

interpret gait analysis data will be refined and standardized. Ultimately, a clinician will likely be able to input kinetics measured with current gait analysis technology into a computerized robotic model that will produce a kinematic gait pattern, or mathematical description of the person's entire gait, that is similar to the individual's actual kinematic pattern. Changing the kinetic inputs in the robotic model could simulate rehabilitation, such as strengthening a particular muscle. The resulting modeled kinematics would help predict the kinematic changes to be expected if the patient were to undergo the treatment.

—Patrick O. Riley and D. Casey Kerrigan

See also Computer Technology; Paralysis.

Further Readings

- Rose, G. K. 1983. "Clinical Gait Assessment: A Personal View." *Journal of Medical Engineering & Technology* 7:273–279.
- Whittle, M. W. 1996. "Clinical Gait Analysis: A Review." *Human Movement Science* 15:369–387.

☐ GALEN (129–CA. 199/216)

Greek physician and philosopher

Galen was a physician from Asia Minor who practiced on both gladiators and rulers, serving as physician to four emperors. He was also a philosopher and author who wrote more than 350 works in Greek on subjects ranging from anatomy to deontology, from philosophy to poetry, from pathology to therapy. He was a vigorous advocate of the tradition of Hippocrates but was equally eager to display his own innovative knowledge and investigations. In particular, Galen enhanced the concept of the four humors as a system of explanation for diseases.

At once arrogant and brilliant, Galen, through his texts and ideas, had a profound influence on elite Western medicine until the nineteenth century, although observations by anatomists and physiologists starting in the sixteenth century (e.g., those of Andreas Vesalius [1514–1564]) began to undercut the power of his ideas.

Galen's descriptions of disabling conditions ranged from fractures and paralyzes to visual impairments

and epilepsy, while his therapeutic interventions embraced dietary changes, fractured limb reductions, and bloodletting. He helped differentiate the trachea and the larynx, thus allowing speech disorders to be pathologized. Galen publicly demonstrated the function of the recurrent laryngeal nerve, which innervates the voice box. He cut the nerve in a squealing pig and thereby "removed" its voice, thus demonstrating both a refined physiological sensitivity and the use of impairment as a marker of physiological dysfunction. Galen's influence on disability, by way of medicine, is at once distant and profound.

—Walton O. Schalick III

See also History of Disability: Ancient West; Medicine.

Further Readings

- Kühn, Karl G. 1997. *Claudii Galeni opera omnia*. New York: Georg Olms.
- Nutton, Vivian. 2004. *Ancient Medicine*. London: Routledge.
- Rose, Martha L. 2003. *The Staff of Oedipus: Transforming Disability in Ancient Greece*. Ann Arbor: University of Michigan Press.

☐ GALLAUDET UNIVERSITY

See Gallaudet, Edward Miner

☐ GALLAUDET, EDWARD MINER (1837–1917)

American educator

Edward Miner Gallaudet, an influential nineteenth-century educator, was the founder of the world's first institution of higher education for deaf people. During his 46-year tenure as the head of the National Deaf-Mutes College (today known as Gallaudet University), Gallaudet was internationally renowned as the originator and chief proponent of the so-called combined method of educating deaf children, a method that stressed a combination of spoken-language training and the use of sign language in the classroom. A

native user of American Sign Language (his mother was deaf), Gallaudet maintained lifelong connections with the American Deaf community largely through “his boys,” the Deaf male graduates of the college.

The youngest son of Thomas Hopkins Gallaudet, cofounder of American Deaf education, Gallaudet was born in Hartford, Connecticut, on February 5, 1837. After a stint as a teacher at the American School for the Deaf from 1855 to 1857, he was invited to establish a school for deaf children in the District of Columbia. The Columbian Institution for the Instruction of the Deaf, Dumb, and Blind was established on February 16, 1857, its college division charter signed by Abraham Lincoln on April 8, 1864. Gallaudet died in Hartford, Connecticut, on September 26, 1917, in the centennial year of the founding of American Deaf education.

