**Tracy’s Davis Discussion**

**Research Methods in Neuroscience**

There a number of techniques that are used to study the brain to understand it while in action. A prominent method is the neurochemical technique that allows researchers to locate neurons that have specific receptors or produces specific neurotransmitters or neuromodulators. The technique is critical because it allows researchers to narrow down on the location of neurons rather than examine the metabolic activities of given regions/parts of the brain (Carlson & Birkett, 2016). Neurochemical methods also allow researchers to determine the amount of chemicals that are secreted by neurons in specified brain parts during various circumstances. The technique is compelling because it allows researchers to find neurons that are associated with particular neurochemicals, and this allows them to determine how a given drug influences behavior. It can be used in first-line investigations of behavior by localizing receptors and measuring brain secretions. The research method can be used to analyze a wide array of substances, and it is useful to analyze substances that do not contain proteins or peptides.

The article, Analytical techniques in neurosciences: Recent advances in imaging, separation, and electrochemical methods, expounds further on neurochemical methods used in the study of the brain. The article explains the importance of this method in understanding neuronal signaling, understanding the role of neurons in controlling behavior, and how neuronal signaling is impaired by drugs/diseases (Ganesana, Lee, Wang &Venton, 2017). Further, the article emphasizes the importance of the research method by highlighting the importance of understanding secretions and the accompanying chemical changes if we are to get deeper insights into neuronal communication. The insightful article highlights various analytical tools that are used in neurochemical techniques such as imaging, separation, and electrochemical techniques to find out what is going inside the brain. The article is valuable as it highlights the importance of neurochemical technique in the study of the brain.

**References**

Carlson, N., & Birkett, M. (2016). Physiology of Behavior. New York: Pearson Education.

Ganesana, M., Lee, S. T., Wang, Y., &Venton, B. J. (2017). Analytical techniques in neuroscience: recent advances in imaging, separation, and electrochemical methods. Analytical chemistry, 89(1), 314-341.