NEUROPEPTIDES

by brain cells and certain other cells. They carry information, and bind to "receptor cells" throughout the body.

Research suggests that this system may provide the key to understanding the body's chemistry of emotion, serving as a form of communication within the entire body.

Pert was among the first researchers to show that opiate drugs such as morphine and heroin, introduced from outside the body, bind to internal receptor sites in the brain. This finding, along with the discovery that the body produces its own, internal, opiate-like chemicals that bind to the same receptor sites, opened a new approach to investigating the roles of brain chemistry and human emotions.

The relationship between neuropeptides and their specific receptor sites has been likened to that of "key and lock." Nueropeptides float through virtually all the body fluids and are attracted onto specific receptors because, in effect, they fit specific locks. This establishes an information system in which neuropeptides "speak" and receptors "listen." Pert believes that this communication system is fundamental to the biochemistry of emotion.

—Editor

conscious control of physiological processes previously thought to be autonomic and not susceptible to voluntary interventions.

Elmer Green, the Mayo Clinic physician who had pioneered biofeedback for treatment of disease, has said, "Every change in the physiological state is accompanied by an appropriate change in the mental emotional state, conscious or unconscious, and conversely, every change in the mental emotional state, conscious or unconscious, is accompanied by an appropriate change in the physiological state." Taylor's question had led me to another insight into the meaning of the discoveries we'd been making about the location of peptides and their receptors, and about the theories we'd been formulating about these molecules of emotion.

If we accept the idea that peptides and other informational substances are the biochemicals of emotion, their distribution in the body's nerves has all kinds of significance, which Sigmund Freud, were he alive today, would gleefully point out as the molecular confirmation of his theories. The body is the host of the unconscious mind! Repressed traumas caused by overwhelming emotion can be stored in a body part, thereafter affecting our ability to feel that part or even move it. The new work suggests there are almost infinite pathways for the conscious mind to access—and modify—the unconscious mind and the body. It also provides an explanation for a number of phenomena that the emotional theorists have been considering.

FILTERING, STORING, LEARNING, REMEMBERING, REPRESSING

motions and bodily sensations are intricately intertwined in a bidirectional network in which each can alter the other. Usually this process takes place at an unconscious level, but it can also surface into consciousness under certain conditions, or be brought into consciousness by intention.

All sensory information undergoes a filtering process as it travels across one or more synapses, eventually (but not always) reaching the areas of higher processes, like the frontal lobes. There the sensory input enters our conscious awareness. The efficiency of the filtering processes, which chooses what stimuli we pay attention to at any given

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