

Sports Medicine In Argentina



Argentinian Sports Medicine through history

September 25th is considered the Sports Physicians Day in Argentina due to Dr Enrique J. Romero Brest's birth. He is considered the first sports physician and also the founder of physical education teaching in Argentina. He created the National Institute of Physical Education (INEF) in 1912, where physical education had its own institutional space in schools for the first time.

During 1920 to 1930, Dr Gofredo Grasso was the first national physician who applied his scientific knowledge in athletes. He became Vice-President of the International Union of Sports Physicians (UIMD), which was founded in 1934. Later in the same year, he became adviser of the Argentinian Olympic Committee (COA). By that time, the socio-political situation in Argentina allowed for the expansion of

sports institutions and sports in general, which permitted the dissemination of his proposal. This "*recreational revolution*" can be seen in the emergence of specialized publications, creation of athletic entities, construction of sports facilities and the participation of Argentinian athletes in international competitions. Dr Grasso "mathematized bodies of elite athletes contributing to produce sports champions" in swimming, athletics, fencing, and boxing, among other sports. He insisted on the need of a qualified medical service to carry out athlete's follow up, which in addition should be mandatory for all recreational institutions.

Medical Education in Argentina

Buenos Aires is the most popular city for any training instance of academic excellence, but there are many other cities where you can study: Rosario, La Plata, Cordoba, Mendoza, among others.

At the Buenos Aires University (UBA), the Medicine School follows an eight-year path. Before entering, all students must carry out one year of academic levelling where the subjects studied involve a Common Basic Course (CBC). At the end, those who have passed get into Medicine School.

Once you are in Medicine School, the whole college career is divided into two stages:

1. **Biomedical stage or preclinical training**, where students get the basis for their clinical training. It is divided into:
 - a. **First year**, where you study Anatomy, Genetics, Biology, Embryology & Histology, Mental Health, Bioethics I and Family Medicine I.
 - b. **Second year**, where you study Biochemistry and Physiology & Biophysics.



c. **Third year**, where you study Immunology, Microbiology & Parasitology I and II, Pathology I and Pharmacology I.

2. Clinical stage, which involves the last two years of study and students aim to acquire knowledge and skills in diagnostics and treatment. Students must meet Internal Medicine I and II, Nutrition, Diagnostic Imaging, Dermatology, Infectious Disease, Pneumology, Neurology, General Surgery, Urology, Orthopaedics, Neurosurgery, Otorhinolaryngology, Gynaecology & Obstetrics, Paediatrics, Pathology II, Pharmacology II, Public Health I & II, Psychiatry, Medicine & Law, Toxicology and Bioethics II.

Once you finish both stages, you must then undertake the final year through the Annual Rotating Internship (IAR), where you have a pre-graduation

practice that is carried out in rotations in the various departments of the University Hospitals. After that, you get your MD degree as a physician!

It must be emphasised that students commencing the 2nd year have only two weeks where they learn about exercise physiology. That means their studies involve only a “quick look” at the extensive chapter of Sports Medicine. They do not even get the idea of sports as a treatment related to noncommunicable diseases (NCDs).

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Training specialization programs or internships (called residency/ concurrency in South America) in Argentina typically lasts 4 years and takes place at University Hospitals or affiliated clinics and includes full-time practical training of 12 hours per day at least. Sports Medicine is not a training you can take by this method.

Almost all universities offer postgraduate medical study programs. After the medical degree, there are different options to earn the Sports Medicine specialty and become a sports physician all throughout the country. There are many private universities where you can find the Sports Medicine course: Catholic (UCA), Maimónides (UMAI), Favaloro, Austral and some others. Public University of La Plata (UNLAP) also offers the Sports Medicine specialty.

The most recommended and prestigious Sports Medicine degree involves a two-year path at UBA. Sports Medicine is a postgraduate speciality. This means you need to be a physician and demonstrate at least one year of training/experience in orthopaedics, paediatrics, general surgery, internal medicine, or cardiology. Once you apply, chair managers interview the applicants.

UBA is the home of the first Sports Medicine department in Argentina. There are 3 offered chairs. We will refer to the one led by Dr Luis V. Parrilla, which has more than 30 years of experience training Sports Physicians. The main objectives of this training

program are to train physicians in injury & illness prevention and to promote and encourage a healthy and physically active lifestyle in general population. This training includes classes in field of play at CeNARD (National Centre for High-Performance Sports), where students might have contact with elite athletes from all of Argentina's sports teams. Indeed, most athletes train and get tested (strength, speed, coordination, balance, VO2max, etc.) at CeNARD. Students also attend classes at UBA's Medicine School.

