Wenwei Zheng, Assistant Professor
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Employment

2017 - Assistant Professor, College of Integrative Sciences and Arts (CISA)
Arizona State University (ASU) Polytechnic, Mesa, AZ

2020 - Graduate faculty, Department of Physics, ASU, Tempe, AZ

2014 - 17 Postdoctoral researcher (Robert Best group)
National Institutes of Health (NIH), Bethesda, MD

Education

2013 Ph.D. in Chemistry (Cecilia Clementi group)
Rice University, Houston, TX

2008 M.S. in Biophysics, B.S. in Physics and Computer Science
Fudan University, Shanghai, China

Professional Memberships

2015 - Biophysical society

I. Scholarly Activities

A. Publications

https://scholar.google.com/citations?hl=en&user=aE7blGIAAAAJ

A1. Peer-Reviewed Journal Papers

* indicates corresponding authors and # indicates co-1st authors.

At ASU (17 papers)
contribution of my lab listed below

39. Wiggers F, Wohl S, Dubovetskyi A, Rosenblum G, **Zheng W***, and Hofmann H*. Diffusion of a Disordered Protein on its Folded Ligand. ***Proc. Natl. Acad. Sci. USA*** 118: e2106690118 (2021)

38. Ramaraju B, Nelson SL, **Zheng W**, Ghirlando R, and Deshmukh L*. Quantitative NMR Study of Insulin-Degrading Enzyme Using Amyloid-β and HIV-1 p6 Elucidates Its Chaperone Activity. ***Biochemistry*** 60:2519 (2021)

37. Wohl S, Jakubowski M, and **Zheng W***. Salt-Dependent Conformational Changes of Intrinsically Disordered Proteins ***J. Phys. Chem. Lett.*** 12:6684 (2021)

36. **Zheng W***, Dignon GL*, Jovic N, Xu X, Regy RM, Fawzi NL, Kim YC*, Best RB*, and Mittal J*. Molecular Details of Protein Condensates Probed by Microsecond Long Atomistic Simulations. ***J. Phys. Chem. B*** 124:11671 (2020)

35. Regy RM, Dignon GL, **Zheng W**, Kim YC, and Mittal J*. Sequence dependent phase separation of protein-polynucleotide mixtures elucidated using molecular simulations. ***Nucleic Acids Res.*** 48:12593 (2020)

34. **Zheng W***, Dignon GL, Brown M, Kim YC, and Mittal J*. Hydropathy Patterning Complements Charge Patterning to Describe Conformational Preferences of Disordered Proteins. ***J. Phys. Chem. Lett.*** 11:3408 (2020)

33. Vancraenenbroeck R, Harel YS, **Zheng W** and Hofmann H*. Polymer Effects Modulate Binding Affinities in Disordered Proteins. ***Proc. Natl. Acad. Sci. USA*** 116:19506 (2019)
Highlighted by Nature Materials: https://www.nature.com/articles/s41563-019-0497-y

32. Dignon GL#, **Zheng W#**, Kim YC, and Mittal J*. Temperature-Controlled Liquid–Liquid Phase Separation of Disordered Proteins. ***ACS Cent. Sci.*** 5:821 (2019)

31. Zerze GH*, **Zheng W***, Best RB*, and Mittal J*. Evolution of All-atom Protein Force Fields to Improve Local and Global Properties. ***J. Phys. Chem. Lett.*** 10:2227 (2019)

30. Dignon GL, **Zheng W**, and Mittal J*. Simulation methods for liquid–liquid phase separation of disordered proteins. ***Curr. Opin. Chem. Eng.*** 23:92 (2019)

29. Peng Y, Cao S, Kiselar J, Xiao X, Du Z, Hsieh A, Ko S, Chen Y, Agrawal P, **Zheng W**, Shi W, Jiang W, Yang L, Surewicz WK, Chance MR, Buck M, and Yang S*. Metastable contacts and structural disorder of the estrogen receptor transactivation domain. ***Structure*** 27:229 (2019)
Featured by https://www.sciencedirect.com/science/article/pii/S0969212619300061

28. **Zheng W**, Hofmann H, Schuler B*, and Best RB*. Origin of internal friction in disordered proteins depends on solvent quality. ***J. Phys. Chem. B*** 122:11478 (2018)

