

Supplemental Figure 1. A: Single transient ¹³C spectrum of urea that had been hyperpolarized using DNP (the ¹³C was present at natural abundance; 1.1%). **B:** Thermal equilibrium spectrum of the same sample acquired after the polarization had decayed. This spectrum was acquired over 65 h (232,128 transients) and demonstrates the large increase in signal-to-noise provided by DNP. Both spectra were acquired at 9.4 T and room temperature. Reproduced from reference¹. **C:** Schematic of a polarizer for sterile use. Reproduced from reference³.