Primary Immune Deficiency Treatment Consortium

NEWSLETTER

Summer 2025 | Issue 23

Group picture of the attendees of the PIDTC Annual Workshop on a staircase

Greetings from Drs. Rebecca Marsh, Chris Dvorak, Elie Haddad, and Troy Torgerson, Multi-PIs

Hello PIDTC Members,

We hope that everyone is gearing up for some well-deserved time off over the upcoming summer months.

We would like to give a huge shout out to all of you who have made tremendous efforts towards finalizing the data cleaning. With the impending closures, we can transition our focus to data entry into the REDCap databases that are in use and supported by the CCHMC DMCC.

We've also been busy with modernizing knowledge transfer at PIDTC. Our PIDTC video podcast, hosted by Jack McDonnell (Cleveland Clinic) and Elie Haddad (St. Justine), debuted on the PIDTC YouTube channel! This episode features special guests Blachy Davila-Saldana (Cincinnati Children's) and Jessie Alexander (Stanford) who will discuss the novel findings from their recently completed PIDTC 6904 WAS manuscript.

Last, huge thanks to everyone for continuing to enroll patients. We are very fortunate that our community remains strong and collaborative.

Cheers!

Rebecca, Chris, Elie, and Troy

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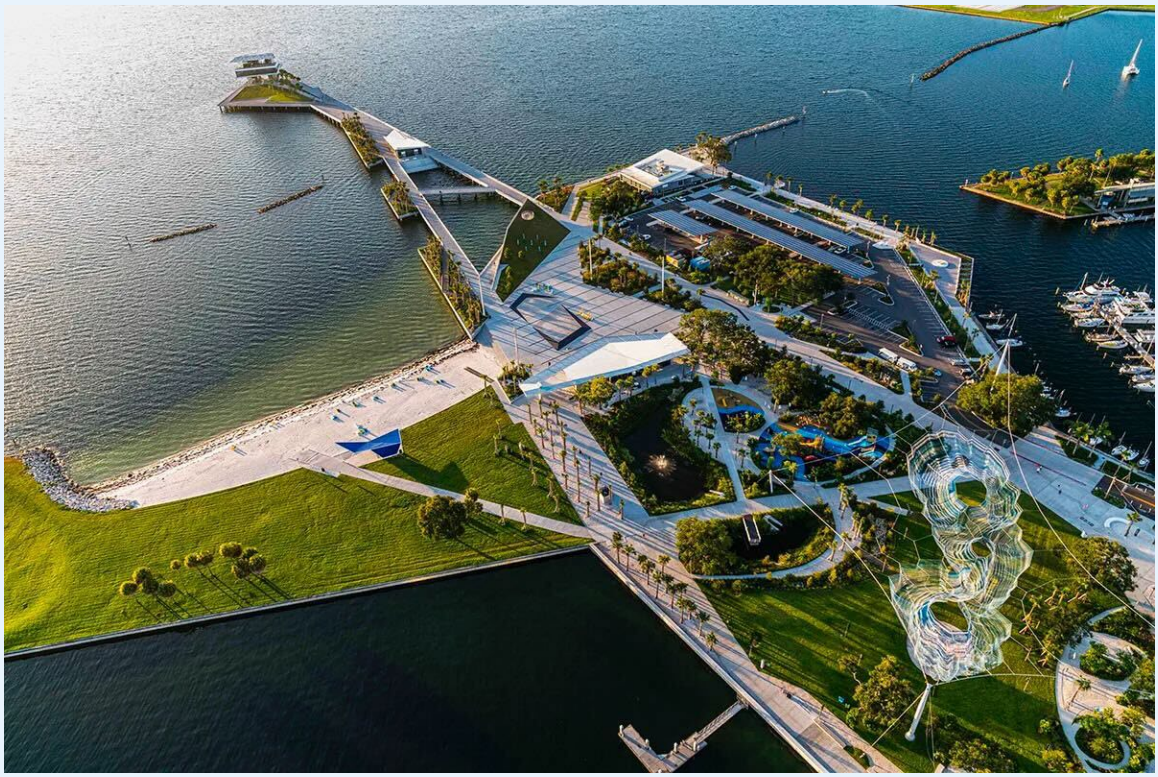
PIDTC Education Day & 14th Annual Scientific Workshop in St. Petersburg, Florida

The PIDTC hosted our **Education Day** on March 9th-10th, where we once again explored unique aspects of diagnosis and management of primary immunodeficiencies with leaders in the field.

This was followed by our **Scientific Workshop** from March 10th-13th. The workshop was a valuable experience, with the vast majority of attendees rating the content as perfectly balanced between topics and overall "excellent" (100% of respondents).



Above: The attendees of the annual workshop listening to a presentation
Below: An aerial view of the St. Petersburg Pier

PIDTC Education Day & 14th Annual Scientific Workshop in St. Petersburg, Florida

We would like to thank Dr. Jen Leiding and the incredible team at Johns Hopkins All Children's Hospital for hosting the workshop and running a smooth and seamless event. Our event could not have been a success without your hard work and contributions!

