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## CURRICULUM VITAE

### Assoc. Prof. DI Dr. Johannes Grillari

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#### EDUCATION:

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| Nov. 1999 | Ph.D. (Dr. rer. nat. tech.) University of Natural Resources and Life Sciences Vienna (BOKU) , Austria  |
| 1996-1999 | PhD-studies and Post-graduate training, Institute of Applied Microbiology, University of Natural Resources and Applied Life Sciences, Vienna, Austria PhD-thesis,: " <i>Subtractive hybridization of mRNAs from early passage and senescent human endothelial cells</i> " (supervision: Prof. H. Katinger) |
| 1996      | Biotechnology diploma University of Natural Resources and Applied Life Sciences Vienna, Austria  |
| 1989-1996 | Studies of business administration, Vienna University of Economics and Business Administration, Austria  |
| 1994      | Diploma-thesis, General Hospital (AKH), Department of endocrinology, Vienna, Austria: " <i>High glucose triggers apoptosis in human umbilical vein endothelial cells</i> " (supervision: Prof. Baumgartner-Parzer, Prof. L. März)  |
| 1988-1996 | Studies of Food- and Biotechnology, University of Natural Resources and Applied Life Sciences, Vienna, Austria   |
| 1979-1987 | Linguistic gymnasium, Lienz, Austria   |

## PROFESSIONAL CAREER:

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Since Jan 2016	Co-founder and scientific advisor of ReMuteBio GmbH
Since Sept. 2015	Co-founder and scientific advisor of Danube 3D GmbH
Since Sept. 2015	Co-founder and scientific advisor of Phoenestra GmbH
since Dec. 2013	Co-founder and scientific advisor of Tamirna GmbH
since Jan. 2011	Co-founder and CSO of Evercyte GmbH
since Oct. 2010	A2 Professorship at University of Natural Resources and Life Sciences Vienna, Austria
since Nov. 1999	Establishing and leading the "Aging Research" group, at the Institute of Applied Microbiology, University of Natural Resources and Applied Life Sciences Vienna, Austria
Dec. 2006	Venia docendi in Molecular Biology, University of Natural Resources and Life Sciences Vienna, "Molecular Biology of Aging: Identification and characterization of proteins involved in cell aging and immortalization"
Nov. 2005	Contract as "University Assistant"

## SCIENTIFIC INTERESTS:

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- Cellular senescence: from molecular mechanisms in vitro to effects of senescent cells in vivo
- Functional role of microRNAs in cellular senescence
- Functional role of RNA modifying proteins in cellular senescence
- Establishing human cell models including mesenchymal stem cells, iPS, kidney cells, endothelial cells, keratinocytes
- Non-coding RNAs as tools for cell engineering of Chinese hamster ovary cells

## PRIZES:

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- TAmiRNA ranked best young company in category 'high-tech' and 2nd best overall ranking in Austria by 'Gewinn' (out of >1.000), 2015
- TAmiRNA awarded 2nd "Best of Biotech" phase II award, 2015
- TAmiRNA awarded "Best of Biotech" phase I award, 2014
- Evercyte awarded the Mercur prize of the WKO for "Best Life Sciences company" (out of more than 170), 2014
- Evercyte ranked 5th best young company in Austria by 'Gewinn' (out of >1.600), 2013

- Walter Doberauer Prize for Aging Research, 2012
- Phönix award for best spin off of University, 2012 to RG
- Poster prize at the EMBO/Harden conference "Ubiquitin and Proteasome system in health and disease" September 6-10 2004, Cirencester, UK to Marlies Löscher
- Poster prize at the European conference on Aging "ECONAG 2006" November 27-30 2006, Innsbruck, Austria to JG
- Poster prize at the 1st Annual Meeting of the Austrian Society of Molecular Biosciences and Technology (ÖGMBT), September 21-23 2009, Innsbruck, Austria to Matthias Hackl
- Poster prize at the 22nd ESACT meeting, 15.-18.5.2011, Vienna, Austria to Regina Grillari
- Poster prize at Berzelius Symposium 85: Telomere Biology in Health and Disease – a Crystal Ball for the Future?, 25.-27.5.2011, Stockholm, Sweden to JG
- 2 Plenary Posters at ASBMR 2014 (among the best 2.5% out of around 1.700 posters)

#### PUBLICATIONS and PATENTS:

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- 93 SCI publications; h-factor 25, total IF ~400; total citations >1900; 4,8 IF/publication, 15 average citations per publication
- 5 book chapters
- 6 contributions to conference proceedings
- 10 patents
- Around 140 conference contributions

