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Liberty, WV, 26074. **A high throughput screen of a natural product library for
the discovery of novel antibiotics with efficiency against *Klebsiella pneumoniae*.**

Klebsiella pneumoniae is a gram negative bacterium in the enterobacteriaceae family. This organism is an opportunistic pathogen that has been associated with antibiotic resistance in recent years. The discovery of new antibiotics is critical to combat this rising trend in resistance. The National Center for Natural Products Research (NCNPR) has assembled a library of over 2500 extracts derived from plants, fungi, marine, and algae species with potential antibacterial properties. In partnership with NCNPR, we have developed a rapid and effective method for screening large quantities of organic compounds for antibacterial sensitivity against *K. pneumoniae*. Bacteria were inoculated into a microtiter plate containing liquid growth medium. A small volume of each compound was added to a corresponding well in the microtiter dish. After incubation at 37°C, bacteria growth was measured using a plate reader. Wells lacking treatment or containing antibiotics known to be effective at inhibiting *K. pneumoniae* were used to identify normal or inhibited growth levels respectively. At least four extracts exhibited potential for inhibiting *K. pneumoniae*: blanket flower, smallflower globemallow, Arizona walnut, and tree fern. Future investigations will involve the characterization and a detailed analysis of the antimicrobial efficacy of these compounds.