There are 16 hours of classes per week during the entire training (45 weeks per year) divided into four modules:

- 1. Introduction to sports medicine** (sports physiology)
- 2. Human performance** (training, body composition, doping and antidoping regulation, biomechanics, recovery, etc.)
- 3. Physical activity in health & sports** (cardiology, infectious disease, ophthalmology, traumatology, emergency, physical therapy, nutrition, etc.)
- 4. Special situations/conditions** (transplanted and para-athletes, diabetes, cancer, pregnancy, etc.)

During the second year, students will carry out internships at various institutions, clubs, medical services, and national or international competitions if available.

AMDARG (Argentinian Sports Physician's Association) emerged from the chair led by Dr Parrilla with graduates and teachers of this same institution. It was founded during the pandemic and is a national multidisciplinary organisation committed to enhancing the health of all Argentinians through safe participation in sport and physical activity. The association's members wish to generate and disseminate scientific knowledge and also want to highlight the Sports Physician's role of providing expert information and advice, with the ultimate purpose of supporting the health and living standards of the entire population where sports medicine and related

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issues are involved. The main vision of AMDARG's proposal is "the continuous training of sports physicians even after graduating. This situation will allow development and growth of sports medicine in the medical community and general population". Nowadays, it is difficult to define "sports physician's dos and don'ts" because sports physicians still do not have their own identity, at least in Argentina. Strengthening ties with other associations such as AATD (Argentinian Sports & Orthopaedics Association), ISEF N 1 Dr Romero Brest, FAA (Argentinian Soccer Players Union), APDA (Sports Psychology Argentinian Association), Hospital M. Rocca, FAMEDEP (Argentinian Sports Medicine Federation), and others is a good start on this path.

Almost all sports physicians are encouraging Argentinian Schools of Medicine to include SEM in their curricula. Medical students need to be taught topics such as healthy habits and exercise counselling. They should be familiar with the American College of Sports Medicine's guidelines on physical activity for health. It is a matter of public health. Recently, the Covid-19 pandemic put topics such as sedentary lifestyles under the spotlight. Sedentary behaviour is a real health problem in Argentina. In 2009, 54.9% of the population did not exercise, and 61.6% of the Argentinian population was overweight or obese. In 2018, Argentina still had the most sedentary behaviour in Latin America. However, in September 2021, the National Institute of Statistics and Census reported that sedentary behaviour is now decreasing for the first time. Unfortunately, noncommunicable diseases are still responsible for 73.4% of deaths in this country. All members from AMDARG wish that the entire population could have access to SEM physicians to achieve continued improvements for public health. Promoting and encouraging a healthy and physically active lifestyle is indeed our duty!



As Dr Luis V. Parrilla, AMDARG's President, said in the last XXI Argentinian Sports Physician's Congress 2021: "The responsibilities of Sports Physician & Sports Medicine are endless. The object of study is precisely the whole population. It is therefore proposed to "redefine" the title of this specialty to "medicine of physical activity/exercise and sport". In other words: SEM - Sport & Exercise Medicine; so as not to restrict it only to a group that practices it with rules. Sports Physicians ideal training should be similar to an internship (hour load, dedication, etc.), not just a postgraduate specialty. In order to perform this change, it would be necessary to establish a standard in teaching & learning process, determining competences and responsibilities of the specialists in order to define the sports physician's identity so they can also be recognized

and valued. Academic training processes should not culminate when graduated, but rather should start! This situation gives sustainability to Sports Medicine and sports physicians".

Nowadays, AMDARG is trying to conduct a census of Sports Physicians all over the country with some difficulties, but we are on our way!

We do not have solid institutes which combine multidisciplinary work in amateur practice. CeNARD is the only place where you can find these collaborative interactions for high-performance athletes. Some National Federations aim to implement more interdisciplinary work, but they do not have enough financial resources to support it. Obviously, some sports do not have these financial issues. Indeed, most known soccer, hockey and rugby teams have a well-organized Sports Medicine Department. We still need more interdisciplinary work on this area in order to have the best staff for athletes.

Some private Hospitals do have a Sports Medicine Department and there is only one institution in the Public Health Care System, but this situation is exceptional. There is a lack of standardized development in this area of health. That is why these kinds of services are generally not included in our healthcare system. Amateur athletes are usually excluded from Sports Medicine Departments and do not have the same opportunities that high-performance athletes do.

Author Bio



Rodrigo A. Martínez Stenger

Staff Orthopaedic Surgeon in Hospital Dr. A. Zubizarreta (Buenos Aires – Argentina)

Co-founder & Member of the Executive Board in AMDARG (Argentinian Sports Physician's Association)

Member of the World Skate Medicine Commission (Lausanne – Switzerland)

Sports Physician of the Argentinian Female Wheelchair Basketball Team