CURRICULUM VITAE

RAMIN SHIEKHATTAR. Ph.D.

Contact Information:

The Wistar Institute
3601 Spruce St.
Philadelphia, PA USA
Phone: (215) 898-3896
shiekhattar@wistar.org

Centre de Regulacio Genomica
Dr. Aiguader 88
08003 Barcelona Spain
phone: +34 93 316 0230
fax: +34 93 316 0099
ramin.shiekhattar@crg.es

EDUCATION:

1980-1984 B.S. in Chemistry, University of Kansas, Lawrence, Kansas
1984-1989 Ph.D. in Biochemistry (R. N. Adams, Advisor), University of Kansas, Lawrence, Kansas
1989-1993 Postdoctoral Training (G. Aston-Jones, Advisor), Hahnemann University, Philadelphia, PA
1993-1997 Postdoctoral Training (D. Reinberg, Advisor), UMDNJ, New Jersey

PROFESSIONAL EXPERIENCE:

2006-present ICREA Professor, CRG, Barcelona, Spain
2005-present Professor, The Wistar Institute, Philadelphia, PA
2001-2005 Associate Professor, The Wistar Institute, Philadelphia, PA
1998-present Adjunct Professor, Biochemistry and Biophysics Department, Univ. of Pennsylvania
1997-2001 Assistant Professor. The Wistar Institute, Philadelphia, PA
1998-2004 Member, Graduate Group in Biochemistry & Molecular Biophysics, Univ. of Pennsylvania
1998-present Member, Graduate Group in Genetics, Univ. of Pennsylvania

HONORS and AWARDS:

1993-1996 National Institute of Health National Research Service Award
1997-1998 American Cancer Society Institutional Research Grant
1999-2001 Scholar of V Foundation for Cancer Research
1998-2001 W.W. Smith Charitable Trust

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

American Association for the Advancement of Science
American Association for Cancer Research

Grant Reviews/Study Sections

2002,2003,2004 Cancer Research, UK
2002 NCI, Special Review Panel (Program Project)
2003 NIH, CDF-1 Study Section, Ad hoc member
2004 Cancer Research, Netherlands

Institutional Faculty Committees/Activities:

Current: Member, Gene Expression and Regulation Program
Member, Molecular & Cellular Oncogenesis Program
Member, Faculty Recruitment Committee

Periodic Manuscript Reviews:
Cell, Science, Nature, Molecular Cell, Molecular and Cellular Biology, Nature Genetics, Nature Cell Biology, J. Biol. Chem., P.N.A.S, Journal of Neuroscience, Cancer Research.

Selected Research Publications, Peer Reviewed

1. Chendrimada TP, Finn KJ, Ji X, Baillat D, Gregory RI, Liebhaber SA, Pasquinelli AE, **Shiekhattar R**. MicroRNA silencing through RISC requirement of eIF6. **Nature** 447; 823-828 (2007).

2. Kawahara Y, Zinshteyn B, Chendrimada TP, **Shiekhattar R**, Nishikura K. RNA editing of microRNA-151 precursor blocks cleavage by dicer-TRBP complex. **EMBO Reports** 8; 763-9 (2007)

3. Zuccolo M, Alves A, Galy V, Bolhy S, Formstecher E, Racine V, Sibarita JB, Fukagawa T, **Shiekhattar R**, Yen T, Doye V. The human Nup107-160 nuclear pore subcomplex contributes to proper kinetochore functions. **EMBO J**. 26; 1853-1864 (2007).

4. Eissenberg JC, Lee MG, Schneider J, Ilvarsonn A, **Shiekhattar R**, Shilatifard A. The trithorax-group gene in Drosophila little imaginal discs encodes a trimethylated histone H3 Lys4 demethylase. **Nat Struct Mol Biol.** 14; 344-346 (2007).

5. Lee MG, Norman JA, Shilatifard A, **Shiekhattar R.** Physical and functional association of a trimethyl H3K4 demethylase and Ring6a/MBLR, a polycomb-like protein. **Cell** 128; 877-887 (2007).

6. Nicolas E, Lee MG, Hakimi MA, Cam HP, Grewal SI, **Shiekhattar R.** Fussion yeast homologs of human H3 lysinee 4 demethylase regulate a common set of genes with diverse functions. **J Biol Chem** 281; 35983-8 (2006).

7. Lee MG, Wynder C, Bochar DA, Hakimi MA, Cooch N, **Shiekhattar R**. Functional interplay between histone demethylase and deacetylase enzymes. **Mol Cell Biol** 26; 6395-402 (2006).

8. Lee MG, Wynder C, Schmidt DM, MaCafferty DG, **Shiekhattar R**. Histone H3 lysine 4 demethylation is a target of nonselective antidepressive medications. **Chemistry and Biology** 13; 563-567 (2006).

9. Lee MG, Wynder C, Norman J, **Shiekhattar R**. Isolation of histone H3 lysine 4 demethylase-containing complexes. **Methods** 2006; 40: 327-330.

10. Norman JA, **Shiekhattar R**. Analysis of Nedd8-associated polypeptides: a model for deciphering the pathway for ubiquitin-like modifications. **Biochemistry** 45: 3014-3019 (2006).

11. Da G, Lenkart J, Zhao K, **Shiekhattar R**, Cairns BR, Marmorstein R. Structure and function of the SWIRM domain, a conserved protein module found in chromatin regulatory complexes. **PNAS** 103; 2057-2062 (2006).

