

# Our Roots as Rehabilitation Specialists

By Emma Goldberg, DPT, MPH Candidate,  
Division of Physical Therapy, Emory University



The First International Congress of the World Confederation of Physical Therapy. London, 1953. Wellcome Library.

**“Merely defining the group in the present pales against the possibility of forming an identity based on a rich past.”**

– Peter Sterns<sup>1</sup>

The World Confederation for Physical Therapy (WCPT) 2017 Congress in Cape Town, South Africa provides an invaluable opportunity to reflect upon the history of physical therapists as movement experts and healthcare providers. A historical review of the roots

of physical therapy (PT) can contextualize current rehabilitation practices and provide greater understanding of the evolution of therapist’s professional identity and role in medicine. This brief overview of physical therapist’s roots as rehabilitation specialists will also illustrate how the work of PT’s forefathers and mothers, such as those who attended the first WCPT Congress, held in London in 1953, has enabled rehabilitation medicine and physical therapy in particular to develop into the robust profession we know today.

Though physical therapy is traditionally thought to have developed from the demands of the worldwide polio epidemic and the large numbers of injured soldiers returning from the wars of the 20th century,<sup>2,3,4</sup> more recent research has been able to trace the roots of “mechanical medicine” as a systematic application to patient care back to 19th Europe.<sup>5,6</sup> The “Medical Gymnasts” in Sweden’s Royal Central Institute of Gymnastics (RCIG) provided an important model of patient care that demonstrated the value of manual manipulation, movement analysis, and comprehensive therapist training for specific patient conditions.<sup>5, 6</sup> This often overlooked narrative of rehabilitation medicine offers a glimpse at the origins of physical therapy practice and highlights the shared

struggles and common goals of health care providers that have persisted over the centuries. By the time that the WCPT formed in 1951, national organizations of Physical Therapists existed in countries around the world. Video footage from the first WCPT congress shows that the profession already emphasized what we now call evidence-based practice and promoted collaborative professional development.<sup>7</sup> Examining the rich past of physical therapy provides a foundation to claim a shared identity as rehabilitation specialists and contribute to the growth of PT as a valued health profession in countries around the world.

The modern use of physical manipulation, massage, and exercise as treatment for musculoskeletal conditions is commonly attributed to Dr. James Cyriax, often cited as the father of orthopedic medicine, who recognized of the need to test and categorize functional movements in 1929.<sup>5,6</sup> However, the use of physical manipulation has been seen over the centuries in distinct cultures around the world. Early manipulation and what we might consider manual therapy can be traced to the “the Balinese of Indonesia, the Lomi-Lomi of Hawaii, in areas of Japan, China and India, by the shamans of Central Asia, by *sabodors* in Mexico,” as well as by bone setters of Nepal, Russia, and Norway.<sup>4</sup> Homer documented massage and tissue mobilization as early as 1000 BCE.<sup>5</sup> Hippocrates, commonly referred to as the “father of medicine” documented the use of spinal manipulation as a treatment for scoliosis as early as 460 BCE.<sup>4</sup> Avicenna, the prolific Persian philosopher, scientist, and doctor from the Islamic Golden Age (8th-13th centuries)<sup>8</sup> recorded using Hippocrates’ spinal manipulation techniques in his medical book “The Book of Healing.”<sup>4</sup> However, it wasn’t until the 19th century in Sweden, that a systematic and documented application of manipulation to specific musculoskeletal conditions that so deeply informed the orthopedic

medicine approach to clinical care, became evident.<sup>5,6</sup>

The Royal Central Institute of Gymnastics (RCIG), founded in Sweden in 1813 by P.H. Ling, instituted a scientifically-based educational approach to physical medicine that utilized active movement and passive manipulations to treat musculoskeletal conditions.<sup>5</sup> <sup>6</sup>The RCIG was a patriarchal organization that drew on German military training techniques<sup>9</sup> and Chinese manual practices to derive specific applications for health promotion.<sup>5, 8, 9</sup> These medical gymnasts have been cited by scholars as the beginning of the modern profession of physical therapy.<sup>5,9,10</sup> The RCIG was successful, in part, due to formal government support and a comprehensive pedagogical model that emphasized the structural impact of body movements and positioning on certain health conditions.<sup>5, 6</sup> The RCIG was so influential that by 1864 physicians “could not open a [physical therapy]-clinic without an exam from the RCIG.”<sup>5</sup> This early image of the male physical therapist training and working closely with physicians provides a distinctly different perspective from the later understanding of physical therapy as an predominantly female profession that served as an adjunct to traditional medicine. The RCIG established a scientific basis for their educational and clinical methods by tracking patient outcomes related to standardized treatments,<sup>5</sup> a process that continues to be essential to PT practice today.

