selezione pubblica per n.1 posto di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera b) della Legge 240/2010 per il settore concorsuale 02/D1, settore scientifico-disciplinare FIS/07 presso il Dipartimento di Biotecnologie Mediche e Medicina Traslazionale Codice concorso 5203

PERSONAL INFORMATION

PANNUZZO MARTINA
Address: Via Lombardia 7, 96100, Siracusa, Italy
E-mail: martina.pannuzzo@gmail.com
ORCID: 0000-0001-8629-0173

EDUCATION

01/02/2023--2033	**Italian Scientific Habilitation as Associate Professor in Physical-Chemistry (s.c. 03/A2)**
25/01/2022-2031	**Italian Scientific Habilitation as Associate Professor in Applied Physics (s.c. 02/D1, ssd FIS/07)**
01/01/2021	**Qualification to the profession of Chemist** OCF - Ordine Interprovinciale dei Chimici e dei Fisici della Liguria, Sicilia
10/2008-02/2012	**Ph.D.** in Chemistry, Physical-Chemistry section (CHIM03/A2), University of Catania (CT), Italy Supervisor: Prof. Dr. A. Raudino Thesis: *"Investigation of polymer effect on adhesion/fusion between membranes by a theoretical and computational approach"*
2005-2008	**Master degree** in Biomolecular Chemistry; grade: *110/110 cum laude,* Department of Chemistry, University of Catania, Italy
2001-2005	**Bachelor Degree** in Cellular and Molecular Biology; grade: *110/110 cum laude,* Department of Animal Biology, University of Catania, Italy

WORK EXPERIENCE

Current

1/07/2022 **Principal Scientist**, **PharmCADD,** Busan, Republic of Korea
Project: "Computational modeling of delivery systems for the release of mRNA-based therapeutics"

1/09/2021 **Associate Editor** for Biochemistry and Biophysics Reports (Elsevier)

1/11/2022 **Advisory Board Member** for Biophysical Chemistry (Elsevier)

Past

1/09/2021 **Senior Scientist**, **PharmCADD,** Busan, Republic of Korea
Project:"Computational modeling of delivery systems for the release of mRNA-based therapeutics"

1/03/2018 **Marie Curie Researcher**, *Computational Nanomedicine*, Italian
31/08/2021 Institute of Technology, Italy
Minded program http://minded-cofund.eu/,
Coordinator: prof. Dr. P. Decuzzi
Project: "Assist the optimization of drug delivery systems via Molecular Dynamics simulations"

1/01/2016 **Postdoctoral Researcher Associate,** *Physics Department*,
31/12/2017 Carnegie Mellon University, Pittsburgh, USA
Supervisor: Prof. Dr. M. Deserno
Project: "Design Hierarchies for Nano-Based Micro Energetic Macro-Actuators(MEMA)"

1/09/2014- **Postdoctoral fellowship award** in the programme Promoting
31/06/2015 Equal Opportunities for Women in Research and Training (FFL), *Computational Biology Department*, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany

Project: "Dynamic Interplay of Amyloid Peptides/GPCRs proteins and Biological Membrane"

11/09/2012-31/08/2014	**Principal Investigator** in the graduate school of Biomembranes and **Postdoctoral fellowship,** *Computational Biology Department*, Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany Coordinator: Prof. Dr. R. Böckmann Project: "Coarse Graining and Atomistic Simulations of Membranes and Proteins"
1/03-31/05/2012	**Postdoctoral fellowship**, *Department of Chemistry*, University of Catania, Italy Supervisor: Prof. Dr. A. Raudino Project: "*Modeling of Membrane Fusion: Physical, Chemical, and Biological Aspects*"
1/05-31/07/2012 & 30/04-23/07/2011	**Europe HPC2 fellow**, *Department of Mathematics and Natural Sciences*, University of Groningen (RUG), The Netherlands Supervisor: Prof. Dr. S.J. Marrink Project: "Coarse Graining and Atomistic Simulations of Soft Matter: PEG-Induced Membranes Adhesion"
21/01-30/03/2011 & 1/04-30/09/2010	**Invited Ph.D. student**, *Department of Applied Mathematics*, University of Western Ontario, London, Canada Supervisor: Prof. Dr. Mikko Kartunnen Projects: "Coarse Graining and Atomistic Simulations of Soft Matter: PEG-Induced Membranes Adhesion, Interaction of Amyloid Peptides with Membrane"