27. Dignon GL#, **Zheng W#**, Kim YC, Best RB, and Mittal J*. Relation between Single-molecule Properties and Phase Behavior of Intrinsically Disordered Proteins. ***Proc. Natl. Acad. Sci. USA*** 115:9929 (2018)

26. Best RB*, **Zheng W**, Borgia A, Buholzer K, Borgia MB, Hofmann H, Soranno A, Nettels D, Gast K, Grishaev A and Schuler B*. Comment on "Innovative scattering analysis shows that hydrophobic disordered proteins are expanded in water". ***Science*** 361:eaar7101 (2018)

25. **Zheng W***, and Best RB*. An extended Guinier analysis for intrinsically disordered proteins. ***J. Mol. Biol.*** 16:2540 (2018)

24. **Zheng W***, Zerze GH, Borgia A, Mittal J, Schuler B*, and Best RB*. Inferring properties of disordered chains from FRET transfer efficiencies. ***J. Chem. Phys.*** 148:123329 (2018)
2018 JCP editors' choice: https://aip-info.org/t/1XPS-652B0-7BCAPVTLAC/cr.aspx
Highlighted by JCP: https://aip.scitation.org/doi/full/10.1063/1.5025418

23. Dignon GL#, **Zheng W#**, Kim YC, Best RB*, and Mittal J*. Sequence determinants of protein phase behavior from a coarse-grained model. ***PLOS Comput. Biol.*** 14:e1005941 (2018)
PLOS CB Research Prize 2019.

Before joining ASU (22 papers)

22. Monahan Z, Ryan VH, Janke AM, Burke KA, Zerze GH, O'Meally R, Dignon GL, Conicella AE, **Zheng W**, Best RB, Cole RN, Mittal J, Shewmaker F* and Fawzi NL*. Phosphorylation of the FUS low-complexity domain disrupts phase separation, aggregation, and toxicity. ***EMBO J.*** e201696394. (2017)
Featured article by EMBO J. https://www.embopress.org/doi/full/10.15252/embj.201798078

21. Borgia A*#, **Zheng W#**, Buholzer K, Borgia M, Schuler A, Hofmann H, Soranno A, Nettels D, Gast K*, Grishaev A*, Best RB* and Schuler B*. Consistent View of Polypeptide Chain Expansion in Chemical Denaturants from Multiple Experimental Methods. ***J. Am. Chem. Soc.*** 138:11714 (2016)
Spotlighted by J. Am. Chem. Soc. https://pubs.acs.org/doi/abs/10.1021/jacs.6b10284

20. **Zheng W***, Borgia A, Buholzer K, Grishaev A, Schuler B and Best RB*. Probing the Action of Chemical Denaturant on an Intrinsically Disordered Protein by Simulation and Experiment. ***J. Am. Chem. Soc.*** 138:11702 (2016)

19. **Zheng W**, De Sancho D, and Best RB*. Modulation of folding internal friction by local and global barrier heights. ***J. Phys. Chem. Lett.*** 6:1028 (2016)

18. **Zheng W** and Best RB*. Reduction of all-atom folding dynamics to one-dimensional diffusion. ***J. Phys. Chem. B*** 119:15247 (2015)

17. **Zheng W**, Borgia A, Borgia MB, Schuler B and Best RB*. Empirical optimization of interactions between proteins and chemical denaturants in molecular simulations. ***J. Chem. Theory Comput.*** 11:5543 (2015)

16. **Zheng W**, De Sancho D, Hoppe T and Best RB*. Dependence of internal friction on folding mechanism. ***J. Am. Chem. Soc.*** 137:3283 (2015)

15. Cazade PA, **Zheng W**, Prada-Gracia D, Berezovska G, Rao F, Clementi C and Meuwly M*. A comparative analysis of clustering algorithms: O2 migration in truncated hemoglobin I from transition networks. ***J. Chem. Phys.*** 142:025103 (2015)

14. Best RB*, **Zheng W** and Mittal J*. Balanced protein-water interactions improve properties of disordered proteins and non-specific protein association. ***J. Chem. Theory Comput.*** 10:5113 (2014)

