for the **Human Resources Strategy for Researchers (HRS4R)** and being the sole Institute for Health Research **fully certified under the ISO9001:2015 quality standard**.

These accomplishments are the result of the dedicated efforts of all IiSGM professionals, and we extend our heartfelt gratitude to them, especially in the context of the sensitive environment of scientific research within hospital settings. The outstanding outcomes presented in this report are the product of a coordinated collective effort aligned with a strategy focused on improving patient health. Remarkably, one new group joined the IiSGM structure in 2022: Group 7.35, “Translational Dermatology: Research and Innovation”, under the leadership of Ana Pulido Pérez and Marta Bergón Sendín, within the Research Area 7 “Systemic Diseases and Organ Transplantation”.

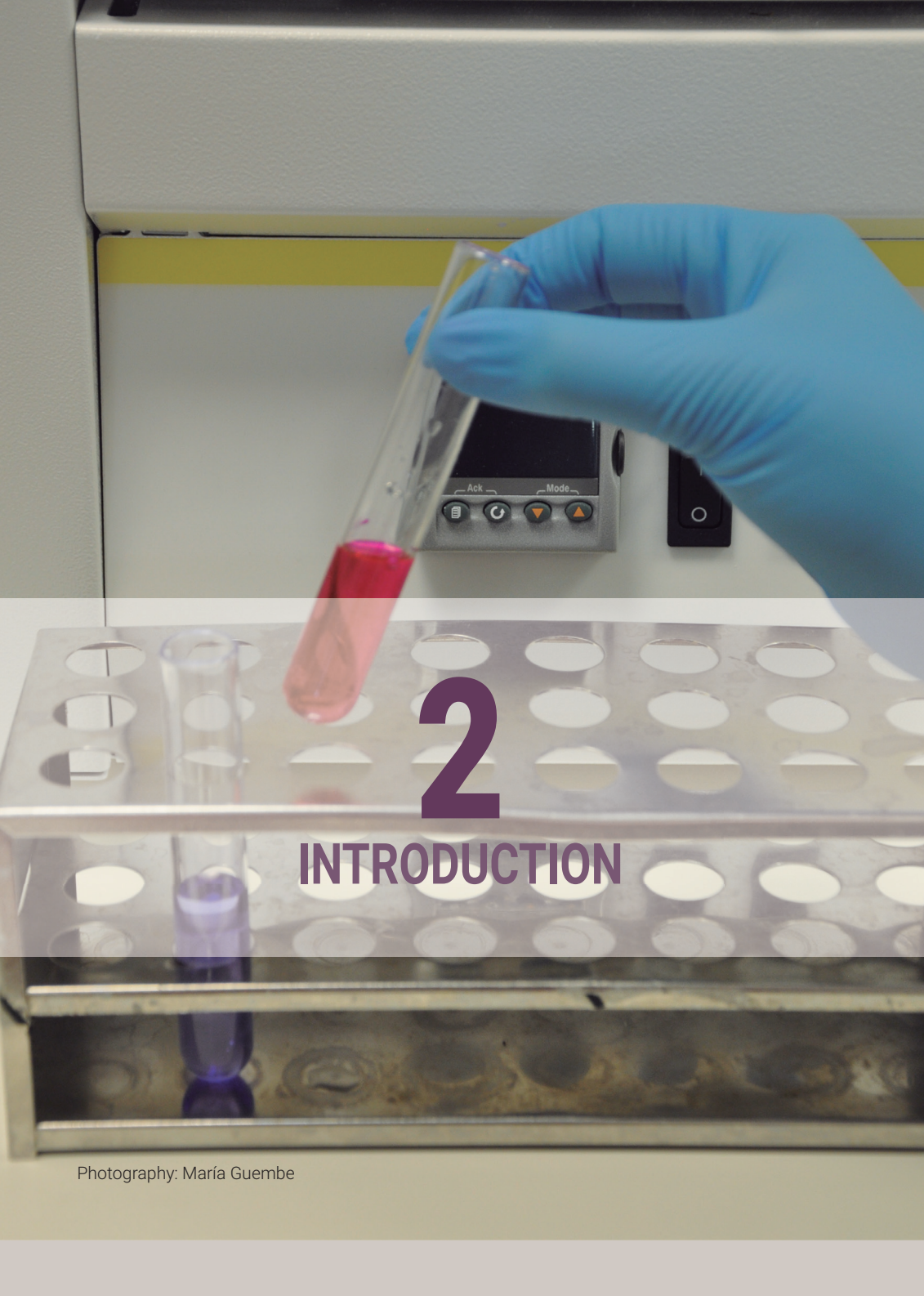
Lastly, we wish to express our gratitude to all **Area Coordinators, Group Leaders, Research Groups, Research Support Services (SAls), Clinical Services, and particularly our young researchers**, who form the backbone of IiSGM’s development and activities.

For another year, the results presented in this report reaffirm that our institution continues to evolve and grow, instilling high expectations for the future and positioning us advantageously to confront the significant challenges ahead while contributing to the foundations of biomedical research: observation, generating questions in clinical practice, and fostering multidisciplinary collaborative research to provide answers.

Thank you very much.

Dr. Ismael Buño Borde
Scientific Director IiSGM

Dra. Sonia García de San José
Managing Director Hospital General
Universitario Gregorio Marañón



2

INTRODUCTION

INTRODUCTION

MISSION

The IISGM is an institution that develops excellent research and innovation, focused on the patient and aimed at obtaining results with high impact on the clinical practice and the productive sector, generating value for the efficiency of the SNS and the quality of life of the population as the final recipient.

VISION

The IISGM must maintain its position as a leading center in biomedical research and scientific and technological innovation at a national and international level under quality standards, being a benchmark for the population as a multidisciplinary entity that offers innovative and efficient responses to health needs and challenges of the society.

VALUES

- Excellence and leadership.
- Competitiveness and innovation.
- Internationalization.
- Commitment.
- Ethics and social responsibility.
- Accessibility and transparency.
- Equality.

Bodies that constitute the Institute of Health Research in Hospital Gregorio Marañón (IISGM):





3

HIGHLIGHTS

Photography: Miguel Ángel Cano

HIGHLIGHTS





4

EXECUTIVE SUMMARY

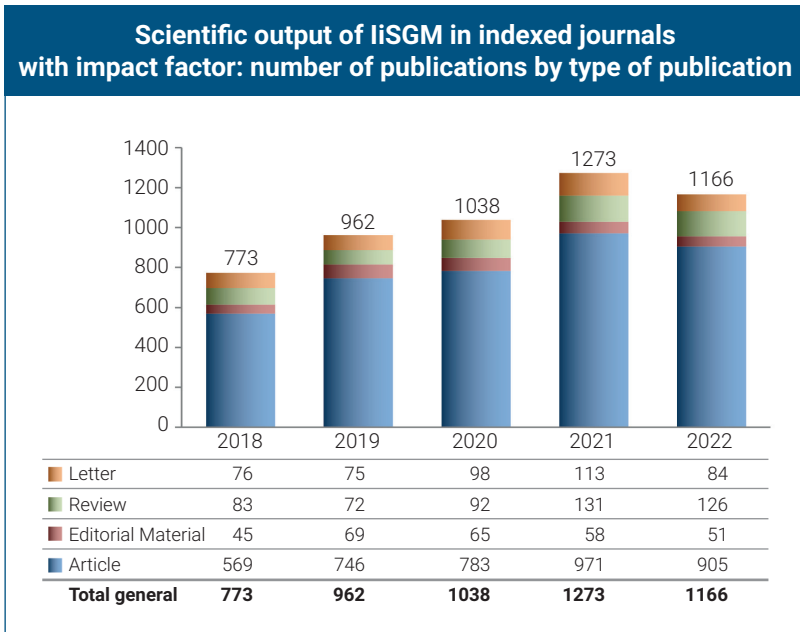
Photography: Miguel Ángel Cano

GLOBAL ANALYSIS

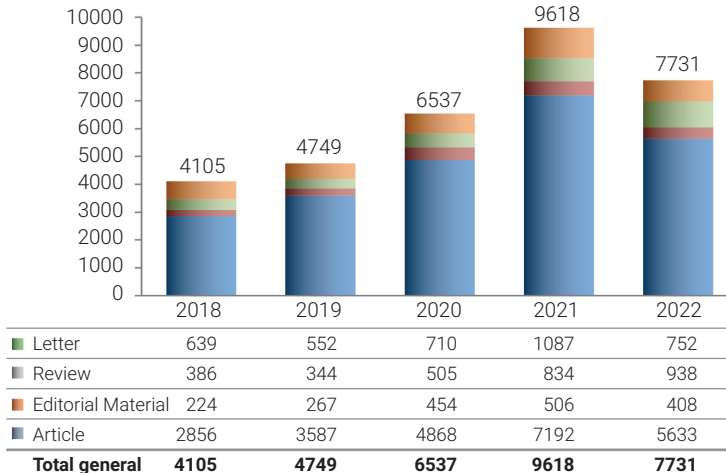
Analysis of the scientific production of IISGM and its bibliometric impact is an essential element in the evaluation of the Institute's research activity, given that both factors reflect the competitiveness of its researchers. In order to prepare this research report, we analyzed journals indexed in the main collection of the Web of Science (WOS) and in PubMed, the most popular open-access database specialized in health sciences. It is important to note that before being assigned to the different research Areas and Groups, the only publications considered were those in which IISGM, Hospital General Universitario Gregorio Marañón, or both were included in the institutional affiliation data in Web of Science. Nevertheless, the search for publications is made based on the name(s) that the individual researcher at the Institute has pointed out as being his/her own. As in previous years, the total sum for the impact factor only takes into account information from indexed publications (eg, original articles, reviews, editorials, and proceedings papers) and excludes other types of publication (eg, letters to the editor and case reports). Of note, the impact factor presented in the figures corresponds to the relevant year of publication. Publications involving different groups or areas of the Institute are counted individually in each group and area, although only once for the calculation of the total impact factor of the Institute. The objective of the methodology used is none other than to apply internationally validated bibliometric tools for the analysis of scientific production, thus ensuring the robustness of the data contained in this Research Report. The following graphs provide a quantitative representation of the scientific output of IISGM during the year 2022, with a total of **1166 indexed publications** (1082 excluding letters), which represent a global impact factor over **7731 points** [6979 excluding letters].

Regardless of the increase in 2021, derived from both the "COVID effect" and the change in the Impact Factor calculation procedure, which

occurred in 2020 and was expected to bias the 2021 data upwards, the 2022 results maintain the increasing trend observed during recent years and are significantly higher than those of 2020.

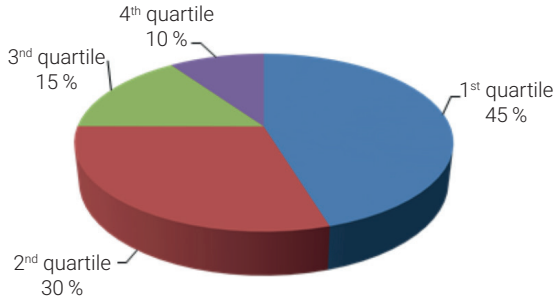


Scientific output of liSGM: total impact factor by type of publication

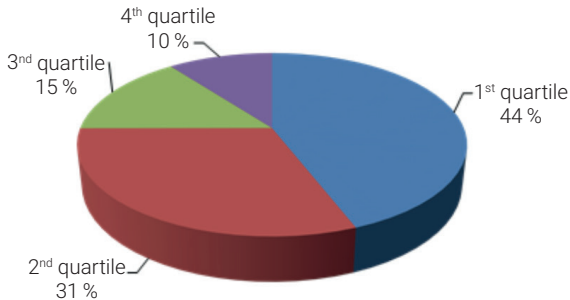


The previous figures summarize the total impact factor corresponding to the scientific production of the liSGM for each of the last 5 years and its distribution according to the different types of publication as can be observed, in this year 2022 the highest impact factor corresponds (in order) to: original articles, reviews, letters and editorials. It is important to note that, once again this year and as in the previous years, the increase in the overall impact factor was mainly due to the significant increase in the number of original articles.

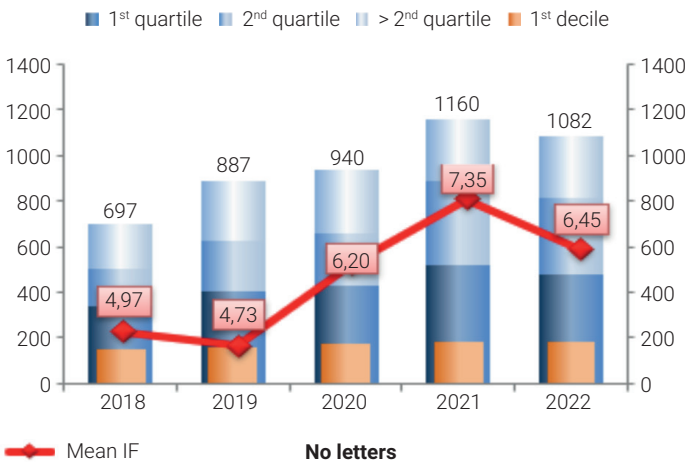
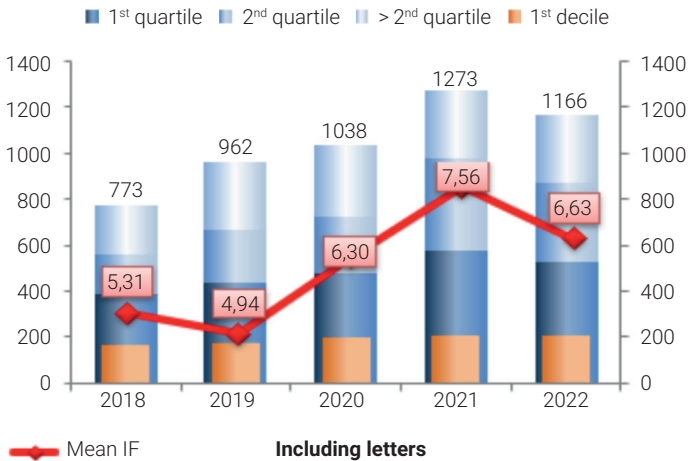
Scientific output of liSGM in indexed journals with impact factor: distribution by quartiles (relative to 2022, including letters)



Scientific output of liSGM in indexed journals with impact factor: distribution by quartiles (relative to 2022, no letters)

