





Educational ar Scientific Medicine



Issue 1 (1) | 2023





pere Atendeter Constants et de Cabinet Moisten of the Republical Echilitation

ISSN: 2181-3175

Journal of Education & Scientific Medicine



Review Article

Complutense University of Madrid – Impressions

Forelle de Gavieres¹, B.T. Khalmatova², A.O. Okhunov³, S.S. Atakov⁴

ABSTRACT

A The Complutense University of Madrid is a public research university located in Madrid. Founded in Alcal in 1293 (before relocating to Madrid in 1836), it is one of the oldest operating universities in the world. It is located on a sprawling campus that occupies the entirety of the Ciudad Universitaria district of Madrid, with annexes in the district of Somosaguas in the neighbouring city of Pozuelo de Alarcon. It is named after the ancient Roman settlement of Complutum, now an archaeological site in Alcala de Henares, just east of Madrid. It enrols over 86,000 students, making it the third-largest nondistance European university by enrollment. It is one of the most prestigious Spanish universities and consistently ranks among the top universities in Spain, together with the University of Barcelona, Pompeu Fabra University, UAM, and UAB in International and European league tables and surveys. Since its foundation, it has attracted numerous scholars, intellectuals and students from all over Spain and the world, establishing itself as one of the main international centres of learning. By the Royal Decree of 1857, the University of Madrid was the first and only institution in Spain authorized to grant doctorate degrees throughout the Spanish Empire. In 1909, the University of Madrid became one of the first universities in the world to grant a doctorate degree to a woman. In the Shangai Ranking, the UCM is ranked among the best 300 worldwide, and among the top 3 Spanish ones. In the QS World University Ranking, the UCM is #226 worldwide, #85 in Europe, and #4 in Spain. In the Scimago institution rankings, the UCM is #175 worldwide, #79 in research, and #3 in Spain. Besides, internationally it is in the top 3% overall, in the top 2% in research, and top 3% in social impact.

Keywords: Complutense University of Madrid, history, student life and extracurricular activities, the Complutense Abroad, international rankings, notable faculty, alumni

On 20 May 1293, King Sancho IV of Castile granted the Archbishop of Toledo, Gonzalo Perez Gudiel, a royal charter to find a studium generale (as universities were known at that time), named El Estudio de Escuelas Generales in Alcala de Henares. One of its alumni, Cardinal Cisneros, made extensive purchases of land and ordered the construction of many buildings, in what became the first university campus ex-novo in history: The Civitas Dei, or city of God, named after the work of Augustine of Hippo. On 13 April 1499, Cardinal Cisneros secured from Pope Alexander VI a papal bull to expand Complutense into a full university. This papal bull conferred official recognition throughout Christendom to all degrees granted by the university. It also renamed the insti-

https://journals.tma.uz/

JESM 2023 | Issue 1 | Volume 1

62

¹ PhD, Head of the Department of International Relations, Complutense University of Madrid, Madrid, Spain PhD, Head of the Department of International Relations, Complutense University of Madrid, Madrid, Spain

² Professor, MD, PhD, Dean of medical faculty of the Tashkent Medical Academy, Tashkent, Uzbekistan

³ Professor, DSc, PhD, Head of the Department of General and Pediatric Surgery, Tashkent Medical Academy, Tashkent, Uzbekistan

⁴ PhD, Associate Professor, Lecturer of Surgery of the Center for Retraining and Advanced Training of Teachers at the Tashkent Medical Academy, Tashkent, Uzbekistan

tution Universitas Complutensis, after Complutum, which was the Latin name of Alcala de Henares, where the university was originally located.



Universidad Complutense de Madrid (Spanish)

In the 1509–1510 school year, the Complutense University already operated with five major schools: Arts and Philosophy, Theology, Canon Law, Philology and Medicine. During the 16th and 17th centuries, Complutense University became one of the world's greatest centres of academic excellence. Many of that age's leading figures in science, arts and politics studied or taught in Complutense's classrooms. Special colleges were created for students of foreign origin, such as Flemish or Irish.

In 1785, Complutense became one of the first universities in the world to grant a doctorate to a female student, María Isidra de Guzmán y de la Cerda. In comparison, the University of Oxford did not accept female scholars until 1920, and the University of Cambridge did not grant a PhD to a female student until 1926.

In 1824, Francisco Tadeo Calomarde further expanded Complutense by merging it with the University of Sigüenza. By a royal order of 29 October 1836, Queen Regent Maria Christina suppressed the university in Alcala and ordered its move to Madrid, where it took the name of Literary University and, in 1851, of Central University of Madrid (Spanish: Universidad Central de Madrid). The university would be known under this name until its original name of "Complutense" was restored in the 1970s.