Teaching Activities

→**Teaching** (in German/English) undergrad courses on Molecular Dynamics Simulation Methods and Unix, Computational Biology department, FAU University, Germany (2012-2014)

→**Tutoring** activity, Physical-Chemistry laboratory, University of Catania, Italy (2009)

AWARDS, AKNOWLEDGMENTS, HONORS

1. 2(+2)-years Marie **Curie co-fund Fellowship**, MINDED program http://minded-cofund.eu/ (2018-2022)
2. 2-years **Postdoctoral fellowship offer,** Physical-Chemistry section, University Normale of Pisa, Italy (2015)
3. 1-year **Postdoctoral fellowship award** by the German program "Promoting Equal Opportunities for Women in Research and Training (FFL)", Computational Biology, FAU University, Germany (2015)
4. **Principal Investigator** in the graduate school of Biomembranes granted by the German Research foundation **DFG**, FAU University, Germany; see project P4 in http://www.biomembranes.org/) (2013-2015)
5. **HPC 2 Europe Project**, **3-months-fellowship** to visit the lab. of Prof. SJ. Marrink, RUG University (Groningen, the Netherlands) (2012)
6. **HPC 2 Europe Project**, **3-months-fellowship** to visit the lab. of Prof. SJ. Marrink, RUG University (Groningen, the Netherlands) (2011)
7. **Invited and funded** by prof. M. Karttunen as a **research scholar**, Math Dept., UWO University, London, Canada (2010-2011)
8. **(Grants) Class B and C Projects** for computing time at the computing centers CINECA (Italy) and SARA (The Netherlands)
9. **Award** for the **Best PhD thesis in Theoretical Biophysics** from the Italian Biophysical Society (2010-2012)
10. **Best on-demand talk award (3rd price)**, CRS 2021 Virtual Annual Meeting (2021)
11. **Travel Award** to present my abstract at the Annual Biophysical Society Meeting, San Francisco, USA (2018)
12. **Travel Award** to attend the 25th Italian Chemical Society (SCI) congress in Rende, Italy (2014)
13. **Travel Award** to attend the 8th European Biophysical Society (EBSA) congress in Budapest (2011)
14. **Travel Award** to attend the 5th SCI congress in Bertinoro, Italy (2013)

15. **Travel Award** to attend the TAM2012 congress, Amsterdam (2012)
16. **Journal Covers and highlights**:
    - ✓ Bioengineering and Translational Medicine, (2021). Cytosolic Delivery of Nucleic Acids: The case of Ionizable Lipid Nanoparticles. ***Cover***
    - ✓ Journal of Controlled Release, 319, 201-212 (2020) ***Cover***
    - ✓ Journal of Chemical Physics 144, 184901 (2016) ***Cover and highlighted on the Journal homepage***
    - ✓ Journal of Chemical Physics 141, 024901 (2014) ***Cover***
    - ✓ Journal of Chemical Physics 138, 234901 (2013) ***Cover***
    - ✓ Journal of Chemical Physics 132, 045103 (2010) ***Highlighted on the Journal homepage***
17. **Associated Editor** for Biochemistry and Biophysics Reports and Biophysical Chemistry (Elsevier journals)
18. **Referee/Reviewer**: JCTC, J Chem Phys, BBA Biomemb, J Biol Phys, J Biol Eng, Alzheimer's & Dementia, Eur J Med Chem, Colloids and Surfaces A, EBJO
19. **Society Memberships**: Biophysical society, CRS society, ACS society

Scholarships to attend the following Workshops and Summer Schools

12/2022	Applied Machine Learning in Python
11/2022	Introduction to Data Science with Python
10/2022	Applied Plotting, Charting and Data Representation with Python
5-7/10/2022	Introduction to Python Programming, CINECA, Italy (Virtual)
24/05/2021	Editorial Manager training, virtual
20-21/02/2021	Scientific Illustration Masterclass, Virtual
7-11/10/2019	ESPResSo summer school, Stuttgart, Germany
19-09-2019	Media training workshop, IIT, Genova, Italy
17-21/07/2019	Summer school in Machine Learning, Genova, Italy
29-31/05/2019	CECAM workshop: Challenges in modeling and simulations of nanoparticles in complex environments, IIT, Genova, Italy
23-25/05/2018	CECAM workshop: Building the bridge between theories and software: SME...IIT, Genova, Italy
26/07- 28/07-17	Cell Modeling (MCell, BioNetGen, CellOrganizer, CellBlender)

