

Insertion: VMD tool to think and VMD plugins

: VMD

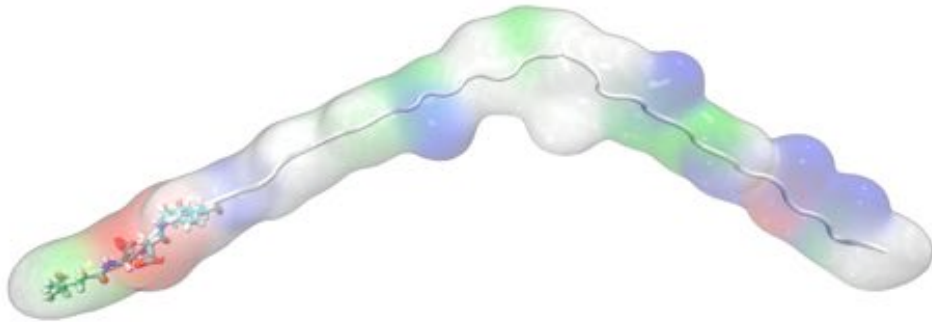
Key person
John Stone
(UIUC)



video: www.lundbeckfoundation.com

VMD: A Thinking Tool

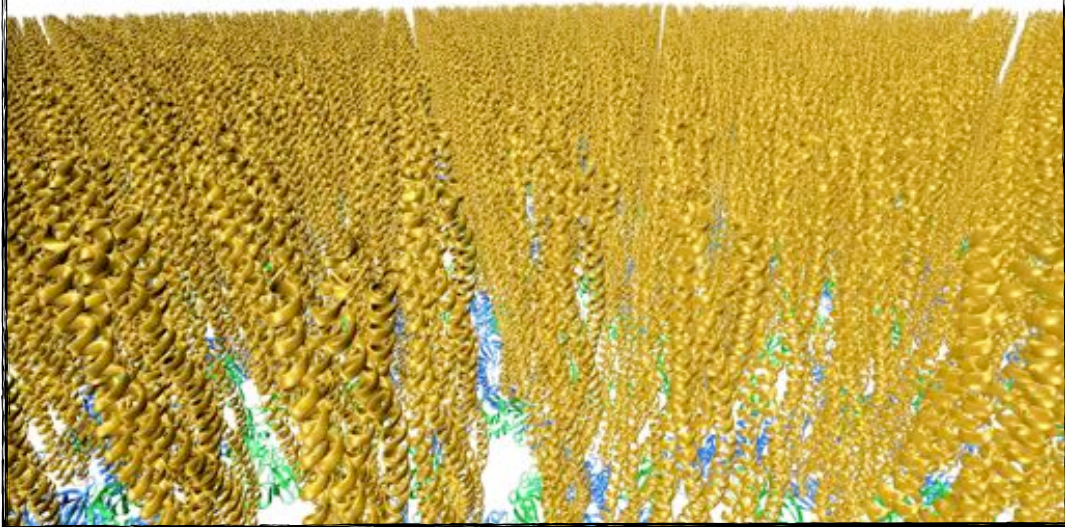
to visualize and analyze trajectories



from small peptides...