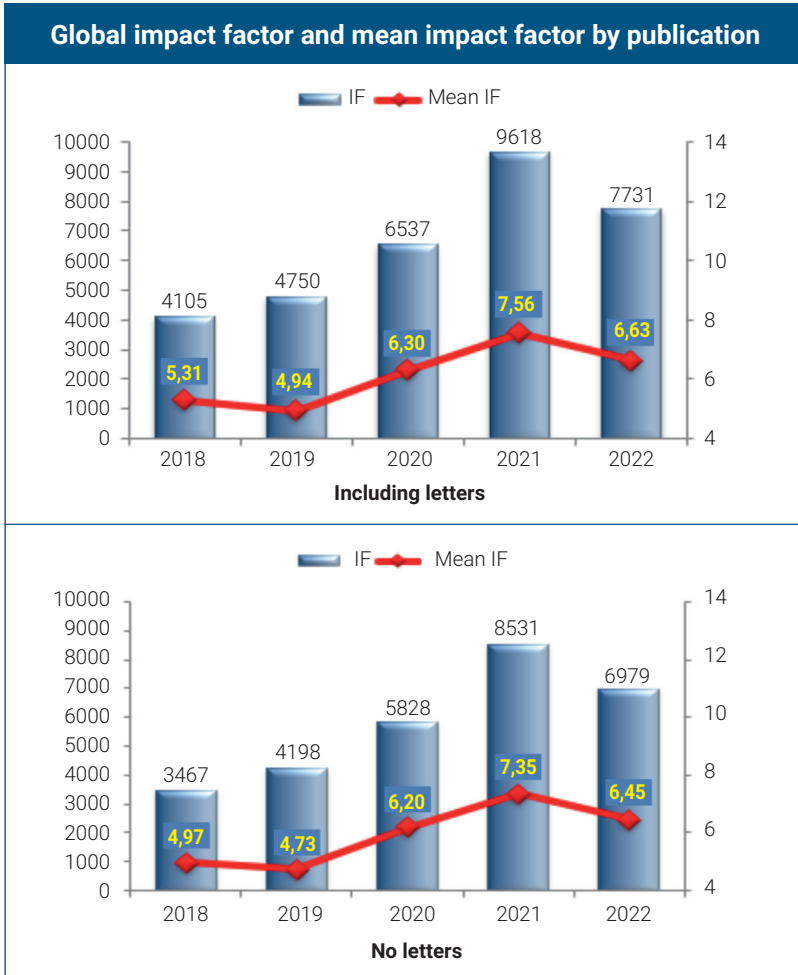


**Scientific output of liSGM in indexed journals with impact factor:
distribution of publications by deciles and quartiles (absolute values)**

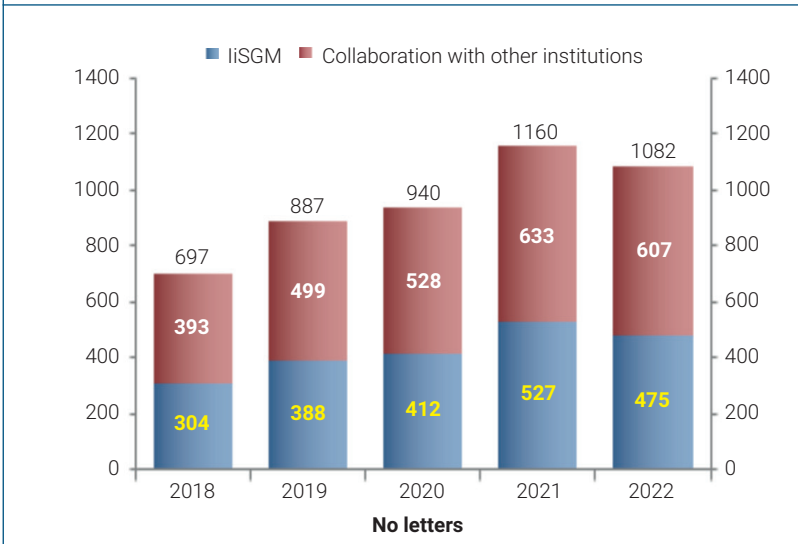
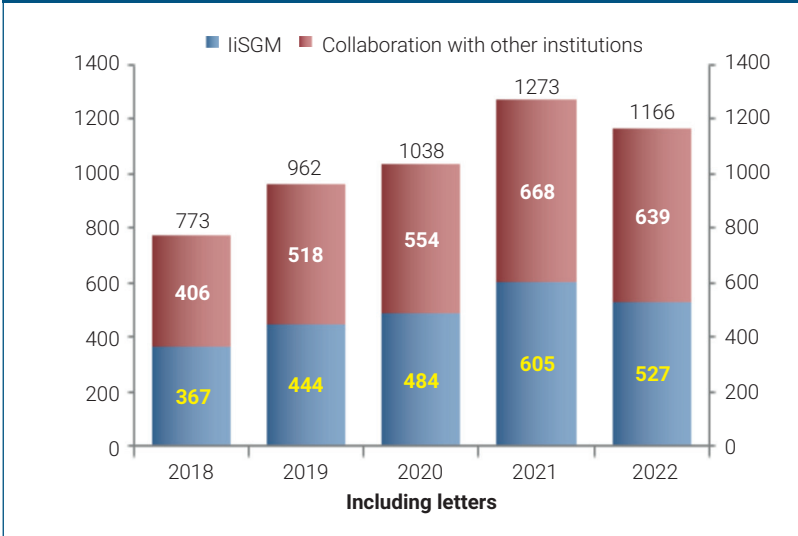


*Only publications in journals indexed in the JCR of the WOS main collection

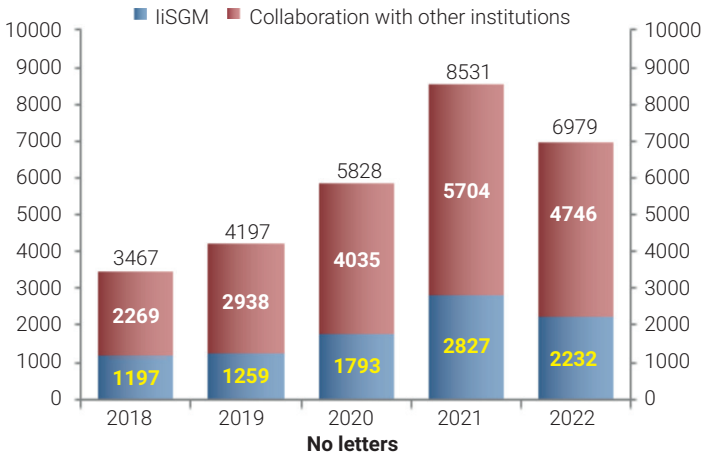
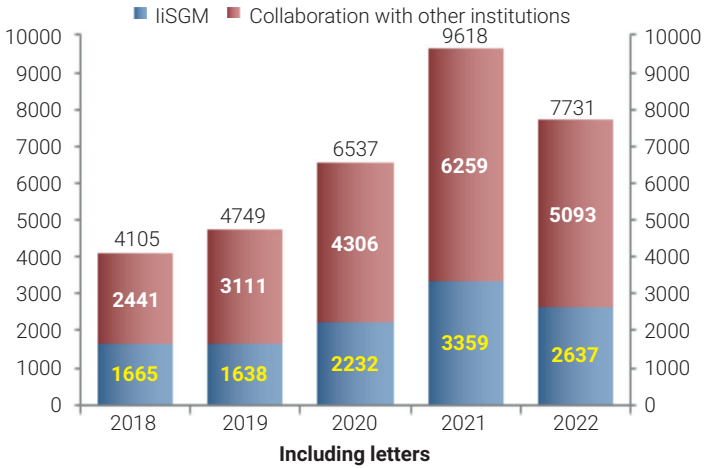
The distribution of IISGM publications according to quartile and decile is shown in the in the two previous graphs. The absolute number of publications in the first decile and first quartile has increased significantly compared to 2020.

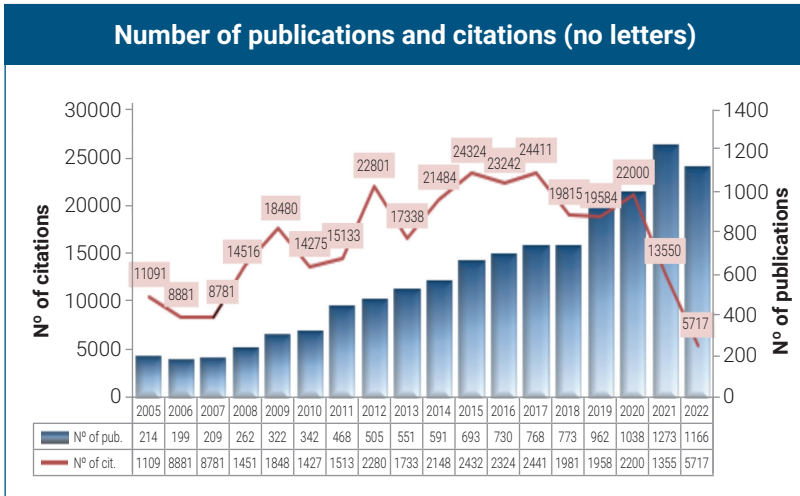


Scientific output of IISGM in indexed journals with impact factor: total number of publications

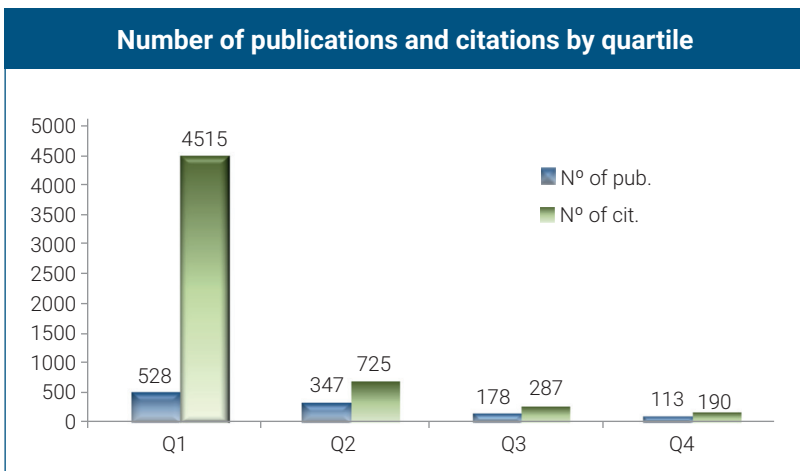


Scientific output of liSGM in indexed journals with impact factor: impact factor

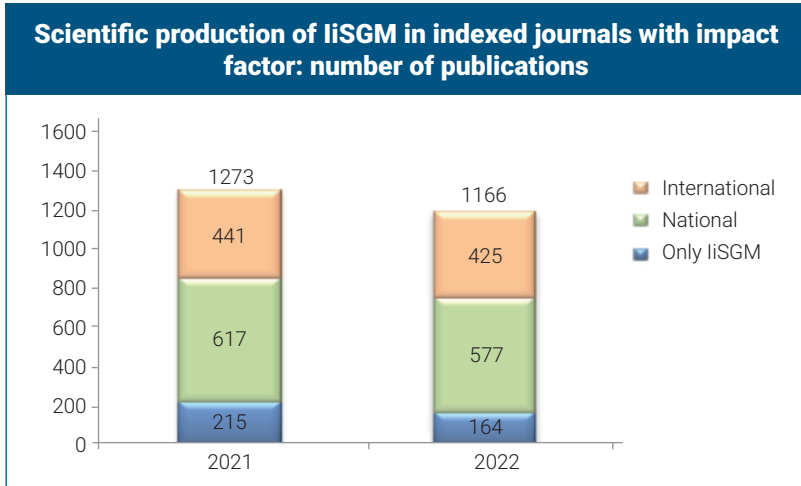




The number of citations for Institute publications over time is logically greater in elder publications, although the number of citations in relatively recent publications (2018-2022) is noteworthy, as is the number of first-quartile citations.



The analysis of activity specifically includes publications whose principal authors (first, last, or corresponding author) are liSGM researchers.



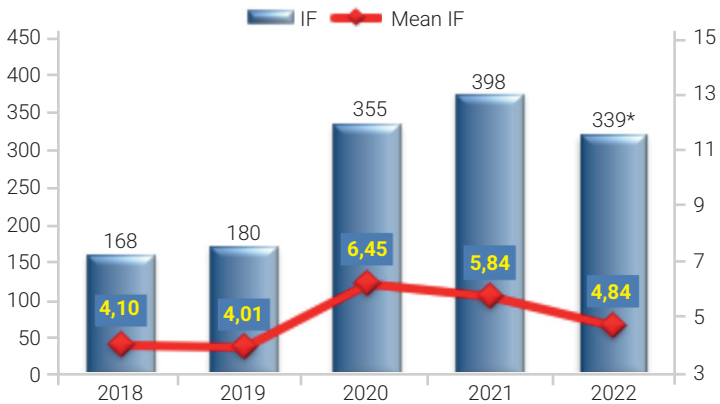
Finally, one of the most relevant elements within the scientific structure of Health Research Institutes is the grouping of research activity to priority areas, which are characterized by their scientific and social relevance and by their capacity for transferring knowledge to society. liSGM has seven priority research areas whose scientific activity is set out in detail below in 2 figures per Research Area:

- The first (on the left) summarizes the total impact factor together with the mean impact factor by publication
- The second (on the right) summarizes the scientific output of the research area distributed by first decile and quartiles.

Both figures show the scientific output for the last 5 years.

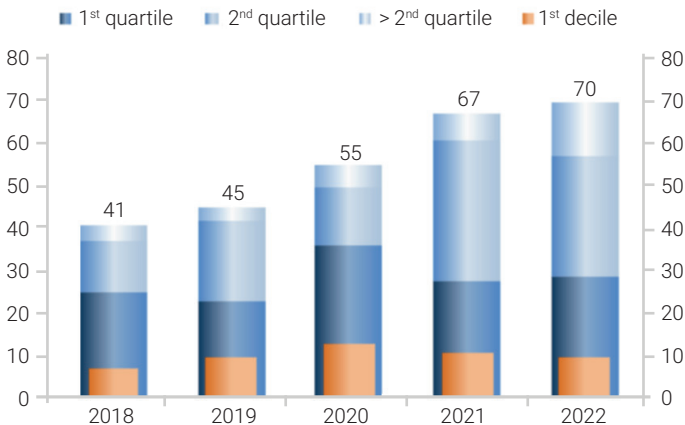
AREA 1: BIOMEDICAL ENGINEERING

Scientific output of Area 1 in indexed journals with impact factor: total and mean impact factor



* Excluding letters: 331

Scientific output of Area 1 in indexed journals with impact factor: distribution of publications by decile and quartile (absolute values)

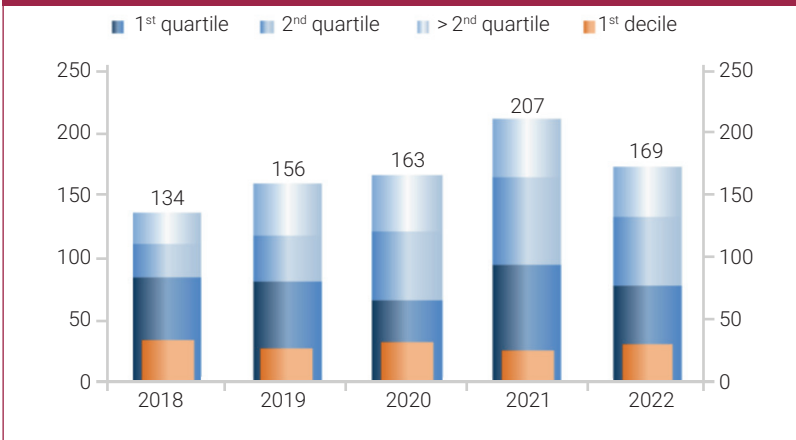


AREA 2: CARDIOVASCULAR DISEASES

Scientific output of Area 2 in indexed journals with impact factor: total and mean impact factor



Scientific output of Area 2 in indexed journals with impact factor: distribution of publications by decile and quartile (absolute values)

