



Research Focus Areas:

The Castleman Disease Collaborative Network's (CDCN) patient, physician, and research communities have identified the following priority research questions (though applications to study additional areas will also be considered). One \$63,270 grant is offered.

- What are novel mechanisms involved in iMCD pathogenesis that may be therapeutic targets beyond IL6, mTOR, and JAK/STAT, particularly for treatment-refractory iMCD?
- What biomarkers can be used to improve diagnosis and tracking (predicting impending relapse) of iMCD?
- What are potential mechanisms underlying why some iMCD patients do not respond to anti-IL-6 therapy?
- What biomarkers can be used to predict a high likelihood of treatment response in individual patients?
- What is the etiological driver of iMCD?
- What mouse model (xenograft, mutant, etc) can be developed to be an effective model of human UCD or iMCD?
- What causal inferences or associations can be identified from whole exome sequencing and SNParrays of constitutional DNA from a cohort of 200-300 iMCD patients (grants intending to address this question would propose performing analyses of these datasets being generated)?
- What is the role of specific auto-antibodies identified through auto-antibody screens in iMCD?
- What proteomic patterns may be present in the serum of the 100 iMCD patients who have had auto-antibody profiling performed?
- What insights can be gained from multi-omic profiling of lymph node tissue from iMCD and/or UCD patients (grants intending to address this question would propose performing multi-omic analyses)?

Proposals should seek to explore one of the above priority research questions. We expect the investigator's application to provide information on the preliminary data that exist, hypotheses being tested, relevant experiences performing similar work, and the experimental plan. Proposing studies with a clear therapeutic impact is a plus. The CDCN will support the project through sample procurement, as needed, and can provide its expertise and guidance throughout the grant. For a complete listing of CDCN studies, visit: https://www.cdcn.org/research-pipeline

