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(a) Professional Preparation

A list of the individual's undergraduate and graduate education and postdoctoral training as indicated below:

Yerevan University	Yerevan, Armenia	Physics	BS, 1972
Institute of Cytology	Leningrad, Russia	Biology	PhD, 1979
Institute of Cytology	Leningrad, Russia	Biology	Research scientist 1979-1992

(b) Appointments

2016-pr.	Professor, Department of Physics, University of Central Florida, Orlando, FL
2008-2016	Associate Prof., Dept. of Physics, University of Central Florida, Orlando, FL
2001-2008	Assoc. Prof., Biomol. Science Center, Univ. Central Florida, Orlando, FL
1999-2001	Assoc. Prof. of Research in Molecular Biosciences, University of Kansas, Lawrence, KS
1995-1999	Assistant Professor of Research in Molecular Physiology and Biological Physics, University of Virginia Medical School, Charlottesville, VA
1992-1995	Research Associate, Department of Molecular Physiology and Biological Physics, University of Virginia Medical School, Charlottesville, VA
1977-1992	Research Scientist, Institute of Cytology, Academy of Sciences USSR, Leningrad, Russia

(c) Products [this section may be titled **Publications** if only publications are listed]

(i) List up to five (5) publications/products that are the **most current** ones related to your field

- Tatulian SA. Challenges and hopes for Alzheimer's disease. *Drug Discovery Today*. 27(4):1027-1043 (2022). [10.1016/j.drudis.2022.01.016](https://doi.org/10.1016/j.drudis.2022.01.016)
- Abedin F, Kandel N, Tatulian SA. Effects of A β -derived peptide fragments on fibrillogenesis of A β . *Scientific Reports*. 11(1):19262 (2021). [10.1038/s41598-021-98644-y](https://doi.org/10.1038/s41598-021-98644-y)
- Abedin F, Tatulian SA. Mutual structural effects of unmodified and pyroglutamylated amyloid β peptides during aggregation. *Journal of Peptide Science*. 27(6):e3312 (2021). [10.1002/psc.3312](https://doi.org/10.1002/psc.3312)
- Tatulian SA. FTIR Analysis of Proteins and Protein-Membrane Interactions. *Methods in Molecular Biology*. 2003:281-325 (2019). [10.1007/978-1-4939-9512-7_13](https://doi.org/10.1007/978-1-4939-9512-7_13)
- Kandel N, Matos JO, Tatulian SA. Structure of amyloid β_{25-35} in lipid environment and cholesterol-dependent membrane pore formation. *Scientific Reports*. 9(1):2689 (2019). [10.1038/s41598-019-38749-7](https://doi.org/10.1038/s41598-019-38749-7)

(ii) List up to five (5) other significant publications/products.

- Serrano A, Guyette JL, Heim JB, Taylor M, Cherubin P, Krengel U, Teter K, Tatulian SA. Holotoxin disassembly by protein disulfide isomerase is less efficient for Escherichia coli heat-labile enterotoxin than cholera toxin. *Scientific Reports*. 12(1):34 (2022). [10.1038/s41598-021-03939-9](https://doi.org/10.1038/s41598-021-03939-9)

- Huhn GR 3rd, Sparkes C, Silva I, Reyes C, Perez G, Khondker F, Jones T, Fragoso A, Contreras P, Alvarez M, Zabala-Rodriguez MC, Tatulian SA, Teter K. Acid-induced disassembly of the Haemophilus ducreyi cytolethal distending toxin. *Biochemistry and Biophysics Research Communications*. 636(Pt 1):57-63 (2022). [10.1016/j.bbrc.2022.10.068](https://doi.org/10.1016/j.bbrc.2022.10.068)
- Serrano A, Qiao X, Matos JO, Farley L, Cilenti L, Chen B, Tatulian SA, Teter K. Reversal of Alpha-Synuclein Fibrillization by Protein Disulfide Isomerase. *Frontiers in Cell and Developmental Biology*. 8:726 (2020). [10.3389/fcell.2020.00726](https://doi.org/10.3389/fcell.2020.00726)
- Tatulian SA, Kandel N. Membrane Pore Formation by Peptides Studied by Fluorescence Techniques. *Methods Mol. Biol.* 2003:449-464 (2019). [10.1007/978-1-4939-9512-7_19](https://doi.org/10.1007/978-1-4939-9512-7_19)
- Guyette J, Evangelista B, Tatulian SA, Teter K. Stability and Conformational Resilience of Protein Disulfide Isomerase. *Biochemistry*. 58(34):3572-3584 (2019) [10.1021/acs.biochem.9b00405](https://doi.org/10.1021/acs.biochem.9b00405)

(d) Graduate teaching experience

- List graduate courses taught within the last 7 years, include date (semester and year)

PHY5715 (Physical Basis of Life) spring 2020, 2021, 2022, 2023

PHY7980 (Dissertation) summer 2016 through spring 2021 continuously

PHY6918 (Directed Research) summer 2017, 2018, 2029, fall 2018, spring 2019

PHY6908 (Independent Study) summer 2018, spring 2019

(e) Graduate students mentored (to completion, if applicable)

- List up to 5 most recent- Chair of thesis/dissertation committees, overall number, names of students, degree, year graduated

Chair of dissertation committee:

Maria C. Zabala-Rodriguez (Biotechnology MS) to graduate in summer 2024

Faisal Abedin (Physics PhD) graduated in 2021

Nabin Kandel (Physics PhD) graduated in 2019

Greg Goldblatt (Biomed PhD) graduated in 2016

Jason Matos (Biotechnology MS) graduated in 2016

Pranav Garg (Biotechnology MS) graduated in 2011

- List up to 5 most recent- Member of thesis/dissertation committees, overall number, names of students, degree, year graduated

Albert Serrano (Biomed. PhD), Jinho Park (Materials Sci. & Ang. PhD), Tyrone Thames

(Physics PhD), Joseph Goode (Biomed PhD), Ryan Connelly (Chemistry PhD, Grad. 2022).

Overall, have served in 33 PhD, 8 MS, 11 HIM, and 1 Honors Undergraduate Thesis committees

(f) Other synergistic activities related to Graduate Education

- Have developed a graduate course Physical Basis of Life (PHY5715)
- Have mentored and trained graduate students outside the Dept. of Physics of UCF (PhD students from the College of Medicine Albert Serrano, Jessica Guyette, Helen Burrell) who acquired biophysical skills for biomedical research.
- Have developed algorithms for biophysical computations ([10.1016/j.compbiolchem.2008.05.001](https://doi.org/10.1016/j.compbiolchem.2008.05.001)), which has been shared with many researchers, including graduate students