Hidetoshi Takada

Faculty of Medicine

E-mail : TakadaH@md.tsukuba.ac.jp
Lab web page : http://www.md.tsukuba.ac.jp/clinical-med/pediatrics/
Forest of Scholars : https://ura.sec.tsukuba.ac.jp/unit-members?kid=70294931
Kakenhi : 70294931 Orcid : 0000-0002-0741-5060
Affiliation : Department of Child Health, Faculty of Medicine, University of Tsukuba, Tsukuba

Theme

- Pediatrics
- Growth, Development and Child Health

Keyword Pediatric Disorders, Diagnosis, Genetic Disorders, Gene Therapy

Highlight

Major Scientific Interests of the Group

Physiologic and pathologic processes of growth and development in terms of molecular mechanism in embryogenesis, differentiation, apoptosis and regeneration. Development of methods to improve human health and control diseases on the basis of the above results.

Projects for Regular Students in Doctoral or Master's Programs

1) Molecular mechanism of diseases of children.
2) Functional and quantitative analysis of the development of children with and without diseases.
3) Establishment of novel gene therapy.

Study Programs for Short Stay Students (one week – one trimester)

1) Surface marker analysis of peripheral blood cells, and use of flow-cytometer for molecular functional analysis.
2) Genetic analysis of diseases of children.
3) Functional and quantitative analysis of child development.
4) Culture of stem cells and functional analysis of cord blood cells.
5) In vivo analysis using gene knockout mice.

Other Faculty Members

Associate Professor : Yayoi Miyazono, Tatsuyuki Ohto,
Lecturer : Hiroko Fukushima, Rhoko Suzuki, Manabu Tagawa, Atsushi Iwabuchi, Taku Murakami, Yu Kanai

Applications and Prospects

- To Clarify the Molecular Mechanism of Normal Growth and Development. Whole Genome Analysis and Development of New Diagnostic System including Newborn Screening for Early Diagnosis of Pediatric Disorders. Use of National Database, Molecular Genetics and Immunology to Clarify Pathophysiology of Pediatric Disorders.

Literature, intellectual property, work

- Quantitative assessment of fine motor skills in children using magnetic sensors. Enokizono T, Ohto T, Tanaka M, Maruo K, Sano Y, Kandori A, Takada H. Brain Dev. 2020 Jun;42(6):421-430.
- Utilization of a novel Sendai virus vector in ex vivo gene therapy for hemophilia A. Yamaki Y, Fukushima T, Yoshida N, Nishimura K, Fukuda A, Hisatake K, Aso M, Sakasai T, Kijima-Tanaka J, Miwa Y, Nakanishi M, Sumazaki R, Takada H. Int J Hematol. 2021 Apr;113(4):493-499.
- Novel ACOX1 mutations in two siblings with peroxisomal acyl-CoA oxidase deficiency. Morita A, Enokizono T, Ohto T, Tanaka M, Watanabe S, Takada Y, Iwama K, Mizuguchi T, Matsumoto N, Morita M, Takashima S, Shimozawa N, Takada H. Brain Dev. 2021 Mar;43(3):475-481.