## LIST OF PUBLICATIONS (ORIGINAL RESEARCH):

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1. Weilner S, Schraml E, Wieser M, Messner P, Schneider K, Wassermann K, Micutkova L, Fortschegger K, Maier AB, Westendorp R, Resch H, Wolbank S, Redl H, Jansen-Dürr P, Pietschmann P, Grillari-Voglauer R and **Grillari J** Secreted microvesicular miR-31 inhibits osteogenic differentiation of mesenchymal stem cells, *Aging Cell* (2016)
2. Erusalimsky, J. D., **Grillari, J.**, Grune, T., Jansen-Duerr, P., Lippi, G., Sinclair, A. J., Tegnér, J., Viña, J., Durrance-Bagale, A., Miñambres, R., Viegas, M., and Rodríguez-Mañas, L. (2016) In Search of "Omics"-Based Biomarkers to Predict Risk of Frailty and Its Consequences in Older Individuals: The FRAILOMIC Initiative. *Gerontology*. 62, 182-90
3. Weilner S, Keider V, Winter M, Harreither E, Salzer B, Schraml E, Messner P, Pietschmann P, Hildner F, Gabriel C, Redl H, Grillari-Voglauer R, and **Grillari J\*** Vesicular Galectin-3 levels decrease with donor age and contribute to the reduced osteo-inductive potential of human plasma derived extracellular vesicles, *Aging*, (2016)
4. Schosserer M, Minois N, Angerer TB, Amring M, Dellago H, Harreither E, Calle-Perez A, Pircher A, Gerstl MP, Pfeifenberger S, Brandl C, Sonntagbauer M, Kriegner A, Linder A, Weinhäusel A, Mohr T, Steiger M, Mattanovich D, Rinnerthaler M, Karl T, Sharma S, Entian KD, Kos M, Breitenbach M, Wilson IB, Polacek N, Grillari-Voglauer R, Breitenbach-Koller L, and **Grillari J\*** Methylation of ribosomal RNA by NSUN5 is a conserved mechanism modulating organismal life span, *Nature Comm* (2015)
5. Schosserer M, Reynoso R, Wally W, Jug B, Weilner S, Buric I, **Grillari J**, Bauer JW, Grillari-Voglauer R Urine is a novel source of autologous mesenchymal stem cells for patients with epidermolysis bullosa *BMC Res Notes*, (2015)
6. Fischer S, Mathias S, Schaza S, Kleemann M, Hackl M, **Grillari J**, Aschrafi A, Handrick R, and Otte K. Targeting the ubiquitin pathway by downregulation of Skp2 contributes to miR-30 mediated enhancement of protein production in CHO cells, *J Biotech*, (2015)
7. Monteforte R., Gruber F., Grausenburger R, Grillari-Voglauer R., Tschachler E., and **Grillari J**. SNEVPrp19/PSO4 deficiency increases PUVA-induced senescence in mouse skin, *Exp Dermatol*, (2016)
8. Harreither E, Pichler J, Shridhar S, Auer N, Hackl M, Jadhav V, Hernandez-Bort J, Höflmayer H, **Grillari J**, Kreil DP and Borth N Gene expression patterns of host cell subclones with increased production capacity, *Biotech J*, (2015)
9. Diendorfer AB, Hackl M, Klanert G, Jadhav V, Stiefel F, Hesse F, **Grillari J**, and Borth N Annotation of novel evolutionary conserved microRNAs in CHO from updated genomic data, *Biotech Bioeng* (2015)
