



E. M. R. S. S.

Euro Mediterranean
Rehabilitation Summer School

Siracusa, Italy



The history of SIMFER and its role in EMRSS Support

G. Iolascon

- **Rehabilitation** is defined as “a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment”
- Rehabilitation is an **essential part of universal health coverage** along with promotion of good health, **prevention of disease, treatment and palliative care**

- Globally, an estimated **2.4 billion people are currently living with a health condition that may benefit from rehabilitation.**
- The need for rehabilitation worldwide is predicted to increase due to changes in the health and characteristics of the population. For example, people are living longer, but with more chronic disease and disability.

- Currently, the need for rehabilitation is largely unmet
- In some low- and middle-income countries, **more than 50% of people do not receive the rehabilitation services they require.**
- Emergencies including conflicts, disasters and outbreaks create **enormous surges in rehabilitation needs** while **also disrupting rehabilitation services**

Care and Rehabilitation are intrinsically linked to the concept of moral responsibility

- "**moral responsibility**" mentioned by Darwin, or the capacity for collaboration, was one of the mechanisms that guaranteed the continuity of species within the complex process of natural selection that guaranteed the survival of individuals with greater environmental wisdom

Prehistoric Man (Pleistocene – 60.000 BC) Shanindar Cave – Kurdistan Region in northern Iraq



pre-medical archetype of rehabilitation

- **Shanidar 1** was an elderly **Neanderthal male** aged between 30 and 45 years **displaying severe signs of trauma-related abnormalities**, which in his case would have been debilitating to the point of making day-to-day life painful
- Shanidar 1 **must have been aided by others in order to survive his injuries**
- This evidence has also led to speculation about **Neanderthals' capacity for altruistic behavior and the presence of ethos in the Neanderthal communities**

Osteoporosis and fragility fractures in a woman who lived in ancient Egypt during the XII Dynasty (ca. 1900 BC), and survived for several years with the consequences of a femoral fracture and multiple fragility vertebral fractures

