

Nicholas Moringo

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Education

Rice University | Houston, TX

Ph.D. in Chemistry

(April 2020)

M.A. in Chemistry

(December 2017)

University of California: Irvine | Irvine, CA

B.S. in Chemistry

(September 2014)

Selected Awards and Honors

- National Science Foundation Graduate Research Fellow (May 2017-May 2020)
- Smalley Curl Institute: Army Futures Presentation Award (August 2019)
- Harry B. Weiser Leadership Award : Rice University Chemistry Dept. (August 2018,2019)
- Harry B. Weiser Research Award: Rice University Chemistry Dept. (August 2018)
- Stephan C. Hofmann Fellowship Award: Top Qualifying Exam (August 2017)

Skills

- *Computer:* MatLab coding, networking, hardware diagnostics, software troubleshooting, Microsoft Office suite, Origin, Visual Molecular Dynamics
- *Laboratory:* Microscopy, optics, Atomic force microscopy, fluorescent imaging, chromatography, dynamic light scattering, electron microscopy, ellipsometry, polymer coatings, polymer films, x-ray photoelectron spectroscopy, circular dichroism spectroscopy, spin coating
- *Financial:* Corporate asset management, non-profit asset management, contractual management, SAP Concur
- *Languages:* English, Spanish (fluent)
- *Writing:* Grant proposals, white-paper proposals, fellowship applications, peer-reviewed publications

Research Experience

Rice University: Landes Group Houston, TX

(August 2015- Present)

- Research protein-polymer interactions using state of the art single-molecule microscopy to develop a mechanistic understanding for improving the costly and poorly understood protein separations utilized to purify biological-based pharmaceuticals
- Constructed, trained, and manage a lab-utilized, home built, widefield microscope for single-molecule imaging at polymer and cell interfaces to ensure reliable daily microscope operation for producing publication quality data
- Published 3 peer-reviewed publications and a review presented at 3 national conferences, 3 regional symposiums, and was invited to present at an Army research base resulting in departmental, national, and regional acknowledgments for research excellence including being named a National Science Foundation Fellow
- Collaborated with peers to produce 8 additional peer-reviewed publications as a member of a research team utilizing expertise in imaging and nanoscale chemistry to corroborate colleague's findings
- Mentored 3 fellow graduate students on lab protocols and instrument operation for successful transfer of knowledge
- Performed data analysis of experimental single-molecule results using custom in house MatLab code to produce publication quality analyses and graphical data representation

UC Irvine Craig Martens Group Irvine, CA

(November 2014-April 2015)

- Executed Visual Molecular Dynamics (VMD) and NANoscale Molecular Dynamics (NAMD) simulations to predict gas molecule orientation in polyhedral clathrate hydrates to exploit them as novel energy storage devices
- Worked as a member of a research team to produce publication quality results

Selected Publications

Moringo, N.; Shen, H.; Wang, W.; Landes, C.F. "Polymer free volume and its effect on the desorption mediated flight of lysozyme on polystyrene interfaces" **2019**, (In Preparation).

Moringo, N.; Bishop, L.D.C.; Carrejo, N.; Shen, H.; Wang, W.; Misiura, A.; Baiyasi, R.; Ye, F.; Robinson, J.T.; Landes, C.F. "A mechanistic examination of salting out in protein-polymer membrane interactions" **2019**, Proceeding of the National Academy of Sciences: United States (Under Revision).

Moringo, N.; Shen, H.; Bishop, L.D.C.; Wang, W.; Landes, C.F. "Enhancing Analytical Separations using Super-resolution Microscopy" *Annual Review of Physical Chemistry* **2018**, 69, 353-375.

Moringo, N.; Shen, H.; Tauzin, L.J.; Wang, W.; Bishop, L.D.C.; Landes, C.F. "Variable lysozyme transport dynamics on oxidatively functionalized polystyrene films." *Langmuir* **2017**, 33,10818–10828.

Selected Presentations

- Smalley Curl Institute Research Colloquium: Houston, TX (August 2019)
- ACS National Meeting: San Diego, CA (August 2019)
- ACS National Meeting: New Orleans, LA (June 2018)
- Smalley Curl Institute Interdisciplinary Research Colloquium: Houston, TX (February 2017)

Leadership & Professional Experience

Esteban Toledo Inc: Public Relations Manager Woodlands, TX (January 2012-Present)

- Build social media presence to develop a fan base on Twitter, Instagram, and Facebook resulting in 75,000 followers
- Establish rapport with executive directors of PGA Tour Champions and European Tour events to enhance public relations exposure in the professional golf industry
- Manage revenue accrued from professional events and endorsements to enhance the corporate net worth from \$2M to \$4.5M

Esteban Toledo Family Foundation: Executive Secretary Irvine, CA (January 2013-Present)

- Communicate with board members and president on the operational goals to ensure foundations outreach and development visions are met in a timely manner
- Oversee and manage assets to budget monies between foundation's subsidiaries in the USA and Mexico totaling over \$750,000
- Promote the mission and success of the foundation's growth on social media outlets for maximized public exposure
- Advise on operational decisions with employees at the foundation's orphanage in Spanish both verbally and in written correspondence

Rice Chemistry Graduate Student Association: President Houston, TX (May 2017-May 2019)

- Organized and led monthly board meetings to cover monthly goals including monthly departmental gatherings for all current graduate students to promote the close-knit chemistry community at Rice
- Constructed fundraising programs and established departmental funding sources for the association leading to the successful funding of events and day to day operation
- Planned local outreach events to promote the fields of STEM to young aspiring scientists in the local Houston community
- Allocated budgets for over 20 events within and outside of the chemistry program to promote social interactions among graduate students in other departments

Rice Chemistry Department Recruitment Co-Chair Houston, TX (February 2018, February 2019)

- Built informative relationships with potential graduate students interested in pursuing a doctoral degree in chemistry
- Coordinated with departmental faculty and director to arrange travel, events, and plan faculty meetings for visiting students to best inform decision for graduate school
- Promoted the research excellence and collaborative scientific community at Rice University

Staples: Easy-Tech Supervisor Orange, CA (October 2012-June 2013)

- Supervised, trained, and mentored newly hired employees for successful daily store operation and logistics
- Sold technical solutions tailored to customer's individual technological needs on multiple computing platforms
- Performed in-home and in-store repairs to vital laptop and desktop computing components including hardware, software, and virus removal
- Conducted computer skill workshops with customers for improving user software experiences and efficiencies

Academic Memberships

- American Chemical Society: Member (January 2015-Present)