10. Fliedl L, Kast F, **Grillari J**, Wieser M, and Grillari-Voglauer R Optimisation of real time PCR based Plasmid Copy Number determination in human cell lines, *N. Biotech* 2015
11. Weilner S, Keider V, Skalicky S, Wagner M, Dovjak P, Pietschmann P, Grillari-Voglauer R, **Grillari J\***, and Hackl M Circulating microRNAs in post-menopausal women suffering from recent femoral-neck fractures impact osteogenic differentiation, *Bone* (2015)
12. Kühnel H., Ablimit A., Dadak A., Wieser M., **Grillari J.**, Upur H., and Alois Strasser. Phytotherapeutic effects of abnormal Savda Munziq are based on cellular senescence and DNA damage. *Chinese J Integrat Med*. (2015)
13. Rohringer S., Holnthoner W, Hackl M, Skalicky S, Proell J, Schweighofer B, Groeger M, Spittler A, **Grillari J**, and Redl H. Molecular and cellular effects of in vitro shockwave treatment on lymphatic endothelial cells, *PLOS one* (2014)
14. Reynoso R., Laufer, N., Hackl M., Skalicky S., Monteforte R., Turk G., Carobene M., Quarleri J, Cahn P., Werner R., Stoiber H., Grillari-Voglauer R., and **Grillari J.\*** MicroRNAs differentially present in the plasma of HIV elite controllers reduce HIV infection in vitro. *Sci. Rep.* (2014)
15. Maccani A., Hackl M., Leitner C., Steinfeldner W., Graf A.B., Tatto N.B., Karbiener M., Scheideler M., **Grillari J.**, Mattanovich D., Kunert R., Borth N., Grabherr R., and Ernst W. Identification of microRNAs specific for high producer CHO cell lines using steady-state cultivation. *Appl. Microbiol Biotechnol* (2014)
16. Waaijer MEC, Wieser M., Grillari-Voglauer R., van Heemst D, **Grillari J**, and Maier A.B. MicroRNA-663 induction upon oxidative stress in cultured human fibroblasts depends on the chronological age of the donor, *Biogerontol* (2014)
17. Ferrando-Martínez S., Ruiz-Mateos E., Dudakov J.A., Velardi E., **Grillari J.**, Kreil D.P., Muñoz-Fernandez A., van den Brink M.R.M., Leal M. WNT signaling suppression in the senescent human thymus. *J Gerontol A Biol Sci Med*, (2014)
18. Fliedl L., Wieser M., Manhart G., Gerstl M., Khan AH, **Grillari J.**, and Grillari-Voglauer R. New Human Renal Proximal Tubular Epithelial Cell panel to reveal influence of GGT activity on nephrotoxicity, *ALTEX*, (2014)
19. Fliedl L., Manhart G., Kast F., Kättinger H., Kunert R., **Grillari J.**, Wieser M., Grillari-Voglauer R. Novel human Renal Proximal Tubular Cell Line for the Production of complex proteins, *J Biotech* 176, 29-39 (2014)
20. Hackl M., Jadhav V., Klanert G., Karbiener M., Scheideler M., **Grillari J.**, and Borth N. Analysis of microRNA transcription and post-transcriptional processing by Dicer in the context of CHO cell proliferation, *J. Biotech*, (2014)
21. Jadhav V., Hackl M., Klanert G., Hernandez Bort J.A., Kunert R., Borth N., and **Grillari J.\*** Stable overexpression of miR-17 enhances recombinant protein production of CHO cells. *J. Biotech* (2014)