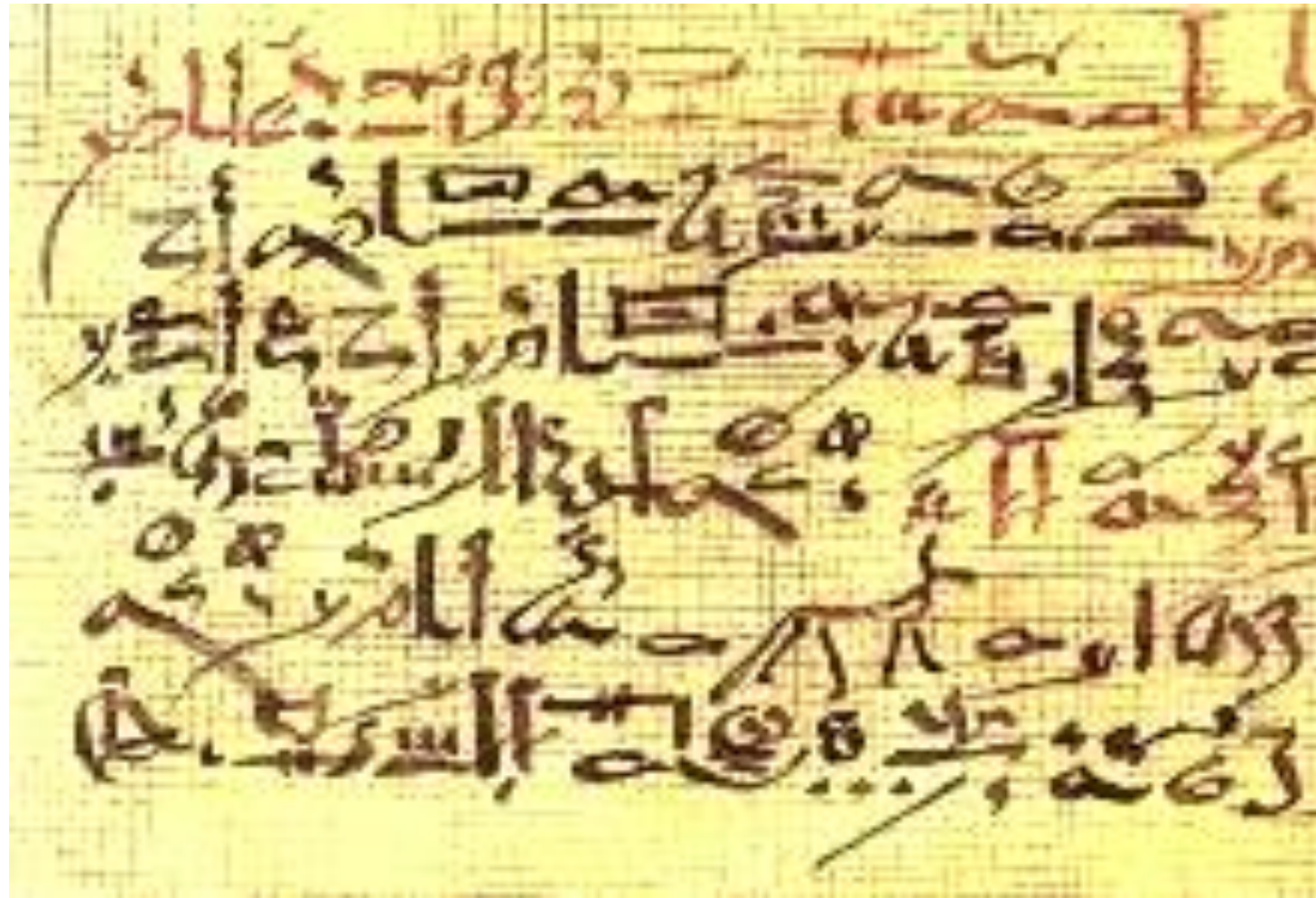


| | <i>aH</i> (mm) | <i>mH</i> (mm) | <i>pH</i> (mm) | % <i>ant/post</i> (%) | % <i>mid/post</i> (%) |
|-----|-------------------|-------------------|-------------------|--------------------------|--------------------------|
| T2 | 16.0 | 15.5 | 16.5 | 96.97 | 93.94 |
| T3 | 15.0 | 13.0 | 17.0 | 88.24 | 76.47 |
| T4 | 16.5 | 16.0 | 17.5 | 94.29 | 91.43 |
| T5 | 15.5 | 14.0 | 17.5 | 88.57 | 80.00 |
| T6 | 15.0 | 15.5 | 17.0 | 88.24 | 91.18 |
| T7 | 17.0 | 15.5 | 18.0 | 94.44 | 86.11 |
| T8 | 16.5 | 14.0 | 19.5 | 84.62 | 71.79 |
| T9 | 18.0 | 16.5 | 21.0 | 85.71 | 78.57 |
| T10 | 17.0 | 18.0 | 21.5 | 79.07 | 83.72 |
| T11 | 19.5 | 19.0 | 22.5 | 86.67 | 84.44 |
| T12 | 19.5 | 20.5 | 23.0 | 84.78 | 89.13 |
| L1 | 27.5 | 25.5 | 28.5 | 96.49 | 89.47 |
| L2 | 27.0 | 25.5 | 29.0 | 93.10 | 87.93 |
| L3 | 27.5 | 27.0 | 28.5 | 96.49 | 94.74 |
| L4 | 28.5 | 27.0 | 28.0 | 101.80 | 96.43 |

aH, anterior vertebral body height; *mH*, midbody height; *pH*, posterior body height.

