

Postdoctoral positions in molecular modeling

Two postdoctoral positions in the area of molecular modeling are available in the Department of Chemistry at Georgia State University in Atlanta, Georgia. Research will be performed under the supervision of Prof. Ivaylo Ivanov (<http://www.cmm.upenn.edu/~iivanov>) centered on the mechanisms of DNA replication and maintenance of genomic integrity with relevance to cancer and degenerative diseases.

The first position is available immediately. The anticipated starting date is October 2009 but a later date can be arranged. Research will be directed towards the development and application of computational techniques (QM/MM, ab initio molecular dynamics, advanced sampling methods etc.) to elucidate the mechanisms of enzyme participants in DNA repair.

Requirements:

- Ph.D. degree in chemistry, physics, biophysics, or a related discipline (completed or near completion)
- strong background in molecular modeling and/or electronic structure methods (programming skills, experience with high-performance computing, QM/MM and ab initio MD is a plus)
- familiarity with common modeling packages, good analytical and communication skills are desirable

The second position is available with an expected starting date in January 2010. Research will be directed towards the application of computational techniques (large scale molecular dynamics, structural bioinformatics, multiscale modeling) to investigate supramolecular assemblies involved in DNA replication and repair.

Requirements:

- Ph.D. degree in chemistry, physics, biophysics, or a related discipline (completed or near completion)
- strong background in molecular dynamics and modeling (programming skills, familiarity with coarse-grain methods, homology modeling etc. is a plus)
- familiarity with common modeling packages, good analytical and communication skills are desirable

Significant computational resources are available for both projects through the National Center for Computational Science at Oak Ridge National Lab. Collaborative opportunities exist with experimental groups in the DNA replication and repair field and will be strongly encouraged.

To apply: To apply, please send a cover letter with a summary of research interests, an electronic version of your curriculum vitae (including a list of publications) and three reference letters (with contact information of the recommenders) to Prof. Ivanov (iivanov@mccammon.ucsd.edu). In the cover letter please indicate which position you are applying for. The initial appointment will be for a period of one year, subsequently renewable upon mutual agreement. Georgia State is located in Atlanta, GA - one of the major metropolitan areas in the US.

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Georgia State University is a major research university with an enrollment of 28,000 undergraduate and graduate students in six colleges. It is the second largest university in the state, with students coming from every county in Georgia, every state in the nation and from over 145 countries. Georgia State is located in downtown Atlanta - the Southeast's governmental, financial, health and legal center.