

SSBH 2021 Curriculum Vitae

Name	Hiroshi Asahara, M.D., Ph.D.
Organization	Tokyo Medical and Dental University
Position & Title	Professor

Educational background & Professional experience

2011-Present	Professor, Department of Systems BioMedicine, Tokyo Medical and Dental University, Tokyo, Japan
2004-2011	Department Head, National Research Institute for Child Health and Development, Japan
2002- Present	Principal Investigator, Department of Molecular Medicine, The Scripps Research Institute, La Jolla, CA
2000-2002	Staff Scientist, Peptide Biology Laboratory, Salk Institute, La Jolla, CA
1999-2000	Postdoc, The Salk Institute, La Jolla, CA
1997-1999	Postdoc, Harvard Medical School, Boston, MA
1997	Ph.D. Okayama University Medical School, Japan
1992	M.D. Okayama University Medical School, Japan

Research Interests

Based on our unique **Systems Biomedicine** approaches combining a novel strategy and database, my lab is trying to uncover molecular mechanisms of **musculoskeletal development** and are also identifying the critical pathway to regulate **inflammatory diseases**, including **rheumatoid arthritis**.

Publications

1. Kurimoto R, Chiba T, Ito Y, Matsushima T, Yano Y, Miyata K, Yashiro Y, Suzuki T, Tomita K, **Asahara H***. [The tRNA pseudouridine synthase TruB1 regulates the maturation and function of let-7 miRNA.](#) *EMBO J.* 2020 Sep 14:e104708.
2. Sato T, Kataoka K, Ito Y, Yokoyama S, Inui M, Mori M, Takahashi S, Akita K, Takada S, Ueno-Kudoh H, **Asahara H***. [Lin28a/let-7 Pathway Modulates the Hox Code via Polycomb Regulation during Axial Patterning in Vertebrates.](#) *eLife.* 2020 May 29;9:e53608.
3. Mokuda S, Nakamichi R, Matsuzaki T, Ito Y, Sato T, Miyata K, Inui M, Olmer M, Sugiyama E, Lotz M, **Asahara H***. [Wwp2 maintains cartilage homeostasis through regulation of Adamts5.](#) *Nat Commun.* 2019 Jun 3;10(1):2429.
4. Mochizuki Y, Chiba T, Kataoka K, Yamashita S, Sato T, Kato T, Takahashi K, Miyamoto T, Kitazawa M, Hatta T, Natsume T, Takai S, **Asahara H***. [Combinatorial CRISPR/Cas9-approach to elucidate a far-upstream enhancer complex for tissue-specific Sox9 expression.](#) *Dev Cell.* 2018 Sep 24;46(6):794-806.
5. **Inui M***, Mokuda S, Sato T, Tamano M, Takada S, **Asahara H***. [Dissecting the roles of miR-140 and its host gene.](#) *Nat Cell Biol. (correspondence)* 2018 May;20(5):516-518.
6. **Ito Y, Inoue A, Seers T, Hato Y, Igarashi A, Toyama T, Taganov K, Boldin M, Asahara H***. [Identification of targets of tumor suppressor microRNA-34a using a reporter library](#)

[system. *Proc Natl Acad Sci U S A.* 2017 Apr 11;114\(15\):3927-3932.](#)

7. Nakamichi R, Ito Y, Inui M, Onizuka N, Kayama T, Kataoka K, Suzuki H, Mori M, Inagawa M, Ichinose S, Lotz M, Sakai D, Masuda K, Ozaki T, **Asahara H***. [Mohawk promotes the maintenance and regeneration of the outer annulus fibrosus of intervertebral discs.](#) *Nat Commun.* 2016 Aug 16;7:12503.
