Redx Pharma Plc

- Redx AI division established April 2013 at Alderley Park
- Sixty research scientists (microbiologists, DMPK, computational and medicinal chemistry)
- Focus on overcoming existing anti-microbial resistance mechanisms:
  - Gram +ve program: Development candidate selected
  - Gram –ve program: Lead optimisation

- Work collaboratively with academics, the NHS, BEAM alliance, large pharma and ENABLE
- Open to partnerships; Happy to discuss at BIO
- M.craighead@redxpharma.com
- www.redxpharma.com
Gram negative program overview

- Three series of novel, non-quinolone, inhibitors of the bacterial type II topoisomerases, DNA gyrase and topoisomerase IV
- Potent compounds with broad/narrow spectrum of activity against resistant strains including recent clinical isolates
- Low frequency of resistance with balanced activity at both target enzymes
- PK properties suitable for iv dosing
Gram positive program overview

- Development candidate selected
- Inhibit bacterial DNA Gyrase without chelating Mg$^{2+}$ - by-pass resistance observed with FQ antibiotics
- X-ray studies confirm differential binding from quinolones
- Broad spectrum of activity including resistant strains (S. aureus, S. epidermidis & S. pyogenes)
- Excellent activity in mouse thigh, septicaemia & N. gonorrhoeae models