

PROFESSOR IOAN ATHANASIU
– AN EXEMPLARY PERSONALITY OF HIS EPOCH –
PROFESORUL IOAN ATHANASIU
– O PERSONALITATE EXEMPLARĂ A EPOCII SALE –

N. CONSTANTIN¹⁾**ABSTRACT | REZUMAT**

Professor Ioan Athanasiu (1868–1926) was one of the representative figures of Romanian scientific personalities at the beginning of the twentieth century.

By his contributions in the development of the physiology, in high education foundation, by creating institutions and cultural publications, through his involvement with all energy and honesty in the actions for increasing the civilization level, Professor Ioan Athanasiu remained in the history of our country as an exemplary personality of his epoch.

He has a special place in the precursors' gallery that have contributed to the progress of veterinary medicine and leading of The General Association of Romanian Veterinarians.

Keywords: physiology, history of veterinary medicine

Profesorul Ioan Athanasiu (1868–1926) a fost una dintre figurile reprezentative ale personalităților științifice românești la începutul secolului al XX-lea.

Prin contribuțiile sale în dezvoltarea fiziologiei, în cadrul instituțiilor de învățământ superior, prin crearea de instituții și publicații culturale, prin implicarea sa cu toată energia și onestitatea în acțiunile de creștere a nivelului de civilizație, profesorul Ioan Athanasiu a rămas în istoria țării noastre ca o personalitate exemplară a epocii sale.

El are un loc special în galeria precursorilor care a contribuit la progresul medicinei veterinare și conducerea Asociației Generale a Veterinarilor din România.

Cuvinte cheie: fiziologie, istoria medicinei veterinare

By its consequent steps, The General Association of Romanian Veterinarians celebrates the most important personalities of our profession and cultivates in the veterinarians generation conscience, important contributions of these personalities to the veterinary medicine development and social progress of the country.

In the gallery of these personalities, Professor Ioan Athanasiu (Fig. 1) - who was born 150 years ago - has a special role by his social, scientific, didactic opera and his scientist-patriot example.

Born in April 27th, 1868, in Sascut locality from the ex-county Putna (actual county Bacău), Ioan Athanasiu was the last child of a family of six children of the priest Theodor Athanasiu and Ecaterina Tănase (become Athanasiu by marriage) (Fig. 2).

He has spent the childhood and attended the courses of the primary school in the native town. The secondary school followed at Bacău County.

In October 1885, when he was not 18 years old yet, Ioan Athanasiu was accepted with scholarship, at The Superior School of Veterinary Medicine from Bu-

charest, where after five years of studies, in 1890, he obtain the veterinarian diploma. After military stage, he is named the veterinarian of Constanța city and after two years of professional practice become lecturer at the Department of Physiology of the Higher School of Veterinary Medicine.

In 1884, he wins by competition, a scholarship granted by Romanian country for a training in the physiology field at The Faculty of Medicine from Paris and College de France (1895–1898). After he returned to the country (1898), he is named substitute professor at the Department of Physiology and Histology of The Superior School of Veterinary Medicine and in 1902 he goes again in France, where he is named Deputy Director of The International Institute of Physiology „*Etienne Jules Marey*”, function that he will occupy until 1905.

To the demands of the famous professors, as Gh. Marinescu, Dimitrie Voinov and Paul Riegler and at the official request of Spiru Haret - the Minister of Public In-



Fig. 1. Professor Ioan Athanasiu (1868-1926)

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struction, professor Ioan Athanasiu resigned from leadership of Marey Institute in 1905 and comes back in Romania, where he is named full professor in the Department of Compared Physiology at The Sciences Faculty in the University of Bucharest in parallel with the position of professor at the Department of Physiology and Histology of The Superior School of Veterinary Medicine of Bucharest.

In 1906, Ioan Athanasiu funded with professors as Ion Cantacuzino, Gheorghe Marinescu and Dimitrie Voinov, *The Society of Biology* (known in that period as *Reunion Biologique de Bucarest*), serving as Secretary of this scientific society until the end of his life.

In 1907, he is named Director (comparable with the function of Dean) of The Superior School of Veterinary Medicine (1907–1910) and from this position, he manages to persuade Spiru Haret in order to introduce in the parliament the project „*The law concerning the reorganization of The Superior School of Veterinary Medicine*” (remained in the history as „*The Law Haret – Athanasiu*”) on the basis of which was in fact being prepared the transformation of The Superior School of Veterinary Medicine in The Faculty of Veterinary Medicine (event realised in 1921).