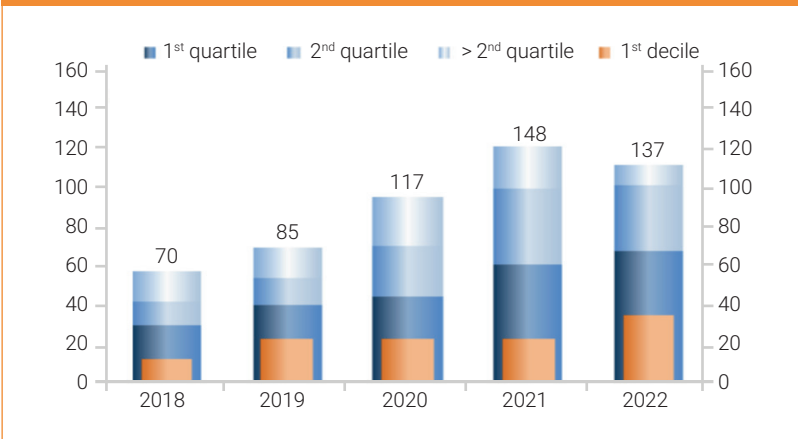


AREA 3: NEUROSCIENCE AND MENTAL HEALTH

Scientific output of Area 3 in indexed journals with impact factor: total and mean impact factor

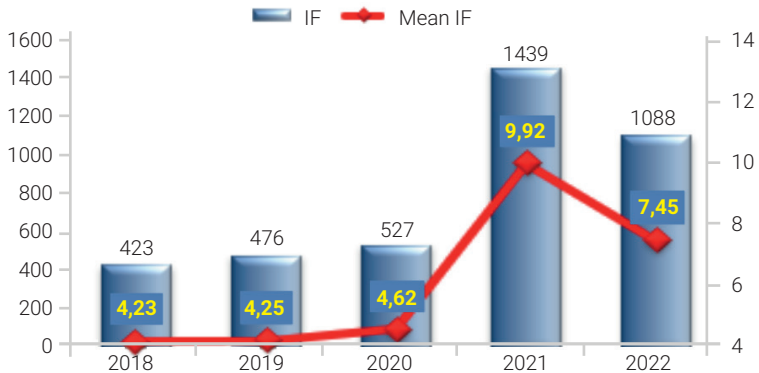


Scientific output of Area 3 in indexed journals with impact factor: distribution of publications by decile and quartile (absolute values)



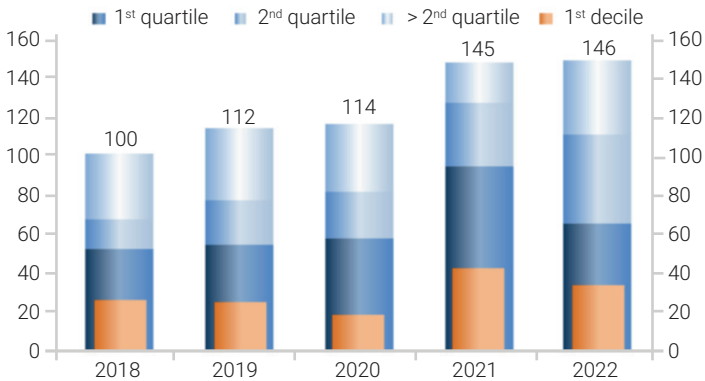
AREA 4: CLINICAL MICROBIOLOGY, INFECTIOUS DISEASES AND AIDS

Scientific output of Area 4 in indexed journals with impact factor: total and mean impact factor



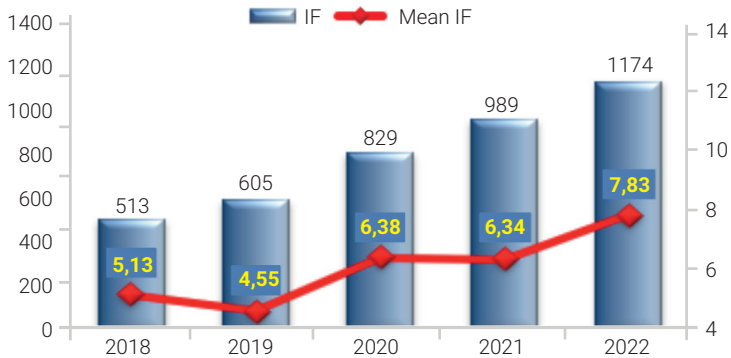
* Excluding letters: 991

Scientific output of Area 4 in indexed journals with impact factor: distribution of publications by decile and quartile (absolute values)



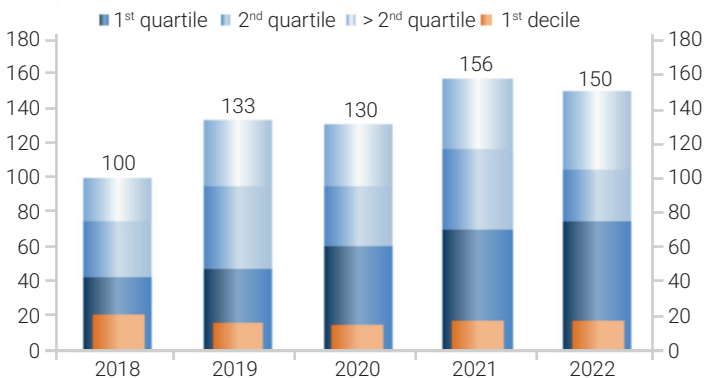
AREA 5: DISEASES OF THE IMMUNE SYSTEM

Scientific output of Area 5 in indexed journals with impact factor: total and mean impact factor



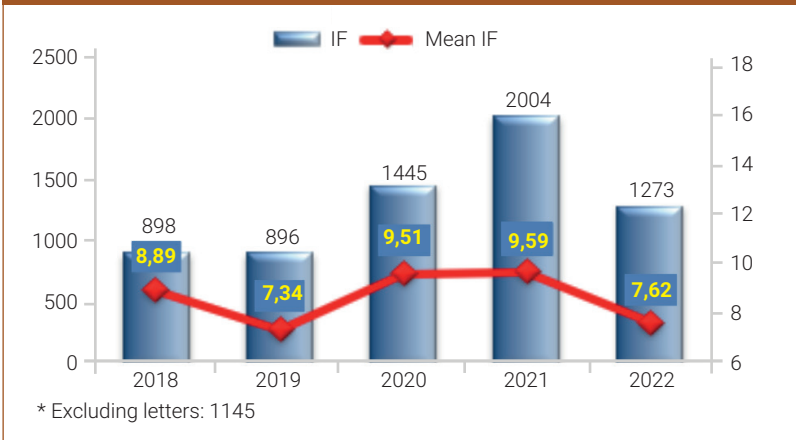
* Excluding letters: 986

Scientific output of Area 5 in indexed journals with impact factor: distribution of publications by decile and quartile (absolute values)

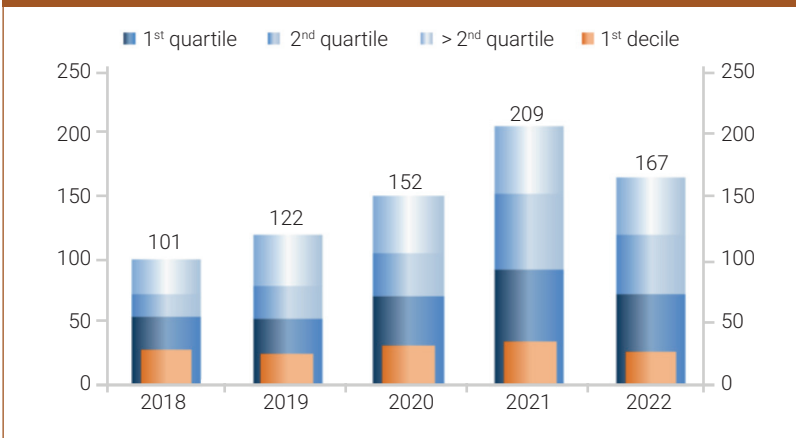


AREA 6: TRANSLATIONAL ONCOLOGY

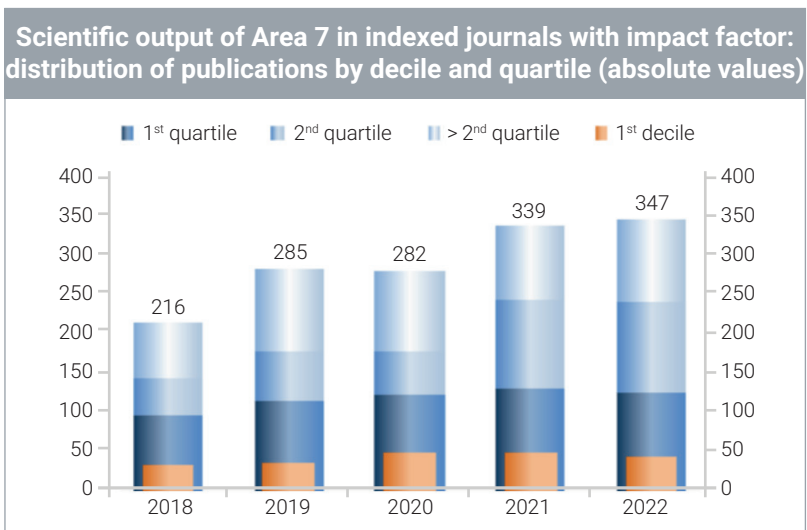
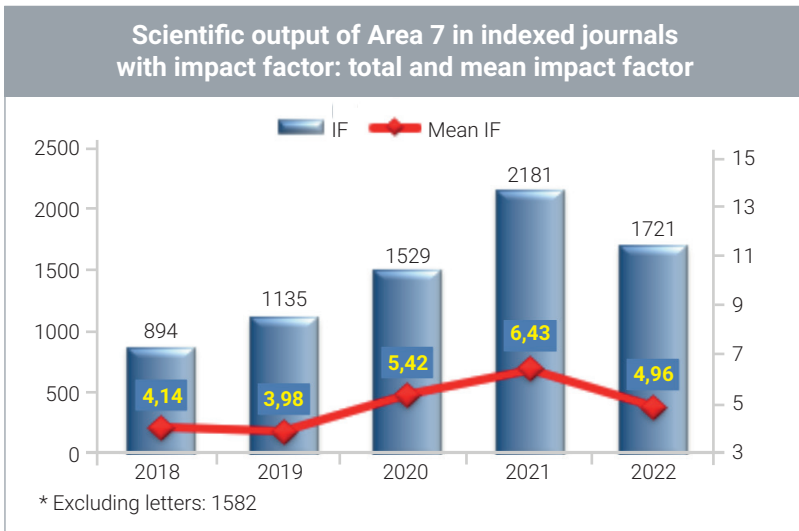
Scientific output of Area 6 in indexed journals with impact factor: total and mean impact factor



Scientific output of Area 6 in indexed journals with impact factor: distribution of publications by decile and quartile (absolute values)

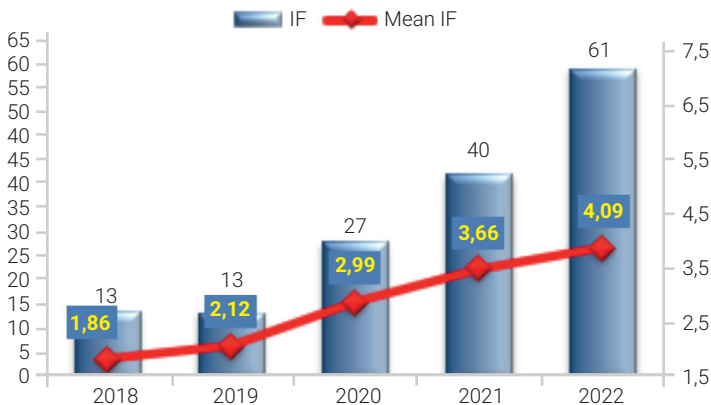


AREA 7: SYSTEMIC DISEASES AND ORGAN TRANSPLANTATION



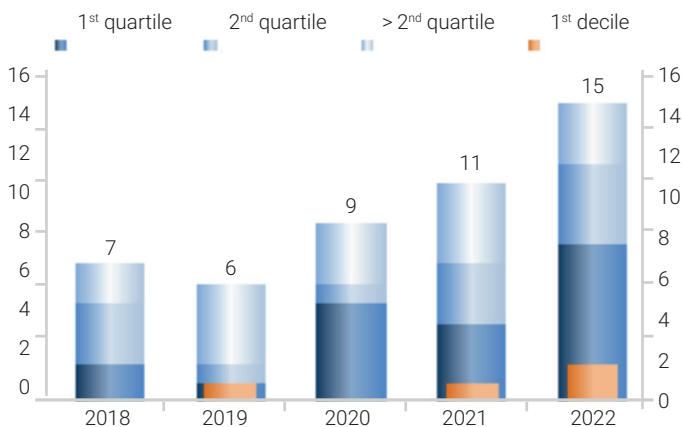
NURSING RESEARCH GROUP

Scientific output of Nursing Group in indexed journals with impact factor: total and mean impact factor



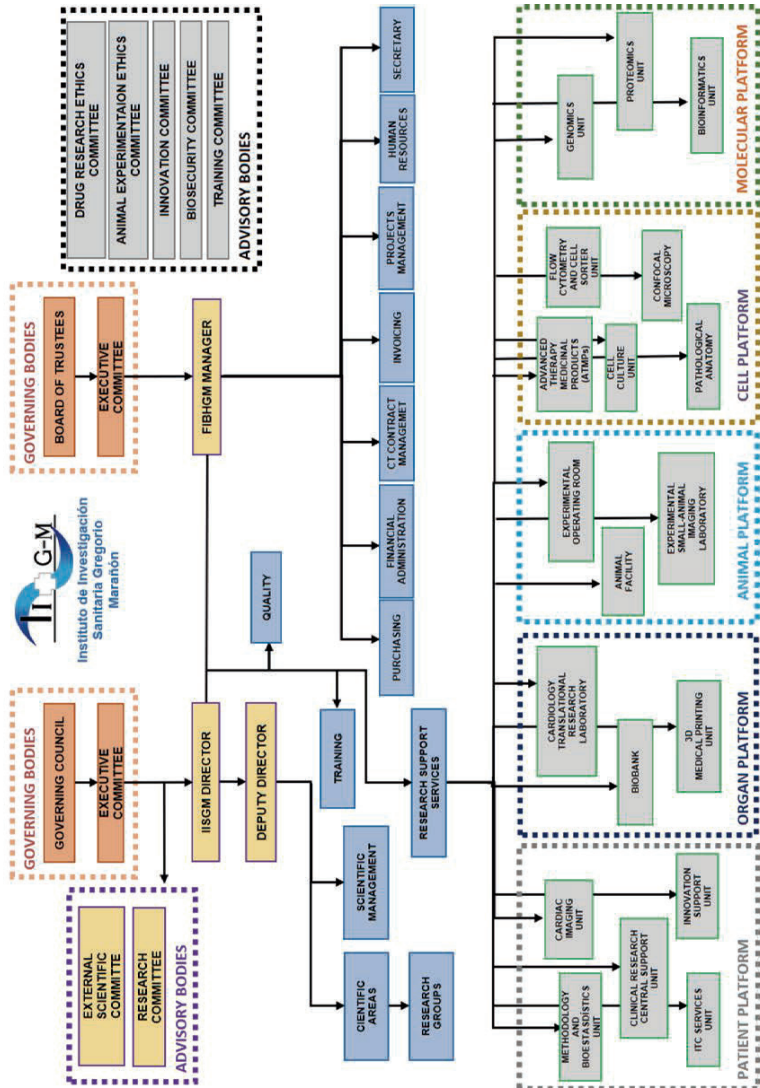
* Excluding letters: 53

Scientific output of Nursing Group in indexed journals with impact factor: distribution of publications by decile and quartile (absolute values)