	Pittsburgh (PA), USA
28/06- 02/07-17	Computational Biophysics (ProDy, NAMD, VMD, iGNM, ANM), Pittsburgh (PA), USA
29/09- 03/10-09	Specialistic Parallel Computing, Cineca (BO), Italy
06-18/07/09	Parallel Computing, Cineca (BO), Italy
29-6/10/08	Parallel Computing (CT), Italy
15-27/06/08	3D Scientific Visualization, CINECA (BO), Italy

Invited Seminars

- **Seminar**, invited by Prof. Paolo Decuzzi, "A computational look at Soft Matter", Istituto Italiano di Tecnologia (2017)

- **Seminar**, invited by Prof. Frederick Lanni "The Functional Interplay between the GTPase Dynamin and Membrane Reshaping", Biology Dept., Carnegie Mellon University, Pittsburgh, USA (2017)

- **Seminar**, invited by Prof. Vincenzo Barone**,** "Softness of Biomembranes", Chemistry Dept., University Normale of Pisa, Italy (2015)

LIST OF PUBLICATIONS	CONTRIBUTION
1. Rando C., et al (2023) GxxxG Motif Stabilizes Ion-Channel like Pores through Cα—H···O Interaction in Aβ (1-40). *Int. J. Mol. Sci.*	Designed and performed Molecular Dynamics simulations; contributed to the discussion of the data and the writing of the manuscript.
2. **Pannuzzo M.**, Felici A., Decuzzi P. (2022) A Coarse-Grained Molecular Dynamics Description of Docetaxel-Conjugate Release from PLGA Matrices. *BioMacromolecules*	***First and corresponding author***; Designed and performed Molecular Dynamics simulations; contributed to the discussion of the data and the writing of the manuscript.
3. Kjølbye L.R., Pereira G.P., Bartocci A., **Pannuzzo M.**, .., Monticelli L., Souza P.C.T. (2022) Towards Design of Drugs and Delivery Systems with the	Discussion and writing of the manuscript

Martini Coarse-Grained Model. *QRD Discovery* https://doi.org/10.1017/qrd.2022.16	
4. Martins A.M., Cook A.B., Di Francesco M., Barbato M.G., Brahmachari S., **Pannuzzo M**., Decuzzi P. (2022) Embedding Hydrogels into Microfluidic Chips: Vascular Transport Analyses and Drug Delivery Optimization. Multifunctional Hydrogels for Biomedical Applications	Discussion and writing of the manuscript
5. Di Francesco M., Fragassi A., **Pannuzzo M.**, Ferreira M., Brahmachari S., Decuzzi P. (2022) Management of osteoarthritis: From drug molecules to nano/micromedicines. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*	Discussion and writing of the manuscript
6. Tempra C., Scollo F., **Pannuzzo M.**, Lolicato F., La Rosa C. (2022) A unifying framework for amyloid-mediated membrane damage: The lipid-chaperone hypothesis. *Biochimica et Biophysica Acta (BBA)-Proteins and Proteomics.*	Share ***first authorship*** with TC and SF. Discussion and writing of the manuscript
7. **Pannuzzo M**. (2021) Beta-Amyloid Pore Linked to Controlled Calcium Influx into the Cell: A New Paradigm for Alzheimer's Disease. *Alzheimers Dement.* doi: 10.1002/alz.12373.	Discussion and writing of the manuscript.
8. Schlich, M., Palomba, R., Costabile, G., Mizrahy,S., **Pannuzzo, M.**, Peer, D., Decuzzi, P., (2021). Cytosolic Delivery of Nucleic Acids: The case of Ionizable Lipid Nanoparticles. *Bioengineering and Translational Medicine.*	Discussion and writing of the manuscript.
9. **Pannuzzo, M.**, Esposito, S., Wu, L. P., Key, J., Aryal, S., Celia, C., ... & Decuzzi, P. (2020). Overcoming Nanoparticle-Mediated Complement Activation by Surface PEG-Pairing. *Nano Letters.*	Share ***first authorship*** with SE and WLP. Designed and performed Molecular Dynamics