22. Harreither E., Rydberg H.A., Åmand H., Jadhav V., Fliedl L., Benda C., Esteban M.A., Pei D., Borth N., Grillari-Voglauer R., Hommerding O., Edenhofer F., Nordén B., **Grillari J.**\* Characterization of a novel cell penetrating peptide derived from human Oct4, *Cell Regeneration* (2014)
23. Klanert K., Jadhav V., Chanoumidou K., **Grillari J.**, Borth N., and Hackl M. Endogenous MicroRNA Clusters Outperform Chimeric Sequence Clusters in Chinese Hamster Ovary Cells, *Biotech J*, (2013)
24. Karbiener M., Pisani DF, Frontini A., Oberreiter LM, Lang E., Vegiopoulos A., Mössenböck K., Bernhardt G., Mayr T., Hildner F., **Grillari J.**, Ailhaud G., Herzog S, Cinti S., Amri E.Z., and Scheideler M. microRNA-26 family is required for human adipogenesis and drives characteristics of brown adipocytes. *Stem Cells*, (2014)
25. Brinkrolf K., Rupp O., Laux H., Ernst W., Kollin F., Kofler R., Linke B., Budach W.E. Hesse F., Noll T., Wienberg J., Jostock T., Leonard M., **Grillari J.**, Tauch A., Goesmann A., Helk B., Mott J., Pühler A., and Borth N. Chinese hamster genome sequenced from sorted chromosomes, *Nature Biotechnology*, 31(8), 694-695 (2013)
26. Aschauer L., Gruber LN, Pfaller W, Limonciel A, Athersuch TJ, Cavill R, Khan AH, Gstraunthaler G, **Grillari J.**, Grillari-Voglauer R., Hewitt P, Leonard MO, Wilmes A. and Jennings P. Delineation of the key aspects in the regulation of epithelial monolayer formation. *Mol Cell Biol*. (2013)
27. Dellago H., Preschitz-Kammerhofer B., Schreiner K., Chang MWF, Hackl M., Fortschegger K., Monteforte R., Gruber F., Tschachler E.T., Scheideler M., Grillari-Voglauer R., **Grillari J.**\*, and Wieser M. Onco-miR-21 induces a senescence-like growth-arrest in normal human cells, *Aging Cell*, (2013)
28. Greussing R., Hackl M., Hofer E., Neuhaus M., Micutkova L., Mueck C., Trajanoski Z., **Grillari J.**, and Jansen-Dürr P. Role of microRNA 101 and Ezh2 in UVB-induced senescence of human diploid fibroblasts, *BMC genomics* (2013)
29. Gerstl MP, Hackl M., Graf AB, Borth N, and **Grillari J.**\* Prediction of transcribed PIWI-interacting RNAs from CHO RNAseq data, *J Biotech* (2013)
30. Löscher M., Schosserer M., Dausse E., Lee K., Ajuh P., Grillari-Voglauer R., Lamond A.I., Toulmé JJ, and **Grillari J.**\* Inhibition of pre-mRNA splicing by a synthetic Blom7a-interacting small RNA, *PLOS one* (2012)
31. Zhou T, Benda C., Dunzinger S., Huang Y., J.C. Ho, Yang J., Wang Y, Zhang Y., Zhang P., Bao X., Tse HF, **Grillari J.**, Grillari-Voglauer R, Pei D., and Esteban MA., Generation of human induced pluripotent stem cells from urine samples, *Nature Protocols* (2012)
32. Traxlmayr M.W., Hasenbühl M., Hackl M., Stadlmayr G., Borth N., **Grillari J.**, Rüker F. and Obinger C. Construction of a stability landscape of the CH3 domain of human IgG1 by combination of a directed evolution approach with high throughput sequencing, *J Mol Biol* (2012)
33. Reynoso R., Wieser M., Kühnel H., Bolcic F., **Grillari J.**, Grillari-Voglauer R., and Quarleri J. HIV-1 induces telomerase activity in monocyte-derived macrophages – safeguarding one of its reservoirs? *J Virol*. (2012)
34. Dellago H, Khan A., Nussbacher M., Gstraunthaler A., Mück C., Jansen-Dürr P., Anrather D., Ammerer G., Scheffold A., Rudolph K.L., Voglauer-Grillari R., and **Grillari J.** \* ATM-dependent phosphorylation of SNEVPRP19/Pso4 is involved in extending cellular life span and suppression of apoptosis, *Aging* (2012)