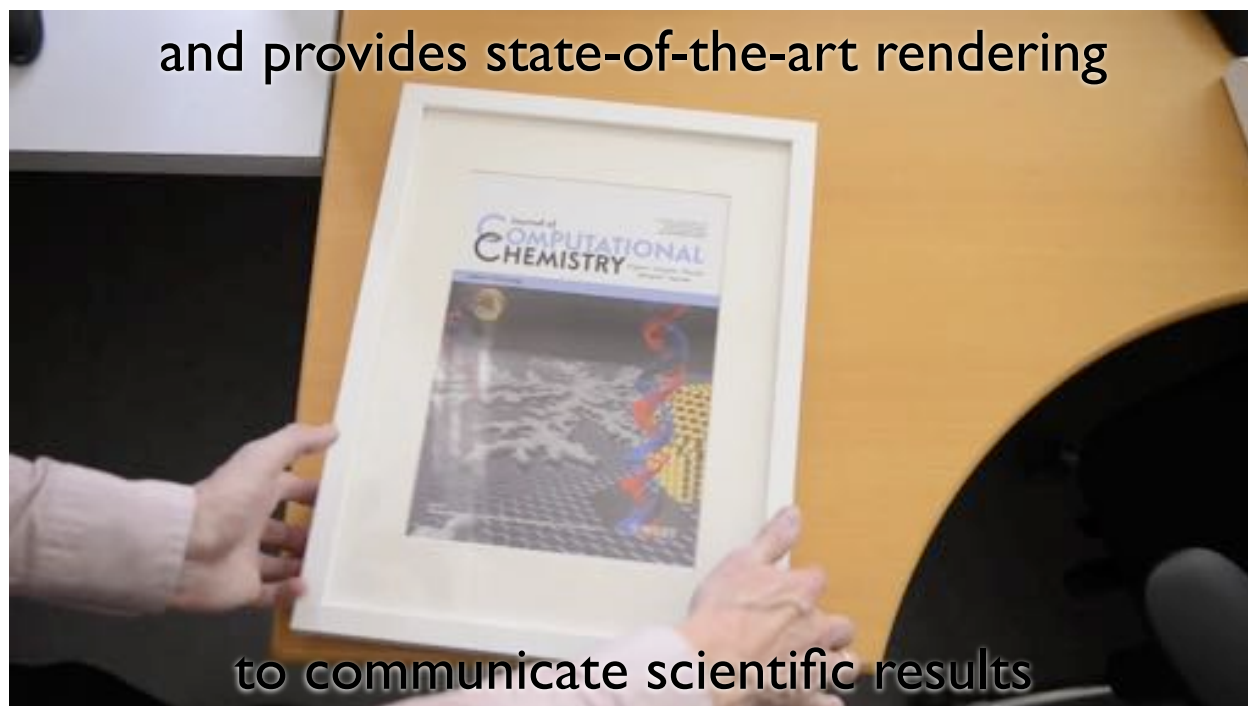
VMD: A Thinking Tool

...to extremely large biological structures



VMD: A Thinking Tool

and provides state-of-the-art rendering



to communicate scientific results

video: www.lundbeckfoundation.com

VMD Plugins

Advanced Tools developed **In-House** and by **External Users**

Analysis

APBSRun
CatDCD
Contact Map
GofRGUI
HeatMapper
ILSTools
IRSpecGUI
MultiSeq
NAMD Energy
NAMD Plot
NetworkView
NMWiz
ParseFEP
PBCTools
PMEpot
PropKa GUI
RamaPlot
RMSD Tool
RMSD Trajectory Tool
RMSD Visualizer Tool
Salt Bridges
Sequence Viewer
Symmetry Tool
Timeline
VolMap

Modeling

Autolize
AutoPSF
Chirality
Clonize
Cispeptide
CGTools
Dowser
Force Field Toolkit
Inorganic Builder
MDFF
Membrane
Merge Structs
Molefactory
Mutator
Nanotube
Paratool
Psfgen
RESPTool
RNAView
Solvate
SSRestraints
Topotools

Visualization

Clipping Plane Tool
Clone Rep
DemoMaster
Dipole Watcher
Intersurf
Navigate
NavFly
MultiMolAnim
Color Scale Bar
Remote
Palette Tool
ViewChangeRender
ViewMaster
Virtual DNA Viewer
VMD Movie Maker

