

Pediatrics

Akihiko Saitoh, M.D., Ph.D.

We have been providing tertiary medical care for sick children at Niigata University Medical and Dental Hospital, educating medical students and graduate students, and conducting medical research in the field of pediatrics at Niigata University Graduate School of Medical and Dental Science.



Research and Clinical interests

Main Research Interests

1. Infectious disease: viral diagnosis in children, pathogenesis of parechovirus-A3 infection
2. Hematology/oncology: cancer immunotherapy by natural killer cells, CAR-T, etc. for pediatric cancers
3. Endocrine/metabolism: genetic evaluation of endocrine/metabolic diseases
4. Cardiology: biomarkers for Kawasaki disease
5. Neonatology: microbiome, genetic factors for chronic lung diseases
6. Nephrology: a role of macrophage for the pathogenesis of nephrotic syndrome and IgA nephropathy

Clinical Interests

We have 45 beds at the Pediatric Ward and 25 beds at NICU/GCU at the Niigata University Hospital, which provides tertiary care for sick children, based their needs, collaborating with specialists in different medical fields. Special fields include diagnosis and treatment of serious infectious diseases and health-care associated infections, pediatric cancers, endocrine/metabolic diseases, congenital heart diseases, complicated Kawasaki diseases, kidney diseases, care for newborns with prematurity and congenital diseases, etc.

Materials and methods for collaborations

1. Providing assays and diagnostic methods for viral diagnosis in children, including real-time PCR methods, assays for neutralizing antibodies, etc.
2. Providing methodologies/strategies to establish CAR-T therapy for pediatric cancers
3. Providing genetic evaluation for endocrine/metabolic diseases
4. Providing biomarkers for Kawasaki disease
5. Providing methodologies to evaluate macrophage for kidney diseases

Links to additional info

Recent representative publications from our laboratory

1. Habuka R. et al. Innate Immune Responses in Serum and Cerebrospinal Fluid from Neonates and Infants Infected with Parechovirus-A3 or Enteroviruses. *J Infect Dis.* 2020 (in press)

<https://academic.oup.com/jid/article-abstract/doi/10.1093/infdis/jiaa131/5810901?redirectedFrom=fulltext>

2. Izumita R, et al. Intrafamilial Transmission of Parechovirus A and Enteroviruses in Neonates and Young Infants. *J Pediatric Infect Dis Soc.* 2019;8:501-506.

<https://academic.oup.com/jpids/article-lookup/doi/10.1093/jpids/piy079>