35. Brunner S., Herndler-Brandstetter D., Arnold C.R., Wieggers J.G., Villunger A., Hackl M., **Grillari J.**, Moreno-Villanueva M., Bürkle A. and Grubeck-Loebenstein B. Upregulation of miR-24 is associated with decreased DNA damage repair in highly differentiated CD8<sup>+</sup> T cells which leads to increased apoptosis in the absence, but not in the presence of IL-15, *Aging Cell* (2012)
36. Meleady P, Hoffrogge R, Henry M, Rupp O, Bort JH, Clarke C, Brinkrolf K, Kelly S, Müller B, Doolan P, Hackl M, Beckmann TF, Noll T, **Grillari J.**, Barron N, Pühler A, Clynes M, and Borth N. Utilization and evaluation of CHO-specific sequence databases for mass spectrometry based proteomics. *Biotech Bioeng* (2012)
37. Vadhav V., Hackl M., Bort J.A., Wieser M., Harreither E., Kunert R., Borth N., and **Grillari J.** \* A screening method to assess biological effects of microRNA overexpression in Chinese hamster ovary cells, *Biotech Bioeng* (2012)
38. Hackl M., Vaibhav J., Jakobi T., Rupp O., Brinkrolff K., Goesmann A., Pühler A., Noll T., Borth N., and **Grillari J.**\* Computational identification of miRNA gene loci and precursor miRNA sequences in CHO cell lines, *J Biotech* (2012)<
39. Hernandez Bort JA, Hackl M, Höflmayer H, Fuchs E, Jadhav V, Ernst W, **Grillari J.**, and Borth N. Dynamic mRNA and miRNA profiling of CHO-K1 suspension cell cultures. *Biotechnol. Journal* (2012)
40. Xu J.Y., Wang B., Xu Y, Sun L., Tian W.H., Shukla D., Barod R., **Grillari J.**, Grillari-Voglauer R., Maxwell P.H., and Esteban M.A., Epigenetic regulation of  $\square$  HIF-1 $\alpha$   $\square$ mRNA  $\square$ in renal cancer cells involves HIF-1 $\alpha$  $\square$  binding to a reverse hypoxia response element, *Oncogene* (2011)
41. Zhou T, Benda C., Dunzinger S., Lixingyan H., Wang B, Guo XP, Akun, Hao L., Alex, Jenny, Wolbank S., Redl H., Wu J, Tse HF, Wieser M, Grillari-Voglauer R, **Grillari J.**, Pei D., and Esteban MA., Urine-derived cells are a non-invasive source for the generation of human induced pluripotent stem cells, *J Amer Soc Nephrol* 12 1221-1228 (2011)
42. Hofer E., Laschober G., Hackl M., Thallinger GG., Lepperdinger G., **Grillari J.**, Jansen-Dürr P., and Trajanoski Z., GiSAO.db: a database for ageing research, *BMC Genomics*, 12 262. 1471-2164-12-262 (2011)
43. Sarközi R. Hauser C., Noppert S.J., Kronbichler A., Pirklbauer M., Haller V.M., **Grillari J.**, Grillari-Voglauer R., Mayer G., and Schramek H., Oncostatin M is a novel inhibitor of TGF- $\beta$ 1-induced matricellular protein expression, *AJP Renal* 301, F1014-25 (2011)
44. Becker J, Timmermann C, Jakobi T, Rupp O, Szczepanowski R, Hackl M, Goesmann A, Tauch A, Borth N, **Grillari J.**, Pühler A, Noll T, Brinkrolf K. Next-generation sequencing of the CHO cell transcriptome. *BMC Proc.* 5 Suppl 8, 6 (2012)
45. Becker J., Hackl M., Jakobi T., Rupp O., Schneider J., Szczepanowski R., Bekel T, Borth N., Goesmann A., **Grillari J.**, Kaltschmidt C., Noll T., Pühler A., Tauch A., and Brinkrolf K. Unraveling the Chinese hamster ovary cell line transcriptome by next-generation sequencing, *J Biotech* 156, 227-35 (2011)
46. Dellago H., Löscher M., Ajuh P., Ryder U., Kaisermayer C., Grillari-Voglauer R., Fortschegger K., Gross S., Gstraunthaler A., Borth N., Eisenhaber F., Lamond A.I., and **Grillari J.**\* Exo70, a subunit of the exocyst complex, interacts with SNEV<sup>hPrp19/hPso4</sup> and is involved in pre-mRNA splicing. *Biochem J.*, 438, 81-91 (2011)
47. Hackl M., Jakobi T., Blom, Doppmeier D., Brinkrolff K., Szczepanowski R., Bernhart S., Hönerzu Siederdisen C., Hernandez-Bort J., Wieser M., Kunert R., Jeffs S., Hofacker I., Goesmann A., Pühler A., Borth N., and **Grillari J.**\* The Chinese Hamster Ovary miRNome:

- new strategies for the de novo identification, annotation and profiling of conserved and novel miRNAs. *J. Biotech.* 153, 62-75 (2011)
48. Mader, R.M., Wieser, M., Berger, W., Kalipciyan, M., Hackl, M., Steger, G.G., and **Grillari, J.** Relevance of microRNA modulation in chemoresistant colon cancer in vitro. *Int J Clin Pharmacol Ther* 49, 67-68 (2011)
  49. Laschober G., Ruli D., Hofer E., Camona-Gutierrez D., Ring J., Hutter E., Muck C., Micutkova L., Breitenbach M., Fröhlich K.U., Grubeck-Loebenstein B., Berger P., Wieser M., Grillari-Voglauer R., **Grillari J.**, Trajanoski Z., Madoe F., Lepperdinger G., and Jansen-Dürr P. Identification of genetic regulators of cellular aging that are conserved in evolution. *Aging Cell*, Vol. 9, 1084-1097 (2010)
  50. Timmermann B., Jarolim S., Rußmayer H., Kerick M., Michel M., Krüger A., Bluemlein K., Laun P., **Grillari J.**, Lehrach H., Breitenbach M., and Ralsler M. A new dominant peroxiredoxin allele identified by whole-genome re-sequencing of random mutagenized yeast causes oxidant-resistance and premature aging. *Aging*, Vol. 2, 1-12 (2010)
  51. Hackl M., Brunner S., Fortschegger K., Schreiner C., Micutkova L., Mück C., Laschober G., Lepperdinger G., Sampson N., Berger P., Herndler-Brandstätter D., Wieser M., Kühnel H., Strasser A., Breitenbach M., Rinnerthaler M., Eckhard L., Tschachler E., Papak C., Scheideler M., Trajanoski Z., Grillari-Voglauer R., Grubeck-Loebenstein B., Jansen-Dürr P., and **Grillari J.\***, miR-17 and miR-19b are down-regulated in human aging, *Aging Cell*, Vol. 9, 291-296 (2010)
  52. **Grillari J.\***, Löscher M., Denegri M., Lee K., Fortschegger K., Eisenhaber F., Ajuh P., Lamond A., Katinger H., and Grillari R. Blom7a is a novel KH domain protein involved in alternative pre-mRNA splicing that interacts with SNEV<sup>PRP19/PSO4</sup> *J Biol Chem*, Vol 284, 29193-29204 (2009)
  53. Mayrhofer C., Krieger S., Huttary N., Chang M., **Grillari J.**, Allmaier G., and Kerjaschki D. Alterations in fatty acid utilization and an impaired antioxidant defense mechanism are early events in podocyte injury. A Proteomic Analysis. *Am J Pathol*, Vol. 174, 1191-1202 (2009)
  54. Jursik, C., Prchal, M., Voglauer, R., Drbal K., D., Jungfer, H., Albert, W.H., Hemetsberger, T., **Grillari J.**, Stockinger, H. and Katinger, H. Characterization and large-scale production of novel CD4+ cytotoxic T cells with broad tumor specificity for immunotherapy. *Mol Cancer Res* Vol. 7, 339-353 (2009)
  55. Wolbank S, Stadler G, Peterbauer A, Gillich A, Karbiener M, Streubel B, Wieser M, Katinger H, van Griensven M, Redl H, Gabriel C, **Grillari J** and Grillari-Voglauer R. Telomerase immortalized human amnion and adipose-derived mesenchymal stem cells: Maintenance of differentiation and immunomodulatory characteristics. *Tissue Eng* Vol. 15 (2009)
  56. Schraml E., Fuchs R., Kotzbeck P., **Grillari J.\***, and Schauenstein K. Acute adrenergic stress inhibits differentiation of murine hematopoietic progenitor cells to the myeloid lineage via p38/MAPK signalling. *Stem Cell Dev*, Vol 18, 215-227 (2009)
  57. Wieser, M., Stadler, G., Jennings, P., Streubel B., Pfaller, W., Ambros, P., Riedl C., Katinger, H., **Grillari J.** and Voglauer, R. hTERT alone immortalizes epithelial cells of renal proximal tubules without changing their functional characteristics. *Am J Physiol - Renal* 2008 Vol. 295, F1365-75 (2008)
  58. Schraml E., Voglauer R., Fortschegger K., Sibilina M., Stelzer I., **Grillari J.\***, and Schauenstein K. Haploinsufficiency of mSNEV causes self-renewal capacity defects of hematopoietic stem cells. *Stem Cell Dev*, Vol. 17, 355-366 (2008)