As a sign of recognition for his valuable activity, in 1911 he became the Correspondent Member of the Romanian Academy and in the period 1915–1920 he was Rector of the University of Bucharest. In the heavy conditions generated by the First World War, during the University of Bucharest retreat of in Iași (1917), he founded the *Renașterea Română* Magazine which he runs and finances until 1921. In the pages of this scientific, cultural and educational publication, Professor Ioan Athanasiu publishes numerous articles dedicated to increase the level of Romanian people civilisation and brings the scientific arguments for the prevention of the pellagra and the alcoholism, “*two calamities that destroy the poor population*”.

In the period 1921 – 1925 he makes a lot of travels abroad in order to research in the well-equipped physiology laboratories from Paris, Leiden and Brussels.

In 1925, the first signs of illness appeared, and his health began to deteriorate rapidly, which is why in 1926 he has to go to a sanatorium in Paris. Aware of the evolution of his ruthless disease, in the summer of the same year, he decides to return in Bucharest, where he dies on the morning of July 20th. **He was only 58 years old !**



Fig. 2. Ioan Athanasiu (the fourth from left on the top row) with his parents, brothers and sisters (in 1885)

He leaved behind a valuable scientific work and a school of physiology, where a numerous scientific personalities were formed in the domains as: biology, medicine and veterinary medicine.

THE SCIENTIFIC CREATION OF THE PROFESSOR IOAN ATHANASIU

In the personality of the scientist Ioan Athanasiu, the teacher qualities, the performant researcher and the intellectual-patriot were found in a happy complementarity, involved in many social and educational aspects of the country (4).

The original contributions for the development of physiology represent the main part of its scientific work and some of the results of the research carried out at that time, in several subdomains of this sciences, have remained as reference data whose validity is still preserved (1).

Thus, Professor Ioan Athanasiu approached, on his own or in collaboration, major fields of physiology, making remarkable contributions to the knowledge of muscle physiology, circulation of blood and lymph, liver functions, bioelectric processes in the nervous system and muscles, thermal homeostasis of organisms, energy metabolism and nutritional value of some foods (4, 6).

His research on the improvement and standardization of the research equipment needed to investigate the functions of the body was the main objective of his creative efforts from 1902 to 1905, when he worked at the Marey Institute (3).

The results of his researches concerning *the graphic method and crono-photograph* were communica-

ted at The International Congress of Physiology, held at Brussels in 1904, and then published „*in order to be used by physiology laboratories around the world*”. At Marey Institute, Ioan Athanasiu made also the remarkable researches of *physiological mechanics* (direct or by pneumatic transmission registration of mechanical functions of certain organs) and he succeed to *cinematograph the movements of vibrating cilia*, being the first from the world.

His scientific publications and qualities of exceptional researcher were early remarked by the scientific community of that epoch that explains his acceptance as a member of *The International Commission of Physiologists* when he was 35 years old, Professor Athanasiu being the only Romanian, the youngest, among 21 members of this impressive scientific structure (3).

As a recognition for value of his scientific activity for dedication of his position in the international scientific community, The French State gave him the high distinction *The Legion of Honor* (4, 6, 11). From this moment, for more than 20 years, Professor Ioan Athanasiu collaborated closely with the European physiological elite personalities that dominate scientific knowledge in the domains of medicine and biology of the beginning of the twentieth century.

One of the themes of great scientific interest with high social impact in that epoch, addressed by Professor Athanasiu in the period 1912–1914, was the identification of functional mechanisms, through the ingestion of alcohol produces the harmful effects. In eight scientific works published on this theme (4), he succeeded to obtain scientific information that stay today at the basis of measures for prevention and treatment of alcoholism.

In synthesis, although the scientific work of Ioan Athanasiu could not be fully documented by his historiographers, yet it has managed to date only 131 scientific works published in prestigious scientific publications of his time, 3 specialized treaties (international collaborations) and several editions of his physiology courses (4).

The history of sciences often mentions an important phenomenon for improvement of scientific community as **the formation of scientific schools**, characterized by a special attraction made by avant-garde ideas of the great personality to the members of scientific community that inspires from the model of the mentor and then continue to develop creatively the style of work and his ideas. From this point of view, **Professor Ioan Athanasiu was a brilliant creator of physiological sciences school in Romania** (4, 6,

7). His work style (remained legendary in the domain !) and his researches in experimental physiology performed in old Institute of Physiology (from Enei street) of Sciences Faculty shaped the training of its collaborators, who in turn became well-known scientific personalities and have illustrated the Departments of Physiology of the Medicine Faculties in Iași (Vasile Rășcanu), Cluj (Dimitrie Călugăreanu), Timișoara (Marin Popescu), Bucharest (Ion Drăgoiu, Ion Nițescu), and Faculties of Veterinary Medicine (Gheorghe Nichita) and Faculties of Biology (Ștefan Niculescu, G. Teodorescu).