13. Rohrdanz MA, **Zheng W**, Lambeth B and Clementi C*. Mutliscale approach to the determination of the photoactive yellow protein signaling state ensemble. ***PLOS Comput. Biol.*** 10:e1003797 (2014)

12. Sambasivan R, **Zheng W,** Burya J, Popp BV*, Turro C*, Clementi C and Ball Z*. A tripodal peptide ligand for asymmetric Rh(II) catalysis highlights unique features of on-bead catalyst development. ***Chem. Sci.*** 5: 1401-1407 (2014)

11. **Zheng W#**, Vargiu A#, Rohrdanz MA, Carloni P and Clementi C*. Molecular recognition of DNA by ligands: Roughness and complexity of the free energy profile. ***J. Chem. Phys.*** 139:145102 (2013)

10. **Zheng W**, Rohrdanz MA and Clementi C*. Rapid exploration of configuration space with Diffusion Map-directed Molecular Dynamics. ***J. Phys. Chem. B*** 117:12769-12776 (2013)

9. Rohrdanz MA, **Zheng W** and Clementi C*. Discovering mountain passes via torchlight: methods for the definition of reaction coordinates and pathways in complex macromolecular reactions. ***Annu. Rev. Phys. Chem.*** 64: 295-316 (2013)

8. **Zheng W**, Qi B, Rohrdanz MA, Caflisch A, Dinner AR and Clementi C*. Delineation of folding pathways of a β-sheet miniprotein. ***J. Phys. Chem. B*** 115:13065–13074 (2011)

7. **Zheng W**, Rohrdanz MA, Maggioni M and Clementi C*. Polymer reversal rate calculated via locally scaled diffusion map. ***J. Chem. Phys.*** 134:144109 (2011)

6. Rohrdanz MA, **Zheng W**, Maggioni M, Clementi C*. Determination of reaction coordinates via locally scaled diffusion map. ***J. Chem. Phys.*** 134:124116 (2011)

5. **Zheng W**, Fan D, Feng M and Wang Z*. The intrinsic load-resisting capacity of kinesin. ***Phys. Biol.*** 6:036002 (2009)

4. Fan D#, **Zheng W#**, Hou R, Li F and Wang Z*. Modeling motility of the kinesin dimer from molecular properties of individual monomers. ***Biochemistry*** 47:4733–4742 (2008)

3. Li D, Fan D, **Zheng W**, Le Y and Wang Z*. From molecular shuttles to directed procession of nanorings. ***Chem. Phys.*** 352:235–240 (2008)

2. Li D, **Zheng W** and Wang Z*. Periodic thermodynamics of laser-driven molecular motor. ***Chinese Phys. B*** 17:1916–1924 (2008)

1. Wang Z*, Feng M, **Zheng W**, Fan D. Kinesin is an evolutionarily fine-tuned molecular ratchet-and-pawl device of decisively locked direction. ***Biophys. J.*** 93:3363–3372 (2007)

A2. Invited Book Chapters at ASU (3 book chapters)

3. **Regy RM**, **Zheng W**, and Mittal J. Using a sequence-specific coarse-grained model for studying protein liquid–liquid phase separation ***Methods Enzymol.*** 646:1 (2021)

2. **Zheng W**, and Chung HS. Single-molecule Fluorescence Studies of IDPs and IDRs. Intrinsically Disordered Proteins: Dynamics, Binding, and Function. Academic Press. (2019)

1. Holmstrom ED, Holla A, **Zheng W**, Nettles D, Best RB, and Schuler B. Distances, Distance Distributions, and Ensembles of Unfolded and Intrinsically Disordered Proteins From Single-Molecule FRET. ***Methods Enzymol.*** 611:287 (2018)

B. Presentations

B1. Conference abstracts and presentations

At ASU (17 abstracts)
* indicates the presenter.

