CSL Research Acceleration Initiative

Applications close 20th February 2025

WHY COLLABORATE WITH CSL?

Funding
of up to $400,000 USD over 2 years

Access global capabilities and expertise
CSL scientific champion assigned to provide industry guidance and help you leverage our global capabilities

Publish with CSL
270+ publications with our collaborators since 2020

Accelerate
Translation of your research into new therapies

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.

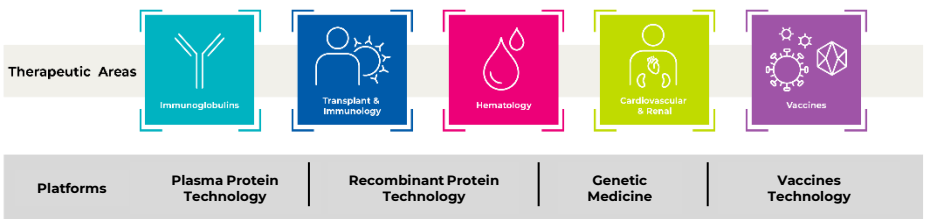
Successful applicants will receive funding of up to $400,000 USD over 2 years.

Interested researchers are invited to:

Attend information webinars to learn more about the initiative: 22 Jan 2025 10 am CST or 6 Feb 2025 10 am CST

- **Contact** Sam Chen at samchen@mail.cmu.edu.tw to express interest in applying and to obtain online application submission instructions.
- **Submit** a non-confidential, 300 word abstract via the CSL online application portal by **20th February 2025.**

The 2025 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 Sam Chen at samchen@mail.cmu.edu.tw

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**:

CARDIOVASCULAR AND RENAL

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)

Homozygous familial hypercholesterolemia

Gene therapy approaches

Immune checkpoint inhibitor myocarditis

Novel targets or biologic therapies
Biomarker approaches for patient stratification

Inflammatory cardiomyopathies

Novel targets or biologic therapies
Biomarker approaches for patient stratification

Rare genetic renal disease

Novel targets or biologic and genetic medicine therapies for e.g. autosomal dominant polycystic kidney disease (ADPKD)

Autoimmune glomerulonephritis indications

Novel targets or biologic therapies for e.g. primary membranous nephropathy (pMN) and focal segmental glomerulosclerosis (pFSGS)

Kidney-targeted drug delivery

Novel ways to target podocytes, glomerular endothelial cells, mesangial cells, parietal cells, and renal tubular epithelial cells

PLASMA PROTEIN RESEARCH

Novel therapeutic candidates derived from human plasma

Novel therapeutic proteins targeting diseases aligned with CSL Therapeutic Areas. CSL will support the planning and execution of pre-clinical testing, including providing plasma-derived proteins

Plasma protein formulation & delivery

High-concentration formulation and delivery methods for plasma protein therapeutics

Engineered affinity binders for plasma protein purification

Methods that enable engineering of affinity binders for selective protein purification from blood plasma. Particular interest in transformative methods (including in silico engineering) that allow generation of many selective binders in parallel

ORAL DELIVERY

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

HEMATOLOGY

Thrombotic microangiopathies

Novel biologic therapies applicable to a broad spectrum of thrombotic microangiopathies (TMAs; pan-treatment)

Acute hemorrhage control and Patient Blood Management (PBM)

Novel pro-hemostatic therapies:

- "Universal" treatment of acute bleeds (Direct Oral Anticoagulants AND anti-platelet agent-associated hemorrhage)
- Treatments for targeting hyperfibrinolysis

Non-viral in vivo gene therapy

1. Next generation non-AAV-based gene therapy for Hemophilia A
2. In vivo HSC-targeted gene therapy for sickle cell disease
3. In vivo liver-targeted gene therapy for hereditary hemochromatosis

Iron metabolism

1. Novel approaches for treating iron deficiency and anemia related to iron metabolism
2. Novel formulation approaches (oral iron supplementation)
3. Novel therapies to treat iron overload conditions

VACCINES

New infectious disease vaccine targets

1. Respiratory pathogens a priority
2. New antigenic vaccine targets without current treatments
3. Methods (e.g. AI/machine learning) to predict viral evolution/pathogenicity to inform vaccine development
4. New approaches to routes of administration
5. New ambient stability technology for vaccines (protein)

RNA delivery

1. RNA delivery, enhanced stability, route of administration and/or expression strategies
2. mRNA cellular targeting technologies

Immune Mechanisms and delivery

1. Modulating innate and/or adaptive responses to vaccines

TRANSPLANT & IMMUNOLOGY

Pathomechanisms of interest

Inhibition of B and T cell responses
Costimulatory blockade, cell depletion modalities

Novel therapies for targeting inflammation
Multi-pathway inhibitors, recombinant mAbs, other modalities to modulate and reduce inflammatory pathways (i.e. DAMP signaling, cytokine pathways, others)

Strategies to induce tolerance for Transplantation and Autoimmune diseases
Novel biologic therapies for the induction of tolerance

Indications of interest

Novel biologic therapies for the treatment and prevention of:

1. Chronic graft versus host disease (cGvHD), antibody-mediated rejection (AMR), Chronic lung allograft dysfunction (CLAD) and Solid Organ Transplant (SOT) rejection
2. Primary Sjögren's Syndrome, Idiopathic Myopathies and Systemic Sclerosis

GENETIC MEDICINE

Gene editing

1. Improve large insertional editing efficiencies in vivo
2. Technologies / assays to improve genome editing safety
3. Large nucleic acid template delivery

Gene expression

1. Tissue/cell-specific or controllable expression of Gene of Interest (GOI)
2. Genetic elements enhancing regulation of cells of the immune system
3. RNA/DNA vectors that achieve durable expression of GOI
4. RNA modifications (base modification, Cap, poly-A tail)

In vivo gene delivery

1. Nanoparticles (LNP or other) achieving:
   - Tissue-specific delivery (liver, blood, kidney, others)
   - Low reactogenicity with potential for re-dosing
2. Targeting moiety for immune cells
3. Novel route or device of administration

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.