POSITION:

May 2009 Assistant professor. Department of Oncology and, by courtesy, Department of Biochemistry. Stanford University School of Medicine.

EDUCATION:

June 1994	A.B. <i>summa cum laude</i> in The Biochemical Sciences. Harvard College.
June 2002	M.D. Harvard Medical School.
June 2002	Ph.D. in Cell and Developmental Biology. Harvard Medical School.
2002-2003	Intern in Internal Medicine. Stanford University Medical Center.
2003-2004	Resident in Internal Medicine. Stanford University Medical Center.
2004-2008	Fellow in Oncology. Stanford University Medical Center.

LICENSURE AND CERTIFICATION

2003	Full California Medical License.
2005-2015	American Board of Internal Medicine Certification in Internal Medicine.
2008-2018	American Board of Internal Medicine Certification in Medical Oncology.

RESEARCH:

1992-1994	Undergraduate research and senior thesis. Laboratory of Jack W. Szostak, Professor
	of Genetics, Massachusetts General Hospital/Harvard Medical School.
	Thesis: Non-Enzymatic Template-Directed Ligation Reactions of
	Ribooligonucleotides.
1997-2000	Doctoral research. Laboratory of Marc W. Kirschner, Professor and Chairman.
	Department of Cell and Developmental Biology, Harvard Medical School.
	Thesis: Biochemical Dissection of a Signaling Pathway that Controls Actin Assembly.
2001-2002	Post-Doctoral Research. Laboratory of Marc W. Kirschner, Professor and Chairman.
	Department of Cell and Developmental Biology, Harvard Medical School.
	Project: Biochemical purification of Toca-1, a Novel factor required for Cdc42-
	induced actin assembly.
2005-2008	Post-Doctoral Fellow. Laboratory of Matthew P. Scott, Professor of Developmental
	Biology. Department of Developmental Biology, Stanford University School of
	Medicine.
	Project: Biochemical mechanisms of Hedgehog signaling.

TEACHING

1993	Teaching Fellow for the undergraduate course <i>Principles of Biochemistry and Cell Biology</i> , Harvard University. Cited by students for quality of teaching in the annual Course Evolution Cuide
1997	Teaching Fellow for the graduate course <i>Principles of Genetics</i> , Harvard Medical
	School.
2003-2005	Resident in Medicine and Fellow in Oncology, Stanford University School of
	Medicine. Supervised medical interns and residents in the care of patients admitted
	to the general medicine and oncology services.
2009	Literature discussion section leader for medical student course Cells to Tissues,
	Stanford University School of Medicine.

HONORS AND AWARDS

1990	National Merit Scholarshin
1991	Detur Prize Harvard College Awarded to the top 50 students in the freshman class
1991	CRC Freshman Chemistry Award Harvard College
1992	John Harvard Scholarshin, Harvard College
1993	<i>Phi Beta Kanna</i> One of ton 24 students at Harvard College class of 1994
100/	Thomas T. Hoopes Prize Harvard College Awarded for excellence in scholarly
1774	work and research based on the undergraduate senior thesis
100/	Lawrence I. Henderson Prize. Harvard College. Awarded to the best undergraduate
1774	senior thesis in the Biochemical Sciences
1994	Medical Scientist Training Program Grant National Institutes of Health Full
	scholarship for the pursuit of MD and PhD studies at Harvard Medical School
2002	Henry Asbury Christian Award for outstanding performance in research and scholarly
	activities. Harvard Medical School.
2006-2007	Damon Runvon Cancer Research Foundation Fellowship.
2007-2008	Pilot/Feasability Award, Stanford Digestive Diseases Center.
2007-2009	Young Investigator Award American Society for Clinical Oncology
2007-2012	Howard Temin Pathway to Independence Award (K99/R00) National Cancer
	Institute.
2009-	Josephine O. Berry Faculty Scholar in Cancer Research, Stanford University.
2009-2011	Martin D. Abeloff Scholar of the V foundation for Cancer Research. Research
	project received the highest rating from the Scientific Advisory Board in 2009.
2010-2013	Stand Up To Cancer Innovation Research Grant. American Association for Cancer
	Research.

PROFESSIONAL MEMBERSHIPS

1995-present	Massachusetts Medical Society
1998-2000	American Society for Cell Biology
2005-2006	American Association for Cancer Research
2006-present	American Society of Clinical Oncology (ASCO)
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TALKS

1999	American Society for Cell Biology Annual Meeting (selected).
2002	Soma Weiss Speaker Award, Harvard Medical School (selected).
2007	Regenerative Medicine at Stanford (REMS) Series. Stanford University (invited).
2007	Department of Hematology and Oncology, University of California, San Diego (invited).
2007	Massachusetts General Hospital Cancer Center (invited).
2007	Department of Biochemistry, Stanford University School of Medicine (invited).
2007	Department of Cancer Biology, Memorial Sloan Kettering Cancer Center (invited).
2008	Department of Hematology and Oncology, University of California, San Francisco (invited).
2008	Department of Molecular Biology, Massachusetts General Hospital (invited).
2008	Department of Stem Cell and Regenerative Medicine, Harvard University (invited).
2008	Department of Cell Biology, University of Texas Southwestern Medical Center (invited).
2009	13th World Conference on Lung Cancer, San Francisco, CA (invited). "The Hedgehog signaling pathway in lung cancer: moving beyond cell growth."