  59. Stadler G., Wieser M., Streubel B., Stift, A., Friedl J., Gnant M., Niederle B., Katinger H., Pfragner R., **Grillari J.**, and Voglauer R. Low telomerase activity: possible role in the progression of human medullary thyroid carcinoma. *Eur. J. Cancer*, Vol. 44, 866-75 (2008)
  60. Stadler G., Wieser M., Steindl F., **Grillari J.**, Katinger H., Pfragner R., and Voglauer R. Development of standardized cell culture conditions for tumor cells with potential clinical applications. *Cytotherapy* Vol. 9, 488-498 (2007)
  61. Fortschegger K., Wagner B., Voglauer R., Sibilina M., Katinger H., and **Grillari J.\***, SNEV<sup>PRP19/PSO4</sup> knock-out is early embryonic lethal *Mol. Cell. Biol.* Vol. 27, 3123-3130 (2007)
  62. Unterluggauer H., Hütter E., Voglauer R., **Grillari J.**, Vöth M., Bereiter-Hahn J., Jansen-Dürr P., and Jendrach M. Identification of cultivation-independent markers of human endothelial cell senescence in vitro. *Biogerontol.*, Vol. 8, 383-397 (2007)
  63. Hampel B., Fortschegger K., Ressler S., Chang M., Unterluggauer H., Voglauer R., Fitzky, B., Lepperdinger G., Jansen-Dürr P., **Grillari J.** Increased expression of extracellular proteins as a hallmark of human endothelial cell in vitro senescence. *Exp. Gerontol.* Vol. 41, 474-481 (2006)
  64. Voglauer R., Chang M.W.F., Dampier B., Wieser M., Baumann K., Sterovsky T., Schreiber M., Katinger H., and **Grillari J.\*** SNEV overexpression extends the life span of human endothelial cells. *Exp. Cell Res.* Vol. 312, 746-759 (2006)
  65. Wieser M., Stadler G., Böhm E., Borth N., Katinger H., **Grillari J.**, and Voglauer R. Nuclear Flow FISH – isolation of cell nuclei improves the determination of telomere lengths. *Exp. Gerontol.* Vol. 41, 230-235 (2006)
  66. **Grillari J.\***, Ajuh P., Stadler G., Löscher M., Voglauer R., Ernst W., Chusainow J., Eisenhaber F., Pokar M., Fortschegger K., Grey M., Lamond A.I., and Katinger H. SNEV is an evolutionarily conserved splicing factor whose oligomerization is necessary for spliceosome assembly. *Nucl. A. Res.* Vol. 33, 6868-6883 (2005)
  67. Löscher M., Fortschegger K., Ritter G., Wostry, M., Voglauer R., Schmid J.A., Steven Watters, Rivett J., Ajuh P., Lamond A.I., Katinger H., and **Grillari J.\*** The U-box E3 ligase SNEV interacts with PSMB4, the  $\beta 7$  subunit of the 20S proteasome. *Biochem. J.* Vol. 388, 593-603. (2005)
  68. Chang M., **Grillari J.\***, Mayrhofer C., Fortschegger K., Allmaier G., Katinger H., and Voglauer R. Comparison of early passage, senescent and hTERT immortalized endothelial cells. *Exp. Cell Res.* Vol 309, 121-136 (2005)
  69. Voglauer R., **Grillari J.**, Fortschegger K., Wieser M., Sterovsky T., Günsberg P., Katinger H. and Pfragner R. Establishment of human fibroma cell lines from a MEN1 patient by introduction of either hTERT or SV40 early region. *Int. J. Oncol.* Vol. 26, 961-970 (2005)
  70. Böhm E., **Grillari J.**, Voglauer R., Gross S., Ernst W., Ferko B., Kunert R., Borth N., and Katinger H. Establishment of a strategy for the rapid generation of a monoclonal antibody against the human protein SNEV (hNMP200) by flow cytometric sorting. *J. Immunol. Met.* Vol. 307, 13-23 (2005)
  71. Marzban G., **Grillari J.**, Reisinger E., Hemetsberger T., Grabherr R.M., Katinger H. Age related alterations in the protein expression profile of C57BL/6J mouse pituitaries. *Exp. Gerontol.* Vol.37, 1451-60 (2002)
  72. Jursik C., Voglauer R., **Grillari J.**, Hemetsberger T., Jungfer H., Katinger H. Killer T cells: A promising new tool for adoptive immunotherapy. *Transplant. Proc.* Vol. 34, 2879-2880 (2002)



