

Our research group makes synthetic parabens, which are simple ester derivatives of p-hydroxybenzoic acid. These compounds are preservatives found in cosmetics and pharmaceuticals. Studies have shown a preliminary link between parabens and changes in cellular functioning, particularly in cancerous cells. We synthesize novel parabens with controllable physical and chemical properties, such as size and lipophilicity, which are then tested on human skin and melanoma cells by the Parsons group.