

# CURRICULUM VITAE

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## EDUCATION

Carnegie Mellon University, Ph.D., 2009, Biomedical Engineering (Dr. Robert F. Murphy)

Johns Hopkins University, B.S., 2004, Biomedical Engineering

## PROFESSIONAL EXPERIENCE

**Applied Research Scientist**, Moffitt Cancer Center, Dr. Karen Mann, Dr. Michael Mann, Department of Molecular Oncology, 2017-

Research Associate, Houston Methodist Research Institute, Dr. Neal Copeland, Dr. Nancy Jenkins, Cancer Center of Excellence, 2013–2016

Postdoctoral Research Associate, Baylor College of Medicine, Dr. Michael Mancini, Department of Molecular and Cellular Biology, 2009–2012

## PATENTS

R.F. Murphy, A. Rao, E. Glory-Afshar, **J.Y. Newberg**, S. Bhavani, A. Kumar. Identifying Location Biomarkers. U.S. patent number 9,092,850 (WO 2012100190).

## PUBLICATIONS

K.M. Mann, **J.Y. Newberg**, M.A. Black, D.J. Jones, F. Amaya-Manzanares, L. Guzman-Rojas, T. Kodama, J. Ward, A.G. Rust, L. van der Weyden, K.Y. Chin, J. Waters, M.L. Leung, K. Rogers, S.M. Rogers, K. McNoe, L. Selvanesan, N. Navin, N.A. Jenkins, N.G. Copeland, and M.B. Mann (2016). Myeloid leukemia oncogenic drivers identified in single tumor cells using SBCapSeq. *Nature Biotechnology*. doi:10.1038/nbt.3637. Published online before print August 1, 2016 at Nature Biotechnology : Research.

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T. Kodama, **J.Y. Newberg**, M. Kodama, R. Rangel, K. Yoshihara, J.C. Tien, P.H. Parsons, H. Wu, M.J. Finegold, N.G. Copeland, N.A. Jenkins (2016). Transposon mutagenesis identifies genes and cellular processes driving epithelial-mesenchymal transition in hepatocellular carcinoma. *PNAS*. 113 (24) E3384-E3393; published ahead of print May 31, 2016, doi:10.1073/pnas.1606876113.

T. Kodama, E.A. Bard-Chapeau, **J.Y. Newberg**, M. Kodama, R. Rangel, K. Yoshihara, J.M. Ward, N.A. Jenkins, N.G. Copeland (2016). Two-step Forward Genetic Screen in Mice Identifies Ral GTPase-activating Proteins as Suppressors of Hepatocellular Carcinoma. *Gastroenterology*. Volume 151, Issue 2, 324 - 337.e12.

F. Stossi, R.D. Dandekar, M.J. Bolt, **J.Y. Newberg**, M.G. Mancini, A.K. Kaushik, V. Putluri, A. Sreekumar, M.A. Mancini (2016). High throughput microscopy identifies bisphenol AP, a bisphenol A analog, as a novel AR down-regulator. *Oncotarget*. 7(13):16962-74.

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- C.J. Jorgez, N. Wilken, J.B. Addai, **J. Newberg**, H.V. Vangapandu, A.W. Pastuszak, S. Mukherjee, J.A. Rosenfeld, L.I. Lipshultz, D.J. Lamb (2015). Genomic and genetic variation in E2F transcription factor-1 in men with nonobstructive azoospermia. *Fertil. Steril.* 103(1):44-52.e1. doi: 10.1016/j.fertnstert.2014.09.021. Epub 2014 Oct 24.
- A. Kumar, A. Rao, S. Bhavani, **J.Y. Newberg**, R.F. Murphy (2014). Automated analysis of immunohistochemistry images identifies candidate location biomarkers for cancers. *Proc. Natl. Acad. Sci.* 111(51):18249-54. doi: 10.1073/pnas.1415120112. Epub 2014 Dec 8.
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- S.M. Hartig, **J.Y. Newberg**, M.J. Bolt, A.T. Szafran, M. Marcelli, M.A. Mancini (2011). Automated microscopy and image analysis for androgen receptor function. *Methods Mol Biol.* 776:313–31.
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- J.H. Boysen, S. Fanning, **J. Newberg**, R.F. Murphy, A.P. Mitchell (2009). Detection of protein-protein interactions through vesicle targeting. *Genetics*. 182(1):33–9.
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- J. Newberg**, R. F. Murphy (2008). A Framework for the Automated Analysis of Subcellular Patterns in Human Protein Atlas Images. *J. Proteome Res.* 7:2300–2308.

## CONFERENCE TALKS

- "Automated Analysis of Subcellular Patterns in Human Protein Atlas Images." *Proc. ISAC XXIV International Congress*. Budapest, Hungary, May 2008.
- "A Method for Comparing Subcellular Location Patterns Independently of Overall Cell Morphology." *BMES*. Baltimore MD, October 2005.
- "Crosstalk between MAPK and Notch Pathways in Development." *BMES*. Baltimore MD, October 2005.