

MRB NEWS

Featured Faculty: Dr. Gennady Verkhivker; Professor; Center for Bioinformatics and Dept of Pharm Chem



Academic Areas:

Theoretical Chemistry

Research Interests

Biomolecular Interactions, Structure-Based Drug Design, Bioinformatics, Computational Pharmacogenomics

Educational

Background:

Postdoctoral Fellowship, Institute of Biophysics, Russian National Academy of Sciences, Moscow, Russia, 1986-1987.

PhD, Institute of Physical Chemistry, Russian National Academy of Sciences, Moscow, Russia, 1986.

M.S., Chemistry, Russian National Academy of Sciences, Moscow, Russia, 1980.

The Center for Bioinformatics and MRB is pleased to welcome Dr. Gennady Verkhivker, a world leading scientist in modeling of biomolecular interactions, structure-based drug design, bioinformatics and computational pharmacogenomics. Dr. Verkhivker earned his PhD in theoretical physical chemistry from the Institute of Physical Chemistry, Russian National Academy of Sciences in 1986. He subsequently received there post-doctoral training and rose to the rank of a Group Leader in Theoretical Chemistry. Dr. Verkhivker continued pursuing his scientific interests in the laboratory of Prof. Ron Elber at the Department of Chemistry, University of Illinois at Chicago in 1990-1992. Upon starting his industrial career at Agouron Pharmaceuticals in 1993, Dr. Verkhivker established a distinguished professional record in pharmaceutical industry. He played a leading role in establishing computer-aided drug design technology and building the largest computational group in pharmaceutical industry. Dr. Verkhivker has held various research and management positions of increasing responsibility at Agouron Pharmaceuticals, Warner-Lambert, Pfizer Global Research and Development and served most recently as an Associate Research Fellow and Group Leader in the Department of Computational Chemistry at Pfizer Global R&D, La Jolla Laboratories. His distinguished

research accomplishments and pharmaceutical industry experience have been highly regarded in the academic world. Dr. Gennady Verkhivker was appointed as an Adjunct Full Professor of Pharmacology at the Department of Pharmacology, University of California, San Diego and the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences. Dr. Verkhivker is a highly distinguished scientist who is widely recognized for his research and important contributions in areas of computational chemistry, bioinformatics and computational biology with numerous high-profile publications in top peer-reviewed journals and presentations at many prestigious international conferences. Dr. Verkhivker is extremely active in the national and international scientific community, organizing many international symposia and workshops. He has been a reviewer of numerous scientific papers in leading journals and a member of review panels in major granting agencies. Dr. Verkhivker joins the Center for Bioinformatics in October, as Full Professor with Tenure, with a joint appointment in the Department of Pharmaceutical Chemistry. Complex biophysical processes such as protein folding and molecular recognition underlie the function of all biological systems, which are characterized by remarkable structural complexity at all levels of organization. The challenge of understanding

biological systems at the molecular level and the systems level is what motivates my research. In our laboratory work is undertaken in areas of protein structure modeling and dynamics, structural bioinformatics, computational proteomics and chemical genomics, ligand-protein docking, and structural systems biology. The overarching goal of the research is to enhance quantitative understanding of protein structure, dynamics and binding in complex biomolecular networks and develop integrated computational approaches and tools for predicting molecular signatures of human disease and translational research.



Pictured above: The Bioinformatics Cluster is housed in a dedicated computing facility that provides battery backed up power, tape backups, independent airconditioning and 24/7 on site personnel. It is connected to the campus backbone, thus ensuring a 1GB link to every desktop of the new offices of the Center for Bioinformatics.

MEET THE GRA:



Name: Abdul Baoum
Lab Group: Berkland Lab
Field of Study:
Pharmaceutical Chemistry
Time at KU: 5 years
Hobbies: Jet Skiing, Fishing
Home Town: Saudi Arabia

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IMPORTANT BUILDING INFORMATION

Congratulations.....
The Center for Bioinformatics is extremely proud and excited that one of its own, Assistant Professor Yang Zhang, won this year CASP7 in the most important and prestigious category - automated server predictions. The automated predictions do not involve human intervention, thus allowing objective evaluation of the prediction methodologies. As such, they are the most respected ones by the scientific community. Critical Assessment of Structure Prediction (CASP) is a biannual worldwide competition in blind protein structure prediction. In this competition, the organizers solicit new unpublished protein structures from the experimentalists and offer the sequences to the community of modelers for blind prediction. The CASP competition is the most high-profile event in computational structural biology and bioinformatics. Dr. Zhang just completed his first year (!) on the faculty as an assistant professor and we at the Center are wondering what to expect from him in the future!

DAY LIGHT SAVINGS TIME COMES EARLY THIS YEAR: In accordance with the Energy Policy Act passed by the U.S. Congress in August 2005, Daylight Saving Time begins three weeks early. It will be on the second Sunday in March instead of the first Sunday in April. Therefore, clocks will "spring forward" this year on Sun., March 11. This will affect Outlook Calendars. Go to www.technology.ku.edu/u/dst.shtml

LOST AND FOUND:
Please be sure to check with the front desk if you've lost anything! We have a hat found in the parking lot!

Spring Break is just around the corner. Please let us know who will be in your labs that week so we can contact the appropriate person(s) for packages and mail.

Don't forget to sign the log sheet on the dock desk when picking up packages in the service area.

The NMR 600MHz magnet in room 102 is now up and running. Please email Teri to have access to the NMR Lab.

Conference rooms are quickly filling up by various departments on the KU Campus. Please be sure to plan ahead if you have certain dates that you need one of these rooms. Please make every effort to not go over the time limit you have reserved the room for.

The espresso machine is back up and running. Shots are 35 cents each or you may make contributions at the front desk!



MRB Family Bowl Night
Friday, March 9th
6:00 pm - ? at Jaybow!



Call or email Carla or Ann or Sign up at the front desk! RSVP by Friday, February 23rd!!!