	simulations; contributed to the discussion of the data and writing of the manuscript.
10. **Pannuzzo, M**., Horta, B. A., La Rosa, C., & Decuzzi, P. (2020). Predicting the Miscibility and Rigidity of Poly (lactic-co-glycolic acid)/Polyethylene Glycol Blends via Molecular Dynamics Simulations. *Macromolecules*.	***First and corresponding author***; Designed and performed Molecular Dynamics simulations; contributed to the discussion of the data and the writing of the manuscript.
11. Di Francesco, M., Primavera, R., Summa, M., **Pannuzzo, M.**, Di Francesco, V., Di Mascolo, D., ... & Decuzzi, P. (2020). Engineering shape-defined PLGA microPlates for the sustained release of anti-inflammatory molecules. *Journal of Controlled Release*, *319*, 201-212.	Designed and performed Molecular Dynamics simulations and contributed to the discussion of the data and the writing of the manuscript;
12. La Rosa, C., Condorelli, M., Compagnini, G., Lolicato, F., Milardi, D., Do, T. N., **Pannuzzo M**.,... & Collu, F. (2020). Symmetry-breaking transitions in the early steps of protein self-assembly. *European Biophysics Journal*, 1-17.	Contributed to perform simulations, discussion and the writing of the manuscript.
13. Brocca, P., Saponaro, A., Introini, B., Rondelli, V., **Pannuzzo, M.**, Raciti, D., ... & Raudino, A. (2019). Protein Adsorption at the Air–Water Interface by a Charge Sensing Interferometric Technique. *Langmuir*, *35*(49), 16087-16100.	Contributed to the discussion and the writing of the manuscript.
14. **Pannuzzo, M.,** Szała, B., Raciti, D., Raudino, A., & Ferrarini, A. (2019). Helical Inclusions in Phospholipid Membranes: Lipid Adaptation and Chiral Order. *The Journal of Physical Chemistry letters*, *10*(18), 5629-5633.	***First author***; Contributed to the design and performed Molecular Dynamics simulations; contributed to the discussion and the writing of the manuscript.
15. **Pannuzzo, M.**, McDargh, Z. A., & Deserno, M. (2018). The role of scaffold reshaping and disassembly in dynamin driven membrane fission. *Elife*, *7*, e39441.	***First author***; Performed Molecular Dynamics simulations; contributed to the discussion and the writing of the manuscript.

16. **Pannuzzo, M.**, Tilton, R. D., & Deserno, M. (2018). Responsive behavior of a branched-chain polymer network: a molecular dynamics study. *Soft Matter*, *14*(31), 6485-6495.	***First and corresponding author***; Designed and performed Molecular Dynamics simulations; contributed to the discussion of the data and writing of the manuscript.
17. Raudino, A., Raciti, D., Grassi, A., **Pannuzzo, M.**, & Corti, M. (2016). Oscillations of Bubble Shape Cause Anomalous Surfactant Diffusion: Experiments, Theory, and Simulations. *Langmuir*, *32*(34), 8574-8582.	Designed and performed Molecular Dynamics simulations; contributed to the discussion of the data and writing of the manuscript.
18. La Rosa, C., Scalisi, S., Lolicato, F., **Pannuzzo, M**., & Raudino, A. (2016). Lipid-assisted protein transport: A diffusion-reaction model supported by kinetic experiments and molecular dynamics simulations. *The Journal of Chemical Physics*, *144*(18), 184901.	Contributed to the design of simulations, to the discussion of the data and the writing of the manuscript.
19. Pannuzzo, G., Graziano, A. C. E., **Pannuzzo, M.**, Masman, M. F., Avola, R., & Cardile, V. (2016). Zoledronate derivatives as potential inhibitors of uridine diphosphate-galactose ceramide galactosyltransferase 8: A combined molecular docking and dynamic study. *Journal of Neuroscience Research*, 94(11), 1318-1326.	Designed and performed Molecular Dynamics simulations, contributed to the discussion of the data and writing of the manuscript.
20. **Pannuzzo, M.** (2016). On the physiological/pathological link between Aβ peptide, cholesterol, calcium ions and membrane deformation: A molecular dynamics study. *Biochimica et Biophysica Acta (BBA)-Biomembranes*, *1858*(6), 1380-1389.	***First and corresponding author***; Designed and performed Molecular Dynamics simulations, contributed to the discussion of the data and writing of the manuscript.
21. Kociurzynski, R., **Pannuzzo, M**., & Bo̎ckmann, R. A. (2015). Phase transition of glycolipid	Contributed to the design of the simulations, the discussion of

