JAVIER MARTINEZ

Positions Held to Date:

Since 2016	Professor, Medical University of Vienna.
2004-2015	Junior Group Leader, IMBA, Vienna, Austria
2001-2003	Post-doctoral Fellow, T. Tuschl lab, Max Planck for Biophysical Chemistry, Göttingen Germany, and Rockefeller University, USA.
1995-2000	Post-doctoral Fellow, A. Virtanen lab, University of Uppsala, Sweden.
1990-1995	Ph.D. Student, J.J. Cazzulo lab, University of Buenos Aires, Argentina.

Main Area of Research:

RNA Biology; RNA processing in mammalian cells.

Teaching and Mentoring:

301585	Molecular Medicine 1.
301591	Advanced Cell Biology.
301652	Molekularbiologie der RNA.
MUW	Coordinator of module „Diseases of Enzymatic Insufficiency“, within the new Master Program in Molecular Precision Medicine.

Awards and Prizes:

2007	European Young Investigator EMBO-YIP and BioRad European RNAi Award.
2015	EMBO Member.

Publications: Most important papers in the last 5 years and other relevant papers:

Sekulovski, S., Devant, P., Panizza, S., Gogakos, T., Pitiriciu, A., Heitmeier, K., Ramsay, E.P., Barth, M., Schmidt, C., Tuschl, T., Baas, F., Weitzer, S., Martinez, J.§, Trowitzsch, S§. (2021). Assembly defects of human tRNA splicing endonuclease contribute to impaired pre-tRNA processing in pontocerebellar hypoplasia. §co-corresponding authors. **Nat Commun.** 2021 Sep 28;12(1):5610. doi: 10.1038/s41467-021-25870-3. PMID: 34584079.

Asanovic, I., Strandback, E., Kroupova, A., Pasajlic, D., Meinhart, A., Tsung-Pin, P., Djokovic, N., Anrather, D., Schuetz, T., Józef Suskiewicz, M., Sillamaa, S., Köcher, T., Beveridge, R., Nikolic, K., Schleiffer, A., Jinek, M., Hartl, M., Clausen, T., Penninger, J., Macheroux, P., Weitzer, S.§ and Martinez, J.§ (2021). The oxidoreductase PYROXD1 utilizes NAD(P)+ as an antioxidant to sustain tRNA ligase activity in pre-tRNA splicing and unfolded protein response. §co-corresponding authors. **Mol Cell.** 2021 Jun 17;81(12):2520-2532.e16. doi: 10.1016/j.molcel.2021.04.007. Epub 2021 Apr 29. PMID: 33930333.

Pinto, P., Kroupova, A., Schleiffer, A., Mechtler, K., Jinek, M., Weitzer, S.,§ and Martinez, J.§ (2020). ANGEL2, a member of the CCR4 family of deadenylases, is a mammalian 2',3'-cyclic phosphatase. §co-corresponding authors. **Science.** 2020 Jul 31;369(6503):524-530. doi: 10.1126/science.aba9763. PMID: 32732418.

Popow, J., Jurkin J., Schleiffer, A., and **Martinez, J**. (2014). Analysis of eukaryotic orthologous groups reveals Archease and DDX1 as tRNA splicing factors. ***Nature.*** Jul 3;511(7507):104-7. *doi: 10.1038/nature13284.*

Popow, J.*, Englert, M.*, Weitzer, S., Schleiffer, A., Mierzwa, B., Mechtler, K., Trowitzsch, S., Will, C.L., Lührmann, R., Söll,† D., and **Martinez, J.**† (2011). HSPC117 is the essential subunit of a human tRNA splicing ligase complex. *co-first authors; †co-corresponding authors. ***Science.*** Feb 11;331(6018):760-4. *doi: 10.1126/science.1197847.*

Weitzer, S. and **Martinez, J.** (2007). The human RNA kinase hClp1 is active on 3' transfer RNA exons and short interfering RNAs. ***Nature.*** 447(7141):222-6. *doi: 10.1038/nature05777.*

Martinez, J., Patkaniowska, A., Urlaub, H., Lührmann, R. and Tuschl, T. (2002). Single-stranded antisense siRNAs guide target RNA cleavage in RNAi**.** ***Cell.*** 110, 563-574. *doi: 10.1016/s0092-8674(02)00908-x.*