

# Matúš Soták

---

Sliepkovce 197, 072 37, Slovakia

[matus.sotak@gmail.com](mailto:matus.sotak@gmail.com)

cell: (+420)776293283

personal web: <http://sotak.info/science>

landline: (+420)241062447

born: 1983    nationality: Slovakia

## Education and Work experience

Time course	Degree	Specialization	Institute
2006 – present	PhD	Animal and Human Physiology	Dept. of Epithelial Physiology Institute of Physiology, Academy of Sciences of the Czech Republic, Videnska 1083, 142 20 Praha 4, Czech Republic
2001 – 2006	Master degree	Biology – Cell biology and biochemistry	Faculty of Science, Charles University in Prague, Albertov 6, 128 43 Praha 2, Czech Republic

## Skills

### Advanced (documented in publications and/or theses):

Intensive work with quantitative real time RT-PCR using different approaches (SYBR Green, Taqman probes) and instruments (Roche, Applied Biosystems). Advanced RNA sample preparing and processing.

Laser capture microdissection – preparing of histological slices followed by laser excision and samples processing. Experience with Leica LMD6000 instrument.

Working with live animal models (rat, mouse) including dietary and chemical treatments.

Radioimmunoassay.

Western blotting.

Voltage-clamp using Ussing chambers.

Computer skills: basic bioinformatics, programming, primers design, sequences handling, using social media for science (Twitter, Mendeley, Researchgate)

Language: Advanced written and spoken English, basic level of German.

Personality qualities: perfect communication skills, public speaking skills, very good natural social interactions, open-minded, loyal, team player, creative, able to focus on particular goals.

### Basics (short-time courses):

cell lines handling, molecular biology manipulations and techniques, genetic engineering, proteomics (2D electrophoresis + mass spectrometry), microscoping techniques, biochemistry techniques, flow cytometry.

## International courses and trainings

Isolation of myenteric plexus from juvenile rat intestine. Institut für Veterinär Physiologie, Justus Liebig Universität, Giessen, Germany. (Hosted by Prof. Martin Diener).

Training in realtime RT-PCR at TATAA Biocenter. TATAA Biocenter Germany, Freising, Germany. (Led by Dr. Michael Pfaffl).

## Awards

Award of "Arturo Leone Prize" for best scientific contribution presented at the 23<sup>rd</sup> Meeting of European Intestinal Transport Group (EITG) held in Salerno, Italy on April 7-10, 2010.

## Interests and personal characteristics

I consider "life" as source of never ending fascination and am interested in revealing of life principles and looking for options to fix disrupted systems. I am curious about new possibilities in technology and science, genomics, personalized medicine (I let check my diseases predisposes at [23andme](#)), local science popularization (I made aggregator of science news in Slovak language – [www.veda24.sk](http://www.veda24.sk)) and fun (I created infographic "[How people in science see each other](#)"). I fight for clearer, funnier and more interesting scientific presentations at meetings and conferences inspired by "[Presentation Zen](#)" book. I am open-minded and like to meet and be inspired by creative and unique people (I attended some [TEDx](#) conferences). I like new technologies, programming, traveling to non-standard places and get know local culture. I actively do sports.

## International conferences

21<sup>th</sup> Meeting of European Intestinal Transport Group. March, 2007, Oberwiesenthal, Germany. Soták et al., Circadian rhythms in the rat intestine. Abstract. J Physiol Biochem 63(1):1-120. [oral presentation]

XI. Congress of the European Biological Rhythms Society. August, 2009, Strasbourg, France. Polidarová, Soták et al., Phasing of circadian rhythms along the rat gut. [poster]

23<sup>rd</sup> Meeting of European Intestinal Transport Group. April, 2010, Salerno, Italy. Soták et al., Distribution of circadian rhythms along rat colonic crypts. [oral presentation]

24<sup>th</sup> Meeting of European Intestinal Transport Group, September 2011, Oxford, UK. Soták et al., Repeated measures ANOVA as a tool for statistical comparison of Ussing chambers data. [poster]

## Teaching experience

I led practical course of Epithelial Physiology comprising of characterization of epithelial cells by isolating crypts followed by real time RT-PCR analysis of selected transporters and channels.

## Education details

<u>PhD</u>	Final state examination (no grading is being made): Epithelial Physiology Proteomics Metabolism and Energy homeostasis Molecular organization of the cell  Dissertation thesis: Intestinal circadian clock and regulation of intestinal functions Supervisor: Prof. Jiří Pácha
<u>Master degree</u>	Final state examination: Molecular Biology A Cell Physiology A Animal and Human Physiology A  Diploma Thesis: Melatonin and its receptors in the gastrointestinal tract Supervisor: Prof. Jiří Pácha

## Referees

I am happy to send contact to referees upon request.

## Publication list

**Soták M**, Polidarová L, Musílková J, Hock M, Sumová A, Pácha J. **Circadian regulation of electrolyte absorption in the rat colon.** *Am J Physiol Gastrointest Liver Physiol.* 2011; 301(6):G1066-74. [[Pubmed](#)] [[DOI](#)] IF = 3.5

Hock M, **Soták M**, Kment M, Pácha J. **The early effect of dextran sodium sulfate administration on carbachol-induced short-circuit current in distal and proximal colon during colitis development.** *Physiol Res.* 2011 Oct 12. [Epub ahead of print] [[Pubmed](#)] IF = 1.6

Polidarová L, Sládek M, **Soták M**, Pácha J, Sumová A. **Hepatic, duodenal, and colonic circadian clocks differ in their persistence under conditions of constant light and in their entrainment by restricted feeding.** *Chronobiol Int.* 2011; 28(3):204-15. [[Pubmed](#)] [[DOI](#)] IF = 5.6

\*Polidarová L, \***Soták M**, Sládek M, Pácha J, Sumová A. **Temporal gradient in the clock gene and cell-cycle checkpoint kinase Wee1 expression along the gut.** *Chronobiol Int.* 2009; 26(4):607-20. [[Pubmed](#)] [[DOI](#)] IF = 4.0

\* authors contributed equally.

**Soták M**, Mrnka L, Pácha J. **Heterogeneous expression of melatonin receptor MT1 mRNA in the rat intestine under control and fasting conditions.** *J Pineal Res.* 2006; 41(2):183-8. [[Pubmed](#)] [[DOI](#)] IF = 4.2