membranes studied by coarse-grained simulations. *Langmuir*, 31(34), 9379-9387.	the data and the writing of the manuscript.
22. Corti, M., **Pannuzzo, M**., & Raudino, A. (2015). Trapping of Sodium Dodecyl Sulfate at the Air–Water Interface of Oscillating Bubbles. *Langmuir*, 31(23), 6277-6281.	Designed and performed Molecular Dynamics simulations and contributed to the discussion of the data and the writing of the manuscript.
23. Grassi, A., Lombardo, G. M., **Pannuzzo, M**., & Raudino, A. (2015). Capture rate and efficiency of an oscillating non-ideal trap interacting with a sea of random diffusing particles. A non-equilibrium Fokker–Planck picture. *Physics Letters A*, *379*(4), 241-245.	Contributed to the discussion of the data and the writing of the manuscript.
24. **Pannuzzo, M.**, Grassi, A., & Raudino, A. (2014). Hydrodynamic enhancement of the diffusion rate in the region between two fluctuating membranes in close opposition: A theoretical and computational study. The *Journal of Physical Chemistry B*, 118(29), 8662-8672.	***First and corresponding author***; Designed and performed Molecular Dynamics simulations, and contributed to the discussion of the data and the writing of the manuscript.
25. **Pannuzzo, M**., Raudino, A., & Böckmann, R. A. (2014). Peptide-induced membrane curvature in edge-stabilized open bilayers: A theoretical and molecular dynamics study. *The Journal of Chemical Physics*, *141*(2), 024901. ***Cover of the Journal***	***First and corresponding author***; Designed and performed Molecular Dynamics simulations; contributed to the discussion of the data and the writing of the manuscript.
26. **Pannuzzo, M**., De Jong, D. H., Raudino, A., & Marrink, S. J. (2014). Simulation of polyethylene glycol and calcium-mediated membrane fusion. *The Journal of Chemical Physics*, *140*(12), 124905.	***First and corresponding author***; Designed and performed Molecular Dynamics simulations; contributed to the discussion of the data and the writing of the manuscript.

27. **Pannuzzo, M**., & Böckmann, R. A. (2014). Energetic View on Membrane Pore Formation. *Biophysical Journal*, *106*(1), 1.	***First author***; Contributed to the discussion of the data and the writing of the manuscript.
28. Corti, M., **Pannuzzo, M.**, & Raudino, A. (2014). Out of equilibrium divergence of dissipation in an oscillating bubble coated by surfactants. *Langmuir*, *30*(2), 477-487.	Designed and performed Molecular Dynamics simulations; contributed to the discussion of the data and the writing of the manuscript.
29. **Pannuzzo, M**., Raudino, A., Milardi, D., La Rosa, C., & Karttunen, M. (2013). α-helical structures drive early stages of self-assembly of amyloidogenic amyloid polypeptide aggregate formation in membranes. *Scientific Reports*, *3*, 2781.	***First author****;* Designed and performed Molecular Dynamics simulations, contributed to the discussion of the data and the writing of the manuscript.
30. Raudino, A., Marrink, S. J., & **Pannuzzo, M**. (2013). Anomalous viscosity effect in the early stages of the ion-assisted adhesion/fusion event between lipid bilayers: A theoretical and computational study. *The Journal of Chemical Physics*, 138(23), 234901.	Designed and performed Molecular Dynamics simulations, contributed to the discussion of the data and writing of the manuscript.
31. **Pannuzzo, M**., Milardi, D., Raudino, A., Karttunen, M., & La Rosa, C. (2013). Analytical model and multiscale simulations of Aβ peptide aggregation in lipid membranes: towards a unifying description of conformational transitions, oligomerization and membrane damage. *Physical Chemistry Chemical Physics*, *15*(23), 8940-8951.	***First author****;* Designed and performed Molecular Dynamics simulations, contributed to the discussion of the data and the writing of the manuscript.
32. Raudino, A., & **Pannuzzo, M**. (2012). Hydrodynamic-induced enantiomeric enrichment of self-assemblies: Role of the solid-liquid interface in chiral nucleation and seeding. *The Journal of Chemical Physics*, 137(13), 134902.	Contributed to the discussion of the data and the writing of the manuscript.

