Acute to Chronic Pain Signatures (A2CPS) Program Goal & Significance

The transition from acute to chronic pain is not well understood

A2CPS Program Goal
Identify biosignatures to predict chronic pain susceptibility or resilience

A2CPS Significance
If successful, the program could enable
- Personalized acute pain care to prevent chronic pain
- Reduced reliance on opioids
- Identification of therapeutic targets
A2CPS program components

Clinical Coordinating Center

Multisite Post-operative Pain Clinical Center

Data Integration & Resource Center

‘Omics Data Generation Centers

Clinical Study Oversight

Submit Clinical Samples

Submit Data

Submit Clinical Samples

Submit Data

Submit Data

Biomedical Research Community mines data to identify additional biosignatures
Plan to re-release FOA(s)

Plan:
Re-release one, or both, or a combination FOA, for Multi-site Clinical Centers (MCC)

Major Goals of FOAs:
• enrollment and multimodal longitudinal assessment of a large cohort of patients with acute pain from a musculoskeletal trauma or acute peri-operative pain
• develop a study enrolling patients from a single type of musculoskeletal trauma (e.g. bone fracture) or a surgical procedure (e.g. thoracotomy) with 30% to 60% rate of transition from acute to chronic pain
• retain these patients for assessments at time = 0, 3 months, and 6 months post-trauma
• work with other program awardees to develop clinical protocols, EHR standardization, biospecimen collection protocols, and data deposition/sharing plans

Differences from first issue:
• outreach to broader communities beyond “Pain”: ex: orthopedic and emergency room communities
• more time available to develop applications