—Joseph J. Murray

See also Deaf, History of the; Deaf Culture; Thomas Hopkins Gallaudet.

Further Readings

- Boatner, Maxine Tull. 1959. *Voice of the Deaf: A Biography of Edward Miner Gallaudet*. Washington, DC: Public Affairs Press.
- De Lorenzo, David L. 1987. “Gallaudet, Edward Miner.” Pp. 439–444 in *Gallaudet Encyclopedia of Deaf People and Deafness*, edited by John V. Van Cleve. New York: McGraw-Hill.
- “Dr. Edward Miner Gallaudet Papers.” Gallaudet University Archives, Washington, DC.
- Gallaudet, Edward Miner. 1867. “Report of the President on the Systems of Deaf-Mute Instruction Pursued in Europe.” In *Tenth Annual Report of the Columbia Institution for the Deaf and Dumb*. Washington, DC: Columbia Institution for the Deaf and Dumb.
- . 1983. *History of a College for the Deaf, 1857–1907*. Washington, DC: Gallaudet University Press.
- Gordon, Joseph. 1892. *Education of Deaf Children. Evidence of E. M. Gallaudet and A. G. Bell Presented to the Royal Commission of the United Kingdom on the Education of the Blind, the Deaf, and the Dumb*. Washington, DC: Volta Bureau.
- “Papers of T. H. and Edward Miner Gallaudet, 1806–1958.” Archival Manuscript Collection, Library of Congress, Washington, DC.
- Winfield, Richard M. 1987. *Never the Twain Shall Meet: Bell, Gallaudet, and the Communications Debate*. Washington, DC: Gallaudet University Press.

▣ GALLAUDET, THOMAS HOPKINS (1787–1851)

American educator

Thomas Hopkins Gallaudet was the cofounder of American Deaf education in 1817. A noted orator and evangelical Christian, Gallaudet used his considerable rhetorical skills to garner support from influential citizens and financial assistance from state legislatures for the then outlandish notion of educating Deaf people. Gallaudet held a lifelong interest in education and social reform, campaigning in areas as disparate as the common school movement, work with the mentally ill, and the abolition of slavery.

Gallaudet, born on December 10, 1787, became interested in the education of Deaf people after meeting Alice Cogswell, the Deaf daughter of a neighbor. With funding from Cogswell’s father and other prominent Connecticut citizens, Gallaudet traveled to Europe in 1815 to learn how to teach Deaf children. Dissatisfied by what he saw in British schools for Deaf people, Gallaudet was invited to visit a school in Paris. There, he received training from Deaf teachers Jean Massieu and Laurent Clerc. The latter accompanied Gallaudet back to Hartford in 1816 and helped him establish the first permanent school for the deaf in the United States in 1817, now known as the American School for the Deaf. Gallaudet served as the institution’s principal until 1830. Gallaudet and his wife, Sofia Fowler, a former pupil, had eight children, the eldest and youngest of whom continued their parents’ work with Deaf people. Gallaudet died on September 10, 1851.

—Joseph J. Murray

See also Deaf, History of the; Deaf Culture; Edward Miner Gallaudet.

Further Readings

- Barnard, Henry. 1859. *Tribute to Gallaudet*. New York: F. C. Brownwell.
- Fernandez, James J. 1980. “The Gate to Heaven: T. H. Gallaudet and the Rhetoric of the Deaf Education Movement” Ph.D. dissertation, University of Michigan.
- . 1987. “Gallaudet, Thomas Hopkins.” Pp. 444–447 in *Gallaudet Encyclopedia of Deaf People and Deafness*, edited by John V. Van Cleve. New York: McGraw-Hill.
- Gallaudet, Edward Miner. 1888. *The Life of Thomas Hopkins Gallaudet, Founder of Deaf-Mute Instruction in America*. New York: Henry Holt.