25. Poster: Wiggers F, Wohl S, Dubovetskyi A, Rosenblum G, **Zheng W***, and Hofmann H. Diffusion of a disordered protein on its folded ligand. Biophysical Society 66th Annual Meeting, San Francisco, CA, 2022
https://www.cell.com/biophysj/pdf/S0006-3495(21)02726-0.pdf

24. Poster: Wohl S*, Jakubowski M, **Zheng W**. Salt-dependent conformational changes of intrinsically disordered proteins. Biophysical Society 66th Annual Meeting, San Francisco, CA, 2022
https://www.cell.com/biophysj/pdf/S0006-3495(21)02718-1.pdf

23. Poster: Otteson L, Nagy G, Kunkel J, Kodis G, **Zheng W**, Bignon C, Longhi S, Grubmuller H, Vaiana AC, and Vaiana SM. Biophysical Society 66th Annual Meeting, San Francisco, CA, 2022
https://www.cell.com/biophysj/pdf/S0006-3495(21)03410-X.pdf

22. Invited Talk: **Zheng W***, Dignon GL, Kim YC, Best RB, and Mittal J. Computational Models for Liquid-Liquid Phase Separation of Intrinsically Disordered Proteins. Biophysical Society 65th Annual Meeting (Remote), 2021
https://www.cell.com/biophysj/pdf/S0006-3495(20)31130-9.pdf

21. Poster: Kodis G, Kunkel JD, **Zheng W**, Matyushov D, and Vaiana SM. Solvent Relaxation Significantly Contributes to Electron Transfer Rates between Tryptophan Triplet State and Cystine. Biophysical Society 65th Annual Meeting (Remote), 2021
https://www.cell.com/biophysj/pdf/S0006-3495(20)32350-X.pdf

20. Poster: Kunkel J*, Kodis G, Nagy G, Bignon C, Longhi S, Vaiana AC, Grubmuller H, **Zheng W**, and Vaiana SM. Dynamical Heterogeneity in the Measles Virus IDP NTAIL in its Free and Bound States. Biophysical Society 65th Annual Meeting (Remote), 2021
https://www.cell.com/biophysj/pdf/S0006-3495(20)32347-X.pdf

19. Poster: **Zheng W***, Dignon GL, Brown M, and Mittal J. Impact of Hydrophobic Patterning on Conformational Ensemble of Disordered Proteins. Biophysical Society 64th Annual Meeting, San Diego, CA, 2020
https://www.cell.com/biophysj/pdf/S0006-3495(19)32206-4.pdf

18. Talk: Jovic N*, Dignon GL, **Zheng W**, Kim YC, and Mittal J. Role of Secondary Structure in Protein Liquid-Liquid Phase Separation Highlighted by a New Coarse-Grained Model. AIChE Annual Meeting, Orlando, FL, 2019
https://aiche.confex.com/aiche/2019/meetingapp.cgi/Paper/577551

17. Invited Talk: **Zheng W***. Methods for Predicting Dimensions of Intrinsically Disordered Proteins. Conference on Foundational & Applied Data Science for Molecular and Materials Science & Engineering, Bethlehem, PA, 2019
https://wordpress.lehigh.edu/indisc/files/2019/01/Abstract-Wenwei-Zheng-ASU-2beollv.pdf

16. Invited Talk: **Zheng W***, Dignon GL, Brown M, Best RB, Kim YC, and Mittal J. Models for liquid-liquid phase separation of disordered proteins. ACS National Meeting, Orlando, FL, 2019

15. Poster: Gibson F, Soranno A, **Zheng W**, and Vaiana SM*. Extracting Sequence-Dependent Intra-Protein Interaction Parameters from Photo-Induced Electron Transfer Measurements of IDPs. Biophysical Society 63rd Annual Meeting, Baltimore, MD, 2019
https://www.cell.com/biophysj/pdf/S0006-3495(18)32382-8.pdf

14. Poster: Dignon GL*, **Zheng W**, Kim YC, and Mittal J. A High-Throughput Approach to Phase Separation of Disordered Proteins. Biophysical Society 63rd Annual Meeting, Baltimore, MD, 2019
https://www.cell.com/biophysj/pdf/S0006-3495(18)33171-0.pdf

13. Poster: Dignon GL*, **Zheng W**, Kim YC, and Mittal J. Molecular Simulations of Liquid-like Assemblies of Intrinsically Disordered Proteins. AIChE Annual Meeting, Pittsburgh, PA, 2018
https://aiche.confex.com/aiche/2018/meetingapp.cgi/Paper/528158