73. **Grillari J.\***, Fortschegger K., Grabherr R.M., Hohenwarter O., Kunert R., Katinger H. Analysis of alterations in gene expression after amplification of recombinant genes in CHO cells. *J. Biotech.* Vol. 87, 59-64 (2001)
74. **Grillari J.\***, Hohenwarter O., Grabherr R.M., Katinger H. Subtractive hybridization of mRNA from early passage and senescent endothelial cells. *Exp. Gerontol.* Vol. 35, 187-197 (2000)
75. Baumgartner-Parzer S.M., Wagner L., Pettermann M., **Grillari J.**, Gessl A., Waldhäusl, W. High-glucose-triggered apoptosis in cultured endothelial cells. *Diabetes* Vol. 44, 1323-1327 (1995)
- \* Corresponding author

## LIST OF PUBLICATIONS (BOOK CHAPTERS, EDITORIALS and OTHER):

---

- Schossere M. and **Grillari J.** Book Chapter on "Biology of Aging", Edts. Bernatzky et al.
- Schossere M. and **Grillari J.** Editorial for special issue on "Geriatric Pharmacology": More than 50 years of cellular senescence: From in vitro model to potential drug target? *J Geront Geriatrics* (2015)
- Grillari J.** Don't shoot the messenger, Book recension on: *Methods in Molecular Biology 969: Synthetic Messenger RNA and Cell Metabolism Modulation: Methods and Protocols* Edited by Peter M. Rabinovich. (2013)
- Hackl M., Borth N., **Grillari J.** The CHO miRNA transcriptome, in *MicroRNAs as Tools in Biopharmaceutical Production*, Edt. Niall Barron, Springer (2012)
- Grillari J., Grillari-Voglauer R., and Jansen-Dürr P., Post-translational modifications of cellular proteins by ubiquitin and ubiquitin-like molecules: role in cellular senescence and aging. *Landes Biosciences*, Edt. Tavernarakis N., <http://www.landesbioscience.com/curie/chapter/4594/> (2010)
- Grillari J.\***, and Dynan W. Editorial for Special issue on DNaging: Exploring the links between DNA damage and repair, organismal aging and aging-related disease. *Nucl. Acids Res.*, Vol. 22, "DNaging", (2007)
- Grillari J.\*** Katinger H., and Voglauer R. SNEV<sup>Prp19/Pso4</sup> is a conserved, multifaceted E3 ligase involved in replicative senescence, DNA repair, and pre-mRNA splicing. *PRP19 Targeted Proteins Database* (2007)

## CONFERENCE PROCEEDINGS:

---

- Stiefel F, Hackl M, **Grillari J**, Hesse F. Identification of process relevant miRNA in CHO cell lines - Process profiling reveals interesting targets for cell line engineering *BMC Proceedings* 2013, 7(Suppl 6):P81 (4 December 2013)
- Grillari J.\***, Hohenwarter O., Grabherr R.M., Katinger H. Isolation of differentially expressed genes from early passage and senescent endothelial cells. in *Current concepts in experimental gerontology*, Vol. 6, Bertoni-Freddari, C., and Niedermüller, H., Eds., Facultas Universitätsverlag, Vienna, 111-125 (1999)
- Borth N., Böhm E., **Grillari J.**, Löscher M., Gross S., Voglauer R., Ferko B., Kunert R., Katinger H: From gene to monoclonal antibody: efficient screening by cell sorting. In: *Animal Cell Technology meets Genomics, Proceedings of the 18th ESACT Meeting*, May 11 - 14, 2003, Granada, Spain, Editors: Francesc Gòdia and Martin Fussenegger, 501-504 (2003).
- Voglauer R, Jursik C, Prchal M, Jungfer, **Grillari J**, Katinger H: Establishment and characterization of CD4+ Killer-T-cells (KTCs). In: *Animal Cell Technology meets Genomics, Proceedings of the 18th ESACT Meeting*, May 11 - 14, 2003, Granada, Spain, Editors: Francesc Gòdia and Martin Fussenegger, 289-292 (2003).

## PATENTS:

---

- Grillari J**, Lämmermann I., Gruber F., Narzt MS, and Berlin I., Plant extract as anti-senescence active, patent filing in progress
- Grillari J.**, Weilner S., Hackl M., Grillari R., Schraml E., Compositions and methods for the treatment of osteoporosis, filed Dec 2014, EP14198560.6
- Grillari J.**, Weilner S., Hackl M., Grillari R., Schraml E., Compositions and methods for the treatment of osteoporosis, filed June 2014, EP14172354.4
- Grillari J.**, Weilner S., Compositions and methods for the treatment of bone disorders, Patent filed Oct 2013, PCT/EP2013/071264
- Esteban M.A., **Grillari J**, Grillari R., Pei D., Zhou T., Method for generating induced pluripotent stem cells from cells contained in urine. Patent filed Dec. 2010, EP11152519.2
- Grillari J.**, Schraml E., Grillari R, Fortschegger K. Compositions for use in treating or preventing bone disorders and/or cardiovascular disorders Patent filed May 2010, EP10163604.1

7. **Grillari R.**, Grillari J, Kanzler O. Panels of immortalized mammalian cells and their use. Patent filed April 2010; PCT/EP2011/056641
8. Hampel B., Fortschegger K., **Grillari J.**, Jansen-Dürr P. Markers for cardiovascular disorders, Amynon Biotech GmbH European patent L2342 EP S3 (2005)
9. **Grillari J.**, Ajuh P., Löscher M., Lamond A.I. SNEV homodimerization and SNEV-Exo70 interactions are essential for splicing. Patent filed May 2005
10. **Grillari J.**, Grabherr R.M. and Katinger H. SNEV- a novel tumor and senescence marker, Polymun Scientific International patent PCT/EP01/00675 (2000)