

## Tricia Ann Windgassen

Postdoctoral Research Fellow, Chemical and Systems Biology

### Bio

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#### PROFESSIONAL EDUCATION

- Bachelor of Science, Bradley University (2011)
- Doctor of Philosophy, University of Wisconsin Madison (2018)

### Publications

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#### PUBLICATIONS

- **Function of a strand-separation pin element in the PriA DNA replication restart helicase** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Windgassen, T. A., Leroux, M., Sandler, S. J., Keck, J. L.  
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- **The elemental mechanism of transcriptional pausing** *ELIFE*  
Saba, J., Chua, X., Mishanina, T. V., Nayak, D., Windgassen, T. A., Mooney, R., Landick, R.  
2019; 8
- **Function of a strand-separation pin element in the PriA DNA replication restart helicase.** *The Journal of biological chemistry*  
Windgassen, T. A., Leroux, M., Sandler, S. J., Keck, J. L.  
2018
- **Structure-specific DNA replication-fork recognition directs helicase and replication restart activities of the PriA helicase** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Windgassen, T. A., Leroux, M., Satyshur, K. A., Sandler, S. J., Keck, J. L.  
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- **Mechanisms of bacterial DNA replication restart** *NUCLEIC ACIDS RESEARCH*  
Windgassen, T. A., Wessel, S. R., Bhattacharyya, B., Keck, J. L.  
2018; 46 (2): 504–19
- **Integrase Move-In Day: Mechanisms of HIV DNA Integration**  
Windgassen, T. A., Fahlberg, S., Hanson, B., Klauser, K., Semia, S., Keck, J. L.  
FEDERATION AMER SOC EXP BIOL.2017
- **An aromatic-rich loop couples DNA binding and ATP hydrolysis in the PriA DNA helicase** *NUCLEIC ACIDS RESEARCH*  
Windgassen, T. A., Keck, J. L.  
2016; 44 (20): 9745–57
- **Biochemical characterization of RecA variants that contribute to extreme resistance to ionizing radiation** *DNA REPAIR*  
Piechura, J. R., Tseng, T., Hsu, H., Byrne, R. T., Windgassen, T. A., Chittani-Pattu, S., Battista, J. R., Li, H., Cox, M. M.  
2015; 26: 30–43
- **Trigger-helix folding pathway and SI3 mediate catalysis and hairpin-stabilized pausing by Escherichia coli RNA polymerase** *NUCLEIC ACIDS RESEARCH*  
Windgassen, T. A., Mooney, R., Nayak, D., Palangat, M., Zhang, J., Landick, R.  
2014; 42 (20): 12707–21
- **RNA polymerase pausing and nascent-RNA structure formation are linked through clamp-domain movement** *NATURE STRUCTURAL & MOLECULAR BIOLOGY*

Hein, P. P., Kolb, K. E., Windgassen, T., Bellecourt, M. J., Darst, S. A., Mooney, R. A., Landick, R.  
2014; 21 (9): 794–802

● **A pause sequence enriched at translation start sites drives transcription dynamics in vivo.** *Science*

Larson, M. H., Mooney, R. A., Peters, J. M., Windgassen, T., Nayak, D., Gross, C. A., Block, S. M., Greenleaf, W. J., Landick, R., Weissman, J. S.  
2014; 344 (6187): 1042-1047

● **Cys-Pair Reporters Detect a Constrained Trigger Loop in a Paused RNA Polymerase** *MOLECULAR CELL*

Nayak, D., Voss, M., Windgassen, T., Mooney, R., Landick, R.  
2013; 50 (6): 882–93