YAEL DAVID

MSKCC ◆Department of Chemical Biology ◆New York, NY
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EDUCATION

Ph.D	Biochemistry, The Weizmann Institute of Science, Rehovot, Israel Thesis Title: "Analyzing the Assembly and Cleavage of Lysine Specific Polyubiquitin Chains". Thesis Advisor: Ami Navon		2011
B.Sc	Biology, SUNY Stony Brook, New York.	*Summa cum laude*	2004

RESEARCH EXPERIENCE

MSKCC New York, NY 9/2016-present
Assistant member, department of Chemical Biology

Princeton University Princeton, NJ 7/2011-8/2016
Postdoctoral Associate
Advisor: Tom W. Muir, Department of Chemistry

The Weizmann Institute of Science Rehovot, Israel
10/2004-5/2011
Graduate student
Advisor: Ami Navon, Department of Biological Regulation

Tel-Aviv University Tel-Aviv, Israel 1/2004-9/2004
Post graduate research associate
Advisor: Mia Horowitz, Department of Cell Biology

SUNY Stony Brook Stony Brook, NY 5/2002-1/2004
Undergraduate research
Advisor: Lonnie Wollmuth, Department of Neurobiology

PUBLICATIONS

1. Glen Liszczak, Zachary Z. Brown, Samuel H. Kim, Rob C. Oslund, **Yael David**, and Tom W. Muir. Genomic targeting of epigenetic probes using a chemically tailored CRISPR/Cas9 system. Proc Natl Acad Sci U S A 2017 Jan 24;114(4):681-686.
2. Matthew Holt, **Yael David**, Sam Pollock, Zhanyun Tang, Jongcheol Jeon, Jaehoon Kim, Robert G. Roeder and Tom W. Muir. Identification of a Functional Hotspot on Ubiquitin Required for Stimulation of Methyltransferase Activity on Chromatin. Proc Natl Acad Sci U S A. 2015 Aug 18;112(33):10365-70.
3. **Yael David**, Miquel Vila-Perello, Shivam Verma and Tom Muir. Chemical Tagging and Customizing of Cellular Chromatin States using Ultrafast Trans-Splicing Inteins. Nature Chemistry. 2015 May;7(5):394-402.

   * Featured in Nature Methods Research Highlights: Doerr A, 'Chemical Biology: Tinkering with chromatin'. Nature Methods. 2015 May:12, 491.

   * Featured in Nature Chemistry News and Views: Fischle W, Schwarzer D, Mootz HD. 'Chemical biology: Chromatin chemistry goes cellular'. Nature Chemistry. 2015 May;7(5):371-3

   * Featured in EurekAlert AAAS, PhysOrg Science news (Chemistry), Science Newsline and others: Nguyen T. 'Decoding the cell's genetic filing system'.
4. Altun M, Walter TS, Kramer HB, Herr P, Iphöfer A, Boström J, **David Y**, Komsany A, Ternette N, Navon A, Stuart DI, Ren J, Kessler BM. The human otubain2-ubiquitin structure provides

insights into the cleavage specificity of poly-ubiquitin-linkages. PLoS One. 2015 Jan 15;10(1):e0115344

5. Nguyen UT, Bittova L, Müller MM, Fierz B, **David Y**, Houck-Loomis B, Feng V, Dann GP, Muir TW. Accelerated Chromatin Biochemistry using DNA-barcoded Nucleosome Libraries. Nature Methods. 2014 Aug;11(8):834-40
6. Berko D, Herkon O, Braunstein I, Isakov E, **David Y**, Ziv T, Navon A, Stanhill A. Inherent Asymmetry in the 26S Proteasome is Defined by the Ubiquitin Receptor RPN13. J Biol Chem. 2014 Feb 28;289(9):5609-18
7. Shahar-Pomerantz Y, Elbaz J, Kirenberg I, Reizel Y, **David Y**, Galiani D, Nevo N, Navon A, Dekel N. From Ubiquitin-Proteasomal Degradation to CDK1 Inactivation: Requirements for the First Polar Body Extrusion in Mouse Oocytes. FASEB J. 2012 Nov;26(11):4495-505.
8. **David Y**, Ternette N, Edelmann M, Ziv T, Gayer B, Sertchook R, Dadon Y, Kessler BM, Navon A. E3 Ligases Determine the Ubiquitination Site and Chain Type by Enforcing Specificity on E2 Enzymes. J Biol Chem. 2011 Dec 23;286(51):44104-15
9. Shimshon L, Michaeli A, Hadar R, Nutt SL, **David Y**, Navon A, Waisman A, Tirosh B. SUMOylation of Blimp-1 promotes its proteasomal degradation. FEBS Lett. 2011 Aug 4;585(15):2405-9
10. **David Y**, Ziv T, Admon A, Navon A. The E2 Ubiquitin Conjugating Enzymes Direct Polyubiquitination to Preferred Lysines. J Biol Chem. 2010 Mar 19;285(12):8595-604.
11. Shtiegman K, Kochupurakkal BS, Zwang Y, Pines G, Starr A, Vexler A, Citri A, Katz M, Lavi S, **Ben-Basat Y**, Benjamin S, Corso S, Gan J, Yosef RB, Giordano S, Yarden Y. (2007) Defective ubiquitylation of EGFR mutants of lung cancer confers prolonged signaling. Oncogene. 2007 Oct 25;26(49):6968-78

SELECTED HONORS AND AWARDS

Josie Robertson investigator	New York, NY	2016
Selected for the Life Science Research Foundation fellowship	Princeton, NJ	2012
Best poster award, ZOMES VI conference	Safed, Israel	2010
Best poster award, Annual Meeting of the Israeli Society for Cell Biology	Herzlia, Israel	2010
Selected for Horizons in Molecular Biology graduate program	Max Plank, Germany	2007
Summa cum laude (graduation GPA 4.0/4.0)	Stony Brook, USA	2003
Howard Hughes Medical Institute research fellowship	Stony Brook, USA	2003
Award for academic excellence	Stony Brook, USA	2002-04
Dean's list	Stony Brook, USA	2002-04
Member of the Phi Beta Kappa National Honor Society	Stony Brook, USA	2004-
Member of the Golden Key International Honor Society	Stony Brook, USA	2003-

SELECTED INVITED TALKS

Keystone symposia Epigenetics and Human Disease	Seattle, WA	1/2017
NYAS Protein Engineering	New York, NY	9/2016
Weizmann Institute of Science	Rehovot, Israel	2/2016
Harvard Medical School	Boston, MA	1/2016
University of Utah	Salt Lake City, UT	1/2016
University of Pennsylvania	Philadelphia, PA	12/2015
Mount Sinai School of Medicine	New York, NY	5/2015
American Society of Mass Spectrometry	MN, USA	6/2013

ARMY SERVICE

Sargent in the IDF	1998-2000