

PEDIATRIC RESEARCH CENTER NEWSLETTER

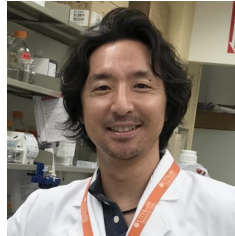
November—December 2019



McGovern
Medical School

Dr. Yoshiro Komatsu's Laboratory

Dr. Hiro Yamaguchi



Dr. Hiro Yamaguchi is a postdoctoral fellow in Dr. Yoshiro Komatsu's Laboratory in the Pediatric Research Center since 2018. Hiro was born and raised in Japan. Hiro received his DDS in 2012 at Tokyo Medical and Dental University in Japan, and his Japanese National Dental License in 2012. Hiro received his PhD degree in 2016 at Tokyo Medical Dental University, Department of Orthodontic Science. Subsequently, he completed his training as an orthodontist and he earned his diploma from the Japanese Board of Orthodontics from the Japanese Orthodontic Society in 2017. Dr. Yamaguchi has 7 years of clinical experience as an orthodontist and dentist. During this time, Hiro consulted many patients with different congenital anomalies such as cleft palate, Treacher Collins syndrome, Apert syndrome, among others. This experience changed his focus from clinical to research and led him to the United States to pursue collaborations in research. He is very passionate about research and strongly wants to contribute to discovering the pathogenesis of craniofacial congenital diseases, using mouse genetic technology. His current work could lead to discovering new treatments, prevention and diagnosis for some craniofacial congenital diseases. Dr. Yamaguchi has received awards for best presentation in the 75th and 77th Japanese Orthodontic Congress and 11th Asian Pacific Orthodontic Conference. Also, Dr. Yamaguchi earned his fellowship supported by Uehara Memorial Foundation in Japan, beginning January 2020 through December 2020.

NIH DEADLINES

November 16	R03, R21, R33, R21/R33, R34, R36, U34, UH2, UH3, UH2/UH3
December 8	F Series Fellowships (including F31 Diversity – NOT-OD-17-029) new, renewal, resubmission
December 12	R13, U13 All - new, renewal, resubmission, revision
February 5	Research Grants – R01 (Investigator-initiated basic and applied research) new
February 12	Career Development – K series new
February 16	Research Grants – R21 (Exploratory/Developmental) new
February 25	Academic Research Enhancement Award (AREA) – R15 new, renewal, resubmission, revision
March 5	Research Grants – R01 (Investigator-initiated basic and applied research)

PUBLICATIONS

Carlson JC, Nidey NL, Butali A, Buxo CJ, Christensen K, Deleyiannis FW, Hecht JT, Field LL, Moreno-Urbe LM, Orioli IM, Poletta FA, Padilla C, Vieira AR, Weinberg SM, Wehby GL, Feingold E, Murray JC, Marazita ML, Leslie EJ. Genome-wide interaction studies identify sex-specific risk alleles for nonsyndromic orofacial clefts. *Genet Epidemiol.* 2018 Oct;42(7):664-672. doi: 10.1002/gepi.22158. Epub 2018 Sep 11. PMID: 30277614; PMCID: PMC6185762.

Blackburn ATM, Bekheirnia N, Uma VC, Corkins ME, Xu Y, Rosenfeld JA, Bainbridge MN, Yang Y, Liu P, Madan-Khetarpal S, Delgado MR, Hudgins L, Krantz I, Rodriguez-Buritica D, Wheeler PG, Al Gazali L, Saeed AM, Al Shamsi M, Gomez-Ospina N, Chao HT, Mirzaa GM, Scheuerle AE, Kukulich MK, Scaglia F, Eng C, Rankin Willsey H, Braun MC, Lamb DJ, Miller RK, Bekheirnia MR*. DYRK1A-related intellectual disability: a syndrome associated with congenital anomalies of the kidney and urinary tract. *bioRxiv [Preprint].* 2019 January 10. *Genet Med.* 2019 Jul 2. [Epub ahead of print] PMID: 31263215

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Heallen TR, Kadow ZA, Wang J, Martin JF. Determinants of Cardiac Growth and Size. *Cold Spring Harb Perspect Biol.* 2019 Oct 15. pii: a037150. doi:10.1101/cshperspect.a037150. [Epub ahead of print] PubMed PMID: 31615785.