Simulation

AutoIMD
IMDMenu
NAMD GUI
NAMD Server
QMTool

Collaboration

BioCoRE Chat
BioCoRE Login
BioCoRE VMD Shared Views
Remote Control

Data Import and Plotting

Data Import
Multiplot
PDBTool
MultiTex

MolFile I/O Plugins

Externally Hosted Plugins

Check sidechains
MultiMSMS
Interactive Essential Dynamics
Mead Ionize
Clustering Tool
iTrajComp
Swap RMSD
Intervor
SurfVol
vmdICE

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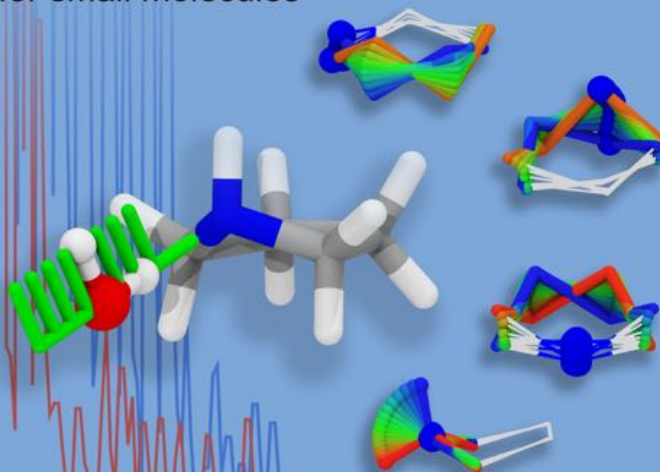
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Paratool
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RESPTool
RNAView
Solvate
SSRstraints
Topotools

Tool to compute force field parameters for small molecules



J. Comput. Chem. **2013**, 34, 2757-2770.

List of Top-Ten Most Accessed Articles for 2014

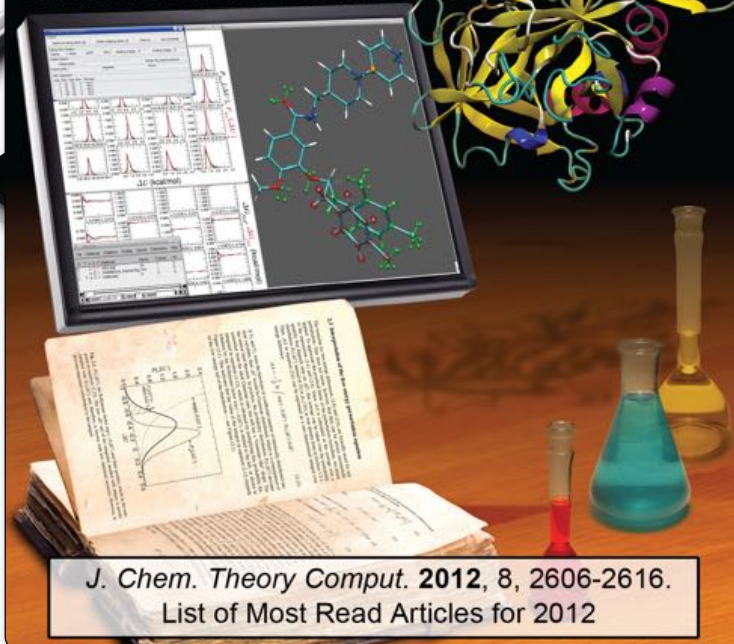
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Sequence Viewer
Symmetry Tool
Timeline
VolMap

