Position opening – pre-call

Position type: RTD iii liv – *Research Scientist,* **1 year, renewable**

Institution: <u>Istituto Nanoscienze</u> **(NANO)** – CNR, Pisa Italy

Reference Person: <u>Valentina Tozzini</u> Head of Research @NANO

Deadlines: call in spring 2023, selection before summer

Funding: PNRR (**Next Generation EU**), THE (Tuscany Health Ecosystem)

Theme of the research: *Multiscale modeling and simulations of (sub)cellular-based radiobiological effects for advanced radiotherapy optimization*

Formal requirements:

✓ **Master's Degree** in Physics or Chemistry or Pharmaceutical Chem or Mathematics or Informatics or Biology or Materials Sci or Statistics or Bio-related Engineering

✓ **PhD OR at least 3 years of activity** in areas related to the theme of the opening

Profile: The research is on **multi-scale modeling of biological systems**, analysis and interpretation of experimental data, machine (and human) learning applied to advanced radiobiological effects.

We look for a **motivated scientist** capable of a **multi-disciplinary view**, with experience in **more than one** of the following areas

- *Monte Carlo* and *reaction/diffusion* methods
- *Ab initio, classical, reactive atomistic molecular dynamics* of bio-systems
- *Low resolution models* for biomolecules, intra-cell environment, membranes/tissues
- *Statistical analysis, kinetic networks, graphs theory* applied to cell networks
- *Machine learning* for models optimization, data mining, statistical analysis

Interested potential candidates:

✓ email to valentina.tozzini@nano.cnr.it for updates on the call
✓ look at https://bio.nano.cnr.it/flash-radiotherapy/ for further details on the project