

OPEN POSTDOC POSITION

Laboratory of Genome Integrity

Institute of Molecular Genetics of the ASCR, v. v. i.

Prague, Czech Republic

Research topics: Maintenance of genome stability, oncogene-induced replication stress, RecQ DNA helicases, R-loops, transcription-replication interference

DNA damage is a frequent event in the life of a cell. Failure to repair DNA damage can lead to cell death, while inaccurate DNA repair can give rise to genomic instability, which promotes the onset of cancer in mammals. Research in our laboratory focuses on understanding various DNA repair mechanisms operative in mammalian cells. Our main aim is to define the exact DNA transactions mediated by RecQ DNA helicases, key players in the maintenance of genomic stability. Recently, we obtained funding from the Czech Science Foundation to study molecular mechanisms underlying the formation and resolution of RNA:DNA hybrids (R-loops), highly genotoxic structures that can arise as a consequence of collisions between replication and transcription machineries.

Laboratory:

Laboratory of Genome Integrity is headed by Professor Jiri Bartek, and the successful candidate will be working on the projects headed by Dr. Pavel Janscak and supervised by Dr. Jana Dobrovolna. More details about the laboratory are on following websites:

- <http://www.img.cas.cz/research/jiri-bartek>
- <http://people.img.cas.cz/pavel-janscak>
- <http://people.img.cas.cz/jana-dobrovolna>.

Benefits:

Institute of Molecular Genetics is located in the new, modern building with the state-of-art equipment.

Laboratory on Genome Integrity has a long-standing interest in mechanisms of genome integrity maintenance and applies a broad spectrum of approaches. The group is publishing in high profile journals and has good funding. However, applying for independent funding, which can help develop candidate's career, is strongly encouraged and supported. The successful candidate can take a short-term internships in collaborating laboratory at the Institute of Molecular Cancer Research, University of Zurich, Switzerland. Work in young and motivated collective. Competitive salary, initial salary is commensurate with experience.

Candidate's profile (requirements):

PhD degree in biochemistry or molecular/cellular biology, good English, independent thinking, strong interest in basic research and experimental work. Background in DNA damage

response, cell cycle regulation or mechanisms regulating DNA replication and transcription is an advantage.

Start of job:

Due to starting funding, the preferred start of appointment is January – February 2018 (could be negotiated for a strong candidate). Submit your application as soon as possible.

Please submit your CV and a cover letter with a description of research experience and interests to Jana Dobrovolna (jana.dobrovolna@img.cas.cz). Be prepared to provide the names of three references.

Thank you for your interest,

Jana Dobrovolná, Ph.D.

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