CSL Research Acceleration Initiative

Applications close 27th February 2024

CSL is a leading global biotech company that develops and delivers innovative biotherapies to help people living with life-threatening medical conditions live full lives.

CSL’s Research Acceleration Initiative aims to fast-track discovery of innovative biotherapies through partnerships between CSL and global research organizations.

Successful applicants will receive funding of up to $400,000 USD over 2 years.

Interested researchers are invited to:

• **Attend information webinars** to learn more about the initiative: Webinars will be held on:
  - Weds 17th January 4pm ET/ 3pm CT / 2pm MT / 1pm PT or
  - Mon 5th February 12pm ET/11am CT / 10am MT / 9am PT

• **Contact Deanna Scarcella** (des4016@med.cornell.edu) to obtain webinar links and online application submission instructions

• **Submit** a non-confidential, 300 word abstract via the CSL online application portal by 27th February 2024.

The 2024 Research Acceleration Initiative will focus on research proposals that align with a CSL Therapeutic Area and are amenable to or include a Platform as illustrated below. Please see over page for specific Focus Areas.

For webinar invitations and online application instructions please email Deanna Scarcella (des4016@med.cornell.edu)
CSL Research Acceleration Initiative

Focus Areas

CSL is seeking applications that align with a CSL Therapeutic Area and are amenable to or include a CSL Platform in the following Focus Areas:

**IMMUNOLOGY**

Novel targets or best-in-class biologic therapeutics addressing:
1. B cell and plasma cell depletion or inhibition
2. T cell modulation, immune checkpoint agonism or co-stimulatory antagonism, Regulatory T cell stimulation or Tolerance
3. Modulation of cytokines, chemokines and immune super family members (e.g. TNF, IL-1), particularly approaches enabling multi-pathway inhibition
4. Depletion/modulation of innate immune effector cells

Autoimmune diseases:
Inflammatory Idiopathic Myopathies including Dermatomyositis, Primary Sjögren’s Syndrome, Pemphigus Vulgaris, Bullous Pemphigoid, Small Fiber Neuropathy, ANCA-Associated Vasculitis and Autoimmune Hepatitis

Not of interest:
Target discovery campaigns or platforms, intracellular targets, complement inhibition

**HEMATOLOGY**

Acute hemorrhage control and hemorrhagic stroke
1. Novel biologic therapies to treat and prevent acute hemorrhage (e.g. intracerebral hemorrhage (ICH), reversal of anti-coagulation/anti-platelet associated bleeding)
2. Novel biologic targets and therapies for the treatment of secondary brain injury in subarachnoid hemorrhage and ICH
3. Omics approaches for patient stratification and drug discovery

Acute thrombotic conditions (macro- and micro-circulation)
1. Novel biologic therapies for targeted fibrinolysis/thrombolysis in acute thrombosis (ischemic stroke, pulmonary embolism)
2. Novel biologic therapies to treat and prevent microvascular thrombosis and endotheliopathies (e.g. thrombotic micro angiopathies, anti phospholipid syndrome and disseminated intravascular coagulation)

Benign hematolytic adjacencies
1. Novel biologic therapies for the treatment of anemias
2. Novel biologic therapies to treat bone marrow disorders

**ORAL DELIVERY**

Technologies enabling oral delivery of biologics (e.g. antibodies and other protein therapeutics)

**CARDIOVASCULAR AND METABOLIC**

Atherosclerotic plaque stabilization in high-risk patient groups
Novel targets or biologic therapies to prevent atherosclerotic plaque rupture/erosion and Major Adverse Cardiovascular Events (MACE)

Rare lipid disorders
Novel targets or biologic therapies (including gene therapies) for rare/severe lipid disorders e.g. homozygous familial hypercholesterolemia, hypertriglyceridemia

Myocarditis
Novel targets or biologic therapies for immune checkpoint inhibitor myocarditis

Inflammatory cardiomyopathies
Novel targets or biologic therapies for inflammatory cardiomyopathies

**NPHROLOGY & TRANSPLANT**

Acute and chronic solid organ transplant rejection (kidney/lung)
Novel biologic therapies or targets to prevent or treat acute and chronic solid organ transplant rejection of the kidney and lung

Chronic graft versus host disease (GvHD)
Novel biologic therapies for the treatment and prevention of chronic GvHD

Tolerance for organ transplant rejection
Novel biologic therapies for the induction of tolerance to prevent or treat organ transplant rejection

**VACCINES**

Respiratory vaccines
1. New antigenic targets (epitopes or combinations)
2. Methods (e.g. artificial intelligence/machine learning) to predict respiratory viral evolution/pathogenicity to inform vaccine development

New vaccine targets
Development of novel targets/approaches for any disease

RNA delivery and therapeutics
1. RNA delivery, enhanced stability, route of administration and/or expression strategies
2. mRNA-encoded protein therapies encompassing cellular targeting technologies

Immune mechanisms
Understanding innate and adaptive responses to vaccines

**RESPIRATORY**

Idiopathic pulmonary fibrosis, pulmonary sarcoidosis and progressive pulmonary fibrosis
1. Novel biologic therapies or target proposals derived from translational or biobank cohorts
2. Therapies targeted at reversing remodelling of fibrotic lung tissue
3. Multiomics-based approaches to target discovery

Community acquired pneumonia (CAP)-associated complications
(Acute Respiratory Distress Syndrome (ARDS), Sepsis, Acute kidney injury (AKI))
1. Novel biologic therapies or target proposals derived from translational or biobank cohorts
2. In Silico approaches for patient stratification to delineate CAP patients at risk for ARDS/Sepsis/AKI

**GENE THERAPY**

Gene editing / genomics
1. Improve insertion/editing efficiencies in vivo
2. Genetic elements enhancing regulation of cells of the immune system (e.g., promoters and enhancers)

In vivo Delivery
1. Delivering nucleic acid templates for insertional gene editing
2. Targeting moiety for hematopoietic stem cells

GT safety
Technologies that minimize serious adverse events from insertional gene editing

**PLASMA PROTEIN RESEARCH**

Novel plasma therapeutic candidates
1. Seeking plasma candidates aligned with CSL’s therapeutic areas
2. CSL can provide native human plasma proteins (≥ µg/L plasma concentration) for preclinical proof-of-concept studies

Novel association of plasma protein function with disease
1. Based on healthy and patient clinical data sets aligned with CSL’s therapeutic areas, or
2. Access to patient data sets with corresponding clinical data to enable association studies to be performed

Novel methods for plasma protein purification
Protein purification systems capable of targeted purification from plasma with high purity at research scale (methods transferrable to manufacturing scale will be prioritized).

CSL is also interested in new uses for our existing products. If you have a proposal in this area, please e-mail RAI@csl.com.au to discuss.