Above: Dr. Jennifer Leiding speaking to the workshop attendees
Below: A group picture of the Johns Hopkins All Children's Hospital coordinators

Some of the 2025 Workshop Speakers...

The PIDTC would like to thank our speakers for their time, presence, and perspectives.

Dr. Bénédicte Neven discussed late-onset enteric virus infection associated with hepatitis (EVAH) in transplanted SCID patients.

Dr. Emma Morris presented current research in inborn errors of immunity and the development of gene therapies for SCID patients.

Dr. Dusan Bogunovic spoke on the genetic architecture of incomplete penetrance.

Dr. Cassandra Josephson discussed the impact of microbial dynamics on B cells responsible for anti-ABO(H) blood group antibody formation.

Dinner at the St. Petersburg Museum of History

A dinner reception was held at the St. Petersburg Museum of History, which houses art galleries, a history exhibit, and Dennis Schrader's collection of autographed baseballs, the largest of its kind.

Top: The attendees of the Annual Workshop at dinner in the main hall of the St. Petersburg Museum of History
Middle: Dennis Schrader posing with his collection of autographed baseballs
Bottom: Picture of the St. Petersburg Museum of History

Dr. Jennifer Puck: Lifetime Achievement Award

Dr. Puck receiving a standing ovation when her award was presented.

The PIDTC was proud to present Dr. Jennifer Puck with the 2025 PIDTC Lifetime Achievement Award.

Dr. Puck developed the newborn screening method for SCID which quantitates T-cell receptor excision circles (TRECs) using DNA from universally collected infant dried blood spots. This screening has been implemented in all 50 states in the U.S. since the end of 2018, as well as many countries worldwide. Dr. Puck's work has made possible the early detection of SCID, in turn leading to fewer infections, earlier transplants and improved outcomes.

Dr. Puck has been one of the PIDTC's Principal Investigators under the U54 grant and helped lead the PIDTC for 7 years.

Remembering Dr. William Tse

It is with great sadness that I inform you of the unexpected passing on March 11, 2025, of William (Bill) Tse, MD, PhD, who was part of the Stem Cell Transplant team in our division here at Lurie Children's (and Children's Memorial) from 2003 to 2018.

Dr. Tse was a beloved member of our division - an outstanding clinician, researcher, educator, and colleague. Many of us fondly remember his infectious enthusiasm for clinical medicine and science. He had a great sense of humor and a trademark laugh you could hear from down the hall. Dr. Tse received his medical degree from the University of Hong Kong Faculty of Medicine in 1985. After several years of advanced training abroad, he completed additional residency training at Stanford and hematology/oncology fellowship training at Boston Children's. During his time at Lurie, he led the development of clinical protocols aimed at using stem cell transplants to treat primary immunodeficiency disorders while running his stem cell lab.

In 2018, he was recruited by the University of Louisville and Norton Children's Hospital to help build and lead their pediatric stem cell transplant program as well as to branch his research out into CAR T-cell therapy and cellular immunotherapies. Bill touched the lives of many patients, families, colleagues, and trainees.

A full obituary can be found here: https://louisville.edu/medicine/departments/pediatrics/press-releases/university-of-louisville-school-of-medicine-and-norton-children2019s-mourn-the-loss-of-dr-william-tse-a-world-renowned-pediatric-hematologist-oncologist-and-world-renowned-pediatric-hematologist-oncologist-passed-away-march-12-2025

Sincerely,
Sonali Chaudhury, M.D.
Division of Pediatric Hematology/Oncology/Stem Cell Transplantation
Ann & Robert H. Lurie Children's Hospital of Chicago
Northwestern University Feinberg School of Medicine

PIDTC Podcast *Immune Matters* Debut

The first episode of the PIDTC podcast *Immune Matters* debuted on the PIDTC YouTube channel on May 31, 2025! The podcast is hosted by Dr. Jack McDonnell and Dr. Elie Haddad, who discuss various immunology topics with special guests.

In this episode of PIDTC: Immune Matters, Dr. Jack McDonnell and Dr. Elie Haddad, along with guests Dr. Blachy Davila and Dr. Jessie Alexander, delve into Wiskott-Aldrich syndrome, a rare X-linked immunodeficiency affecting boys. They discuss the clinical manifestations, management strategies, and the importance of bone marrow transplantation as a definitive treatment. The conversation highlights a recent study analyzing transplant outcomes and conditioning regimens, emphasizing the need for timely intervention and collaboration in research to improve patient care.

Click here to watch the first episode: https://www.youtube.com/watch?v=6rtyQ9pLPRA&t=1s

Protocol Updates

Severe Combined Immunodeficiency (SCID) – 6901/6902/6907

Protocol 6907 is now open at 42 centers and is actively accruing all available SCID patients, both newly diagnosed and previously treated, using our modular case report forms to assemble the premier database on treatment and outcomes of patients with SCID. As you continue to enroll patients, please complete the case report forms promptly, especially for newly enrolled prospective patients! We will have a data monitoring plan for the protocol that should keep everyone up to date and limit the need for queries to be sent out later for 6907.