The University of Madrid awarded Albert Einstein a Doctor of Science degree Honoris Causa on 28 February 1923; this was the first Doctor of Science degree Honoris Causa that Albert Einstein accepted from a European university. In April 1933 the Minister for Education and the Arts, Fernando de los Rios, announced that Einstein had agreed to take charge of a professorship in a research institute, which would bear the name Instituto Albert Einstein, under the university's School of Science. However, as the political situation began to deteriorate throughout Europe, Prof. Einstein ended up accepting a similar position at the Institute for Advanced Study in Princeton, New Jersey.



Cardinal Cisneros expanded the existing Studium Generale into a large five-college University.

The university greatly expanded during the 19th century, and its accommodations in central Madrid proved to be increasingly inadequate. Besides the greater number of students, after its move from Alcala, the university

JESM 2023 | Issue 1 | Volume 1

had been based in a few preexisting, government-acquired properties – mainly aristocratic mansions and royal châteaux from centuries past, abandoned by their owners for more contemporary lodgings. Though they were not without their charm, the ancient buildings were not ideal as educational settings, and the early 20th century witnessed the students at the Central University attending philosophy lectures and anatomy lessons in elaborate spaces that had served as ballrooms and salons only a few decades prior.



Alfonso XIII, King of Spain, with Faculty members of the university: Albert Einstein, José Rodríguez Carracido, Blas Cabrera y Felipe, among others, on 11 March 1923.

This situation changed in 1927 when by royal decree King Alfonso XIII ceded state-held lands in the proximity of the Palace of La Moncloa to establish space for the University of Madrid. At the time, this constituted all the land between the Royal Palace and the Palace of El Pardo, and today it comprises a vast swath of western Madrid referred to as the "Ciudad Universitaria", or the University City of Madrid.

A council appointed by King Alfonso XIII had decided that the new University of Madrid would require innovative architecture and planning. A team of academics was sent on an international expedition to visit the most prestigious universities in Europe and North America, to combine the best of both continents and design a utopian academic setting. The trip took them to 19 universities in the American northeast, as well as to Paris, Lyon, Oxford, Berlin, Hamburg, and numerous other European cities, all to discern the best possible building structure. The architectural tendencies of the era, however, ended up having a greater influence than the academics' visits to Harvard, the University of Pennsylvania, La Sorbonne or the University of Berlin; while the final plans from this period are hardly recognizable to anyone familiar with the contemporary campus, the buildings from the era that managed to survive the design revisions, the Civil War and the Franco regime betray the period's fondness for the German Bauhaus movement. Indeed, the original buildings, exemplary amongst them the Schools of Medicine, Pharmacy and Odontology, are a homage to structural functionalism and the graceful utilitarianism of the 1920s.

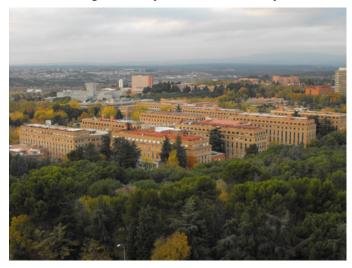


Engineers graduated in 1913 from the Complutense University.

In the 1970s, following the political instability of the regime of Francisco Franco, the University of Madrid was renamed, dividing existing colleges between the Complutense University of Madrid and the Technical University of Madrid. When the city of Alcala de Henares decided to open a university within the older campus buildings, it was named Universidad de Alcala de Henares to clearly distinguish it from the Complutense University.

The University of Madrid has played a major role in the political development of Spain since its founding. Its graduates have been members, at either congressional or ministerial level, in all the governments of Spain since the Enlightenment, and their positions in the Second Spanish Republic and the post-Franco transition to

democracy were particularly notable. The former first deputy prime minister, Maria Teresa Fernandez de la Vega, and the former president, Jose Maria Aznar, are both graduates of the university. The Complutense University has also played host to some of the most significant figures of the intellectual world, with a long tradition of visiting professors, which feature some of the greats of world academia (most notably, Albert Einstein). A significant part of the European intelligentsia flocked to its halls during the 1930s when democratic Spain provided a refuge from the rising terrors of fascism. Contemporary Complutense University has also counted numerous Nobel Laureates not only among its graduates but also among its faculty members over the years.



University City of Madrid

Currently, the Complutense University is the largest university in Spain. During the 2004–2005 academic year the university recorded an enrollment of 91,598 students and employed a staff of 9,500, of which over 6000 are directly involved in teaching duties; the university operates on government subsidies, grants, and enrollment funds, with a current annual budget of over €500,000,000. The university currently offers nearly 80 possible majors, 230 individual degrees, and 221 doctorate programs. The university has over 30 libraries, with over 2 million works in print, a particularly rich archive of over 90,000 historical documents, and one of the most extensive film collections in Europe.