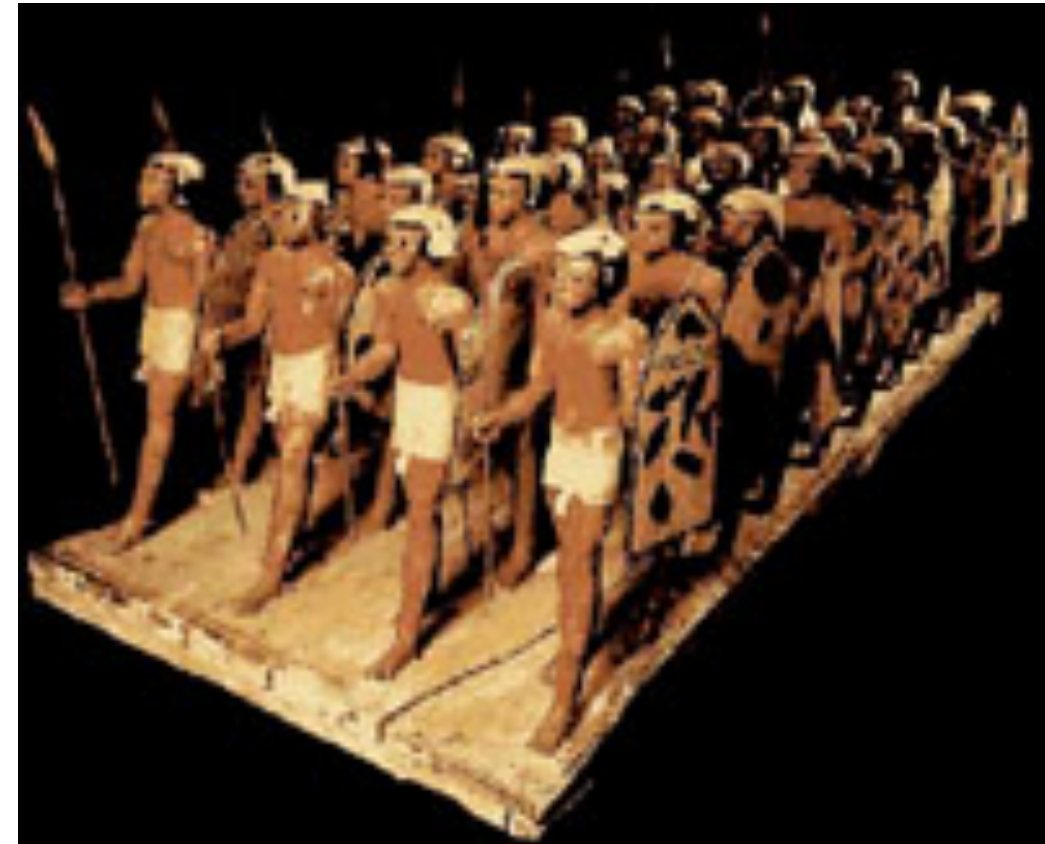
Edwin Smith Papyrus (1800 BC)

The Papyrus embodies the birth of scientific observation in medicine



48 “clinical cases”

- Head (27 cases, the first incomplete)
- Throat and Neck (Cervical Vertebrae), Cases 28-33.
- Clavicle, Cases 34-35.
- Humerus, Cases 36-38.
- Sternum, Overlying Soft Tissue, and True Ribs, Cases 39-46.
- Shoulders, Case 47.
- Spinal Column, Case 48 (incomplete).



