

Sravya Ganesh

Marie Cibulkove 9, 140 00 Praha 4, Czech Republic, +420777252071, sravyaqanesh23@gmail.com

Education and Research experience:

- 2014 – 20XX: PhD student at the Institute of Molecular Genetics of the Academy of Sciences, Prague and Marie Curie Initial Training Network PhD Fellow - **RNATRIN** (<https://rnatrain.ku.dk/>)
Thesis: “**Long Non-Coding RNAs in Mouse Oocyte-to-Zygote Transition.**”
Supervisor: Dr. Petr Svoboda
- 2012 - 2014: Junior Research Fellow at Institute for Stem Cell Biology and Regenerative Medicine, Bangalore.
Topic: “**Study of P-Bodies Composition in Proliferating, Differentiated and Quiescent Muscle Cells.**”
Supervisor: Dr. Jyotsna Dhawan
- 2011 - 2012: Trainee in Indian Institute of Chemical Technology, Hyderabad.
Topic: “**Study of Roscovitine Based Analogues in Controlling Cell Growth and Apoptosis.**”
Supervisor: Dr. Manika Pal Bhadra
- 2009 - 2011: Masters in Genetics at University of Mysore, Mysore. (Graduated with 79% out of 100, 2nd Rank holder)

Publications:

- [Ganesh S](#) & Svoboda P. **Retrotransposon-associated long non-coding RNAs in mice and men**; *Pflugers Arch - Eur J Physiol* (2016) 468: 1049.
- Karlic R*, [Ganesh S*](#), Franke V*, Svobodova E, Urbanova J, Suzuki Y, Aoki F, Vlahovicek K, Svoboda P (2017) **Long non-coding RNA exchange during the oocyte-to-embryo transition in mice**. *DNA Res* 24: 129-141. doi:10.1093/dnares/dsx008
- Franke V, [Ganesh S](#), Karlic R, Malik R, Pasulka J, Horvat F, Kuzman M, Fulka H, Cernohorska M, Urbanova J, et al. (2017) **Long terminal repeats power evolution of genes and gene expression programs in mammalian oocytes and zygotes**. *Genome Res* 27: 1384–1394. doi:10.1101/gr.216150.116

Technical Skills:

- **Animal Work:** Trained and received certificate in animal handling. Intra-peritoneal injections, dissections, oocyte and embryo isolations. Breeding and breeding analysis of five CRISPR Knockout mice which I generated during my PhD.
- **Cell culture work:** Experience in mESC, NIH3T3, C2C12 and Hela cell lines. Basic cell culture handling, RNA and plasmid transfections, generating stable cell lines, CRISPR (knockout and overexpression), IR and chemical treatments.
- **DNA/RNA work:** DNA/RNA isolation, PCR and qPCR, in-vitro transcription, total RNA-seq library preparation from oocytes (NuGen Kit), RNA affinity purification (RAP), DNA affinity purification (DAP-process of standardization), Florescent in-situ hybridization (FISH).
- **Protein work:** Immuno-precipitation (IP), Western blotting and Indirect immuno-fluorescence (IIF).
- **Molecular cloning:** classic cloning methods, site directed mutagenesis, CRISPR design and cloning.
- **Microscopy:** Fluorescent wide field and confocal microscopes, live cell imaging.

Courses and Conferences:

- Poster Presentation at EMBO workshop: Noncoding RNAs in embryonic development and cell differentiation, Israel, 2018. **(500\$ Travel award)**
- Poster Presentation at EMBO meeting: The Mobile Genome: Genetic and Physiological Impacts of Transposable Elements, Heidelberg, 2017. **Best poster award.**
- Oral presentation at RNA society 2017 Prague. (Invited)
- Oral presentation at RNA club 2016, Brno. **Best speaker award.**
- Poster presentation at RNA society 2016, Kyoto. **(700\$ travel award)**
- EMBO PhD workshop Heidelberg, 2015.

Other Activities and skills:

- I am a PhD student representative at the Institute of Molecular Genetics where I am responsible for organizing activities like seminars, especially our Annual PhD student conference and I serve as a spokesperson for the PhD students.
- I have supervised a masters student for her Erasmus internship and our PhD students with mice work.
- I love baking (I would be a baker if not for science). I learned oil and water painting, which I now practice at home.
- I am fluent in English and Hindi (native). I also speak Telugu and Kannada.

References: Petr Svoboda (petr.svoboda@img.cas.cz) Kristian Vlahovicek (kristian@bioinfo.hr)

Publications

Ganesh S, Svoboda P. Retrotransposon-associated long non-coding RNAs in mice and men. *Pflugers Arch.* 2016; 468(6):1049-60. doi: 10.1007/s00424-016-1818-5. Review. PubMed PMID: 27044413.

Karlic R*, Ganesh S*, Franke V*, Svobodova E, Urbanova J, Suzuki Y, Aoki F, Vlahovicek K, Svoboda P. Long non-coding RNA exchange during the oocyte-to-embryo transition in mice. *DNA Res.* 2017; 24(2):129-141. doi: 10.1093/dnares/dsw058. PubMed PMID: 28087610

* these three authors contributed equally

Franke V, Ganesh S, Karlic R, Malik R, Pasulka J, Horvat F, Kuzman M, Fulka H, Cernohorska M, Urbanova J, Svobodova E, Ma J, Suzuki Y, Aoki F, Schultz RM, Vlahovicek K, Svoboda P. Long terminal repeats power evolution of genes and gene expression programs in mammalian oocytes and zygotes. *Genome Res.* 2017 Aug;27(8):1384-1394. doi: 10.1101/gr.216150.116. PubMed PMID: 28522611.