Due to its long history in the capital, Complutense University enjoys great support from Madrid-based institutions, at local, national, and international levels. The School of Medicine operates the Hospital Clinico Universitario de San Carlos, Hospital Gregorio Maranon, and the most famous one, Hospital 12 October, as well as several other specialized clinics located on campus, some of which are operated jointly with the Ministry of Health or perform specific research for the ministry.



Rectorate building of the Complutense University

The Hospital Clinico San Carlos is a hospital located in the Ciudad Universitaria neighbourhood in Madrid, Spain, part of the hospital network of the Servicio Madrileno de Salud (SERMAS).

It is one of the healthcare institutions associated with the Complutense University of Madrid (UCM) for the purpose of clinical internship.

It is the successor of the namesake Hospital de San Carlos located near the Calle de Atocha and inaugurated on 1 October 1787. The idea for the new building dates to 1927, during the dictatorship of Primo de Rivera. Following a project by Manuel Sanchez Arcas (with Eduardo Torroja as structural engineer), the building works started in 1932, during the Second Republic. The project stood out by the beamless slabs of the cantilevered balconies and by the cover of the operating rooms (both elements unseen in Spain up to that date). The hospital

was still unfinished by the time of the beginning of the Spanish Civil War when the Ciudad Universitaria became part of the frontline. Reconstruction works were resumed in 1941. Despite the hospital started operations on 20 January 1951, as the chair of General Pathology was transferred then from Atocha, building works lasted until 1967, when the last services provided at the old hospital were finally transferred to the new building.



Auditorium of Universidad Complutense

A project of Martin Jose Marcide, it was built on the land plot delimited by the streets of Doctor Esquerdo, Doctor Castelo, Ibiza and Maiquez formerly occupied by the Hospital de San Juan de Dios. It was an enterprise of the provincial deputation; the Provincial Hospital of Madrid/General Hospital of Madrid (an institution with more than four centuries of history) moved to the new facilities. It was inaugurated by Francisco Franco on 18 July 1968 under the name Ciudad Sanitaria Provincial Francisco Franco. Years after the death of the dictator it was renamed, making a reference to Gregorio Maranon, a renowned physician. The hospital complex comprises more than 20 buildings.

It is a reference center in the fields of cardiology and oncology. It particularly stands out in heart transplantation in children. As of 2017, it has 1,671 beds and 45 operating rooms.

The architectural project was led by Martin Jose Marcide, who had Fernando Florez Plaza and Miguel Tapia-Ruano Rodriganez as collaborators, Federico Mestre Rossi, and José Martí Barcelo were the leading structural engineers. The floor plan followed the X-shaped structure characteristic of buildings such as the Memorial Unit's Grace-New Haven Community Hospital or the Wesley Foundation Memorial Unit in Chicago. For the lower floors, a sui generis hexagonal-based outline was also employed. Built in 18 months, it was inaugurated by Francisco Franco on 2 October 1973 under the name of Ciudad Sanitaria 1° de October ("October 1st Health City"), a nod to his appointment as Head of State on 1 October 1936. Years after the death of the dictator, on 12 October 1988, the name was changed to "12 de October».



The School of Medicine is not the only one with government involvement; indeed, despite past conflicts, the Complutense University shares a close bond with the Spanish government, as both the presidential residence of La Moncloa and the Spanish Constitutional Court are located directly on campus (with the political centre of the city at walking distance).

The School of Communications, meanwhile, enjoys equally good relations with the press (a large part of its professors being former reporters, editors, or directors of major Spanish and international newspapers). Moreover, the school is known particularly for its role as one of the premiere pre-screening locales in Spain- all major Spanish film productions are screened first before an audience of Complutense students, with the main actors or production figures of the films attending a post-screening press

conference. Most recently, Blanca Portillo, Carmen Maura, Lola Duenas, and Yohana Cobo pre-screened Pedro Almodóvar's Volver; past pre-screening visitors have included director Santiago Segura, actor Alejo Sauras, and writer E. Annie Proulx.



Professor giving a lecture at the Complutense University





The Faculty of Fine Arts was created in 1978, and now offers first degrees in Fine Arts, Design, and Preservation and Restoration of Artistic Patrimony; as well as postgraduate magisters and doctorate degrees.

Each year, the Madrid Circulo de Bellas Artes extends special invitations to the Complutense students during its series of annual conferences featuring prominent philosophers, sociologists, and psychologists. Likewise, all the faculties have been able to benefit greatly from lectures given by some of the most illustrious figures in recent history, of all fields, from singersongwriter and Catalan activist Joan Manuel Serrat to historian Ernst Gombrich, writer Umberto Eco to communist politician Santiago Carrillo. Alejandro Amenabar wrote his first film, Tesis, while still attending Complutense University. All the on-campus scenes in the film were shot in the School of Communications, which Amenabar himself had attended, and the building itself serves as a major device in the plot.