ORGANIZATIONAL STRUCTURE OF IISGM

1. Organizational Chart



STRUCTURE OF RESEARCH AREAS

AREA 1: Biomedical Engineering

Coordinator: *Manuel Desco Menéndez*

Group	Group Leader	Type of Group	Organization
1.01 Advanced technological applications and human health	Manuel Desco Menéndez	CONSOLIDATED	HGUGM-UC3M
1.02 Signal processing	Antonio Artés Rodríguez	CONSOLIDATED	UC3M
1.03 Computer architecture, communications, and systems: ARCOS	Jesús Carretero Pérez	CONSOLIDATED	UC3M
1.04 Nonparametric statistics and intensive computing	Juan Romo Urróz	ASOCIATED	UC3M
1.05 Structural and Functional Medical Imaging	Jesús de la Torre Fernández Juan A. Guzmán de Villoria	EMERGING	HGUGM

AREA 2: Cardiovascular diseases

Coordinator: *Francisco Fernández-Avilés Díaz*

Group	Group Leader	Type of Group	Organization
2.01 Natural history of heart disease	Francisco Fernández-Avilés Díaz	CONSOLIDATED	HGUGM-UCM
2.02 Cardiovascular pathophysiology	Victoria Cachofeiro Ramos	CONSOLIDATED	UCM
2.03 Cardiac celular electrophysiology	Eva Delpón Mosquera	CONSOLIDATED	UCM
2.05 Cardiology and heart transplantation in infants	Constancio Medrano López	EMERGING	HGUGM
2.06 Blood lipids and cardiovascular risk	Luis Antonio Álvarez-Sala Walthier	EMERGING	HGUGM-UCM
2.07 Acute cerebral ischemia. Stroke	Antonio Gil Núñez	EMERGING	HGUGM

UCM: Universidad Complutense de Madrid. HGUGM: Hospital General Universitario Gregorio Marañón. UC3M: Universidad Carlos III.

AREA 3: Neuroscience and Mental Health**Coordinator:** *Celso Arango López*

Group	Group Leader	Type of Group	Organization
3.01 Neurobiological and psychological bases of mental disorders. Disorders of neurodevelopment	Celso Arango López	CONSOLIDATED	HGUGM-UCM
3.03B Neurological diseases	Francisco Javier Grandas Pérez	EMERGING	HGUGM

AREA 4: Clinical Microbiology: Infectious Diseases and AIDS**Coordinator:** *Patricia Muñoz García de Paredes*

Group	Group Head	Type of Group	Organization
4.01 Clinical microbiology and infectious diseases	Patricia Muñoz García de Paredes	CONSOLIDATED	HGUGM-UCM
4.02 Clinical and epidemiological aspects of HIV infection and associated conditions	Juan Carlos López Bernaldo de Quirós	CONSOLIDATED	HGUGM

AREA 5: Diseases of the Immune System**Coordinator:** *Eduardo Fernández-Cruz Pérez*

Group	Group Head	Type of Group	Organization
5.01 Pathophysiology and clinical research into chronic inflammatory and immunological diseases	Eduardo Fernández-Cruz Pérez	CONSOLIDATED	HGUGM
5.02 Molecular biology of HIV	M ^a Ángeles Muñoz Fernández	CONSOLIDATED	HGUGM
5.03 Systemic autoimmune diseases	José María Álvaro Gracia	CONSOLIDATED	HGUGM
5.05 Pathogenesis of the immunoallergic response	José Manuel Zubeldia Ortuño	EMERGING	HGUGM
5.06 Immune regulation and homeostasis in diseases of the immune system	Rafael Correa Rocha Marjorie Pion	EMERGING	HGUGM
5.07 Infections in pediatric patients	María Luisa Navarro Gómez	CONSOLIDATED	HGUGM

UCM: Universidad Complutense de Madrid. HGUGM: Hospital General Universitario Gregorio Marañón. UC3M: Universidad Carlos III.

AREA 6: Translational Oncology**Coordinator:** *Miguel Martín Jiménez*

Group	Group Leader	Type of Group	Organization
6.01 Interdisciplinary oncology and biotechnology	Ana Álvarez González Mercedes Muñoz Fernández	CONSOLIDATED	HGUGM-UCM
6.02 Translational medical oncology and personalized cancer therapy	Miguel Martín Jiménez	CONSOLIDATED	HGUGM-UCM
6.03 Genetics and clinical aspects of hematologic malignancies and hematopoietic stem cell transplantation	José Luis Díez Martín/ Ismael Buño Borde	CONSOLIDATED	HGUGM
6.04 Surgical oncology	Luis González Bayón	EMERGING	HGUGM

AREA 7: Systemic Diseases and Organ Transplantation**Coordinator:** *Rafael Bañares Cañizares*

Group	Group Leader	Type of Group	Organization
7.01 Vascular damage and inflammation in chronic kidney disease, dialysis, and kidney transplantation. Pathophysiology of the kidney	María de los Ángeles Goicoechea Díezhandino	CONSOLIDATED	HGUGM
7.02 Pathophysiology and natural history of liver and digestive diseases	Rafael Bañares Cañizares	CONSOLIDATED	HGUGM-UCM
7.04 Diseases of the critically ill child	Jesús López-Herce Cid	CONSOLIDATED	HGUGM
7.05B Physiological and therapeutic medical-surgical aspects of respiratory diseases	Luis Puente Maestu Ignacio Garutti Martínez	CONSOLIDATED	HGUGM
7.06 Regenerative medicine in plastic surgery	José M ^a Lasso Vázquez	ASOCIATED	HGUGM
7.07 Experimental kidney transplantation	Enrique Lledó García	EMERGING	HGUGM
7.08 Pediatric endocrinology	Marina Mora Sitj María Sanz Fernández	ASOCIATED	HGUGM

UCM: Universidad Complutense de Madrid. HGUGM: Hospital General Universitario Gregorio Marañón. UC3M: Universidad Carlos III.

Structure of research areas and groups

Group	Group Leader	Type of Group	Organization
7.10 Regeneration and biomaterials in musculoskeletal disease	Francisco Javier Vaquero Martín	EMERGING	HGUGM-UCM
7.12 Emergency medicine	Javier Muñoz González	ASOCIATED	HGUGM
7.16B Pathophysiology of the cardiovascular system and circulatory support	M ^a Begoña Quintana Villamandos Juan Francisco del Cañizo	EMERGING	HGUGM
7.18 Peritransplant evaluation (liver)	José María Pérez Peña	ASOCIATED	HGUGM
7.19 Perianesthetic assessment	Carmen Fernández Riveira	ASOCIATED	HGUGM
7.20 Anesthesia, toxins, and arrhythmias	Matilde Zaballos García	ASOCIATED	HGUGM
7.21 Biopathology of aging	José Antonio Serra Rexach	CONSOLIDATED	HGUGM
7.22 Neonatal and developmental pathophysiology	Manuel Sánchez Luna	EMERGING	HGUGM
7.26 Evaluation of health services and clinical epidemiology	Nieves López Freneña	EMERGING	HGUGM
7.27 Hospital pharmacy and pharmacogenomics	María Sanjurjo Sáez	CONSOLIDATED	HGUGM
7.28 Clinical nutrition	M ^a Cristina de la Cuerda Compés	EMERGING	HGUGM
7.29 Vascular pathophysiology and pharmacology	Francisco Pérez Vizcaino	CONSOLIDATED	UCM
7.31 Pathophysiology in women, pregnancy, labor, and puerperium	Santiago Lizarraga Bonelli Juan Antonio León Luis	EMERGING	HGUGM
7.32 Physical medicine and rehabilitation	Sonia Esteban Marta Supervía Pola	EMERGING	HGUGM
7.33 Pathological Anatomy	Javier Menárguez Palanca	EMERGING	HGUGM
7.34 Multimorbidity, chronic diseases and health services. Primary Care	Isabel del Cura González Jesús Martín Fernández	CONSOLIDATED (in the process of integration)	HGUGM
7.35 Dermatología traslacional: Investigación e Innovación	Ana Pulido Pérez Marta Bergón Sendín	EMERGING	HGUGM

Nursing Research Group

Coordinator: *Ana García Pozo*

Group	Group Head	Organization
Research in nursing	Ana María García Pozo	HGUGM

UCM: Universidad Complutense de Madrid. HGUGM: Hospital General Universitario Gregorio Marañón. UC3M: Universidad Carlos III.

RESEARCH SUPPORT SERVICES (RSSS)

liSGM has organized research support services into various technology platforms according to the object of research. Thus, liSGM aims to promote the human and technological interrelationships necessary when investigating the object of biomedical research from different technological perspectives.

Five platforms have been developed, as follows:

1. Patient platform.
2. Organ platform.
3. Animal platform.
4. Cell platform.
5. Molecular platform.



Publications generated with the participation of the Research Support Services (RSSs)				
	RSS	Publications of the main WOS collection in journals indexed in the JCR with impact factor	Publications of the main WOS collection in journals without impact factor	Others publications
Patient Platform	Methodology and Biostatistics Unit	8		
	Cardiac Imaging Unit	30	2	1
Organ Platform	Biobank	17	1	3
	Cardiology Translational Research Laboratory	32	3	1
	3D Medical Printing Unit	3	2	2
Animal Platform	Experimental Operating Room	1		
	Experimental Small-Animal Imaging Laboratory	22	1	
Cell Platform	Advanced Therapy Medicinal Products Production Unit	6	1	
	Flow Cytometry and Cell Sorter Unit	1		
	Cell Culture Unit	3		
	Confocal Microscopy	4		
Molecular Platform	Genomics Unit	6	1	

INNOVATION, KNOWLEDGE TRANSFER, AND TRANSLATION TO PRACTICE

INNOVATION SUPPORT UNIT

Intellectual Property KPIs

IISGM activity in innovation during 2022 is summarized in the following:

- a) **Copyright** (computer software, database, scientific publications, etc.):
 - 6 copyright applications filed in 2022
 - 7 copyright registered in 2022
 - Portfolio of 49 copyrights at 31st December 2022
- b) **Patents (it includes utility models)**:
 - 8 patents applications.
 - 6 patents granted.
 - Portfolio of 80 patents (50 granted and 30 applications) at 31st December 2022.
 - 47 patents licensed (29 granted y 18 applications) at 31st December 2022.

Technology Transfer KPIs

- a) **Technology transfer agreements**:
 - 1 license agreements signed in 2022.
- b) **Others research & innovation agreements (NDAs, collaboration agreement, etc.)**:
 - 7 agreements.

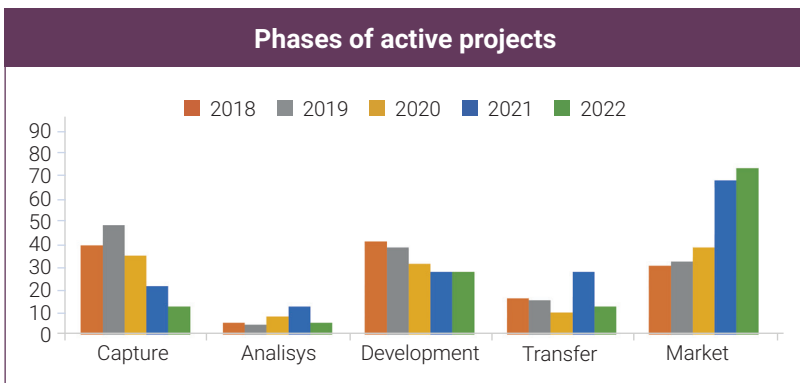
Innovation projects KPIs

During 2022, 14 new innovation projects were supported in the unit. The UAI managed a portfolio of 147 innovation projects at 31st December

2022. The following figures show the distribution of projects classified by development phase over the last 5 years.

IISGM has received € 1.569.433,75 from **innovation funding** programmes.

Other initiatives and achievements of the Unit during 2022:



- Re-accreditation of R&D&I management system according to UNE 166002:2021 standard.
- First day of healthcare entrepreneurship.

- Growth of the UAI with the incorporation of a new person.
- 8 training talks.
15 UAI presentations in clinical sessions.

INNOVATION PORTFOLIO

Below, we show the project portfolio, or «innovation funnel». The UAI managed a portfolio of 147 innovation projects at 31st December 2022.

	ICTs Health	Material and devices	Medicines and pharmaceutical products	Biotechnology and molecular diagnosis	Imaging	Care organization
Ideas proposed (not developed)	0	4	1	3	2	4
Ideas under assessment	2	0	1	1	0	2
Ideas under development	5	11	2	7	2	4
Ideas under transfer	20	11	5	7	13	26
Ideas in the market	3	2	1	4	4	0

*ICT: information and communications technology.

Patent family (it included utility models) ** A patent family is “a set of patents taken in various countries to protect a single invention.

INTERVENTIONAL AND NON INTERVENTIONAL CLINICAL STUDIES

During the year **2022**, a total of **1135** clinical trials were active in our hospital. A total of 211 studies were implemented.

Approximately 97 % of the clinical trials with medicines started during 2022 were Phase I, II, and III studies. There has been an increase in Phase I trials compared to 2021.

As for the distribution by research areas, almost **47 %** of the clinical trials were led by the Translational Oncology Area (Area 6).

ACTIVE CLINICAL TRIALS	
2018	1190
2019	1115
2020	1038
2021	1145
2022	1135

NEW CLINICAL STUDIES			
	Clinical Trials	Observational studies	Total
2018	136	74	210
2019	140	68	208
2020	162	81	251
2021	176	47	223
2022	151	60	211

DISTRIBUTION OF CLINICAL TRIALS SIGNED BY PHASE (%)					
	2018	2019	2020	2021	2022
Phase I	11.7	7.28	5.29	20.7	25.1
Phase II	34.5	37.1	40	33.9	29.8
Phase III	48	43.7	45.88	42.55	42.43
Phase IV	3.6	4.6	4.11	2.3	2.65
Others (Medical device, etc)	2.2	7.29	4.70	0.57	0

DISTRIBUTION OF CLINICAL STUDIES SIGNED IN 2022 (National/International)		
	N°	%
National	69	32,7
International	142	67,30

DISTRIBUTION OF CLINICAL STUDIES SIGNED IN 2022 BY RESEARCH AREA OF IISGM		
	N°	%
Area 1	0	0
Area 2	10	4,7
Area 3	10	4,7
Area 4	7	3,2
Area 5	16	7,5
Area 6	99	46,5
Area 7	53	24,9
Nursing group	0	0
Associated clinicians	16	7,5

FUNDINGS OF IISGM

The global analysis of Institute funding was performed by collecting all income obtained by research groups both from competitive/non-competitive projects and from clinical trials, agreements with various entities, and donations.