THE CONTRIBUTIONS OF PROFESSOR IOAN ATHANASIU TO DEVELOPMENT OF HIGHER EDUCATION

The documentary information concerning to professor Ioan Athanasiu's life and work (4, 6, 8) support his native precious quality, frequently named *exceptional pedagogic vocation or talent*. At his courses, the audience was represented by not only the students and his contributors, but other university professors, doctors, biologists, pharmacists, chemists, officials, and simple admirers also. It was emblematic the inaugural course at Sciences Faculty, given in 1905, in the Auditorium of University of Bucharest, where there were Carol I The King and the Minister of Public Instruction, Spiru Haret, about that the press from that period wrote: „*Professor Athanasiu fascinated the whole auditorium ... In the end, The King went to the speaker and shook his hand, rare gest for Carol I The King, congratulating and wishing to him to fulfil the mission in the same way, captivately as now*” (9).

Now, we can speculate that, by this participation, The Minister of Public Instruction, Spiru Haret wanted to demonstrate in public that the appointment as the Head of Physiology Department and Director of The Institute of Physiology was made on basis of his exceptional qualities as professor and researcher.

In fact, the history of physiology demonstrated that Professor Athanasiu, conscious of his high obligations, dedicated with whole responsibility to serve the Romanian higher education (10, 12). *His contributions was in organizing the university institutions (and another structures) in Bucharest*, as: re-organization of The Superior School of Veterinary Medicine (1909), improvement of this institution and transformation into faculty (1921), upgrade of old Institute of Physiology, that he transformed in authentic centre of research and specialisation (1905 – 1925), foundation of new Institute of Physiology in the actual Faculty of Biology (step unfinished due to his death in 1926), ope-

rative management of The University of Bucharest (2), as Rector (1915–1920), initiation of a great campus university project for the students in Bucharest (the project University City performed in 1924 with Vintilă Brătianu – rector and Zamfir Brătescu – State Secretary) etc. (4, 6, 7).

THE CIVIC ACTIVITY OF PROFESSOR IOAN ATHANASIU

Professor AthanasIU was also a public personality in Romania, he militated for more efficient involvement of intellectuals (including students) in the national effort of increasing the level of civilisation and welfare of Romanian society. In some lectures given at The Romanian Athenaeum and numerous articles published in the press, especially in the magazine *Romanian Renaissance*, Professor militated, almost obsessive, for the necessity of emancipation of *peasantry*, the social category deepest affected by poverty and also mentioned the obligation of state to protect the poor students, especially those originated from rural area. In a lectures named suggestively: *The food for Romanian peasant; The food of soldier in the campaign; Nutritive value of the maize; So-called nutritive value of alcohol*, the physiologist Ioan AthanasIU bring in attention of Romanian society the scientific arguments concerning the danger represented by qualitative and quantitative poor nutrition and disastrous consequences of alcoholism. He said: "...the Romanian peasant is threatened by degradation ... the alcohol and maize are 2 calamities that haunt our rural population, especially from mountain ...".

In his civic steps, Professor AthanasIU had the belief that the students represented, in that social and economic conditions of the country, the most dynamic component of Romanian intellect able to send an enlightenment message to the population: "go, dear students and waste the thick fog that stay on this section of the people" (6).

Another important civic step for the national culture was the foundation of *The Society of Romanian Book* by Professor AthanasIU. Among the argument bring for the necessity of foundation of this cultural society, Professor Ioan AthanasIU (a president and prime shareholder of this), said: "... we have not the books for popularization of the sciences, we have not suitable books for school, therefore the majority of population lives with the same fund of wrong faiths, superstitions and routines that come from the oldest generations of ancestors" (6).

In 1918, close to realization of our national unity,

Professor Ioan AthanasIU sign, as President of Association of University Professors from Romania (APUR), **The Proclamation for Romanians from everywhere** that mobilizes the Romanians to exceeding of people condition from that period, characterized by "division, oppression and resignation".

The modality of perception in Romanian society of Professor Ioan AthanasIU's civic activity was reflected in the press of that epoch. Thus, in the scientific "V. Adamachi", in the number from August 1926, it was written: "The honest thread, of exemplary correctness, he was the type of western scientist, so rare in us. Keeping away from political intrigues, his word was a word and you could rely on him ... A true man led in the life by the highest moral principles". That was Professor Ioan AthanasIU's intellectual and ethical profile, a perennial model for the following generations.

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