The Complutense University publishes a bi-monthly newspaper, the Gaceta Complutense, and features a fully operational radio station, Radio Complutense, which broadcasts for 12 hours daily; both are run by the School of Communications.

While the university has a select number of registered dormitories, these are located on the fringes of the campus within bordering neighbourhoods, and therefore no students truly live on the campus proper. Due to the costs, and the fact that university-affiliated lodging is not required, the majority of the Complutense's students live independently, either in non-affiliated dormitories or in actual apartments.

The University of Madrid is home to over 100 student political, social, and sports-related groups. Aerobics, gym, yoga, swimming, tennis, diving, tai-chi, and numerous other courses are offered. In terms of team sports, the Complutense features male and female basketball, football, and volleyball divisions, as well as rugby. Chess, badminton, golf, judo, karate, table tennis, and

archery teams are also available. Internal university games are held several times a year, with all the different schools competing; the Complutense also participates in the regional university games, held each March at the Puerta del Hierro Stadium in Madrid, and selected national competitions. All students, professors, staff members, and family of staff members have the right to be evaluated and attended to at the Complutense University Center for Sport and Fitness Medicine.



Besides an extensive series of accords permitting student/professor exchanges and study abroad opportunity with prestigious universities throughout the world, the Complutense University of Madrid currently operates four full-time institutions outside of Spain.

The Real Colegio Complutense at Harvard University (Cambridge, Massachusetts): The RCC was founded as a joint cooperative institution to foster intellectual and scientific interaction between Harvard University and Complutense, with the support of HM King Juan Carlos I, HM Queen Sofia of Spain, and the Commonwealth of Massachusetts. It follows the tradition of the Royal Spanish College, founded in 1364 to host Spanish Visiting Scholars at the University of Bologna. The RCC accord is the only one of its sorts ever to have been approved by Harvard. The institution is directed jointly by the President of Harvard and the Rector of Complutense University, with an academic council formed by 5 Harvard professors and 5 Complutense professors. It permits a select number of Complutense professors to conduct their research at Harvard as visiting scholars. RCC Fellows enjoy the same privileges as Harvard's non-tenured faculty. Each year the institution hosts the RCC Fellows Lectures, a conference cycle during which the visiting scholars deliver lectures revealing the results of their investigations to an audience of Harvard professors and students. Finally, it also permits a small number of students to attend doctoral school at the university as research associates, under scholarships hosted by the Spanish royal family.

College des Hautes Etudes Européennes Miguel Servet (Paris, France): founded upon the initiative of the Club Europeen des Recteurs, the College des Hautes Etudes Europeennes Miguel Servet is a Franco-Iberian center of learning and research located within the La Sorbonne. Besides specialized degrees, it offers programs focused on jurisprudence and economy within the European Union, a double-major program in Franco-Iberian law, and the Diplome de Formation Europeenne, which operates under the auspices of the European Union and UNESCO. It was awarded the status of 'centre excellence, and in 1995 it opened chapters in Italy, Portugal, and South America.

Catedra Complutense en la Universidad de Karlova (Prague, Czech Republic): Full campus in operation, offering bachelor and doctoral degrees in partnership with Charles University (Univerzita Karlova v Praze) in Prague.

Catedra Dubcek (Bratislava, Slovakia): Full campus in operation, offering bachelor and doctoral degrees in partnership with Comenius University in Bratislava.

Notable faculty

Antonio Bru - theoretical physicist and permanent professor in the Department of Applied Mathematics

Jose Maria de Azcarate - art historian, author, researcher, curator, and professor, specializing in medieval Castilian art and Renaissance sculpture. Azcarate was the Chair of History of Medieval Art at Complutense University of Madrid from 1973, until his death in 2001.

Maria Angeles Duran - sociologist and economist.

Gonzalo Trancho - professor in the Zoology and Anthropology Department.

Juan Luis Arsuaga - professor in the Paleontology Department of the Faculty of Geological Sciences.

Fernando Savater - professor of Ethics in the Faculty of Philosophy and Letters of the Complutense University.

David Hernandez de la Fuente - professor in the Department of Classics at the Complutense University.

Javier de Felipe - biologist researcher at Cajal Institute.

Alicia Gomez Montano - professor of journalism at the Faculty of Information Science.

Gonzalo Alvarez Chillida - tenured professor of the history of Thought and Social and Political Movements at Complutense University.

Maria Vallet-Regi - tenured professor of inorganic chemistry and heads the Smart Biomaterials group at the Complutense University.