Along these lines, a very BIG THANK YOU for responses to the queries to complete the 6901 and 6902 data sets. These datasets are permanently closed as of the end of May and will not be updated further, though they will be available for data extraction and analysis for projects going forward. The SCID working group is always happy to hear new proposals for potential analyses to be performed on this rich dataset.

Finally, we are interested to engage with all center faculty and trainees to participate in the SCID Working Group calls, which currently occur on the 1st, 3rd, 4th and 5th Friday of each month from 3-4pm EST. To become more involved in the SCID working group, please reach out to SCID Leads, Jen Heimall (heimallj@chop.edu) and Geoff Cuvelier (geoffrey.cuvelier@albertahealthservices.ca).

Chronic Granulomatous Disease (CGD) – 6903/6908

The 6903 overall CGD paper was published in Blood in December 2023. Papers describing transplant outcomes for p47phox-deficient CGD and the intestinal microbiome and metabolome signatures in patients with CGD have also been published. The CGD team is now working on several additional manuscripts, including further microbiome papers.

Protocol 6903 is closed to enrollment, and final corrections were made prior to the permanent closure of the legacy database at the end of May. Outstanding data entry must be done for patients enrolled to 6903 by this date.

CGD Protocol 6908 has been activated at 36 PIDTC centers. We welcome anyone interested in joining our CGD calls. Reach out to the CGD program managers Lisa Lim (lisa.lim@ucsf.edu) and Jessica Ni (jessica.ni@ucsf.edu) with any questions related to 6903 data completion or 6908 enrollment.

Primary Immune Regulatory Disorders (PIRD) – 6906

The 6906 PIRD REDCap database was completed and made available for data entry in December 2024. Please make sure to enter all information for patients who were enrolled and confirmed eligible before the REDCap database opened so that their eligibility information can be entered promptly.

There are now 83 patients enrolled in PIDTC 6906 from the 34 sites that have activated this protocol. Thank you for all your hard work! Please keep consenting and enrolling potential patients and submitting their eligibility data promptly.

The PIRD Working Group is recruiting eligibility reviewers to help review cases both offline and during our semiweekly working group calls, as well as central facing reviewers for data entry. Please contact Lisa Lim (lisa.lim@ucsf.edu) and Rafael Ricon (rafael.ricon@ucsf.edu) if you are interested in participating.

Ongoing Clinical Trials

C-SIDE

This trial aims to test the efficacy of regimens containing busulfan targeted to 30 mg*h/L vs 60 mg*h/L in patients with X-linked, JAK3, and RAG1/RAG2 SCID. To date, 13 IL2RG/JAK3 and 10 RAG1/RAG2 patients have been enrolled. The vast majority of patients have done very well with reconstitution of T cells and varying degrees of humoral immune reconstitution. We encourage all sites to offer enrollment on CSIDE to every eligible patient. If you have any questions, please email **Sung-Yun Pai, MD** (sung-yun.pai@nih.gov), **Mike Pulsipher, MD** (mpulsipher@chla.usc.edu), and **Janelle Olson, MD** (jolson@nmdp.org).

UCSF Artemis SCID Gene Therapy

In this trial, newly diagnosed or previously treated patients with insufficient immunity due to ART-SCID receive "lentiviral gene transfer," also called "gene therapy." A normal copy of the DCLRE1C gene is inserted into blood-forming stem cells that grow and develop into all blood lineages. The inserted gene provides correct instructions to the defective stem cells so that functioning T and B lymphocytes can develop. So far 10 patients have been treated.

For eligibility or more information about the study, please contact: **Mort Cowan, MD** (Mort.Cowan@ucsf.edu) or **Jennifer Puck, MD** (Jennifer.Puck@ucsf.edu).

Clinical Trial at Mayo for LADII Deficiency

A Phase 3 Randomized, Double-blind Crossover Study to Assess the Efficacy and Safety of AVTX-803 in Subjects with Leukocyte Adhesion Deficiency Type II (LAD II; also called SLC35C1-CDG) enrolled the first patient at Clinical Genomics, Mayo Clinic Rochester.

The study enrolls LAD II patients older than 6 months receiving dietary supplements containing L-Fucose and randomizes patients into a two-period study with a withdrawal phase (placebo) and treatment phase (L-Fucose) with crossover. Patients with abnormal sialyl-Lewis antigen and a history of recurrent infections are eligible for the study. Please see the link or contact **Jennifer Lin** (huiyil@augtx.com) for more information.
Website: https://clinicaltrials.gov/study/NCT05462587

PIDTC: Summer 2025

Newsletter brought to you by the PIDTC Program Management Team. Thank you to our partners at the RDCRN/DMCC!

Got announcements?
Email: rafael.ricon@ucsf.edu