Xiao Y, Hill MC, Li L, Deshmukh V, Martin TJ, Wang J, Martin JF. Hippo pathway deletion in adult resting cardiac fibroblasts initiates a cell state transition with spontaneous and self-sustaining fibrosis. *Genes Dev.* 2019 Nov 1;33(21-22):1491-1505. doi: 10.1101/gad.329763.119. Epub 2019 Sep 26. PubMed PMID: 31558567.

Deshmukh V, Wang J, Martin JF. Leading progress in heart regeneration and repair. *Curr Opin Cell Biol.* 2019 Aug 10;61:79-85. doi:10.1016/j.cob.2019.07.005. [Epub ahead of print] Review. PubMed PMID: 31408771.

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Heallen TR, Kadow ZA, Kim JH, Wang J, Martin JF. Stimulating Cardiogenesis as a Treatment for Heart Failure. *Circ Res.* 2019 May 24;124(11):1647-1657. doi:10.1161/CIRCRESAHA.118.313573. PubMed PMID: 31120819; PubMed Central PMCID: PMC6534162.

Yu Q, Kou W, Xu X, Zhou S, Luan P, Xu X, Li H, Zhuang J, Wang J, Zhao Y, Xu Y, Peng W. FNDC5/Irisin inhibits pathological cardiac hypertrophy. *Clin Sci (Lond).* 2019 Mar 1;133(5):611-627. doi: 10.1042/CS20190016. Print 2019 Mar 15. PubMed PMID: 30782608.

Zhang Y, Lin T, Lian N, Tao H, Li C, Li L, Yang X. Hop2 Interacts with ATF4 to Promote Osteoblast Differentiation. *J Bone Miner Res.* 2019 Aug 21; doi: 10.1002/jbmr.3857. [Epub ahead of print] PubMed PMID: 31433867

Dr. Karin Uchima

Dr. Karin Uchima moved in February 2019 to USA and started working as a postdoctoral fellow in Dr. Yoshihiro Komatsu's Laboratory in Pediatric Research Center. Karin was born in Peru, where she received her DDS degree in 2010 from the National University of San Marcos as a top student. Passionate to improve oral health in her country, she pursued postgraduate studies in Japan, receiving her PhD degree in 2017 at Tokyo Medical and Dental University, Department of Orthodontic Science. During her PhD, she received awards as best presentation in the 46th Annual Scientific Congress of the Korean Association of Orthodontists and on the 73rd Annual Meeting of the Japanese Orthodontic Society. After graduation she moved back to Peru and started working as a lecturer in the National University of San Marcos, while also continuing her clinical work. As an orthodontist, Karin realized that understanding the growth and development of the craniofacial complex, especially the skeletal tissue, would contribute on the treatment approach of several craniofacial deformities that usually lead to surgical procedure of the bones. With her experience as a Faculty member and clinician, Karin desired to expand her knowledge of bone development, thus encouraging her to pursue a postdoctoral career in US. She currently focusses on the development of long bones as basis to understand the skeletal pathologies, hoping to contribute in the future to new treatment directions on bone diseases.



PRC SEMINAR SERIES

Up Next:

November 12, 2019

Noon to 1pm | MSB B.605

Sheng Pan, PhD

Associate Professor, IMM - Precision BioMedicine

“Deciphering glycoproteomes in pancreatic ductal adenocarcinoma”

Upcoming:

January 17, 2020 Noon—1PM MSB B.100	Michael Galko, PhD UTMDA
February 21, 2020 Noon—1PM MSB B.100	William Lagor, PhD Baylor College of Medicine
March 20, 2020 Noon—1PM	Daisuke Nakada, PhD Baylor College of Medicine

ANNOUNCEMENTS

- ◆ Dr. Rachel Miller was awarded the 2019 Whitman Early Career Investigator Award Marine Biological Laboratory (Woods Hole, Massachusetts) and the 2019 Junior Investigator Award Society for Developmental Biology
- ◆ Alexandria Blackburn in Dr. Miller's Laboratory was awarded the Schissler Foundation Fellowship MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences and Dean's Research Award UTHealth McGovern Medical School
- ◆ 2019 PRC / CCR Retreat on November 19, 2019
- ◆ PRC Holiday Party on December 16, 2019