The objective of this methodology is to be able to provide information on the capacity of IISGM groups to generate income.

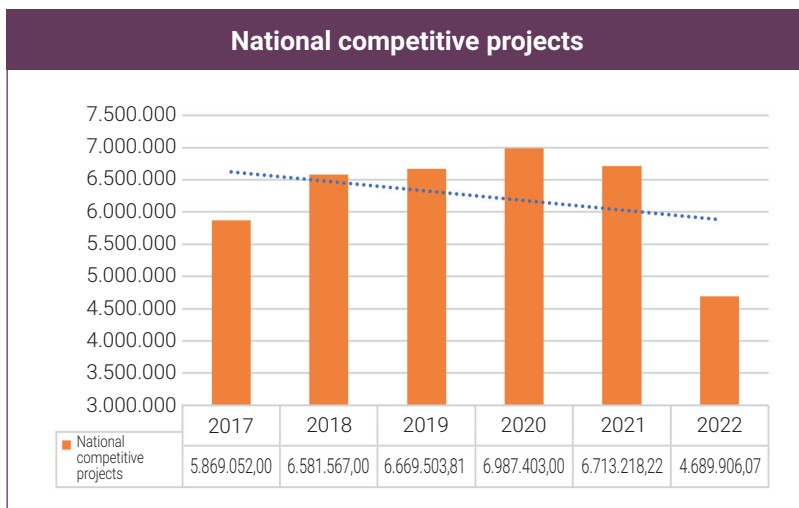
The total income generated by IISGM researchers own activity in 2022 came to 18.684.150 €. To these revenues we must add, for the 5th year in a row, the nominative subsidy of 756.020 € granted to this foundation by the Consejería of Health of the Community of Madrid, which would raise total revenues of the Foundation to **19.440.170 €**.

	2017	2018	2019	2020	2021	2022
Total income generated by researchers	14,431,258 €	15,503,687 €	16,476,182 €	19,183,609 €	17,699,418 €	18,684,150 €
Nominative subsidy Madrid Community	–	612,220 €	622,220 €	622,220 € + 850,000 €	622,220 €	756.020€

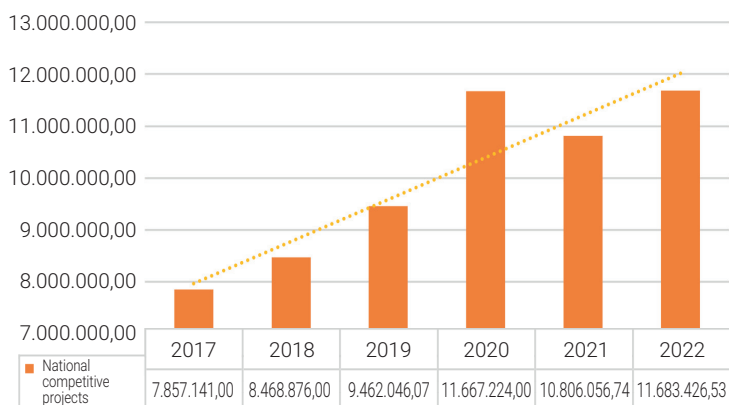
The revenues generated by researchers in 2022 is 5,6% higher than in 2021. The increase in International competitive projects, both from Europe and the North America (NIH), and from private competitive projects have compensated the reduction in revenues from national competitive projects.

As in previous years, this income is earmarked for the support and development of research activities in the groups.

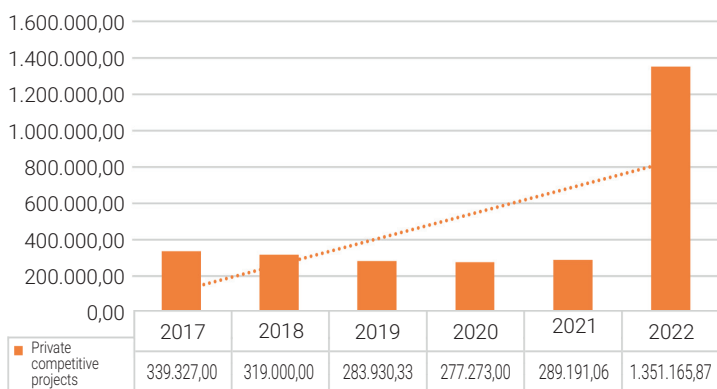
EVOLUTION OF INCOME GENERATED BY RESEARCHERS BY CATEGORY



Non competitive projects



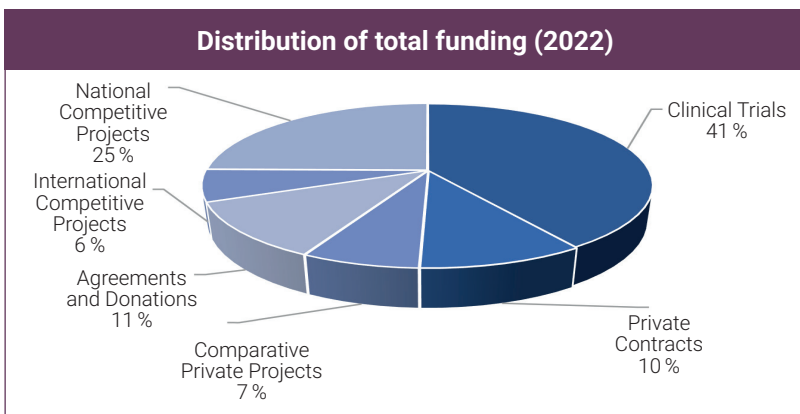
Private competitive projects

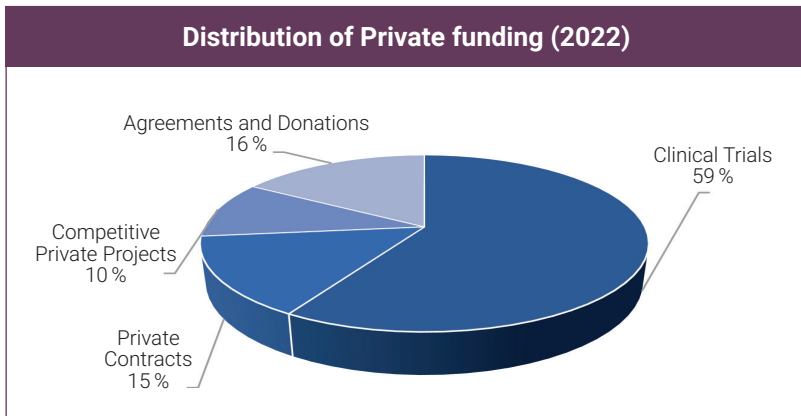




DISTRIBUTION OF INCOME GENERATED BY RESEARCHERS

As far as the distribution of income is concerned, in 2022, 38 % of the total income generated by the researchers of the IISGM came from competitive sources, and 41 % from Clinical Trials.





As in previous years, in the case of individual information provided by each group in this report, only projects obtained by groups in **competitive calls (public and private)** where the principal investigator was a group researcher are reported.

Therefore, other sources of funding have not been taken into account.

The objective of this premise is to provide information on the capacity of each of the groups to obtain funding in a competitive environment.

LIST OF ACTIVE PROJECTS IN 2022 BY AREA OF RESEARCH

		Research projects	Human resources
AREA 1. Biomedical Engineering	1.01 Advanced technological applications and human health	28	21
	1.02 Signal processing	9	8
AREA 2. Cardiovascular Diseases	2.01 Natural history of heart disease	20	2
	2.02 Cardiovascular pathophysiology	1	6
	2.03 Cardiac cellular electrophysiology	3	2
AREA 3. Neuroscience and Mental Health	3.01 Neurobiological and psychological bases of mental disorders. Disorders of neurodevelopment	25	24
	3.03B Neurological diseases	4	0
AREA 4. Clinical Microbiology Infectious Diseases and AIDS	4.01 Infectious diseases	18	21
	4.02 Clinical and epidemiological aspects of HIV infection and associated conditions	3	2
AREA 5. Diseases of the Immune System	5.01 Pathophysiology and clinical research into chronic inflammatory and immunological diseases	8	5
	5.02 Molecular biology of HIV	3	3
	5.03 Systemic autoimmune diseases	1	0
	5.05 Pathogenesis of the immunoallergic response	2	0
	5.06 Immune regulation and homeostasis in diseases of the immune system	5	6
	5.07 Infections in pediatric patients	4	2

(Continued)

List of active projects in 2022 by area of research

(Cont.)

		Research projects	Human resources
AREA 6. Translational Oncology	6.01 Interdisciplinary oncology and biotechnology	0	1
	6.02 Translational medical oncology and personalized cancer therapy	3	0
	6.03 Genetics and clinical aspects of hematologic malignancies and hematopoietic stem cell transplantation	3	1
AREA 7. Systemic Diseases and Organ Transplantation	7.01 Vascular damage and inflammation in chronic kidney disease, dialysis, and kidney transplantation. Pathophysiology of the kidney	4	1
	7.02 Pathophysiology and natural history of liver and digestive diseases	8	3
	7.04 Diseases of the critically ill child	8	4
	7.05B Pathophysiology, outcome, and therapeutic strategies in chronic respiratory insufficiency and respiratory disorders of sleep	2	0
	7.10 Regeneration and biomaterials in musculoskeletal disease	1	0
	7.16B Pathophysiology of the cardiovascular system and circulatory support	2	1
	7.21 Biopathology of aging	2	0
	7.22 Pathophysiology of the neonate and developing child	2	0

(Continued)

(Cont.)

		Research projects	Human resources
AREA 7. Systemic Diseases and Organ Trasplantation	7.27 Hospital pharmacy and pharmacogenomics	7	1
	7.28 Clinical nutrition	1	0
	7.29 Vascular pathophysiology and pharmacology	5	3
	7.31 Pathophysiology in women, pregnancy, labor, and puerperium	2	2

SCIENTIFIC PUBLICATIONS

The list presented below shows all the referenced publications in which investigators from the IISGM participated in during 2022.

Publications with an impact factor greater than **10 points are highlighted**. In order to obtain the total impact factor, only information from publications indexed as original articles, reviews, editorials and letters in the main collection of the Web of Science (WOS) have been taken into account.

It is important to note that publications involving different groups or areas of the Institute are computed individually in each group and area, although only once for purposes of the calculation of the Institute's total impact factor.

Journal	Nº	IF	Amount IF
ACTA DERMATO-VENEREOLOGICA	1	3,6	3,6
ACTA PAEDIATRICA	1	3,8	3,8
ACTA PAULISTA DE ENFERMAGEM	1	0,7	0,7
ACTA PSYCHIATRICA SCANDINAVICA	2	6,7	13,4
ACTAS ESPANOLAS DE PSIQUIATRIA	1	1,5	1,5
Actas Urologicas Espanolas	6	1,1	6,6
ADDICTION BIOLOGY	1	3,4	3,4
ADVANCES IN THERAPY	1	3,8	3,8
AGING & MENTAL HEALTH	2	3,4	6,8
AIDS	3	3,8	11,4
AIDS CARE-PSYCHOLOGICAL AND SOCIO-MEDICAL ASPECTS OF AIDS/HIV	2	1,7	3,4

(Continued)

(Cont.)

Journal	Nº	IF	Amount IF
AIDS RESEARCH AND HUMAN RETROVIRUSES	1	1,5	1,5
AIDS Research and Therapy	1	2,2	2,2
ALIMENTARY PHARMACOLOGY & THERAPEUTICS	2	7,6	15,2
ALLERGY	3	12,4	37,2
ALZHEIMERS & DEMENTIA	1	14	14
AMERICAN JOURNAL OF CARDIOLOGY	2	2,8	5,6
AMERICAN JOURNAL OF GASTROENTEROLOGY	1	9,8	9,8
AMERICAN JOURNAL OF HEMATOLOGY	3	12,8	38,4
AMERICAN JOURNAL OF NEURORADIOLOGY	1	3,5	3,5
AMERICAN JOURNAL OF PERINATOLOGY	3	2	6
AMERICAN JOURNAL OF RESPIRATORY CELL AND MOLECULAR BIOLOGY	1	6,4	6,4
AMERICAN JOURNAL OF TRANSPLANTATION	2	8,8	17,6
Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration	1	2,8	2,8
ANAESTHESIA CRITICAL CARE & PAIN MEDICINE	1	5,5	5,5
ANAIS BRASILEIROS DE DERMATOLOGIA	1	1,7	1,7
ANALES DE PEDIATRIA	22	2,1	46,2
ANGIOLOGY	1	2,8	2,8
ANNALS OF ALLERGY ASTHMA & IMMUNOLOGY	1	5,9	5,9
ANNALS OF HEMATOLOGY	2	3,5	7
ANNALS OF PHARMACOTHERAPY	1	2,9	2,9
ANNALS OF PLASTIC SURGERY	1	1,5	1,5
ANNALS OF SURGICAL ONCOLOGY	3	3,7	11,1
ANNALS OF THE RHEUMATIC DISEASES	2	27,4	54,8

(Continued)

(Cont.)

Journal	Nº	IF	Amount IF
Antibiotics-Basel	1	4,8	4,8
ANTIMICROBIAL AGENTS AND CHEMOTHERAPY	2	4,9	9,8
Antioxidants	7	7	49
ANTIVIRAL THERAPY	2	1,2	2,4
Applied Materials Today	1	8,3	8,3
Applied Sciences-Basel	1	2,7	2,7
ARCHIVES OF DISEASE IN CHILDHOOD	1	5,2	5,2
ARCHIVES OF DISEASE IN CHILDHOOD-FETAL AND NEONATAL EDITION	1	4,4	4,4
ARCHIVOS DE BRONCONEUMOLOGIA	10	8	80
ARCHIVOS ESPANLES DE UROLOGIA	1	0,5	0,5
ARQUIVOS BRASILEIROS DE CARDIOLOGIA	1	2,6	2,6
ARTHRITIS RESEARCH & THERAPY	1	4,9	4,9
ARTIFICIAL ORGANS	1	2,4	2,4
ATENCION PRIMARIA	1	2,5	2,5
AUSTRALIAN CRITICAL CARE	1	3,3	3,3
BEHAVIORAL PSYCHOLOGY-PSICOLOGIA CONDUCTUAL	1	1,1	1,1
Behavioral Sciences	1	2,6	2,6
BEST PRACTICE & RESEARCH CLINICAL HAEMATOLOGY	1	2,1	2,1
BIOCHEMICAL PHARMACOLOGY	1	5,8	5,8
Biofabrication	1	9	9
BIOLOGICAL PSYCHIATRY	1	10,6	10,6
BIOLOGY DIRECT	1	5,5	5,5
Biomarker Research	1	11,1	11,1

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
BIOMEDICAL MATERIALS	1	4	4
BIOMEDICINE & PHARMACOTHERAPY	5	7,5	37,5
Biomedicines	6	4,7	28,2
BIOSENSORS-BASEL	1	5,4	5,4
BLOOD	1	20,3	20,3
Blood Advances	3	7,5	22,5
Blood Cancer Journal	2	12,8	25,6
Blood Transfusion	1	3,7	3,7
BMC CANCER	2	3,8	7,6
BMC GASTROENTEROLOGY	1	2,4	2,4
BMC GERIATRICS	2	4,1	8,2
BMC INFECTIOUS DISEASES	2	3,7	7,4
BMC MEDICAL EDUCATION	1	3,6	3,6
BMC MEDICAL IMAGING	1	2,7	2,7
BMC MUSCULOSKELETAL DISORDERS	1	2,3	2,3
BMC Nursing	1	3,2	3,2
BMC Pregnancy and Childbirth	1	3,1	3,1
BMC Psychiatry	1	4,4	4,4
BMC PUBLIC HEALTH	1	4,5	4,5
BMJ Open	4	2,9	11,6
BMJ-British Medical Journal	1	105,7	105,7
BONE MARROW TRANSPLANTATION	5	4,8	24
BRAIN BEHAVIOR AND IMMUNITY	1	15,1	15,1
Brain Sciences	1	3,3	3,3

(Continued)

(Cont.)

