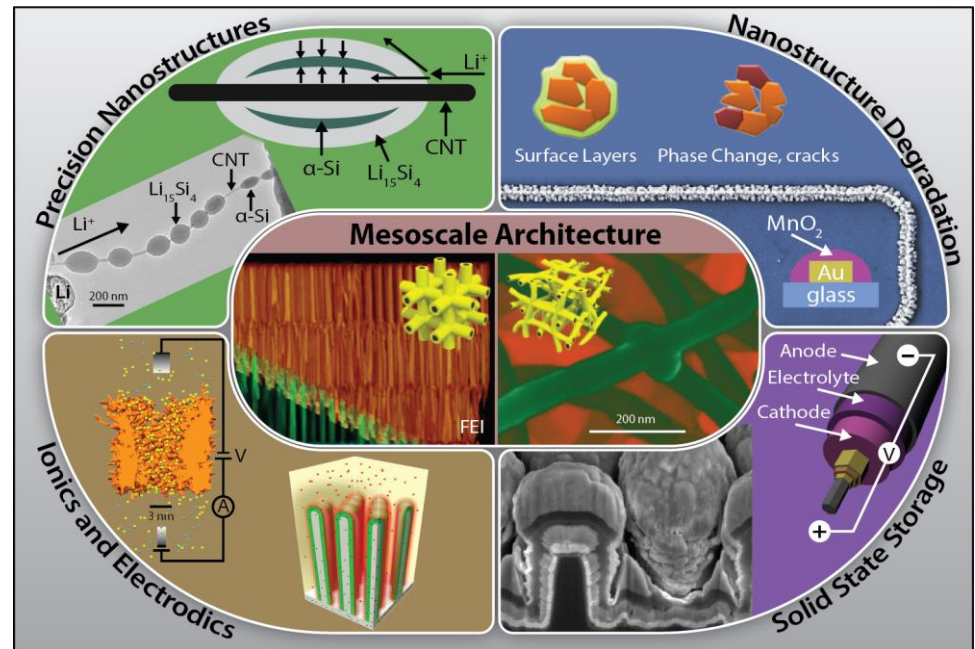


Nanostructures for Electrical Energy Storage (NEES)

Gary W. Rubloff (University of Maryland)

NEES mission: To reveal scientific insights and design principles that enable a next-generation electrical energy storage technology based on dense mesoscale architectures of multifunctional nanostructures.

www.efrc.umd.edu



RESEARCH PLAN

- arrange **precision nanostructures** into **mesoscale architectures** in regular & random configurations,
- investigate **mesoscale ionics & electrodeics consequences**,
- pursue a **science of dynamic nanostructure degradation** addressing both short & long term time scales,
- enable **solid-state nanostructured batteries** for safety, high power & energy.



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NANOSTRUCTURES for ELECTRICAL ENERGY STORAGE



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