Graduates of the RCIG were licensed by Sweden’s National Board of Health and emigrated to countries all around Europe where they spread their teachings and practices.<sup>5, 11</sup> Many influential physicians also graduated from RCIG including Jonas Henrik Kellgren and Edgar Cyriax Snr., James Cyriax’s grandfather and father, respectively. By the time that James Cyriax came to prominence in London in the early 20th century, the collaborative relationship that had existed between

therapists and physicians had eroded, in part due to his writings and professional posturing.<sup>5, 6</sup> Scholars have suggested that the influence of physical therapists and their role in medicine was overlooked by physicians who claimed propriety over manual manipulation to further their own professionalization and to settle conflicts of scope of practice.<sup>6</sup> The techniques that had been promoted by therapists at the RCIG were incorporated into orthopedic medicine<sup>6</sup> and this portion of the history of PT was obscured until recent scholars reasserted the link between the RCIG and modern evidence-based physical therapy practices.<sup>4, 5, 6</sup>

As orthopedic medicine began to establish and differentiate itself, the female dominated narrative of physical therapy emerged through the work of nurses and health aides in Europe and the United States. Nurses in the mid to late 19<sup>th</sup> century began using rudimentary exercise and therapeutic massage in their work with injured veterans<sup>4</sup> and in doing so began to establish a matriarchal model of rehabilitative care. In 1894, four nurses, Lucy Robinson, Rosalind Paget, Elizabeth Manley, and Margaret Palmer, founded the Society of Trained Masseuses in the United Kingdom in hopes of protecting and sustaining the practices that they had seen help soldiers recover after injury.<sup>4</sup> This organization would later become known as the Chartered Society of Massage and Medical Gymnastics in 1920, and finally the Chartered Society of Physiotherapy in 1944.<sup>4</sup> Health and nursing students came from all over the world to seek training in the rehabilitation sciences<sup>4</sup> as poliomyelitis reached epidemic levels in the 1940s and 50s and the world wars saw an increase in debilitating, but life sustaining, injuries in the boys and men who returned home. Much of the foundation of the modern practice of rehabilitation medicine and physical therapy can be seen in the training from these organizations that

international students then brought back and spread within their home countries.

One of the students who studied at the Chartered Society of Physiotherapy was Mary McMillan, the American “Mother of Physical Therapy”. McMillan was greatly influenced by orthopedic medicine<sup>3, 4, 6</sup> and even cited P.H. Ling’s gymnastic approach as a foundational concept to her model of physiotherapy in her book “Massage and Therapeutic Exercise.”<sup>5</sup> When she returned from her studies to the United States, McMillan was one of the civilian women who served as “reconstruction aides” during World War I. In this capacity, she was able to spread her approach of rehabilitation in the military hospitals where she worked. The services that reconstruction aides provided included hydrotherapy, electrotherapy, and mechanotherapy<sup>12</sup> which are still practiced in some form today. By the late 1940s, the professional organization that had been started by this group of women volunteers, and led by McMillan, had adopted the name by which it continues to be known today, the American Physical Therapy Association (APTA).<sup>12</sup> The APTA now boasts 95,000 members across the United States with 213 institutions offering advanced physical therapy education.<sup>12</sup> In setting the educational, practice, and ethical standards for the profession of physical therapy in the United States, the APTA continues to build on the traditions established by McMillan, and promote a robust, collaborative and patient centered approach to clinical rehabilitation. Current physical therapy education can trace its roots through McMillan to the practices of the RCIG and European orthopedic medicine, suggesting that the modern approach to rehabilitation medicine, in the United States at least, is a culmination of shared knowledge and techniques from different countries around the world.

The World Confederation for Physical Therapy embodies the goals of the APTA while representing the shared history of PT through its mission to improve global health with international collaboration that promotes the advancement of physical therapy.<sup>13</sup> Originally made up of 11 member organizations, the WCPT is now comprised of 210 member organizations representing over 350,000 therapists from different countries around the world.<sup>13</sup> A video recording of the first WCPT congress in 1953 documented the attendance of over 1000 therapists and medical professionals from 25 different countries for a week long event<sup>13</sup> where participants shared the latest techniques and practices in physical therapy. In addition to capturing the nostalgia of a by-gone era, the video highlights the salience of PT's commitment to the highest quality of patient care. The endorsement from British Minister of Health at the time, Ian McCloud, who opens the congress by recognizing the long history of physical therapy with the objectives of "not just returning the patient to existence, but to a real full, happy, and useful life"<sup>7</sup> reflects the growing recognition of physical therapy at that time as a valued healthcare provider. Further examination of the footage reveals lessons that are applicable to rehabilitation medicine today, including the importance of patient-centered treatments, the role of evidence-based practice, and the power of pooling resources and knowledge to address complex health issues. Most importantly perhaps, the video illustrates how barriers to developing high standards of patient care within rehabilitation medicine can be overcome by establishing strong connections among healthcare professionals.