Journal	Nº	IF	Amount IF
BRAZILIAN JOURNAL OF PSYCHIATRY	1	5,5	5,5
BREAST	2	3,9	7,8
BREAST CANCER RESEARCH AND TREATMENT	2	3,8	7,6
Breast Care	1	2,1	2,1
BRITISH JOURNAL OF ANAESTHESIA	1	9,8	9,8
BRITISH JOURNAL OF CANCER	2	8,8	17,6
BRITISH JOURNAL OF CLINICAL PHARMACOLOGY	2	3,4	6,8
BRITISH JOURNAL OF GENERAL PRACTICE	1	5,9	5,9
BRITISH JOURNAL OF PHARMACOLOGY	1	7,3	7,3
BRITISH JOURNAL OF SURGERY	2	9,6	19,2
CANADIAN JOURNAL OF CARDIOLOGY	2	6,2	12,4
Cancer Biomarkers	1	3,1	3,1
CANCER CHEMOTHERAPY AND PHARMACOLOGY	1	3	3
CANCER EPIDEMIOLOGY	1	2,6	2,6
Cancer Medicine	1	4	4
CANCER TREATMENT REVIEWS	1	11,8	11,8
Cancers	17	5,2	88,4
CARDIOLOGY IN THE YOUNG	2	1	2
Cardiology Journal	4	2,9	11,6
CARDIOVASCULAR DIABETOLOGY	2	9,3	18,6
CARDIOVASCULAR DRUGS AND THERAPY	1	3,4	3,4
CARDIOVASCULAR RESEARCH	1	10,8	10,8
CATHETERIZATION AND CARDIOVASCULAR INTERVENTIONS	1	2,3	2,3
Cell Death & Disease	1	9	9

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
Cells	5	6	30
CELLULAR AND MOLECULAR LIFE SCIENCES	1	8	8
CELLULAR IMMUNOLOGY	1	4,3	4,3
CHEMICAL RESEARCH IN TOXICOLOGY	1	4,1	4,1
CHILD DEVELOPMENT PERSPECTIVES	1	6,4	6,4
Children-Basel	4	2,4	9,6
CHRONIC OBSTRUCTIVE PULMONARY DISEASES- JOURNAL OF THE COPD FOUNDATION	1	2,4	2,4
CIN-COMPUTERS INFORMATICS NURSING	1	1,3	1,3
CIRCULATION	1	37,8	37,8
CIRCULATION-ARRHYTHMIA AND ELECTROPHYSIOLOGY	2	8,4	16,8
CIRUGIA ESPANOLA	2	1,9	3,8
CIRUGIA Y CIRUJANOS	3	0,5	1,5
CLINICA CHIMICA ACTA	1	5	5
CLINICAL & TRANSLATIONAL ONCOLOGY	13	3,4	44,2
CLINICAL AND APPLIED THROMBOSIS-HEMOSTASIS	1	2,9	2,9
CLINICAL AND EXPERIMENTAL DERMATOLOGY	3	4,1	12,3
CLINICAL AND EXPERIMENTAL HYPERTENSION	1	12,3	v
CLINICAL AND EXPERIMENTAL RHEUMATOLOGY	1	3,7	3,7
CLINICAL BREAST CANCER	1	3,1	3,1
CLINICAL CANCER RESEARCH	3	11,5	34,5
CLINICAL DRUG INVESTIGATION	1	3,2	3,2
CLINICAL GASTROENTEROLOGY AND HEPATOLOGY	1	12,6	12,6
CLINICAL GERONTOLOGIST	2	2,8	5,6
CLINICAL INFECTIOUS DISEASES	5	11,8	59

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
CLINICAL JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY	1	9,8	9,8
CLINICAL KIDNEY JOURNAL	4	4,6	18,4
CLINICAL MICROBIOLOGY AND INFECTION	9	14,2	127,8
CLINICAL NEPHROLOGY	1	1,1	1,1
CLINICAL NUCLEAR MEDICINE	1	10,6	10,6
CLINICAL NUTRITION	9	6,3	56,7
CLINICAL RESEARCH IN CARDIOLOGY	1	5	5
CLINICAL RHEUMATOLOGY	1	3,4	3,4
CLINICAL TOXICOLOGY	1	3,3	3,3
CLINICAL TRANSPLANTATION	1	2,1	2,1
CLUSTER COMPUTING-THE JOURNAL OF NETWORKS SOFTWARE TOOLS AND APPLICATIONS	1	4,4	4,4
COLORECTAL DISEASE	2	3,4	6,8
COMPARATIVE IMMUNOLOGY MICROBIOLOGY AND INFECTIOUS DISEASES	1	2	2
Complementary Therapies in Clinical Practice	1	3	3
COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE	1	6,1	6,1
CORONARY ARTERY DISEASE	1	1,8	1,8
CRITICAL REVIEWS IN ONCOLOGY HEMATOLOGY	1	6,2	6,2
CURRENT EYE RESEARCH	1	2	2
CURRENT MEDICAL RESEARCH AND OPINION	2	2,3	4,6
CURRENT OPINION IN INFECTIOUS DISEASES	2	3,9	7,8
CURRENT PROBLEMS IN CARDIOLOGY	1	4,2	4,2
Dermatitis	1	5,2	5,2

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
DERMATOLOGIC THERAPY	4	3,6	14,4
DERMATOLOGY	2	3,4	6,8
Diabetes & Vascular Disease Research	1	2,4	2,4
Diabetes Therapy	1	3,8	3,8
DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE	1	2,9	2,9
Diagnostics	1	3,6	3,6
DIGESTIVE AND LIVER DISEASE	1	4,5	4,5
DIGESTIVE ENDOSCOPY	1	5,3	5,3
DRUG SAFETY	1	4,2	4,2
DRUGS & AGING	1	2,8	2,8
EBioMedicine	1	11,1	11,1
Eclinicalmedicine	1	15,1	15,1
EJSO	3	3,8	11,4
eLife	1	7,7	7,7
EMBO MOLECULAR MEDICINE	1	11,1	11,1
Emergencias	5	5,5	27,5
EMERGING INFECTIOUS DISEASES	1	11,8	11,8
Emerging Microbes & Infections	1	13,2	13,2
ENDOCRINE	1	3,7	3,7
Endocrine Connections	1	2,9	2,9
ENDOCRINE-RELATED CANCER	1	3,9	3,9
Endocrinología Diabetes Y Nutrición	8	1,9	15,2
ENDOSCOPY	1	9,3	9,3
ENFERMEDADES INFECCIOSAS Y MICROBIOLOGIA CLINICA	6	2,5	15

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
Entropy	1	2,7	2,7
ENVIRONMENTAL HEALTH	1	6	6
ENVIRONMENTAL RESEARCH	1	8,3	8,3
EPIDEMIOLOGY AND PSYCHIATRIC SCIENCES	3	8,1	24,3
EPILEPSY & BEHAVIOR	1	2,6	2,6
ERJ Open Research	2	4,6	9,2
ESC heart failure	1	3,8	3,8
Esmo Open	2	7,3	14,6
EUROPEAN CHILD & ADOLESCENT PSYCHIATRY	7	6,4	44,8
European Geriatric Medicine	1	3,8	3,8
EUROPEAN HEART JOURNAL	1	39,3	39,3
European Heart Journal-Cardiovascular Imaging	3	6,2	18,6
European Heart Journal-Cardiovascular Pharmacotherapy	3	7,1	21,3
EUROPEAN JOURNAL OF CANCER	5	8,4	42
EUROPEAN JOURNAL OF CARDIO-THORACIC SURGERY	2	3,4	6,8
EUROPEAN JOURNAL OF CLINICAL INVESTIGATION	1	5,5	5,5
EUROPEAN JOURNAL OF CLINICAL MICROBIOLOGY & INFECTIOUS DISEASES	1	4,5	4,5
EUROPEAN JOURNAL OF CLINICAL NUTRITION	2	4,7	9,4
EUROPEAN JOURNAL OF DERMATOLOGY	9	2,5	22,5
EUROPEAN JOURNAL OF EMERGENCY MEDICINE	1	4,4	4,4
EUROPEAN JOURNAL OF HEART FAILURE	1	18,2	18,2
EUROPEAN JOURNAL OF HOSPITAL PHARMACY	1	1,7	1,7
EUROPEAN JOURNAL OF IMMUNOLOGY	2	5,4	10,8

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
EUROPEAN JOURNAL OF INTERNAL MEDICINE	3	8	24
EUROPEAN JOURNAL OF NEUROLOGY	2	5,1	10,2
EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING	1	9,1	9,1
EUROPEAN JOURNAL OF PEDIATRIC SURGERY	1	1,8	1,8
EUROPEAN JOURNAL OF PEDIATRICS	8	3,6	28,8
European Journal of Preventive Cardiology	2	8,3	16,6
EUROPEAN JOURNAL OF TRAUMA AND EMERGENCY SURGERY	5	2,1	10,5
EUROPEAN NEUROPSYCHOPHARMACOLOGY	6	5,6	33,6
EUROPEAN PSYCHIATRY	2	7,8	15,6
EUROPEAN RADIOLOGY	1	5,9	5,9
EUROPEAN RESPIRATORY JOURNAL	2	24,3	48,6
European Thyroid Journal	1	4,7	4,7
EUROPEAN UROLOGY	2	23,4	46,8
Eurosurveillance	3	19	57
EXPERIMENTAL DERMATOLOGY	1	3,6	3,6
EXPERIMENTAL GERONTOLOGY	2	3,9	7,8
EXPERT OPINION ON BIOLOGICAL THERAPY	1	4,6	4,6
EXPERT OPINION ON DRUG METABOLISM & TOXICOLOGY	1	4,3	4,3
EXPERT OPINION ON DRUG SAFETY	1	3,1	3,1
EXPERT OPINION ON INVESTIGATIONAL DRUGS	1	6,1	6,1
Expert Review of Hematology	1	2,8	2,8
EXPERT REVIEW OF MOLECULAR DIAGNOSTICS	1	5,1	5,1
EXPERT REVIEW OF PHARMACOECONOMICS & OUTCOMES RESEARCH	2	2,3	4,6

(Continued)

(Cont.)

Journal	Nº	IF	Amount IF
Foot and Ankle Surgery	3	2,5	7,5
Frontiers in Cardiovascular Medicine	10	3,6	36
Frontiers in Cell and Developmental Biology	2	5,5	11
Frontiers in Cellular and Infection Microbiology	2	5,7	11,4
Frontiers in Endocrinology	2	5,2	10,4
Frontiers in Genetics	1	3,7	3,7
Frontiers in Immunology	15	7,3	109,5
Frontiers In Medicine	6	3,9	23,4
Frontiers in Microbiology	4	5,2	20,8
Frontiers in Neuroscience	1	4,3	4,3
Frontiers in Oncology	8	4,7	37,6
Frontiers In Pediatrics	7	2,6	18,2
Frontiers in Pharmacology	3	5,6	16,8
Frontiers in Physiology	4	4	16
Frontiers in Psychiatry	2	4,7	9,4
FRONTIERS IN PSYCHOLOGY	1	3,8	3,8
Frontiers in Public Health	1	5,2	5,2
Future Oncology	1	3,3	3,3
FUTURE VIROLOGY	1	3,1	3,1
GACETA SANITARIA	1	1,9	1,9
Games for Health Journal	2	3,5	7
Gastroenterologia y Hepatologia	3	1,9	5,7
Gland Surgery	1	1,8	1,8
GUT	1	24,5	24,5

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
HAEMATOLOGICA	1	10,1	10,1
HEALTH & SOCIAL CARE IN THE COMMUNITY	1	2,4	2,4
Healthcare	2	2,8	5,6
HEART	2	5,7	11,4
Hepatology Communications	2	5,1	10,2
HEPATOLOGY INTERNATIONAL	1	6,6	6,6
HISTOPATHOLOGY	1	6,4	6,4
HIV MEDICINE	3	3	9
HUMAN BRAIN MAPPING	4	4,8	19,2
Human Fertility	1	1,9	1,9
HUMAN IMMUNOLOGY	2	2,7	5,4
HUMAN MOLECULAR GENETICS	1	3,5	3,5
IEEE Access	2	3,9	7,8
IEEE Journal of Biomedical and Health Informatics	2	7,7	15,4
IEEE TRANSACTIONS ON INFORMATION THEORY	3	2,5	7,5
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY	1	6,8	6,8
IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS	1	10,4	10,4
INDIAN JOURNAL OF PEDIATRICS	1	4,3	4,3
INFECTION	1	7,5	7,5
INFECTIOUS DISEASES	1	5,8	5,8
Infectious Diseases and Therapy	3	5,4	16,2
INFLAMMATORY BOWEL DISEASES	1	4,9	4,9
INJURY-INTERNATIONAL JOURNAL OF THE CARE OF THE INJURED	1	2,5	2,5

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
INTENSIVE CARE MEDICINE	3	38,9	116,7
INTERNAL AND EMERGENCY MEDICINE	1	4,6	4,6
International Journal for Numerical Methods in Biomedical Engineering	1	2,1	2,1
INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS	1	10,8	10,8
International Journal of Chronic Obstructive Pulmonary Disease	1	2,8	2,8
INTERNATIONAL JOURNAL OF DERMATOLOGY	1	3,6	3,6
International Journal of Diabetes in Developing Countries	1	0,9	0,9
INTERNATIONAL JOURNAL OF GERIATRIC PSYCHIATRY	1	4	4
INTERNATIONAL JOURNAL OF HEMATOLOGY	1	2,1	2,1
INTERNATIONAL JOURNAL OF IMPOTENCE RESEARCH	1	2,6	2,6
INTERNATIONAL JOURNAL OF INFECTIOUS DISEASES	2	8,4	16,8
International Journal of Medical Sciences	1	3,6	3,6
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES	12	5,6	67,2
INTERNATIONAL JOURNAL OF NEUROPSYCHOPHARMACOLOGY	1	4,8	4,8
INTERNATIONAL JOURNAL OF NURSING PRACTICE	1	1,9	1,9
INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY	1	2,4	2,4
INTERNATIONAL JOURNAL OF PEDIATRIC OTORHINOLARYNGOLOGY	1	1,5	1,5
International Journal of Rheumatic Diseases	1	2,5	2,5