PUBLICATIONS

Original articles:

- 1. **Rohatgi R**, Bartel DP, and Szostak JW. Kinetic and mechanistic analysis of non-enzymatic, template-directed oligoribonucleotide ligation. *J Am Chem Soc* 118, 3332-3339 (1996).
- 2. **Rohatgi R**, Bartel DP, and Szostak JW. Non-enzymatic, template-directed ligation of oligoribonucleotides is highly regioselective for the formation of 3'-5'-Phosphodiester bonds. *J Am Chem Soc* 118, 3340-3344 (1996).
- 3. Ma L, **Rohatgi R**, and Kirschner MW. The Arp2/3 complex mediates actin polymerization induced by the small GTP-binding protein Cdc42. *Proc Natl Acad Sci USA* 95, 15362-15367 (1998).
- 4. Rohatgi R*, Ma L*, Miki H, Lopez M, Kirchhausen T, Takenawa T, and Kirschner MW. The interaction between N-WASP and the Arp2/3 complex links Cdc42-dependent signals to actin assembly. *Cell* 97, 221-231 (1999).
 *Equal contribution. *Selected by the "The Scientist" magazine as one of the most frequently cited papers in the field.*
- 5. **Rohatgi R***, Ho HY*, and Kirschner MW. Mechanism of N-WASP activation by CDC42 and phosphatidylinositol 4, 5-bisphosphate. *J Cell Biol* 150, 1299-1310 (2000). *Equal contribution.
- 6. Martinez-Quiles N, **Rohatgi R**, Anton IM, Medina M, Saville SP, Miki H, Yamaguchi H, Takenawa T, Hartwig JH, Geha RS, and Ramesh N. WIP regulates N-WASP-mediated actin polymerization and filopodium formation. *Nat Cell Biol* 3, 484-91 (2001).
- 7. **Rohatgi R**, Nollau P, Ho HY, Kirschner MW, and Mayer BJ. Nck and phosphatidylinositol 4,5 bisphosphate synergistically activate actin polymerization through the N-WASP-Arp2/3 pathway. *J Biol Chem* 276, 26448-52 (2001).
- 8. Ho HY*, **Rohatgi R***, Ma L, and Kirschner MW. CR16 forms a complex with N-WASP in brain and is a novel member of a conserved proline-rich actin-binding protein family. *Proc Natl Acad Sci USA*. 98, 11306-11311 (2001). *Equal contribution.
- 9. Eden S, **Rohatgi R**, Podtelejnikov AV, Mann M, and Kirschner MW. The mechanism of regulation of WAVE1-induced actin nucleation by Rac1 and Nck. *Nature* 418, 790-793 (2002). *Selected as "Must Read" by The Faculty of 1000.*
- Feldheim DA, Nakamoto M, Osterfield M, Gale NW, DeChiara TM, Rohatgi R, Yancopoulos GD, and Flanagan JG. Loss-of-function analysis of EphA receptors in retinotectal mapping. *J Neurosci.* 24, 2542-50 (2004).
- 11. Ho HY*, **Rohatgi R***, Lebensohn A, Ma L, Li L, Gygi SP, Kirschner MW. Toca-1 mediates Cdc42- dependent actin nucleation by activating the N-WASP-WIP complex. *Cell* 118, 203-216 (2004). *Equal contribution.
- 12. **Rohatgi R***, Milenkovic L*, and Scott MP. Patched1 regulates Hedgehog signaling at the primary cilium. *Science* 317, 372-376 (2007). *Equal contribution. *Highlighted in Science*, *Cell, and Nature Reviews in Cell and Molecular Biology*.
- 13. **Rohatgi R***, Milenkovic L*, Corcoran RB, and Scott MP. Hedgehog signal transduction by smoothened: pharmacological evidence for a two-step activation process. *Proc Natl Acad Sci USA* **106**:3196-201 (2009). *Equal contribution.
- 14. Milenkovic L, Scott MP, and **Rohatgi R**. Lateral Transport of Smoothened from the plasma membrane to the membrane of the cilium. *J Cell Biol* 187(3), 365-374 (2009).

Reviews :

- 1. Ho HY, **Rohatgi R**, Lebensohn A, Kirschner MW. In vitro reconstitution of cdc42-mediated actin assembly using purified components. *Methods Enzymol.* 406, 174-90 (2006).
- 2. **Rohatgi R** and Scott MP. Patching the gaps in Hedgehog signaling. *Nat Cell Bio* 9, 1005-1009 (2007).
- 3. Rohatgi R and Scott MP. Arrestin' Movement in Cilia. Science 320, 1726 1727 (2008).