12. Talk: Dignon GL*, Mittal J, and **Zheng W**. Simulation-Aided Design of Intrinsically Disordered Proteins with Tunable Phase Behavior. AIChE Annual Meeting, Pittsburgh, PA, 2018
https://aiche.confex.com/aiche/2018/meetingapp.cgi/Paper/528633

11. Talk: **Zheng W***, Zerze G, Borgia A, Mittal J, Schuler B, and Best RB. Inferring Properties of Disordered Chains From FRET Transfer Efficiencies. Biophysical Society 62nd Annual Meeting, San Francisco, CA, 2018
https://www.cell.com/biophysj/pdf/S0006-3495(17)33268-X.pdf

10. Poster: Dignon GL*, **Zheng W**, Kim YC, Mittal J and Best RB. Coarse-Grained Simulations of Intrinsically Disordered Proteins in the Context of Liquid-Liquid Phase Separation. Biophysical Society 62nd Annual Meeting, San Francisco, CA, 2018
https://www.cell.com/biophysj/pdf/S0006-3495(17)33623-8.pdf

9. Poster: **Zheng W***, Dignon GL, Kim YC, Best RB, and Mittal J. Sequence determinants of protein phase behavior from a coarse-grained model. Gordon research conference—Protein folding dynamics, Galveston, TX, 2018

Before joining ASU (8 abstracts)

8. Talk: **Zheng W***, Borgia A, Grishaev A, Schuler B, and Best RB. Resolving the Controversy between SAXS and FRET Measurements on Unfolded Proteins. Biophysical Society 61st Annual Meeting, New Orleans, LA, 2017
https://www.cell.com/biophysj/pdf/S0006-3495(16)32738-2.pdf

7. Poster: **Zheng W***, and Best RB. All-atom models for unfolded state structure and dynamics. ACS 252nd National Meeting, Philadelphia, PA, 2016

6. Talk: **Zheng W***, de Sancho D, and Best RB. Dependence of internal friction on local and global barrier height. ACS 251st National Meeting, San Diego, CA, 2016

5. Poster: **Zheng W***, de Sancho D, and Best RB. Modulation of internal friction by local and global barrier heights. Gordon research conference—Protein folding dynamics, Galveston, TX, 2016

4. Poster: **Zheng W***, de Sancho D, Hoppe T, and Best RB. Dependence of internal friction on native topology. Biophysical Society 59th Annual Meeting, Baltimore, MD, 2015
https://www.cell.com/biophysj/pdf/S0006-3495(14)04052-1.pdf

3. Poster: **Zheng W***, and Best RB. Do unfolded proteins collapse? Understanding the controversy between FRET and SAXS experiment. Gordon research conference—Computational Chemistry, West Dover, VT, 2014

2. Proceedings: Rohrdanz MA*, **Zheng W**, Lambeth B, Clementi C. Multiscale characterization of macromolecular dynamics: application to photoactive yellow protein. Proceedings XSEDE13, San Diego, CA, 2013
https://dl.acm.org/doi/abs/10.1145/2484762.2484836

1. Poster: **Zheng W***, Defining 'optimal' reaction coordinates by locally scaled diffusion map. CECAM workshop, ETH Zurich, Lugano, Switzerland, 2012
https://www.cecam.org/workshop-details/689

B2. Colloquium and Seminar Talks

At ASU (14 presentations)

19. Invited Talk: Models for liquid-liquid phase separation of intrinsically disordered proteins. University of Oregon (Remote) May 2021

18. Invited Talk: Models for liquid-liquid phase separation of intrinsically disordered proteins. Multiscale Modeling for Biotherapeutics Symposium, Schrödinger, Inc. (Remote) Apr 2021
https://www.schrodinger.com/webinars/archives/1770/multiscale-modeling-for-biotherapeutics-symposium/647319

17. Talk: Computational models for understanding formation of membraneless organelles. ASU, Polytechnic, Mesa, AZ, Feb 2021

16. Invited Talk: Models for liquid-liquid phase separation of intrinsically disordered proteins. Center for Theoretical Biological Physics, Rice University, Houston, TX, Oct 2020

15. Talk: What can we learn from polymer effects of intrinsically disordered proteins. ASU, Polytechnic, Mesa, AZ, Feb 2020