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
INTERNATIONAL JOURNAL OF SURGICAL PATHOLOGY	1	1,2	1,2
INTERNATIONAL JOURNAL OF TUBERCULOSIS AND LUNG DISEASE	1	4	4
INTERNATIONAL JOURNAL OF UROLOGY	1	2,6	2,6
INTERNATIONAL ORTHOPAEDICS	1	2,7	2,7
INTERNATIONAL PSYCHOGERIATRICS	1	7	7
INTERNATIONAL UROLOGY AND NEPHROLOGY	1	2	2
iScience	1	5,8	5,8
JACC-Cardiovascular Imaging	1	14	14
JACC-Heart Failure	1	13	13
JAIDS-JOURNAL OF ACQUIRED IMMUNE DEFICIENCY SYNDROMES	3	3,6	10,8
JAMA Internal Medicine	1	39	39
JAMA Oncology	1	28,4	28,4
JCR-JOURNAL OF CLINICAL RHEUMATOLOGY	2	3,4	6,8
JMIR mHealth and uHealth	2	5	10
Journal for ImmunoTherapy of Cancer	2	10,9	21,8
JOURNAL OF AAPOS	1	1,6	1,6
Journal of Affective Disorders	3	6,6	19,8
Journal of Allergy and Clinical Immunology-In Practice	3	9,4	28,2
JOURNAL OF ALZHEIMERS DISEASE	1	4	4
JOURNAL OF ANTIMICROBIAL CHEMOTHERAPY	8	5,2	41,6
JOURNAL OF ATTENTION DISORDERS	1	3	3
JOURNAL OF AUTISM AND DEVELOPMENTAL DISORDERS	1	3,9	3,9

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
JOURNAL OF CANCER SURVIVORSHIP	1	3,7	3,7
JOURNAL OF CARDIOPULMONARY REHABILITATION AND PREVENTION	1	3,8	3,8
Journal of Cardiovascular Development and Disease	2	2,4	4,8
JOURNAL OF CARDIOVASCULAR ELECTROPHYSIOLOGY	1	2,7	2,7
Journal of Clinical Medicine	38	3,9	148,2
JOURNAL OF CLINICAL MICROBIOLOGY	1	9,4	9,4
JOURNAL OF CLINICAL NEUROSCIENCE	1	2	2
JOURNAL OF CLINICAL ONCOLOGY	4	45,3	181,2
JOURNAL OF CLINICAL PHARMACY AND THERAPEUTICS	2	2	4
Journal of Clinical Sleep Medicine	2	4,3	8,6
JOURNAL OF COGNITION AND DEVELOPMENT	1	2,1	2,1
JOURNAL OF COLLOID AND INTERFACE SCIENCE	1	9,9	9,9
JOURNAL OF CRANIO-MAXILLOFACIAL SURGERY	1	3,1	3,1
JOURNAL OF CROHNS & COLITIS	2	8	16
JOURNAL OF DERMATOLOGICAL TREATMENT	1	2,9	2,9
JOURNAL OF ENDOVASCULAR THERAPY	1	2,6	2,6
Journal of Fungi	3	4,7	14,1
JOURNAL OF GENERAL INTERNAL MEDICINE	2	5,7	11,4
JOURNAL OF GENERAL PHYSIOLOGY	1	3,8	3,8
Journal of Geriatric Cardiology	2	2,5	5
JOURNAL OF HAND SURGERY-EUROPEAN VOLUME	2	1,8	3,6
JOURNAL OF HEPATOLOGY	4	25,7	102,8
JOURNAL OF HOSPITAL INFECTION	1	6,9	6,9

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
JOURNAL OF HYPERTENSION	1	4,9	4,9
JOURNAL OF INFECTION	2	28,2	56,4
JOURNAL OF INNATE IMMUNITY	2	5,3	10,6
JOURNAL OF INTENSIVE CARE MEDICINE	1	3,1	3,1
JOURNAL OF INTERNAL MEDICINE	1	11,1	11,1
JOURNAL OF INVESTIGATIONAL ALLERGOLOGY AND CLINICAL IMMUNOLOGY	3	7,2	21,6
JOURNAL OF INVESTIGATIVE DERMATOLOGY	2	6,5	13
JOURNAL OF LAPAROENDOSCOPIC & ADVANCED SURGICAL TECHNIQUES	1	1,3	1,3
JOURNAL OF MATERNAL-FETAL & NEONATAL MEDICINE	4	1,8	7,2
Journal of Medical Economics	1	2,4	2,4
JOURNAL OF MEDICAL INTERNET RESEARCH	2	7,4	14,8
JOURNAL OF MENTAL HEALTH	1	3,3	3,3
JOURNAL OF MINIMALLY INVASIVE GYNECOLOGY	1	4,1	4,1
JOURNAL OF NANOBIO TECHNOLOGY	2	10,2	20,4
JOURNAL OF NEUROINFLAMMATION	1	9,3	9,3
JOURNAL OF NEUROLOGY	1	6	6
JOURNAL OF NEUROSCIENCE	1	5,3	5,3
JOURNAL OF NEUROSCIENCE NURSING	1	2,3	2,3
JOURNAL OF ONCOLOGY PHARMACY PRACTICE	1	1,3	1,3
JOURNAL OF ORAL PATHOLOGY & MEDICINE	1	3,3	3,3
Journal of Orthopaedic Surgery and Research	1	2,6	2,6
Journal of Pain Research	1	2,7	2,7

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
JOURNAL OF PEDIATRIC GASTROENTEROLOGY AND NUTRITION	2	2,9	5,8
JOURNAL OF PEDIATRIC SURGERY	1	2,4	2,4
Journal of Pediatric Urology	1	2	2
JOURNAL OF PEDIATRICS	1	5,1	5,1
JOURNAL OF PERINATAL MEDICINE	1	2,4	2,4
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	1	2,1	2,1
JOURNAL OF PLASTIC RECONSTRUCTIVE AND AESTHETIC SURGERY	4	2,7	10,8
JOURNAL OF PSYCHIATRIC RESEARCH	4	4,8	19,2
JOURNAL OF SLEEP RESEARCH	1	4,4	4,4
Journal of Stomatology Oral and Maxillofacial Surgery	1	2,2	2,2
JOURNAL OF THE AMERICAN ACADEMY OF DERMATOLOGY	1	13,8	13,8
JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	8	24	192
JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY	1	13,6	13,6
JOURNAL OF THE EUROPEAN ACADEMY OF DERMATOLOGY AND VENEREOLOGY	5	9,2	46
Journal of the International AIDS Society	2	6	12
JOURNAL OF THE NEUROLOGICAL SCIENCES	1	4,4	4,4
Journal of the Pediatric Infectious Diseases Society	2	3,2	6,4
Journal of Thoracic Disease	1	2,5	2,5
JOURNAL OF THROMBOSIS AND HAEMOSTASIS	1	10,4	10,4
JOURNAL OF THROMBOSIS AND THROMBOLYSIS	1	4	4

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
JOURNAL OF TRACE ELEMENTS IN MEDICINE AND BIOLOGY	1	3,5	3,5
JOURNAL OF TRAVEL MEDICINE	1	25,7	25,7
JOURNAL OF ULTRASOUND IN MEDICINE	2	2,3	4,6
JOURNAL OF VASCULAR SURGERY	1	4,3	4,3
JOURNAL OF VIRAL HEPATITIS	2	2,5	5
JOURNALS OF GERONTOLOGY SERIES A-BIOLOGICAL SCIENCES AND MEDICAL SCIENCES	1	5,1	5,1
Jove-Journal of Visualized Experiments	1	1,2	1,2
Kidney International Reports	1	6	6
KOREAN JOURNAL OF INTERNAL MEDICINE	1	2,4	2,4
LANCET	1	168,9	168,9
LANCET CHILD & ADOLESCENT HEALTH	1	36,4	36,4
Lancet Haematology	1	24,7	24,7
LANCET INFECTIOUS DISEASES	1	56,3	56,3
Lancet Microbe	1	38,2	38,2
LANCET ONCOLOGY	4	51,1	204,4
Lancet Psychiatry	4	64,3	257,2
Lancet Respiratory Medicine	2	76,2	152,4
LANGENBECKS ARCHIVES OF SURGERY	2	2,3	4,6
LASERS IN MEDICAL SCIENCE	1	2,1	2,1
LEUKEMIA	1	11,4	11,4
LEUKEMIA & LYMPHOMA	4	2,6	10,4
Life Science Alliance	1	4,4	4,4
LIVER INTERNATIONAL	2	6,7	13,4

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
LIVER TRANSPLANTATION	3	4,6	13,8
LUNG CANCER	1	5,3	5,3
MAGNETIC RESONANCE IN MEDICINE	1	3,3	3,3
MEDICAL MYCOLOGY	2	2,9	5,8
MEDICINA CLINICA	6	3,9	23,4
Medicina Intensiva	3	3	9
MEDICINA ORAL PATOLOGIA ORAL Y CIRUGIA BUCAL	1	2,2	2,2
MEDICINA-LITHUANIA	4	2,6	10,4
MEDICINE	1	1,6	1,6
Metabolites	1	4,1	4,1
Microbiology spectrum	8	3,7	29,6
Microorganisms	2	4,5	9
MICROPROCESSORS AND MICROSYSTEMS	1	2,6	2,6
MINERVA ANESTESIOLOGICA	1	3,2	3,2
Minerva Pediatrics	1	2,6	2,6
Minerva Surgery	1	1,4	1,4
Molecular Autism	1	6,2	6,2
MOLECULAR CANCER THERAPEUTICS	1	5,7	5,7
MOLECULAR PSYCHIATRY	6	11	66
Molecular Therapy-Nucleic Acids	1	8,8	8,8
MOVEMENT DISORDERS	2	8,6	17,2
Multiple Sclerosis and Related Disorders	3	4	12
MYCOSES	2	4,9	9,8
Nanomaterials	1	5,3	5,3

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
Nanotechnology Reviews	1	7,4	7,4
NATURE	1	64,8	64,8
Nature and Science of Sleep	2	3,4	6,8
NATURE BIOTECHNOLOGY	1	46,9	46,9
NATURE NEUROSCIENCE	1	25	25
NEFROLOGIA	7	2,6	18,2
Neonatology	2	2,5	5
NEPHROLOGY DIALYSIS TRANSPLANTATION	3	6,1	18,3
Neural Regeneration Research	1	6,1	6,1
NEUROCIROGIA	1	0,8	0,8
NEUROCOMPUTING	1	6	6
NEUROENDOCRINOLOGY	1	4,1	4,1
NeuroImage-Clinical	1	4,2	4,2
NEUROINFORMATICS	1	3	3
NEUROLOGIA	7	3,9	27,3
NEUROLOGICAL SCIENCES	1	3,3	3,3
NEUROLOGY	1	9,9	9,9
Neurology and Therapy	2	3,7	7,4
Neurology-Neuroimmunology & Neuroinflammation	2	8,8	17,6
Neuropsychiatric Disease and Treatment	2	3,2	6,4
NEURORADIOLOGY	1	2,8	2,8
NEUROSCIENCE AND BIOBEHAVIORAL REVIEWS	1	8,2	8,2
NEW ENGLAND JOURNAL OF MEDICINE	1	158,5	158,5
npj Precision Oncology	1	7,9	7,9

(Continued)

(Cont.)

Journal	Nº	IF	Amount IF
Nurse Education in Practice	1	3,2	3,2
NURSING ETHICS	1	4,2	4,2
Nursing Open	2	2,3	4,6
NUTRICION HOSPITALARIA	12	1,2	14,4
Nutrients	4	5,9	23,6
NUTRITION IN CLINICAL PRACTICE	2	3,1	6,2
Open Forum Infectious Diseases	3	4,2	12,6
ORAL ONCOLOGY	1	4,8	4,8
ORTHOPAEDICS & TRAUMATOLOGY-SURGERY & RESEARCH	1	2,3	2,3
PACE-PACING AND CLINICAL ELECTROPHYSIOLOGY	1	1,8	1,8
Pathogens	2	3,7	7,4
Patient Preference and Adherence	1	2,2	2,2
PEDIATRIC DERMATOLOGY	1	1,5	1,5
PEDIATRIC EMERGENCY CARE	4	1,4	5,6
PEDIATRIC INFECTIOUS DISEASE JOURNAL	9	3,6	32,4
PEDIATRIC NEPHROLOGY	1	3	3
PEDIATRIC PULMONOLOGY	3	3,1	9,3
PEDIATRIC RESEARCH	1	3,6	3,6
PEDIATRIC SURGERY INTERNATIONAL	1	1,8	1,8
PEDIATRIC TRANSPLANTATION	1	1,3	1,3
Pharmaceuticals	1	4,6	4,6
Pharmaceutics	2	5,4	10,8
PHARMACOLOGY & THERAPEUTICS	1	13,5	13,5
PHARMACOPSYCHIATRY	1	4,3	4,3

(Continued)

(Cont.)

Journal	Nº	IF	Amount IF
PHYSICS IN MEDICINE AND BIOLOGY	1	3,5	3,5
PLoS One	9	3,7	33,3
PROGRESS IN BIOPHYSICS & MOLECULAR BIOLOGY	1	3,8	3,8
PROGRESS IN NEURO-PSYCHOPHARMACOLOGY & BIOLOGICAL PSYCHIATRY	2	5,6	11,2
PSYCHIATRY RESEARCH	1	11,3	11,3
PSYCHOLOGICAL MEDICINE	12	6,9	82,8
PSYCHOPATHOLOGY	1	3,6	3,6
RADIOTHERAPY AND ONCOLOGY	1	5,7	5,7
REPRODUCTIVE SCIENCES	1	2,9	2,9
RESEARCH IN MICROBIOLOGY	1	2,6	2,6
RESPIRATORY MEDICINE	2	4,3	8,6
RESPIRATORY RESEARCH	2	5,8	11,6
RESUSCITATION	1	6,5	6,5
Retrovirology	1	3,3	3,3
REVIEWS IN CARDIOVASCULAR MEDICINE	2	2,7	5,4
REVIEWS IN ENDOCRINE & METABOLIC DISORDERS	1	8,2	8,2
REVISTA CLINICA ESPANOLA	1	2,9	2,9
REVISTA DE NEUROLOGIA	2	1,2	2,4
REVISTA DE PSIQUIATRIA Y SALUD MENTAL	1	9,2	9,2
REVISTA ESPANOLA DE CARDIOLOGIA	14	5,9	82,6
REVISTA ESPANOLA DE ENFERMEDADES DIGESTIVAS	3	2	6
Revista Espanola de Medicina Nuclear e Imagen Molecular	5	1,2	6
REVISTA ESPANOLA DE QUIMIOTERAPIA	17	1,9	32,3

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
REVISTA ESPANOLA DE SALUD PUBLICA	2	1,1	2,2
Revista Internacional de Andrologia	1	0,8	0,8
REVISTA LATINOAMERICANA DE HIPERTENSION	1	0,1	0,1
Revista Portuguesa de Cardiologia	1	1,8	1,8
RHEUMATOLOGY	2	5,5	11
Rheumatology and Therapy	1	3,8	3,8
Rmd Open	3	6,2	18,6
SCANDINAVIAN JOURNAL OF RHEUMATOLOGY	1	2,1	2,1
SCHIZOPHRENIA BULLETIN	4	6,6	26,4
SCHIZOPHRENIA RESEARCH	4	4,5	18
Scientific Reports	10	4,6	46
SEIZURE-EUROPEAN JOURNAL OF EPILEPSY	2	3	6
SEMINARS IN ARTHRITIS AND RHEUMATISM	1	5	5
SENSORS	1	3,9	3,9
Small	1	13,3	13,3
STATISTICS IN MEDICINE	1	2	2
SUPPORTIVE CARE IN CANCER	1	3,1	3,1
SURGERY	2	3,8	7,6
SURGERY TODAY	1	2,5	2,5
Techniques in Coloproctology	1	3,3	3,3
TELEMEDICINE AND E-HEALTH	2	4,7	9,4
Therapeutic Advances in Neurological Disorders	1	5,9	5,9
THERAPEUTIC APHERESIS AND DIALYSIS	1	1,9	1,9
THORAX	3	10	30

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
THROMBOSIS AND HAEMOSTASIS	3	6,7	20,1
TOBACCO INDUCED DISEASES	1	3,7	3,7
TRANSBOUNDARY AND EMERGING DISEASES	3	4,3	12,9
TRANSFUSION	2	2,9	5,8
Translational Psychiatry	2	6,8	13,6
TRANSPLANT INFECTIOUS DISEASE	2	2,6	5,2
TRANSPLANT INTERNATIONAL	2	3,1	6,2
TRANSPLANTATION	4	6,2	24,8
Transplantation And Cellular Therapy	3	3,2	9,6
TRANSPLANTATION PROCEEDINGS	1	0,9	0,9
TRENDS IN CARDIOVASCULAR MEDICINE	2	9,3	18,6
Trials	1	2,5	2,5
ULTRASOUND IN MEDICINE AND BIOLOGY	1	2,9	2,9
United European Gastroenterology Journal	2	6	12
Updates in Surgery	2	2,6	5,2
UROLOGIA INTERNATIONALIS	1	1,6	1,6
UROLOGIC ONCOLOGY-SEMINARS AND ORIGINAL INVESTIGATIONS	1	2,7	2,7
Vaccines	1	7,8	7,8
VALUE IN HEALTH	1	4,5	4,5
VASCULAR MEDICINE	1	3,5	3,5
Virulence	1	5,2	5,2
Viruses-Basel	3	4,7	14,1
Wiley Interdisciplinary Reviews-Nanomedicine and Nanobiotechnology	1	8,6	8,6

(Continued)

(Cont.)