33. Raudino, A., **Pannuzzo, M**., & Karttunen, M. (2012). Combined depletion and electrostatic forces in polymer-induced membrane adhesion: A theoretical model. *The Journal of Chemical Physics*, *136*(5), 02B601.	Designed and performed Molecular Dynamics simulations and contributed to the discussion of the data and the writing of the manuscript.
34. Del Favero, E., Raudino, A., **Pannuzzo, M**., Brocca, P., Motta, S., & Cantú, L. (2012). Transient step-like kinetics of enzyme reaction on fragmented-condensed substrates. *The Journal of Physical Chemistry B*, 116(32), 9570-9579.	Contributed to the discussion of the data and the writing of the manuscript.
35. Raudino, A., & **Pannuzzo, M**. (2010). Adhesion Kinetics between a Membrane and a Flat Substrate. An Ideal Upper Bound to the Spreading Rate of an Adhesive Patch. *The Journal of Physical Chemistry B*, 114(47), 15495-15505.	Contributed to the discussion of the data and the writing of the manuscript.
36. Raudino, A., & **Pannuzzo, M**. (2010). Nucleation theory with delayed interactions: An application to the early stages of the receptor-mediated adhesion/fusion kinetics of lipid vesicles. *The Journal of Chemical Physics*, 132(4), 01B617. *Research highlight featured*	Contributed to the discussion of the data and the writing of the manuscript.
37. Milardi, D., Pappalardo, M., **Pannuzzo, M**., Grasso, D. M., & La Rosa, C. (2008). The role of the Cys2-Cys7 disulfide bridge in the early steps of Islet amyloid polypeptide aggregation: A molecular dynamics study. *Chemical Physics Letters*, *463*(4-6), 396-399.	Performed Molecular Dynamics simulations and contributed to the discussion of the data.
38. Raudino, A., Sarpietro, M. G., **Pannuzzo, M.** (2011). The thermodynamics of simple biomembrane mimetic systems. *Journal of Pharmacy and Bioallied Sciences*, *3*(1), 15.	Contributed to the writing of the chapter.
39. Raudino A., Sarpietro M.G., **Pannuzzo, M.** "*Differential Scanning Calorimetry (DSC): Theoretical Fundamentals*", Book chapter in: "Drug-Biomembranes Interaction Studies: The	Contributed to the writing of the chapter.

Application of Calorimetric Techniques" R. Pignatello Ed., Woodhead. Publ., Cambridge, UK, 127-168 (2013)

TALKS

1. On-demand talk (3rd price), CRS 2021 Virtual Annual Meeting (2021);

2. Invited speaker, Controlled Release Society (CRS) Annual Workshop, Catania, Italy, 2019
"*Multiscale Modelling and Simulations at the Nanometer Scale for the Optimization of Delivery Systems*"

3. Invited speaker, VIII Coupled Problems conference, Sitges, Spain, 2019
"Molecular Dynamics Simulations for Tackling the Mechanical Properties of PLGA-PEG Mixtures in Nanomedicine"

4. CECAM workshop 'Challenges in modeling and simulations of nanoparticles in complex environments', Genova, Italy, 2019
"The role of Nanomedicine Deformability in Enhancing Therapeutic Efficacy"

5. Biophysical Society Annual Meeting, San Francisco, USA, 2018
"*All in one: GTP-mediated membrane strangling, fission, and dynamin scaffold disassembly"*

6. 25th DCSB Congress, Hotel Roma Siracusa, Italy, 2015
"*Positional Adjustments Induced by the Membrane Curvature Affect the Fate of Self-Assembling Peptides: A Theoretical and Molecular Dynamics Study"*

7. 25th SCI Congress, University of Calabria, Italy, 2014
"Phenomenological picture of the Peg and Calcium-mediated membrane fusion: theory and simulations"

8. Invited speaker, Symposium titled "Role of Amyloids in Alzheimer's disease", San Antonio, Texas USA, 2013
"Unraveling the spontaneous self-assembly of α-helical Aβ-peptides in lipid membranes by analytical and multiscale approach"

9. DCSB congress, Bologna, Italy, 2013
"Aβ-Membrane Interactions Promote Vesiculation"

10. 40th National Congress of Chemical Physics, Alessandria, Italy, 2013
"*Analytical model and multiscale simulations of Aβ peptide aggregation in lipid membranes*"

11. CECAM workshop, Jülich, Germany, 2013
"*Key to Function: Membrane-Protein Interaction*"

12. Symposium "Atomic View of Biomolecular Function" University of Michigan (Ann Arbor), USA, 2013
"Switching from 2D to 3D protein self-assemblies at the membrane-water interface: ..."