the brain or skull
in hieroglyphs

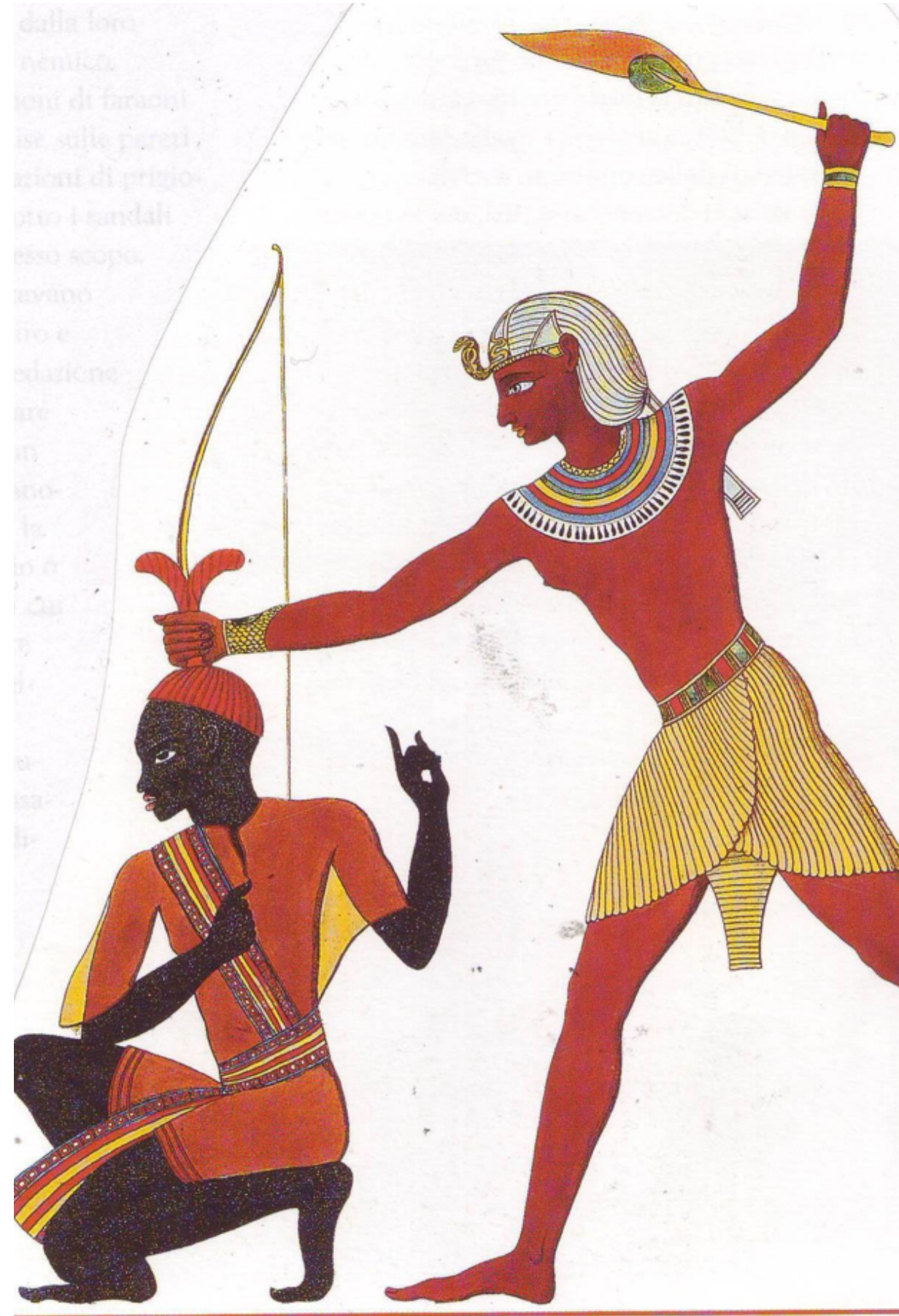
Edwin Smith Papyrus

- It is believed to be a scribe's copy of an earlier medical text, possibly attributed to Imhotep, a great architect, high priest, and physician of the kingdom who lived between 3000 and 2500 BC.
- The treatise consists exclusively of cases, not recipes or magical spells.
- The cases are organized systematically, from head wounds and working downward through the body.
- The treatment of the cases is scientifically approached, with particular attention to the surgical aspect (magic is used only in cases 8 and 9 of the 48 preserved).
- Each case is classified by one of three different verdicts: "favorable," "uncertain," or "unfavorable."

Case 8

“he walks shuffling with his sole, on the side of him having that injury which is in his skull...”

- This case anticipates neurological observation and gait analysis—centuries before neurophysiology existed.
- It shows that functional assessment of movement impairment, a core aspect of rehabilitation medicine, was already intuitively practiced in ancient Egypt.



The Birth of Care for War Veterans

Hôtel des Invalides, Paris (17th c.)

- Built by Louis XIV to house disabled soldiers.
- Aim: Ensure that those who risked their lives for the monarchy could “spend their remaining days in tranquility” (Royal Edict, 1670).
- Early model of state-supported care for wounded and elderly veterans.
- **the institutionalization of rehabilitation**