Tool for free-energy changes in alchemical transformations



J. Chem. Theory Comput. **2012**, 8, 2606-2616.

List of Most Read Articles for 2012

Plotting

ns


d Plugins

VMD Plugins

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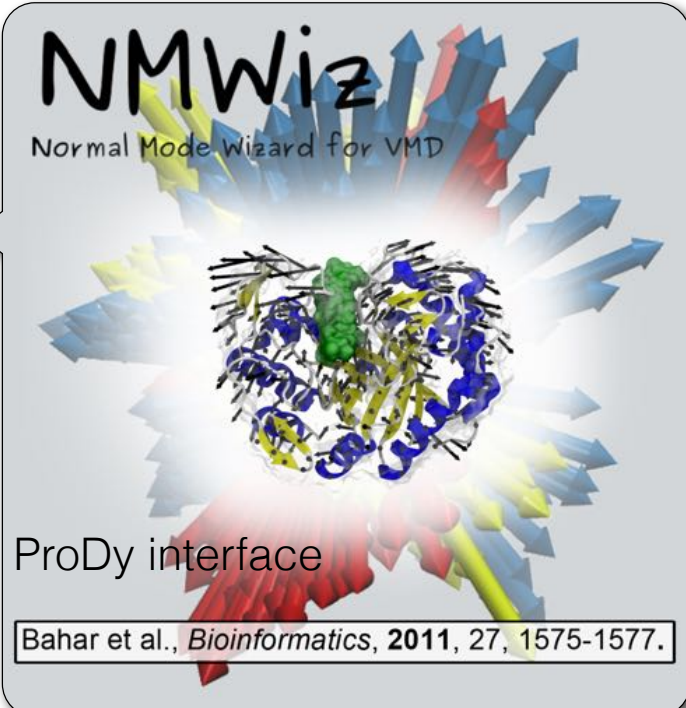
Analysis

- APBSRun
- CatDCD
- Contact Map
- GoRGUI
- HeatMapper
- ILSA



NMWiz
ParseFEP
PBCTool

RMSD Trajectory Tool
RMSD Visualizer Tool
Salt Bridges
Sequence Viewer
Symmetry Tool
Timeline
VolMap



Normal Mode Wizard for VMD

ProDy interface

Bahar et al., *Bioinformatics*, 2011, 27, 1575-1577.


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and Plotting
Plugins
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mics

VMD Plugins

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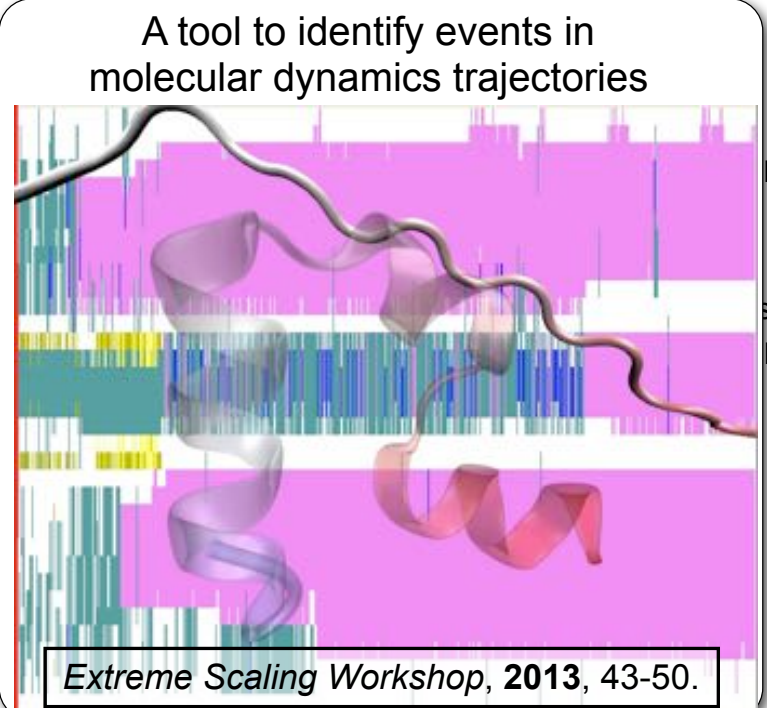
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- APBSRun
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Network
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RMSD Trajectory Tool
RMSD Visualizer Tool
Salt Bridges
Sequence Viewer
Symmetry Tool
Timeline
VolMap



A tool to identify events in molecular dynamics trajectories

Plotting
Plugins

Extreme Scaling Workshop, 2013, 43-50.