

We unlock
the power of the immune system
through bio-inspired nanotechnologies.

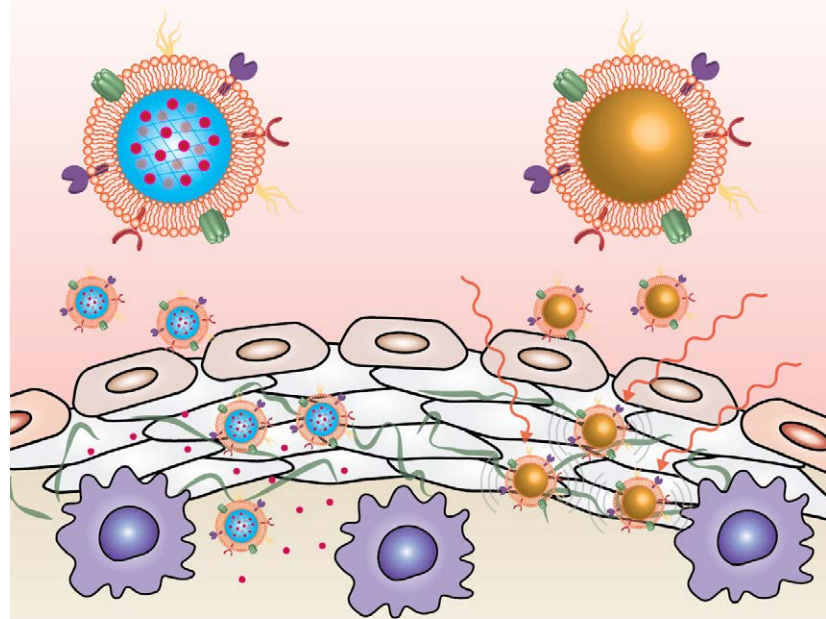
OUR BIO-INSPIRED NANOTECHNOLOGIES:

Activate the immune system
to hone in on disease sites.

Program immune cells
to recognize and clear disease.

Reinstate immune balance
to restore normal function.

We are working to prevent and treat:
cancer, cardiovascular disease,
autoimmune disorders and allergies.



IMMUNO-ENGINEERING WORKFORCE

Some of the biggest advances in human health will take place at the interface of nanotechnologies and immuno-engineering.

We are preparing tomorrow's technical and clinical leaders in this area of immuno-engineering science and technology development.



Center for Nano-ImmunoEngineering

We provide a platform for interdisciplinary collaboration, bringing together scientists, engineers and clinicians from many disciplines across UC San Diego and neighboring institutions.

WE ARE WORLD LEADERS IN BIO-INSPIRED REPROGRAMMING OF NANO-IMMUNO SYSTEMS

ADJUVANTS AND NANOPARTICLES	MANUFACTURE AND DELIVERY	RE-WIRING CELLS: CELL ENGINEERING	DISCOVERY TOOLS
Virus-like particles, biomimetic nanoparticles	Polymer blends, microneedle patches	Biomaterials, circuit engineering, remote control interfacing	AI, machine learning, multi-omics, high throughput screening
Nicole F. Steinmetz, Ph.D. NanoEngineering Dept. Center Director Liangfang Zhang, Ph.D. NanoEngineering Dept. Center Co-Director Michael Sailor, Ph.D. Chemistry and Biochemistry Dept.	Jon Pokorski, Ph.D. NanoEngineering Dept. Joseph Wang, Ph.D. NanoEngineering Dept.	Jack Bui, M.D., Ph.D. Pathology Dept. Nisarg Shah, Ph.D. NanoEngineering Dept. Yingxiao (Peter) Wang, Ph.D. Bioengineering Dept.	Dennis Carson, M.D. Moores Cancer Center Stephen Howell, M.D. Moores Cancer Center Stephen Schoenberger, Ph.D. La Jolla Institute for Immunology Wei Wang, Ph.D. Chemistry and Biochemistry Dept.

BENEFITS OF PARTNERSHIP

- Recruit our top students, post-docs, and residents
- Access to multidisciplinary researchers with shared focus
- Embed a Visiting Industry Fellow in our labs
- Industry-faculty-student research teams
- Fast-track research agreements
- Access to commercialization engine with lab-to-market focus
- Seat on the Center Advisory Board
- Invitations to Research Summits

LEADERSHIP

Nicole F. Steinmetz
Center Director
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