13. 21st SIBPA congress, Ferrara, Italy, 2012
"Unraveling the early steps of IAPP mediated membrane damage: insights from all atom ..."

14. 21st SIBPA congress, Ferrara, Italy, 2012
"Modelling polymer-induced adhesion between charged membranes: theoretical and computational approach"

POSTERS

1. UKICRS virtual Symposium, 2020
"Optimizing Delivery Systems via Multiscale Simulations"
M. Pannuzzo, P. Decuzzi

2. Soft Matter Days 2018, Jülich, Germany, 2018
"A Computational Look at Mechanical Properties of PLGA-PEG Blends"
M. Pannuzzo, P. Decuzzi

3. Biophysical Society Annual Meeting, New Orleans, USA, 2017
"Phase Behavior and Elastic Properties of Branched Polymers and Networks: A Molecular Dynamics Study" **M. Pannuzzo**, M. Deserno

4. Biophysical Society Annual Meeting, New Orleans, USA, 2017
"A phenomenological model of dynamin assembly"
M. Pannuzzo, Z. McDargh, M. Deserno

5. 10th European Biophysical Meeting, Dresden, Germany, 2015
"Geometrical considerations about membrane curvature effects on the peptide self-assembling pathway"
M. Pannuzzo, A. Raudino, A. Sandoval-Perez, R. A. Böckmann

6. 10th European Biophysical Meeting, Dresden, Germany, 2015
"*Effect of cholesterol on membrane-embedded Aβ- amyloids"*
A. Sandoval-Perez, **M. Pannuzzo**, R. Böckmann

7. Modeling cellular life: From single molecules to cellular function, CECAM-HQ-EPFL, Lausanne, Switzerland, 2014
"Pore Formation by b-Amyloid Aggregates"
A. Sandoval-Perez, **M. Pannuzzo**, R. Böckmann

8. Computer Simulation and Theory of Macromolecules, Huenfeld, Germany, 2014
"A Theoretical and Molecular Dynamics Study of the Buckling Transition: the Intriguing Case of Abeta Peptides"
M.Pannuzzo, A. Raudino, R. Böckmann

9. Computer Simulation and Theory of Macromolecules, Huenfeld, Germany, 2014
"*Coarse-grained Simulation Studies on Phase Transition Glycolipid Membranes"*
R. Kociurzynski, **M. Pannuzzo**, R. A. Böckmann

10. TAM (Transnational Access Meeting), the Netherlands, 2012
"Modelling polymer-induced adhesion between charged membranes: a

computational approach"
A. Raudino, **M. Pannuzzo**

11. 8th EBSA Congress in Budapest, 2011
"*Theoretical and computational models for explaining the enhancement of the fusion rate of charged membranes in presence of water soluble polymer*" European Biophysics Journal with biophysics letters, vol. 40, p. 83, ISSN: 0175-7571.
A. Raudino, **M. Pannuzzo**, M. Karttunen

12. 8th EBSA Congress in Budapest, 2011
"*Towards a dynamic vision of amyloid-membrane assemblies*"
European Biophysics Journal with biophysics letters, vol. 40, p. 93, ISSN: 0175-7571.
M. Pannuzzo, A. Raudino, D. Milardi, M. Karttunen, C. LaRosa

13. CAP (Canadian Association of Physics) University of Toronto, Canada, 2010
"Modeling the polymer-induced adhesion between charged membrane"
A. Raudino, **M. Pannuzzo**, M. Karttunen

14. Italian Society of Liquid Crystals meeting, Catania, Italy, 2008
"Interaction of Human Islet Amyloid Polypeptide with Phosphatidylcholin and Phosphatidylserine Model Membranes"
M.F.M. Sciacca, V. Carbone, **M. Pannuzzo**, M. Pappalardo, D. Milardi, C. La Rosa, D.M. Grasso

15. Italian Society of Liquid Crystals meeting, Catania, Italy, 2008
"Interaction of fibrillogenic hIAPP fragments with liquid-crystalline membranes"
M.F.M. Sciacca, V. Carbone, **M. Pannuzzo**, M. Pappalardo, D. Milardi, F. Attanasio, C. La Rosa, D.M. Grasso

Data	5/02/2023	Luogo	Siracusa