

Chip ICT High Performance Computing

Life Sciences

Fundamental research in Life Sciences and Medicine today is unimaginable without the deployment of high-performance computing systems.

It is nearly impossible to develop a comprehensive understanding of an organism's metabolic details, or to drive the development of innovative drugs, without a deep knowledge on the level of Biochemistry or molecular dynamics.

Large computational capacities are needed in genomic research, for finding out cross-species genetic relationships, understanding viral influence on the germ line, or learning about the predisposition for hereditary diseases.

- ☑ Biochemistry
- ☑ Theoretical chemistry
- ☑ Computational life sciences
- ☑ Physical chemistry
- ☑ Molecular biology
- ☑ Molecular dynamics
- ✓ Quantum chemistry
- ✓ Visualization
- ☑ Molecular docking

- ☑ Genome research
- ☑ Next generation sequencing
- ☑ Protein folding
- ☑ Molecular structures
- ☑ Artificial antibodies
- ☑ Hartree-Fock
- ☑ Density-functional theory
- ☑ Orbital structures
- ☑ Schrödinger equation

Whether you need highly performing CUDA workstations for visualizing molecular processes, or high-performance compute clusters with up to 8 NVIDIA GPU's in each system for simulating protein folding in three dimensions, or a parallel filesystem solution for highly scalable HPC storage for high-performance access to massive sequencing datasets, the Chip ICT solutions for all areas of scientific computing comprise the latest technology and serve only one purpose: to provide you with a highly productive and high-performance development and research environment that is easy to manage and easy to use.

We will design, deliver and install your custom solution

Your decision for a Chip ICT solutions means you opt for the most intensive customer-care and best service in HPC.

Our experts will be happy to bring their expertise and support to assist you at any stage, from design to daily cluster operations.

Typical applications:

- BarraCUDA
- SOAP3 and SOAp3-dp
- √ SeaNFind
- ✓ VASP
- ✓ AMBER
- ✓ CHARMM
- ✓ ESPResSO

- ✓ GROMACS
- ✓ LAMMPS
- ✓ NAMD
- ✓ GAMESS
- ✓ Gaussian
- ✓ LATTE
- ✓ VMD
- ✓ And many more...

For more information please visit: www.chipict.com or call: +31 (0) 888 377 377