Manuel Sanchez Cuesta - professor of Ethics in the Faculty of Philosophy and Letters of the Complutense University.

Alfredo Alvar - associated professor at the Complutense University, specialising in modern history.

List of Complutense University of Madrid alumni

In recent years, the university's notable alumni include 7 Nobel Prize recipients, 18 Prince of Asturias Awardees, 7 Miguel de Cervantes Prize recipients, as well as prime ministers of Spain, European commissioners, presidents of the EU Parliament, a European Council secretary general, European Central Bank Executive Board members, a NATO secretary general, a UNESCO director general, an IMF managing director, Spanish royalty, and heads of state. Over the course of seven centuries, the University of Madrid has provided invaluable contributions to the sciences, fine arts, and political leadership. Alumni include renowned philosophers (José Ortega y Gasset, Ignatius of Loyola, Thomas of Villanova), writers (Federico García Lorca, Antonio de Nebrija, Pedro Calderón de la Barca), scientists (Santiago Ramon y Cajal, Severo Ochoa, Andres Manuel del Rio, Ricardo Rubio), historians (Juan de Mariana, Juan Gines de Sepulveda), military leaders (Don John of Austria, Alexander Farnese), and foreign leaders (Cardinal Mazarin, Jose Rizal).

Conflict of Interest – The authors state that they have no conflict of interest.

Financing – independent.

REFERENCES:

- A combination of diabetes mellitus and acute purulentdestructive lung diseases solving the problems of diagnosis and treatment. / A.O. Okhunov, Sh.A. Khamdamov // World Bulletin of Public Health, 2023, #19, P.127-135. Retrieved from https://scholarexpress.net/index.php/ wbph/article/view/2149
- A new method of treating pneumonia complicated by an abscess in patients after COVID-19 / A.K. Shadmanov, J. Mirshaval, A.O. Okhunov, Sh.A. Bobokulova // Journal of Education and Scientific Medicine, 2023, 1(2), P. 2-9. Retrieved from https://journals.tma.uz/index.php/jesm/ article/view/421
- About predatory publishing what it is and how to recognize it? / F.L. Azizova, A.O. Okhunov, N.Sh. Khudaibergenova // Journal of Educational and Scientific Medicine – 2023 – V.1, #3. – P.45-55.
- 4. Aktivnost monooksigenaznoy i nitrergicheskoy sistem v mikrosomax pecheni pri deystvii na organizm induktorov

i ingibitorov lekarstvennogo metabolizma / S.A.Sayfullaeva, A.O.Oxunov, A.S. Komarin, et al. // Vrach-aspirant - 2012 - # 59 (4). - S. 73-78. [in Russian]

- Bobokulova Sh.A., Okhunov A.O. Acute purulent-destructive lung diseases as consequences of endotheliitis after COVID-19. // Journal of Education and scientific medicine, 2022, 2(3), 56-61. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/360
- Differential diagnosis of necrotizing fasciitis. / A.O. Okhunov, D. N. Korikhonov, et al. // British Medical Journal – 2023 - #3.1.
- Differentiated approaches to the diagnosis and treatment of acute lung abscesses in patients who have had COVID-19. / A. O. Okhunov, Sh. A. Bobokulova // British Medical Journal – 2023 - #3.1.
- Difficult aspects of treatments patients with acute lung abscesses who survived COVID-19 / S.S. Atakov, Sh.A. Bobokulova, U.K. Kasimov, et all. // Journal of Education and scientific medicine, 2023, (1), 57-60. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/292
- Effektivnost primeneniya tunnelnoy abdominoplastiki v sochetanii s liposaktsiey pri esteticheskoy xirurgicheskoy korrektsii razlichnыx variantov deformatsii peredney bryushnoy stenki / X.F. Asadov, A.O. Oxunov, D.A. Oxunova, et al. // Vrach-aspirant – 2012 - № 50 (1.1), S. 199-205. [in Russian]
- Endovascular methods for correcting angiopathy of the diabetic foot syndrome in patients after COVID-19 / Okhunov A.O. // 16th European Diabetes and Endocrinology Congress – 2022, P.12-15.
- Errors and causes of ineffectiveness of primary operations for phlegmons of the face and neck. / A.O.Okhunov, K.Kh.Boboev, O. A.Bobokhodjaev, et al. // Journal of Education and Scientific Medicine, 2023, 1(2), P. 30-38. Retrieved from <u>https://journals.tma.uz/index.php/jesm/</u> <u>article/view/422</u>
- Etiological factors leading to purulent mediastinitis. / A.O. Okhunov, & K.Kh. Boboev. // World Bulletin of Public Health, 2023, 18, 118-125. Retrieved from https://scholarexpress.net/index.php/wbph/article/view/2081
- Etiology and pathogenesis of primary purulent mediastinitis. / A. O. Okhunov, K. Kh Boboev. // British Medical Journal – 2023 - #3.1.
- Evaluation of the effectiveness of various methods of treatment of acute purulent-destructive lung diseases in patients with diabetes mellitus. / A.O. Okhunov, Sh. A. Khamdamov // British Medical Journal – 2023 - #3.2.
- 15. Fargals in the treatment of necrotic infections of soft tissues on the background of diabetes mellitus / Kasimov

U.K., et al. // Open Access Repository - 2023 - 4.02: 63-73.

