

## ***CURRICULUM VITAE***

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### **Education**

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| 2001 | Ph.D. | Program in Molecular and Computational Biophysics<br>Johns Hopkins University |
| 1995 | B.S.  | Department of Chemistry<br>Eastern Michigan University                        |

### **Professional Experience**

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|------------------|----------------------------------|--|
| Aug 2007-present | Assistant Professor              | Department of Biological Sciences<br>University of Pittsburgh, Pittsburgh, PA  |
| 2001-2007        | Postdoctoral Fellow              | Department of Biochemistry<br>University of Utah<br>Laboratory of Dr. Christopher Hill   |
| 1996-2001        | Graduate Student                 | Program in Molecular and Computational Biophysics<br>Johns Hopkins University<br>Laboratory of Dr. Cynthia Wolberger<br><br>Dissertation: Molecular Insights into Polyubiquitylation through<br>Structural and Biochemical Analysis of the Mms2/Ubc13 Ubiquitin<br>Conjugating Complex |
| 1994-1996        | Research Technician              | Parke-Davis Warner-Lambert Pharmaceuticals, Ann Arbor, MI  |
| 1990-1995        | Undergraduate Research Assistant | Department of Chemistry<br>Eastern Michigan University<br>Laboratory of Dr. Michael Brabec   |

## **Honors and Awards**

- 2003-2005 Post-doctoral Research Fellowship, American Cancer Society  
2002-2003 Post-doctoral Research Fellowship, University of Utah  
Multidisciplinary Cancer Research Training Program

## **Publications**

VanDemark lab members indicated in bold, underlined names indicate University of Pittsburgh Undergraduate Researchers

Roland, B.P., Stuchul, K.A., Larsen, S.B., **Amrich, C.G.**, **VanDemark, A.P.**, Celotto, A.M., and Palladino, M.J. (2013). Evidence of a triosephosphate isomerase non-catalytic function critical to behavior and longevity. *Journal of Cell Science*. ePub

Godin, S., **Wier, A.**, Kabbinavar, F., Bratton-Palmer, D.S., Ghodke, H., Van Houten, B., **VanDemark, A.P.**, and Bernstein, K.A. (2013). The Shu complex interacts with Rad51 through the Rad51 paralogues Rad55-Rad57 to mediate error-free recombination. *Nucleic Acids Research* **41**, 4525-4534.

**Mohan, S.**, Rizaldy, R., Das, D., Bauer, R.J., Heroux, A., Trakselis, M.A., Hildebrand, J.D., and **VanDemark, A.P.** (2012). Structure of Shroom domain 2 reveals a three-segmented coiled-coil required for dimerization, Rock binding, and apical constriction. *Molecular Biology of the Cell* **23**, 2131-2142.

Celotto, A.M., Liu, Z., **VanDemark, A.P.**, and Palladino, M.J. (2012). A novel Drosophila SOD2 mutant demonstrates a role for mitochondrial ROS in neurodevelopment and disease. *Brain and Behavior* **2**, 424-434.

**Amrich, C.G.**, Davis, C.P., Rogal, W.P., Shirra, M.K., Heroux, A., Gardner, R.G., Arndt, K.M., and **VanDemark, A.P.** (2012). Cdc73 subunit of Paf1 complex contains C-terminal Ras-like domain that promotes association of Paf1 complex with chromatin. *Journal of Biological Chemistry* **287**, 10863-10875.

D'Aiuto, L., Marzulli, M., Mohan, K.N., Borowczyk, E., Saporiti, F., **VanDemark, A.P.**, and Chaillet, J.R. (2010). Dissection of structure and function of the N-terminal domain of mouse DNMT1 using regional frame-shift mutagenesis. *PLoS One* **5**, e9831.

**VanDemark, A.P.**, Xin, H., McCullough, L., Rawlins, R., Bentley, S., Heroux, A., Stillman, D.J., Hill, C.P., and Formosa, T. (2008). Structural and functional analysis of the Spt16p N-terminal domain reveals overlapping roles of yFACT subunits. *Journal of Biological Chemistry* **283**, 5058-5068.

Welch, B.D\*, **VanDemark, A.P.\***, Heroux, A., Hill, C.P., and Kay, M.S. (2007). Potent D-peptide inhibitors of HIV-1 entry. *Proceedings of the National Academy of Sciences* **104**, 16828-16833.

\*Contributed equally to this work

- VanDemark, A.P.**, Kasten, M.M., Ferris, E., Heroux, A., Hill, C.P., and Cairns, B.R. (2007). Autoregulation of the rsc4 tandem bromodomain by gcn5 acetylation. *Molecular Cell* **27**, 817-828.
- VanDemark, A.P.**, Blanksma, M., Ferris, E., Heroux, A., Hill, C.P., and Formosa, T. (2006). The structure of the yFACT Pob3-M domain, its interaction with the DNA replication factor RPA, and a potential role in nucleosome deposition. *Molecular Cell* **22**, 363-374.
- VanDemark, A.P.**, and Hill, C.P. (2005). E1 on the move. *Molecular Cell* **17**, 474-475.
- Macbeth, M.R., Schubert, H.L., **VanDemark, A.P.**, Lingam, A.T., Hill, C.P., and Bass, B.L. (2005). Inositol hexakisphosphate is bound in the ADAR2 core and required for RNA editing. *Science* **309**, 1534-1539.
- VanDemark, A.P.**, and Hill, C.P. (2004). Grabbing E2 by the tail. *Nature Structural & Molecular Biology* **11**, 908-909.
- VanDemark, A.P.**, and Hill, C.P. (2003). Two-stepping with E1. *Nature Structural Biology* **10**, 244-246.
- VanDemark, A.P.**, and Hill, C.P. (2002a). SUMO wrestling with specificity. *Structure* **10**, 281-282.
- VanDemark, A.P.**, and Hill, C.P. (2002b). Structural basis of ubiquitylation. *Current Opinion in Structural Biology* **12**, 822-830.
- VanDemark, A.P.**, Hofmann, R.M., Tsui, C., Pickart, C.M., and Wolberger, C. (2001). Molecular insights into polyubiquitin chain assembly: crystal structure of the Mms2/Ubc13 heterodimer. *Cell* **105**, 711-720.
- Pickart, C.M., and **VanDemark, A.P.** (2000). Opening doors into the proteasome. *Nature Structural Biology* **7**, 999-1001.
- Jabet, C., Sprague, E.R., **VanDemark, A.P.**, and Wolberger, C. (2000). Characterization of the N-terminal domain of the yeast transcriptional repressor Tup1. Proposal for an association model of the repressor complex Tup1 x Ssn6. *Journal of Biological Chemistry* **275**, 9011-9018.