Future Perspectives

✓ Exploring RUT for its potential to improve hippocampal neurogenesis in dentate gyrus by assessing mature and immature neuronal cell markers like, NeuN, Ki67 and DCX by immunohistochemistry and role of RUT on BDNF signaling within the brain

✓ Influence of RUT on blood flow, glucose uptake and metabolic activity in brain regions responsible for learning and memory

✓ Using immunocompromized animals for studying the neurobiology of chemotherapy-induced cognitive impairment for various forms of memory

✓ Use of most commonly used combination of chemotherapeutic agents to understand the influence of clinically relevant chemotherapy cocktail regimens on learning and memory aspects of cognitive function

✓ Exploring the molecular mechanisms underlying neurobiology of chemobrain for diverse chemotherapeutic drugs either alone or in combination which is only possible through animal model developmental studies

✓ Exploring the chemotherapeutic drugs for their chemobrain-inducing potential for various cognitive measures in metastatic forms of animal models of mammary carcinoma

✓ Clinical investigation of RUT for its role to protect from the chemobrain associated cognitive complications in cancer survivors, especially breast cancer survivors who underwent chemotherapy in an attempt to improve the activities of daily living and thereby health related QOL