- 16. Features of the educational program in foreign universities: the example of the medical college of the University of Central Florida, USA / A.K. Shadmanov, Z Kawell, A.O. Okhunov // Journal of Educational and Scientific Medicine 2023 V.2, #2. P.2-9. Publisher: <u>https://journals.tma.uz/index.php/jesm/article/view/440</u>
- How does lipid peroxidation affect the development of pneumosclerosis: experimental justification / I. Marupov, Sh. Bobokulova, A. Okhunov, et all. // Journal of Education and Scientific Medicine, 2023, 1(1), P. 2-7. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/ 368
- How to treat acute purulent-destructive lung diseases if they are sequels to COVID-19: problems and ways to solve them / Sh.A. Bobokulova, Sh.A. Khamdamov, D. Korikhonov, et all. // Journal of Education and Scientific medicine, 2023, 1(1), 47-55. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/394</u>
- Improvement of treatment methods of acute purulent destructive pulmonary diseases considering the non-respiratory function of lungs. / A. O.Okhunov, Sh. A. Bobokulova // 湖南大学学报 (自然科学版) 48.8 (2021): P. 313-319.
- Influence of granulocyte-colony-stimulating factor on the cytological picture of the wound in patients with purulentinflammatory diseases of soft tissues on the background of diabetes mellitus. / Okhunov A. // Research Square; 2022. DOI: 10.21203/rs.3.rs-2304237/v1.
- Intensivnost perekisnogo okisleniya lipidov v legkix pri eksperimentalnom pnevmoskleroze / I.A. Ziyakulov, A.O. Oxunov, O.T. Sattarov, A.S. Komarin // Vrach-aspirant. -2011. - №47 (4.2). - S.330-335. [in Russian]
- 22. Intestinal peptides and their main role in the pathogenesis of type 2 diabetes mellitus / P. Azizova, Sh. Razzakov, et all. // Journal of Education and scientific medicine, 2022, #2(3), P.95-100. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/362</u>
- Khamdamov Sh.A., Okhunov A.O. Immediate results of endovascular and little invasive methods of treatment of lung purulent diseases with diabetes mellitus. // Journal of Education and scientific medicine, 2022, (2), P. 63-65. Retrieved from <u>https://journals.tma.uz/index.php/jesm/</u> <u>article/view/274</u>
- 24. Kliniko-morfologicheskaya xarakteristika novogo sposoba modelirovaniya ostrogo gnoyno-destruktivnogo zabolevaniya legkix / A.O.Oxunov, Sh.A. Xamdamov et al. //

Vestnik nauki i obrazovaniya - 2018. - № 9 (9 (45)), S. 89-93. [in Russian]

- Metabolicheskaya aktivnost mikrosom slizistoy obolochki kulti jeludka posle rezektsii porajennogo yazvennim protsessom uchastka gastroduodenalnoy zoni / A.O. Oxunov, S.A. Sayfullaeva, I.S. Sattarov et al. // Vrach-aspirant -2010. - Tom. 39. - №2.1. - S.131-140. [in Russian]
- 26. Morphological aspects of wounds in patients with purulent inflammation of soft tissues in diabetes mellitus and under the influence of granulocyte-colony-stimulating factor / U.I. Pulatov, R.I. Israilov, A.O. Okhunov et all. // Journal of Education and scientific medicine, 2022, 2(3), 43-50. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/363
- Morphological characteristics of a new experimental model of chronic renal failure in the background of diabetic nephropathy. / Shadmanov A.K., Okhunov A.O., Abdurakhmanov F. M. // Journal of Education and scientific medicine, 2022, 2(3), 68-76. Retrieved from <u>https://</u> journals.tma.uz/index.php/jesm/article/view/364
- Morphological Characteristics of Intestinal Vessels of Animals with an Experimental Model of Diabetes Mellitus Type 2 Complicated by Microangiopathy. / Okhunov A., et all. // Indian Journal of Forensic Medicine & Toxicology 14.4 (2020): P. 7348-7353.
- Necrotizing fasciitis: difficulties on the way to diagnosing tactics. / Korikhonov D., Boboev K., Abdurakhmanov F. // Journal of Education and Scientific Medicine, 2023, 2(1), P. 28-34. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/389</u>
- Nerespiratornaya funktsiya legkix pri ix gnoynovospalitelnыx zabolevaniyax / О.Т.Sattarov, Yo.X.Azizov, A.O. Oxunov, et al. // Vrach-aspirant. - 2011. - №44 (1.1).
 S.205-210. [in Russian]
- New approaches to improve autodermaplasty results / F.M. Abdurakhmanov, Sh.A. Khamdamov, D. Korikhonov, et all. // Journal of Education and Scientific Medicine, 2(1), P. 22-27. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/387</u>
- 32. New approaches to treating lung abscesses as covid-19 sequels. / Okhunov A.O, Bobokulova Sh. A. // World Bulletin of Public Health, 2023 #19, P.101-107. Retrieved from <u>https://scholarexpress.net/index.php/wbph/article/view/2281</u>
- New pedagogical technologies in teaching surgery / A.O. Okhunov, N.Sh. Khudaibergenova, S.S. Atakov, et all. // Journal of Education and scientific medicine, 2022, 1(3), 8-11. Retrieved from <u>https://journals.tma.uz/index.php/</u> jesm/article/view/316