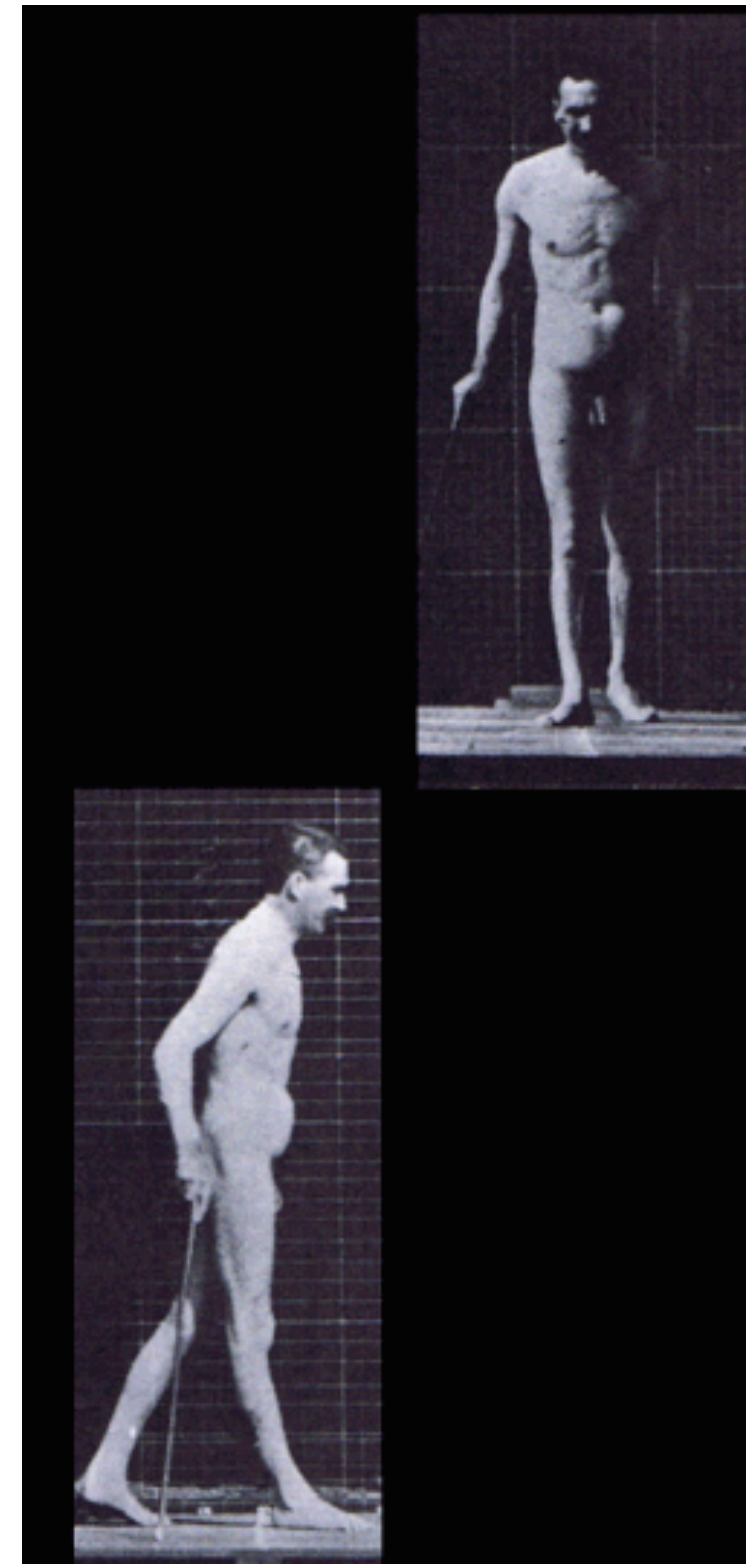


Next step : The Development of Rehabilitation Science

It was essentially built upon **three main pillars**:

- the **advancement of movement sciences** and the understanding of human motor function;
- the growing number of people with disabilities, particularly **war veterans**;
- the emergence of **competitive sports** as a means of recovery and enhancement of residual abilities

