

NanoPro User Success Story: Professor Zoran Radić



Zoran Radić is an Associate Adjunct Professor at UC San Diego and a Scientific Advisor (equivalent of Research Professor) at University of Zagreb in Croatia. Radić's work is **funded by the National Institute of Health**. He is an independent user of Nanome software. Zoran's work relies heavily on the visualization of macromolecular structures. "As a part of an academic institution [Radić is] not allowed to work for profit. However, Nanome solutions **allow [Radić] to present [himself] as a more competitive educator and researcher, both nationally and internationally.**"

Prior to using Nanome software, Radić had "difficulty perceiving experimentally accurate details of binding interactions of small ligands in the active center of my enzyme. In particular, [Radić had trouble] perceiving accurate molecular volumes..."

To resolve this, Radić experimented with alternative VR software solutions like *Molecular Rift*. "The experience was very

limited [as Radić] was left to struggle with custom software implementation in a unique software/hardware environment... [Radić] was able to load and see several PDB structures with limited rendering, but unable to manipulate and interact with the molecule. Molecules were static in a single view and single rendering option."

Radić encountered Nanome software via a researcher colleague. It became immediately obvious that "**NanoPro was the product [Radić] wanted, needed and was in line with [his] research interests, projects and associated funding resources.**" NanoPro stood out for its "**aesthetically impressive visual rendering, accuracy in representation of molecular attributes and capability to collaborate between multiple users**, i.e. share the same VR space and objects between several users...." Additionally "the Nanome Inc. development and **management teams were unparalleled, impressive and highly productive in supporting [Radić] as a customer.**"

Today, Radić uses Nanome software to visualize macromolecular structures deposited in RCSB PDB, present unpublished macromolecular structures to colleagues and visitors., and analyze the results of pairwise computational



comparisons of ligand-free and liganded macromolecular structures. **Radić relies upon Nanome software for the “ability to manipulate independently multiple macromolecular objects in a single VR space with display and rendering control down at an atomic level.”**

Shortly after complimenting his personal workflow with Nanome software, Radić implemented the software with his students. The process was “seamless. [Radić’s] hardware capacities grew from one to six VR stations... with impeccable support.” He uses Nanome software to introduce students to molecular level drug target interactions. **Radić’s six VR workstations facilitate classes between three and twenty students in**

size, at both UCSD and UZ. At least four students use these workstations on a daily basis.

Furthermore, Radić implements Nanome solutions to deliver dozens of lectures and seminars across the globe. He intends to establish “shared collaborative VR interactions between [his] laboratory and out-of-state research collaborators.”

Thanks to Nanome software, Radić is recognized as a “technologically advanced teacher and researcher able to adopt new, evolving technologies rapidly and efficiently.” **He is invited regularly to speak at the NIH, NASA, and universities** in the US, Sweden, and Croatia.