President of WCPT at the first congress in 1953, Mildred Elson, stated in the video that "In physical therapy, there are no barriers of language or communication. We have a common bond, a common

interest, physical therapy for the patient."<sup>7</sup> In reviewing a brief history of the origins of physical therapy and rehabilitation medicine, the common theme that underlies the diverging professional discourse is that of providing the best care to meet the needs of the patient. Interventions and techniques from medical gymnasts, orthopedic doctors, nurses, and reconstruction aides were all designed to address the common goal of promoting the health and rehabilitation of the patient, regardless professional biases. This continues to be the case today as physical therapists from countries around the world strive, as individuals and as a profession, to claim their identity as rehabilitation specialists with a rich history of growth and innovation. One last lesson that modern therapists may be able to take from their forefathers and mothers who attended the first WCPT Congress, is that many of the perceived barriers to providing high quality patient care may be overcome by returning to our foundation as collaborative, patient-centered, evidence-based health care providers.

*E. Goldberg was a doctorate of physical therapy candidate, Emory University at the time this manuscript was written.*

## References

1. Stearns PN. Why study history. American Historical Association Web site. <https://www.historians.org/teaching-and-learning/why-study-history>. Accessed March 7, 2017.
2. Nicholson S. The evolution of physical therapy. In: *The Physical Therapist's Business Practice and Legal Guide*. Jones and Bartlette Publishers; 2008. [http://www.jblearning.com/samples/0763740691/40691\\_CH01\\_FINAL.pdf](http://www.jblearning.com/samples/0763740691/40691_CH01_FINAL.pdf). Accessed March 7, 2017.
3. Moffat M. Three quarters of a century of healing the generations. *Phys Ther*. 1996; 76: 1242-1252.
4. Pettman E. A history of manipulative therapy. *J Man Manip Ther*. 2007; 15(3): 165-174.
5. MacDonald C. Recognizing 200 years of international OMT practice. Talk presented at: AAOMPT 2013 Annual Conference; October 2013; Sweden.

- <https://kpta.com/userfiles/files/200%20years%20OMPT%20CM.pdf>. Accessed March 7, 2017.
6. Ottosson A. The manipulated history of manipulations of spines and joints? Rethinking orthopaedic medicine through the 19th century discourse of European mechanical medicine. *Medicine Studies*. 2011; 3 (2):83-116.
  7. Macleod I, Elson M, United Motions Picture, Chartered Society of Physiotherapy. The first international congress of the World Confederation for Physical Therapy. Wellcome Library Web site. <http://wellcomelibrary.org/item/b2870678x>. Accessed March 7, 2017.
  8. Wikipedia. Avicenna. Wikipedia Web site. <https://en.wikipedia.org/wiki/Avicenna>. Updated March 21, 2017. Accessed March 24, 2017.
  9. Leeworthy D. Training for battle and play: Swedish gymnastics in Britain, 1890-1914. History on the Dole, notes from the margins of the past Web site. <https://historyonthedole.wordpress.com/2014/05/31/training-for-battle-and-play-swedish-gymnastics-in-britain-1890-1914/>. Accessed March 24, 2017.
  10. Low J. The reconstruction aides. *Amer J Occup Ther*.1992;46: 38-43. <http://ajot.aota.org/article.aspx?articleid=1876533>. Accessed March 7, 2017.
  11. Olson, K. Introduction. In: *Manual Physical Therapy of the Spine*. 2nd ed. St. Louis, MO: Elsevier; 2016.
  12. American Physical Therapy Association. APTA History. APTA Web site. <http://www.apta.org/History/>. Accessed March 21, 2017.
  13. World Confederation for Physical Therapy. WCPT in 2015: growing, unifying, moving physical therapy forward. <http://www.wcpt.org/news/Videos-profile-WCPT-June15>. Accessed March 7, 2017.
  14. World Confederation of Physical Therapy. WCPT in 2015: meeting the needs of members. <http://www.wcpt.org/news/Videos-profile-WCPT-June15>. Accessed March 7, 2017.

## About the Author



*Emma Goldberg is a dual degree DPT/MPH graduate student interested in developing best practices for navigating inter-professional relationships while using humanities and digital scholarship to inform clinical practice. Her interest in public health and physical therapy developed from the hope to combine patient-centered care with community-based wellness initiatives that promote health across the life span.*



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).