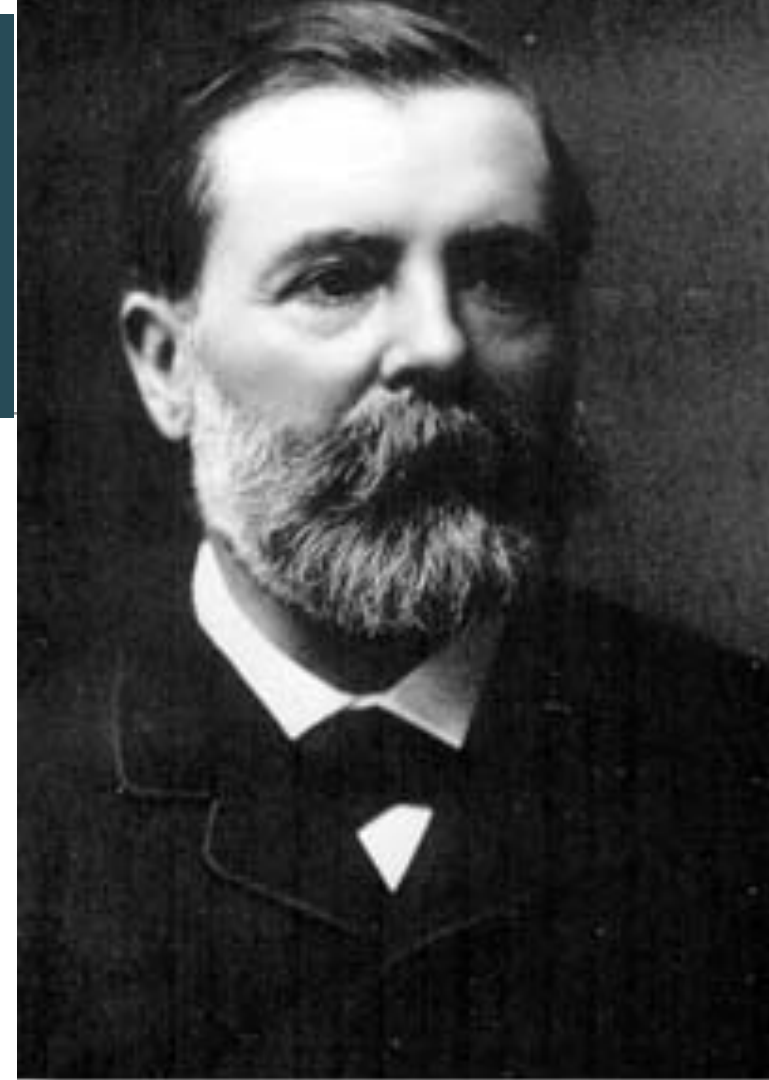
The Photographic Study of Human Movement : Eadweard Muybridge



Étienne-Jules Marey

(1830-1904)

- **Studies on muscular forces**
- **Research on gait and locomotion**
- **Promotion of physical exercise for youth and soldiers**
- **Experimental testing in a wide range of conditions**
- **Cinematographic studies of the movements of athletes and workers**
- **Motion analyses of horses and humans**
- **Founder of the Station Physiologique**



The Lumière brothers, Auguste and Louis, pioneers of cinema,

- their interest in human and animal motion was rooted in the scientific and technical research of the late 19th century, in continuity with the experiments of Étienne-Jules Marey and Eadweard Muybridge.



The Lumière brothers

From natural motion to the science of gesture



- Although brief and simple, their films represented a new way to analyze movement: cinema as a scientific and educational tool.
- Some projections were even used in medical and physiological settings to observe coordination and body dynamics.
- In this sense, the Lumières contributed—directly or indirectly—to the birth of scientific cinematography and kinematic analysis of human motion.

The Birth of Modern Competitive Sport

The Athens Olympics, 1896



- Marked the beginning of the modern Olympic era, inspired by **ancient Greek ideals**
- Promoted international unity and athletic excellence through fair competition
- Stimulated scientific curiosity about the **physiology of movement and performance**.
- Led to the **development of sports medicine, exercise physiology, and athletic rehabilitation, focusing on injury prevention, recovery, and performance optimization**
- The **growing demands of competitive sport** encouraged the creation of **specialized rehabilitation methods** to restore athletes' function and enable safe return to competition.