- 34. Okhunov A. Influence of granulocyte-colony-stimulating factor on the cytological picture of the wound in patients with purulent-inflammatory diseases of soft tissues on the background of diabetes mellitus. Research Square; 2022. DOI: 10.21203/rs.3.rs-2304237/v1.
- Okhunov A.O. Endovascular methods for correcting angiopathy of the diabetic foot syndrome in patients after COVID-19 // 16th European Diabetes and Endocrinology Congress – 2022, P.12-15.
- Okhunov A.O. Prediction and prevention of sepsis in patients with necrotizing fasciitis on the background of diabetes mellitus // 42-Annual Meeting of the Surgical Infection Society, Westlake Village, CA, 2023, April 11-14, P.39.
- Okhunov A.O. SMART TEXTBOOK: a New Level in the Modern Educational Process. Journal of Education and scientific medicine, 2022, 2(3), 11-18. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/337</u>
- Okhunov A.O., Abduralhmanov F.M. Prolonged intraarterial catheter therapy for diabetic gangrene of the lower limb // 42-Annual Meeting of the Surgical Infection Society, Westlake Village, CA April 11-14, 2023 – P.38
- Okhunov A.O., Boboev K.Kh., Bobokhodjaev O. A. Errors and causes of ineffectiveness of primary operations for phlegmons of the face and neck. // Journal of Education and Scientific Medicine, 2023, 1(2), P. 30-38. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/422
- 40. Optimization of the educational process at the Department of general surgery / A.O. Okhunov, N.Sh. Khudayberganova, U.K. Kasimov, et all. // Journal of Education and scientific medicine, 2023, (1), P. 98-101. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/</u> <u>303</u>
- Optimizatsiya rezultatov lecheniya gnoyno-nekroticheskix porajeniy myagkix tkaney na fone saxarnogo diabeta / B.D. Babadjanov, U.K. Kasimov, J.X. Otajonov, et al. // Vrach-aspirant. - 2009. - №5. - S.375-382. [in Russian]
- 42. Otsenka effektivnosti G-KSF (Filgrastim) pri lechenii gnoyno-vospalitelnix porajeniy myagkix tkaney na fone saxarnogo diabeta / U.K.Kasimov, B.D.Babadjanov, A.O.Oxunov, et al. // Vrach-aspirant 2012 № 50 (1.1).
 S. 185-194. [in Russian]
- 43. Otsenka endotelialnoy disfunktsii pri diabeticheskoy angiopatii / I.A. Ziyakulov, A.O. Oxunov, O.T. Sattarov, et al. // Vrach-aspirant. 2011. №46 (3). S.46-53. [in Russian]
- 44. Play to Become a Surgeon: Impact of Nintendo WII Training on Laparoscopic Skills / D. Giannotti, G. Patrizi,

