1. **Robotic Refueling Mission (RRM):**
   * A series of experiments designed to demonstrate and test the tools, technologies, and techniques needed to robotically refuel satellites in orbit.
2. **Advanced Plant Habitat (APH):**
   * An experiment designed to study plant growth in microgravity, providing insights into how plants respond to the space environment. It helps in developing sustainable life support systems for long-duration space missions.
3. **Microgravity Science Glovebox (MSG):**
   * A sealed workspace on the ISS that allows astronauts to conduct experiments with materials, fluids, and other substances in a controlled environment, exploring their behavior in microgravity.
4. **Rodent Research:**
   * Studies using mice as model organisms to investigate the effects of microgravity on various biological systems, providing insights into how the human body might respond to long-term space travel.
5. **Spaceborne Computer:**
   * The deployment of a commercial off-the-shelf computer system to test how well it functions in the harsh environment of space, paving the way for more powerful computing capabilities on future missions.
6. **Cold Atom Laboratory (CAL):**
   * An experiment that produces clouds of ultra-cold atoms (near absolute zero) to study quantum phenomena in microgravity, offering insights into fundamental physics and potentially leading to improved sensors and technologies.
7. **3D Printing in Space:**
   * The use of 3D printing technology on the ISS to manufacture tools, spare parts, and even experimental components, showcasing the potential for on-demand manufacturing in space.
8. **Astrobatics:**
   * The use of small, free-flying robots (Astrobatics) to test autonomous navigation and rendezvous capabilities in microgravity, which is crucial for future space exploration missions.
9. **VEGGIE Plant Growth System:**
   * A system for growing plants in space, contributing to the understanding of how microgravity affects plant growth and providing fresh food for astronauts during long missions.
10. **ISSpresso:**
    * The first espresso machine designed for use in microgravity, allowing astronauts to enjoy freshly brewed coffee on the ISS. It's an example of adapting everyday technologies for space environments.