World Wars



World Wars

- Wars played a crucial role in the **development of rehabilitation sciences, as the need to treat injured soldiers led to the creation of new medical and rehabilitative techniques**
- The large number of wounded veterans during the World Wars prompted the establishment of **specialized rehabilitation centers** and the birth of modern **physical and occupational therapy**
- Military conflicts accelerated research on **prosthetics, neuromuscular recovery, and functional re-education**, shaping the foundations of contemporary rehabilitation medicine
- The **collaboration between physicians, engineers, and therapists** during wartime fostered innovations that later benefited civilian healthcare and rehabilitation
- **From trauma management to social reintegration**, the lessons learned from war rehabilitation programs profoundly **influenced modern approaches to disability and functional recovery**

Birth of scientific societies of physical and rehabilitation medicine

-
- AAPMR: american academy of physical medicine and rehabilitation
 - They began to promote physical medicine as a specialty.
 - Dr. Krusen moved to Mayo Clinic in 1936 where he developed a Department of Physical Medicine.
 - They asked the American Medical Association (AMA) for specialty status and an examining board for physical medicine.
 - His training program there developed into the first three-year residency in physical medicine in the United States.
 - In 1938, Dr. Krusen proposed the term “physiatrist” to identify the physician specializing in physical medicine
 - Dr. Krusen along with fourteen other “physical therapy physicians” found themselves with different interests and concerns than their colleagues the physical therapists and radiologists.
 - However, it wasn't until 1946 that the AMA sponsored the term

Brief history of AAPMR

- The name of the organization continually evolved.
- American Society of Physical Therapy Physicians in 1938
- American Society of Physical Medicine in 1944.
- In 1951, the words “and Rehabilitation” were added.
- The present name, “The American Academy of Physical Medicine and Rehabilitation, was adopted in 1955.

1950 – United Kingdom

- British Association of Physical Medicine (BAPM) : established to advance physical medicine and hospital-based rehabilitation.
- In 1970 it became the British Society of Rehabilitation Medicine (BSRM).

1952 – France

- Société Française de Médecine Physique et de Réadaptation (SOFMER)
- It played a central role in defining the field of rééducation et réadaptation fonctionnelle.

1957 – Europe

- European Federation of Physical Medicine and Rehabilitation (EFPMR)
- The first European federation in the field, later evolving into today's ESPRM (European Society of Physical and Rehabilitation Medicine).

Italy - 1958

- The Italian Society of Physical and Rehabilitation Medicine (SIMFER) was founded in Turin in 1958 and is currently the scientific society with the largest number of members in Europe



SIMFER

Società Italiana di Medicina Fisica e Riabilitativa

sito dell'Associazione Scientifica dei medici che lavorano in riabilitazione

Cultural Roots of Rehabilitation

The Birth of a New Medical Philosophy

- Early 20th century: rise of rehabilitation culture
- Based on humanistic and holistic principles
- Centrality of the Person and global approach to care

SIMFER: The Founders' Vision

Unity and Internationalism

Two key choices:

- Unification of existing societies (SIMFER + ANFR)
- International cooperation, especially in Europe
- **Founding members:** Fiandesio, Boccardi, Valobra, Tonazzi

SIMFER

Early Congresses and Scientific Growth

The 1960s: Building a Scientific Identity

- First National Congress, Venice 1962
- Topics: neurophysiology, motor re-education, rehabilitation techniques
- **Birth of the Fédération Européenne de Médecine Physique et Réadaptation**

SIMFER

The First Decade

Institutions and Education

- First specialization schools: Bologna (1956), Rome (1957), Milan (1961)
- 1965: official recognition of the specialty
- Collaboration with WHO and European institutions

SIMFER

SIMFER and SIMFiR

Science and Professional Representation

- **1961: Foundation of SIMFiR** (Italian Union of Physical and Rehabilitation Physicians)
- Strong synergy between scientific and professional growth

SIMFER

International Engagement Europe and Beyond

- SIMFER co-founder of European Federation of PRM
- Active role in IRMA (1970), UEMS, and Academie Européenne de Réadaptation
- Hosting international congresses in Venice, Milan, and Turin

SIMFER

The 1970s: Growth and Identity

From Physical Therapy to Rehabilitation Medicine

- Struggle for full medical recognition
- 1969 “Mariotti Law” establishes rehabilitation units in hospitals
- SIMFER grows with new centers and academic programs

SIMFER

Building a National Network

Hospitals, Universities, and Research

- Expansion of hospital rehabilitation departments
- Development of physiotherapy schools
- Early textbooks and national guidelines published

SIMFER

The 1980s: Cultural Expansion

A Period of Consolidation and Reflection

- 1980 Bologna Conference: “The Physiatrist and Rehabilitation in Italy”
- Birth of the SIMFER Bulletin and Europa Medicophysica journal
- Growing membership (over 600 members by 1981)