Journal	N°	IF	Amount IF
WORLD JOURNAL OF BIOLOGICAL PSYCHIATRY	2	3,1	6,2
WORLD JOURNAL OF SURGERY	1	2,6	2,6
World Psychiatry	1	73,3	73,3
Total general	1166	168,9	7730,7

Publications generated by clinical researchers-associated with IISGM	
Publications of the main WOS collection in journals indexed in the JCR with impact factor	Publications of the main WOS collection in journals without impact factor
394	84

TRAINING: COURSES, SEMINARS AND MEETINGS

Following the pandemic, training activities have undergone a process of transformation to online or hybrid formats. For example, the weekly seminars have been held online since May 2020. Next year, the aim is to return to face-to-face format.

During 2022, the IISGM Training Committee continued working along the same lines as in previous years to detect specific needs in training.

After requesting information from IISGM researchers by means of a needs analysis, we assessed the results and decided on the areas that were most relevant for the Institute. These can be seen in the Training Plan 2022 (<http://www.iisgm.com/actualidad/convocatorias-y-formacion/>).

The Continuing Training Committee of the Health Care Professions of the Autonomous Community of Madrid mostly certifies the training activities offered by IISGM.

As stated in the Training Plan, during the year 2022, the IISGM intended to offer the following training opportunities among those periodically organized by the Institute (see Figure):

- Basic Course in Research Methodology, which tries to cover the needs detected for training in basic areas of methodology in the needs analysis. This essentially practical course lasts 20 hours and is aimed mainly at medical residents and staff members who are in the early stages of their research career. Based on a case study, the course addresses review of information sources, design of a research project and database, and basic concepts of statistical analysis, interpretation and representation of results, as well as the synthesis and reporting of the information obtained.
- Course in Biomedical Research Methodology, which is organized into 4 modules lasting 80 hours. The course provides advanced training in the basics of biomedical research methodology. The format of the course enables it to cover all areas from the initial research hypothesis to publication of results.

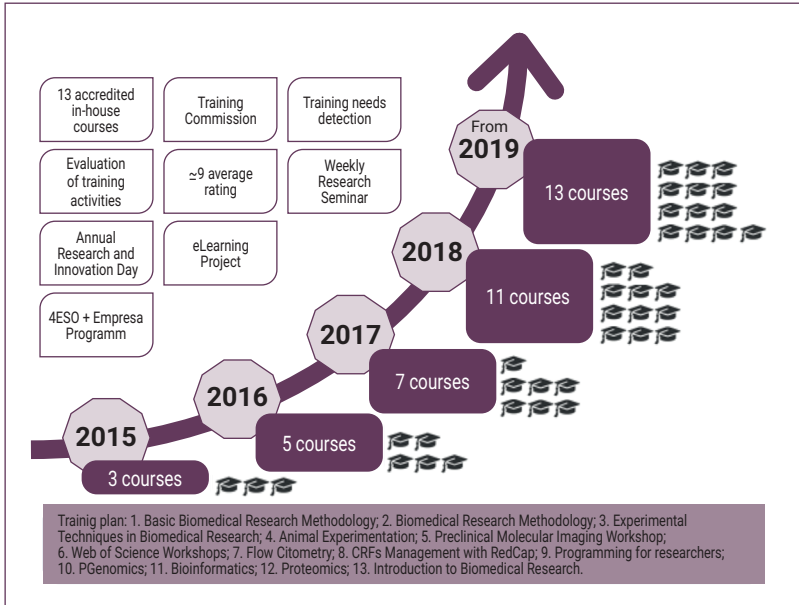
- Course on Biomedical Research Instrumental Techniques, which aims to provide researchers with data on the main instrumental techniques and the various research platforms of the IISGM. The course is practical in nature and addresses various surgical and microsurgical techniques. The IISGM has the ideal facilities, equipment, and staff for organizing training activities at the highest level. Therefore, its human and material resources can be appropriately managed to design competitive and high-quality training. The course has very specific elements that set it apart from the range of courses provided by health research institutes and could eventually become a reference in the field of post-graduate training for veterinarians.

Furthermore, the IISGM Weekly Research Seminars Program is continuing, with sessions every Wednesday of the year covering areas of basic research, clinical medicine, and practical aspects of research, as well as with the participation of guest researchers. This forum is considered by the Institute to be the perfect space for implementing cooperation and synergies between groups from the IISGM and researchers from other institutions who are invited to speak.

Other courses provided included the following:

- Seminars on research and lectures in the Medical Imaging Laboratory of the Experimental Medicine and Surgery Unit.
- A series of training activities were coordinated from the Nursing Research Support Unit, as follows:
 - Training courses in research methodology for resident nursing interns in gynecology and obstetrics, mental health, and pediatrics. First steps in bibliographic searches and information resources in health sciences and qualitative research.
 - Workshops: bibliographic searches and reference management. Creation of databases in access. Workshops: bibliographic searches and reference management. Creation of databases in access.

Training 2022



CLINICAL PRACTICE GUIDELINES

Clinical Practice Guidelines		
AREA 2. Cardiovascular Diseases	2.01 Natural history of heart disease	2
	2.02 Cardiovascular pathophysiology	3
AREA 3. Neuroscience and Mental Health	3.01 Neurobiological and psychological bases of mental disorders. Disorders of neurodevelopment	6
AREA 5. Diseases of the Immune System	5.01 Pathophysiology and clinical research into chronic inflammatory and immunological diseases	1
	5.03 Systemic autoimmune diseases	3
	5.07 Infections in pediatric patients	5
AREA 6. Translational Oncology	6.02 Translational medical oncology and personalized cancer therapy	16
AREA 7. Systemic Diseases and Organ Transplantation	7.01 Vascular damage and inflammation in chronic kidney disease, dialysis, and kidney transplantation. Pathophysiology of the kidney	1
	7.04 Diseases of the critically ill child	3
	7.16B Pathophysiology of the cardiovascular system and circulatory support	1
	7.27 Hospital pharmacy and pharmacogenomics	13
	7.28 Clinical nutrition	7

DOCTORAL THESES DEFENDED

Doctoral theses defended		
AREA 1. Biomedical Engineering	1.01 Advanced technological applications and human health	6
	1.02 Signal processing	4
AREA 2. Cardiovascular Diseases	2.01 Natural history of heart disease	4
AREA 3. Neuroscience and Mental Health	3.01 Neurobiological and psychological bases of mental disorders. Disorders of neurodevelopment	3
	3.03B Neurological diseases	1
AREA 5. Diseases of the Immune System	5.02 Molecular biology of HIV	3
	5.06 Immune regulation and homeostasis in diseases of the immune system	1
	5.07 Infections in pediatric patients	2
AREA 7. Systemic Diseases and Organ Transplantation	7.01 Vascular damage and inflammation in chronic kidney disease, dialysis, and kidney transplantation. Pathophysiology of the kidney	2
	7.04 Diseases of the critically ill child	2
	7.05B Pathophysiology, outcome, and therapeutic strategies in chronic respiratory insufficiency and respiratory disorders of sleep	3
	7.16B Pathophysiology of the cardiovascular system and circulatory support	1
	7.28 Clinical nutrition	1
Total general		33

COOPERATIVE RESEARCH STRUCTURES

Cooperative Research Structures					
		Ciber	RICORS/ RETICS	Platforms	Others
AREA 1. Biomedical Engineering	1.01 Advanced technological applications and human health	1		1	2
	1.02 Signal processing				1
AREA 2. Cardiovascular Diseases	2.01 Natural history of heart disease	1	2		4
	2.02 Cardiovascular pathophysiology	1			
	2.03 Cardiac cellular electrophysiology	1			
AREA 3. Neuroscience and Mental Health	3.01 Neurobiological and psychological bases of mental disorders. Disorders of neurodevelopment	1			2
AREA 4. Clinical Microbiology Infectious Diseases and AIDS	4.02 Clinical and epidemiological aspects of HIV infection and associated conditions	1	1		
AREA 5. Diseases of the Immune System	5.01 Pathophysiology and clinical research into chronic inflammatory and immunological diseases		2		2
	5.02 Molecular biology of HIV	1	1	1	2
	5.03 Systemic autoimmune diseases		1		
	5.07 Infections in pediatric patients	1			20

(Continued)

(Continued)

		Ciber	RICORS/ RETICS	Platforms	Others
AREA 6. Traslational Oncology	6.02 Translational medical oncology and personalized cancer therapy	1			16
	6.03 Genetics and clinical aspects of hematologic malignancies and hematopoietic stem cell transplantation			1	
AREA 7. Systemic Diseases and Organ Trasplantation	7.01 Vascular damage and inflammation in chronic kidney disease, dialysis, and kidney transplantation. Pathophysiology of the kidney		2		1
	7.02 Pathophysiology and natural history of liver and digestive diseases	1			
	7.04 Diseases of the critically ill child		2		
	7.05B Pathophysiology, outcome, and therapeutic strategies in chronic respiratory insufficiency and respiratory disorders of sleep				1
	7.21 Biopathology of aging	1			1
	7.27 Hospital pharmacy and pharmacogenomics			1	
	7.34 Multimorbidity, chronic diseases and health services. Primary Care		1		
	Clinical Trials Unit			1	

PARTNER COMPANIES

ABBVIE SPAIN SLU	FRESENIUS KABI	LABORATORIOS VIIV
ALMIRALL, S.A.	ESPAÑA, S.A.	HEALTHCARE SL
ASOCIACIÓN INFANTIL	FUNDACIÓN ALADINA	MARTINCO
ONCOLÓGICA DE	FUNDACIÓN ALICIA	IMPRESION, S.L.
MADRID (ASION)	KOPLOWITZ	MEDTRONIC IBÉRICA, S.A.
ASOCIACIÓN LA VIDA	FUNDACIÓN DE LA	MERCK SHARP & DOHME
CON HERNIA	SOCIEDAD ESPAÑOLA	ESPAÑA, S.A.
DIAFRAGMÁTICA	DE HEMATOLOGÍA	MERCK, S.L.U.
CONGENITA	Y ONCOLOGÍA	NESTLE ESPAÑA S.A.
ASOCIACIÓN MADRILEÑA	PEDIÁTRICAS	NOVARTIS
DE NEUROLOGÍA	(FSEHOP)	FARMACEUTICA, S.A.
(AMN)	FUNDACION EPIC	NUTRICIA, S.R.L.
ASOCIACIÓN RIS RED	FUNDACIÓN FAMILIA	PIERRE FABRE
DE INVESTIGACION	ALONSO	IBERICA, S.A.
EN SIDA	FUNDACIÓN JOSÉ LUIS	PRODUCTOS
ASPANION	CASTAÑO-SEQC	MEDICINALES
C.D.E. BRAZADAS POR	FUNDACIÓN MUTUA	MEDELA, S.L.
SONRISAS	MADRILEÑA	RAIZ PUBLICIDAD, S.L.
CHIESI ESPAÑA, S.A.	FUNDACION MUTUAL	REINER MEDICAL, S.L.
CLINICALSOFT SL	MEDICA	ROCHE FARMA, S.A.
DOCTAFORUM	FUNDACION PARA LA	SANDOZ
SERVICIOS, S.L.	INNOVACION EN	FARMACÉUTICA, SA
ESPECIALIDADES	BIOMEDICINA	SANITARIA 2000 SL
FARMACÉUTICAS	FUNDACIÓN SEIMC-	SANOFI - AVENTIS, S.A.
CENTRUM, S.A.	GESIDA	SOCIEDAD ESPAÑOLA
EUROPEAN SOCIETY OF	FUNDACIÓN SIGNO	DE DIRECTIVOS
ANAESTHESIOLOGY	GALAPAGOS BIOPHARMA	DE LA SALUD
AND INTENSIVE CARE	SPAIN S.L.U.	SOCIEDAD ESPAÑOLA
(ESAIC)	GILEAD SCIENCE, S.L.U.	DE FARMACIA
FEDERACIÓN ESPAÑOLA	GLAXOSMITHKLINE INV. Y	HOSPITALARIA
DE PADRES DE NIÑOS	DESARROLLO, S.L.	TERUMO BCT
CON CÁNCER	GLOBAL MEETINGS, S.L.	ESPAÑA, S.L.U.
FONDAZIONE PENTA	JANSSEN CILAG, S.A.	VEGENAT
ONLUS	KERN PHARMA, S.L.	HEALTHCARE, S.L.
		VIFOR PHARMA
		ESPAÑA, S.L.

During this year 2022, the funding provided to the **FIBHGM by Janssen-Cilag S.A.** to support the «Fellowship Program for Scientific Research» came to 105,000 €.



Instituto de Investigación Sanitaria
Gregorio Marañón



uc3m

Universidad
Carlos III
de Madrid



**Hospital General Universitario
Gregorio Marañón**



QR Code: Annual Scientific Report

url: <http://www.iisgm.com/documentacion/memorias/>



Unión Europea

**FONDO EUROPEO DE
DESARROLLO REGIONAL**
Una manera de hacer Europa
FONDO SOCIAL EUROPEO
El FSE invierte en tu futuro