G. Di Rocco, et al. // PLOS ONE. – 2013 - #8 (2) – P:57372.

- 45. Possibilities of modern physical methods of antisepsis in the treatment of acute lung abscesses in patients with diabetes mellitus / Sh. A. Khamdamov, F.M. Abdurakhmanov, Sh.A. Bobokulova, et all. // Journal of Education and Scientific Medicine, 2023, 1(1), P. 37-46. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/395</u>
- 46. Principles of diagnosis and treatment of acute purulentdestructive lung diseases. / A.O. Okhunov, K.Kh. Boboev, A.F. Valijonov, et al. // World Bulletin of Public Health, 2022, #7, 1-2. Retrieved from <u>https://scholarexpress.net/</u> index.php/wbph/article/view/526
- Programma prognozirovaniya razvitiya tyajelogo sepsisa na fone nekroticheskogo fastsiita / O.T.Sattarov, A.O.Oxunov, Yo.X. Azizov, et al. // Vrach-aspirant. - 2011. - № 48 (5.2). - R. 314-322. [in Russian]
- Prolonged intraarterial catheter therapy for diabetic gangrene of the lower limb / Okhunov A.O., Abduralhmanov F.M. // 42-Annual Meeting of the Surgical Infection Society, Westlake Village, CA April 11-14, 2023 – P.38
- Purulent-destructive lung diseases, pathogenesis, and modern principles and treatment / Sh.A. Khamdamov, Sh.A. Bobokulova, D. Korikhonov, et all. // Journal of Education and Scientific Medicine, 2023, #2(1), P. 57-66. Retrieved from <u>https://journals.tma.uz/index.php/jesm/</u> <u>article/view/406</u>
- 50. Recommendations for the organization of distance education on the example of the use of electronic books. / Shadmanov A.K., Okhunov A.O. // Journal of Education and Scientific medicine, 2022, #2(3), P.7-10. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/</u> <u>336</u>
- 51. Role and place of technologies webinar in cooperation of the educational process of the branches of the Tashkent medical academy / A.O. Okhunov, N.Sh. Khudaibergenova, S.S. Atakov, et all. // Journal of Education and scientific medicine, 2022, (2), 73-76. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/278</u>
- 52. Sepsis / A.O.Oxunov, B.D.Babadjanov, U.I. Pulatov, et al. // Patent izobreteniya DGU 04057 - 2016. [in Russian]
- 53. Shadmanov A.K., Okhunov A.O. Recommendations for the organization of distance education on the example of the use of electronic books. Journal of Education and Scientific medicine, 2022, 2(3), 7-10. Retrieved from <u>https://</u> journals.tma.uz/index.php/jesm/article/view/336
- 54. Shadmanov A.K., Okhunov A.O., Abdurakhmanov F. M. Morphological characteristics of a new experimental model of chronic renal failure in the background of dia-

betic nephropathy. Journal of Education and scientific medicine, 2022, 2(3), 68-76. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/364</u>

- 55. Sostoyanie aktivnosti monooksigenaz slizistoy obolochki jeludka pri ushivanii perforativnix yazv s ispolzovaniem amnioticheskoy tkani / Sh.E. Ataxanov, R.I.Raximov, A.S.Komarin, et al. // Vrach-aspirant. - 2009. - № 1. - S.4-10. [in Russian]
- 56. Sovershenstvovanie metodov lecheniya kriticheskoy ishemii nijnix konechnostey na fone diabeticheskoy angiopatii / A.O. Oxunov, I.S. Sattarov, B.B. Janabaev, et al. // Vrach-aspirant. - 2009. - № 32 (5). - S. 382-388. [in Russian]
- 57. The microbiological environment of wounds and skin in patients with purulent-inflammatory diseases of soft tissues / W.S. Jonson, A.O. Okhunov, S.S. Atakov, et al. // Journal of Educational and Scientific Medicine 2023 V.2, #2. P.72-81.
- 58. The role and place of nitroxidergic regulation of the endothelial system in the pathogenesis of acute lung abscess.
 / A. O. Okhunov et al. // Medical & Clinical Research 7.12 (2022): P. 1-6.

- Translational medicine: a new way from the experimental laboratory to clinical practice. / Shadmanov A.K., Okhunov A.O. // Journal of Education and scientific medicine, 2023, (1), 2-7. Retrieved from <u>https://journals.t-</u> ma.uz/index.php/jesm/article/view/282
- Treatment of acute lung abscesses considering their nonrespiratory function in patients with diabetes. / Okhunov A. O., et all. // Indian Journal of Forensic Medicine and Toxicology 14.4 (2020): P. 7465-7469.
- Ways to achieve positive results of dermaplasty in patients with diabetic foot syndrome. /Okhunov A. O., and F. M. Abdurakhmanov. // British Medical Journal – 2023 - #3.1.
- What Do You Know About the Royal College of Physicians (London, UK)? Results of the Visit / A.K. Shadmanov, A.O. Okhunov, Sh.A. Bobokulova // Journal of Educational and Scientific Medicine 2023 V.1, #3. P.2-10.
- 63. What do you need to know about the origin of purulent mediastinitis? / K. Kh. Boboyev, D.N. Korikhonov, A. O. Okhunov, F. M. Abdurakhmanov // Journal of Education and Scientific Medicine, 2023, 2(1), P. 15-21. Retrieved from <u>https://journals.tma.uz/index.php/jesm/article/view/</u> <u>385</u>