SIMFER

The 1990s: Maturity

National Guidelines and Organizational Models

- **1998: Italian Ministry of Health adopts SIMFER's work as National Rehabilitation Guidelines**
- **Focus on:**
 - **Centrality of the Person**
 - **Interdisciplinary teamwork**
 - **Individual Rehabilitation Plan**

SIMFER

The ICF Revolution

A New Language for Disability

- SIMFER promotes the ICF framework (WHO, 2001)
- Distribution of 1800 Italian copies to members
- Training courses to implement the ICF model nationwide

SIMFER

Scientific and Academic Growth

The New Millennium

- Over 60 university psychiatrists
- Expansion of specialization schools
- International journal renamed European Journal of PRM

Italian Rehabilitation Policy Guidelines- 2011

- The purpose of rehabilitation intervention is to “**gain health**”, in a perspective that sees the person with a disability and participation limitations no longer as a “patient,” but as a “**person with rights**” (Madrid Conference, 2002, European Year of People with Disabilities).
- The role of rehabilitation intervention is to define the “person”, and then implement all the necessary health interventions to enable that person, through genuine **empowerment**, to achieve the **highest possible level of functioning and participation**, in accordance with their own wishes and context.

SIMFER

Legacy and Continuity From Founders to the Present

- A line of Presidents from Veglia (1958) to Iolascon (2024)
- A heritage of commitment to patients, science, and society
- A community that continues to grow and inspire



E. M. R. S. S.

Euro Mediterranean
Rehabilitation Summer School

Siracusa, Italy

EMRSS – Euro-Mediterranean Rehabilitation Summer School

- International and specialized school in Physical and Rehabilitation Medicine (PRM)
- Mainly aimed at young medical residents
- Focus on the Euro-Mediterranean region

E.M.R.S.S. 2005



History and Foundation

- Founded in 2005 by Dr. Francesco Cirillo
- Scientific support from international societies:
- ISPRM (International Society of Physical and Rehabilitation Medicine)
- SIMFER (Italian Society of Physical and Rehabilitation Medicine)
- Official headquarters in Syracuse, Italy
- Since 2008, hosted at Fondazione S. Angela Merici Onlus

E.M.R.S.S. 2016



Mission and Focus

- The EMRSS serves as a high-level educational and scientific meeting point, focusing on the Euro-Mediterranean area.
- It aims to promote excellence in Physical and Rehabilitation Medicine (PRM) through international collaboration and cultural exchange.

Target Participants

- Main audience: young physicians in PRM specialty training.
- Participants from Euro-Mediterranean countries and beyond.
- Language: English.
- Format: 1-week residential course.

Educational Goals

- Provide intensive theoretical and practical training on selected PRM topics.
- Engage internationally recognized lecturers and moderators.
- Encourage interactive learning, teamwork, and cultural exchange.

Accessibility and Inclusion

- Thanks to agreements with SIMFER and the European Board of PRM (ESPRM/UEMS):
- Participation and accommodation are often free or covered by scholarships.
- This policy promotes equal access and cross-border mobility among trainees.

Growth and Achievements

- Founded in 2005, the EMRSS has trained over 500 students and 120 lecturers (as of 2020).
- The course has become a reference model for Euro-Mediterranean PRM education.
- In 2025, EMRSS celebrates its 20th Anniversary Edition.

International Cooperation

- Supported by ESPRM and SIMFER.
- Financial and logistical backing for trainees from UEMS PRM member countries.
- Ensures high scientific standards and broad international participation.

SIMFER's Role and Commitment

- Promotion: actively publicizes EMRSS events via official channels.
- Scholarships: provides grants or free registration/hotel for young members (<40).
- Institutional Participation: SIMFER representatives attend the course annually.
- This collaboration reinforces Italy's leadership in Euro-Mediterranean PRM education.

Conclusions

- The EMRSS stands as a cornerstone of advanced PRM education.
- Promotes scientific exchange, innovation, and cultural dialogue.
- The partnership between SIMFER and EMRSS continues to shape the future of rehabilitation medicine across the Euro-Mediterranean region.