14. Invited Talk: Models for structure and dynamics of intrinsically disordered proteins. Shanghai Tech, Shanghai, China, Jun 2018

13. Invited Talk: Organized disorder? Structure and dynamics of intrinsically disordered proteins. Nanjing University, Nanjing, China, Jun 2018

12. Invited Talk: Models for structure and dynamics of intrinsically disordered proteins. East China Normal University, Shanghai, China, Jun 2018

11. Invited Talk: Organized disorder? Structure and dynamics of intrinsically disordered proteins. Fudan University, Shanghai, China, Jun 2018

10. Talk: Models for liquid-liquid phase separation of disordered proteins. Biophest 2018, University of Arizona, Tucson, AZ, May 2018

9. Talk: Organized disorder? Structure and dynamics of intrinsically disordered proteins. ASU, Polytechnic, Mesa, AZ, Apr 2018

8. Invited Talk: Structure and dynamics of intrinsically disordered proteins. Center of Biological Physics, ASU, Tempe, AZ, Mar 2018

7. Invited Talk: Structure and dynamics of intrinsically disordered proteins. Rice University, Houston TX, Jan 2018

6. Invited Talk: Structure and dynamics of intrinsically disordered proteins. Levin Center, ASU, Tempe, AZ, Sep 2017

Before joining ASU (5 presentations)

5. Invited Talk: All-atom models for unfolded protein structure and dynamics using experiments and simulations. New Jersey Institute of Technology, Newark, NJ, Apr 2017

4. Talk: Structure and dynamics of intrinsically disordered proteins from simulations and experiments. ASU, Polytechnic, Mesa, AZ, Mar 2017

3. Talk: Do unfolded proteins collapse? Resolving the controversy between FRET and SAXS experiments. Computational theory Washington/Baltimore local symposium, NHLBI, NIH, Rockville, MD, Jun 2014

2. Talk: Multiscale analysis of macromolecular systems. Laboratory of Chemical Physics seminar series, NIDDK, NIH, Bethesda, MD, Sep 2013

1. Talk: A multiscale approach to understand macromolecular system. Physics of living system annual meeting, Yale University, New Haven, CT, Jul 2012

II. Instructional Activities

C. Teaching

https://www.ratemyprofessors.com/ShowRatings.jsp?tid=2313332

Courses taught at ASU

Student evaluation score is obtained using the score for "Q17: All things considered, this instructor was a very effective university teacher" from anonymous ASU student evaluation at the end of the semester, with a 1-5 scale, 1.0 the best and 5.0 the worst.

Year	Term	Course	Title	Credit hours	Enrollment	Student evaluation
2022	Spring	CHM113	General Chemistry I	4	159	
2021	Fall	CHM113	General Chemistry I	4	89	1.5 (1.0 best)

2021	Fall	ABS/ MAT394	Intro to Scientific Computing	3	10	1.0
2021	Spring	CHM113	General Chemistry I	4	164	1.2
2020	Fall	CHM113	General Chemistry I	4	80	1.1
2020	Fall	ABS/ MAT394	Intro to Scientific Computing	3	15	1.0
2020	Spring	CHM113	General Chemistry I	4	80	1.3
2020	Spring	CHM113	General Chemistry I	4	68	1.1
2019	Fall	CHM113	General Chemistry I	4	71	1.1
2019	Fall	ABS/ MAT394	Intro to Scientific Computing	3	11	1.0
2019	Spring	CHM113	General Chemistry I	4	77	1.4
2019	Spring	CHM113	Gen Chem I (recitation)	1	34	1.6
2019	Spring	CHM113	Gen Chem I (recitation)	1	19	1.1
2018	Fall	CHM113	General Chemistry I	4	73	1.2
2018	Fall	ABS/ MAT394	Intro to Scientific Computing	3	8	1.0
2018	Spring	CHM113	General Chemistry I	4	72	1.8
2017	Fall	CHM113	General Chemistry I	4	58	2.0
Average					217.6 /year	1.28

D. Mentoring

D1. Graduate students

#	Student	Term	Note
8	Lilian Otteson	Sp2021 -	co-advising with Sara Vaiana
7	Samuel Wohl	F2020 -	Thesis committee chair
6	Roshan Regy	F2019 -	co-advising with Jeetain Mittal
5	Nina Jovic	F2018 -	co-advising with Jeetain Mittal
4	John Kunkel	Sp2020 – F2021	co-advising with Sara Vaiana
3	Felicia Gibson	Sp2018 – Sp2019	co-advising with Sara Vaiana
2	Codi Bure	Sp2018 – F2018	co-advising with Marianne Moore
1	Gregory Dignon	F2016 – F2019	co-advising with Jeetain Mittal

D2. Undergraduate students

Barrett Honors Thesis

#	Student	Term	Thesis
3	Madison Lovell	Sp2020 – Sp2021	COVID-19 Literature Search via Natural Language Processing Tools https://keep.lib.asu.edu/items/148458
2	Nolan French	Sp2018 - Sp2019	Properties of Disordered Regions of Proteins in RNA Granules https://repository.asu.edu/items/56160
1	Matthew Brown	Sp2018 – Sp2019	Predicting Dimensions of Intrinsically Disordered Proteins https://repository.asu.edu/items/52688

Undergraduate researchers

#	Student	Term
6	Iman Khan	Sp – F2021
5	Matthew Jakubowski	Sp2021
4	Carter Williamson	F2019
3	Maya Pennett	Sp2019
2	Robert Nguyen	Sp2018 - Sp2019
1	Nathan Szpakowski	F2018 – Sp2019

D3 Highschool student

1. Max Gao (ASU Preparatory Academy)
- Supervising period: Spring 2018 – Spring 2019
- Biophysics apprenticeship program at ASU Preparatory Academy (K-12)

III. Service Activities

E. ASU Service

E1. College Level (College of Integrative Sciences and Arts)

6. Member of CISA academic standard committee (2021 – present)

E2. Unit Level (Science and Mathematics)

5. Member of student award committee (2018 – present)

4. Member of searching committee for Assistant Professor Genetics #17055 (2021 – 2022)

3. Member of searching committee for Chemistry Lecturer #17038 (2021)

2. Chair of searching committee for Chemistry Instructional Professional #12856 (2019)

1. Organization of Chemistry lab experiences at ASU Open Door 2018, 2019, 2020, and 2022 (expecting in March, 2022) for local community and K-12 students

F. Professional Service

F1. Grant reviews

1. U.S.-Israel Binational Science Foundation (BSF) (01/2022)

2. National Institutes of Health (NIH) Macromolecular Structure and Function C (MSFC) study section (06/2020)

3. American Chemical Society (ACS) Petroleum Research Fund (PRF) (07/2020)

F2. Peer-reviews for journals (an average of ~14 reviews per year)

Journal names (alphabetical order):

1. Biomolecules (Impact factor=4.694)
2. Biophysical Journal, Biophysical Reports (Impact factor=4.033)
3. Communications Biology (Impact factor=6.268)
4. International Journal of Molecular Sciences (Impact factor=5.923)
5. Journal of Chemical Physics (Impact factor=3.488)
6. Journal of Chemical Theory and Computation (Impact factor=6.006)
7. Journal of Physical Chemistry B (Impact factor=2.991)
8. Journal of Physical Chemistry Letters (Impact factor=6.475)
9. Molecular Biology and Evolution (Impact factor=16.24)
10. Molecular Pharmaceutics (Impact factor=4.939)
11. New Journal of Chemistry (Impact factor=3.591)
12. Physical Chemistry Chemical Physics (Impact factor=3.676)
13. Proceedings of the National Academy of Sciences of the United States of America (Impact factor=11.2)
14. Proteins: Structure, Function and Bioinformatics (Impact factor=3.756)
15. RSC Advances (Impact factor=3.36)
16. Scientific Reports (Impact factor=4.379)

Timeline	2021	2020	2019	2018	Aug – Dec, 2017	Before joining ASU
# manuscripts	15	14	15	14	6	47

G. Community Service

1. Regeneron International Science and Engineering Fair (ISEF) grand award judge (2021)

2. Basis Mesa (K-12) science fair judge (2021)

3. Intel International Science and Engineering Fair (ISEF) grand award judge (2019)