12. Yang W, Chendrimada TP, Wang Q, Higuchi M, Seeburg PH, **Shiekhattar R**, Nishikura, K. Modulation of microRNA processing and expression theorugh RNA editing by ADAR deaminases. **Nature Sruct Mol Biol** 13; 13-21 (2006).

13. Ross DA, Hannenhalli S, Tobias JW, Cooch N, **Shiekhattar R**, Kadesch T. Functional analysis of Hes-1 in preadipocytes. **Mol Endocrinol** 20; 698-705 (2006).

14. Gregory RI, Chendrimada TP, Cooch N, **Shiekhattar R**. Human RISC couples microRNA biogenesis and posttranscriptional gene silencing. **Cell** 123; 631-640 (2005).

15. Baillat D, Hakimi MA, Naar A, Shilatifard A, Cooch N, **Shiekhattar R**. Integrator, a multiprotein mediator of small nuclear RNA processing associates with the C-terminal of RNA polymerase II. **Cell** 123; 256-276 (2005).

16. Wynder C, Lee MG, Hakimi MA, Epstein J, **Shiekhattar R**. Recruitment of MLL by HMG-domain protein iBRAF promotes neural differentiation. **Nature Cell Biology** 7; 1113-7 (2005).

17. Lee MG, Wynder C, Cooch N, **Shiekhattar R**. An essential role for Corest in histone 3 lysine 4 demethylation. **Nature** 437; 432-435 (2005).

18. Chendrimada TP, Gregory RI, Kumaraswamy E, Norman JA, Cooch N, Nishikura K, **Shiekhattar R**. TRBP recruits Dicer complex to Ago2 for microRNA processing and gene silencing. **Nature** 436; 740-744 (2005).

19. Guo S, Hakimi MA, Chen X, Farber MJ, Klein-Szanto AJP, Cooch NS, Godwin AK, **Shiekhattar R.** Linking transcriptional elongation and mRNA export to metastatic breast cancer. **Cancer Research** 65; 3011-3016 (2005).

20. Zhou J, Chau CM, Deng Z, **Shiekhattar R**, Spindler MP, Schepers A, Lieberman PM. Cell cycle regulation of chromatin at an origin of DNA replication. **EMBO J** 24; 1406-1417 (2005).

21. Banting GS, Barak OG, Ames T, Burnham A, Kardel M, Davidson C, Godbout R, McDermid HE, **Shiekhattar R**. CERC2, a protein involved in neurulation, forms a novel chromatin-remodeling complex with SNF2L. **Human Molecular Genetics** 14; 513-524 (2005).

22. Gregory RI, Chendrimada TP, **Shiekhattar R**. MicroRNA biogenesis: Isolation and characterization of the microprocessor complex. **Methods of Molecular Biology** 2005; 342: 33-47.

23. Gregory RI, **Shiekhattar R**. MicroRNA biogenesis and cancer. **Cancer Research** 2005; 65: 3509-3512.

24. Gregory RI, Yan K, Amuthan G, Chendrimada TP, Doratotaj B, Cooch N, **Shiekhattar R**. The Microprocessor complex mediates the genesis of microRNAs. **Nature** 432; 235-240 (2004).

25. Gregory RI, **Shiekhattar R**. Chromatin modifiers and carcinogenesis. **Trends in Cell Biology** 2004; 14: 695-702.

26. Barak O, **Shiekhattar R**. Isolation and characterization of human ISWI complexes. **Methods of Enzymology** 2004; 377: 389-401.

27. Barak OG, Lazzaro MA, Cooch NS, Picketts D, **Shiekhattar R**. A tissue-specific naturally occurring human SNF2L variant inactivates chromatin remodeling**. J Biol Chem** 279; 45130-45138 (2004).

28. Tang J, Wu S, Liu H, Stratt R, Barak OG, **Shiekhattar R**, Picketts DJ, Yang X. A Novel transcription regulatory complex containing daxx and the ATR-X syndrome protein. **J Biol Chem** 279; 20369-77 (2004).

29. Dong Y, Hakimi MA, Chen X, Kumaraswamy E, Cooch NS, Godwin AK, **Shiekhattar R**. Regulation of BRCC, a Holoenzyme Complex Containing BRCA1 and BRCA2, by a Signalosome-like Subunit and its Role in DNA Repair. **Molecular Cell** 12; 1087-1099 (2003).

30. Barak O, Lazzaro MA, Lane WS, Speicher DW, Picketts D, **Shiekhattar R**. Isolation of human NURF: a regulator of engrailed gene expression. **EMBO J**. 22; 6089-6100 (2003).

31. Cho DS, Yang W, Lee JT, **Shiekhattar R**, Murray JM, Nishikura K. Requirement of dimerization for RNA editing activity of adenosine deaminases acting on RNA. **J. Biol Chem** 278; 17093-102 (2003).

32. Hakimi MA, Dong Y, Lane WS, Speicher DW, **Shiekhattar R**. A candidate X-linked mental retardation gene is a component of a new family of histone deacetylase-containing complexes. **J. Biol Chem** 278; 7234-9 (2003).

33. Hakimi MA, Bochar DA, Schmiesing JA Jr, Dong Y, Barak OG, Speicher DW, Yokomori K, **Shiekhattar R**. A chromatin-remodeling complex that loads cohesion onto human chromosomes. **Nature** 418; 994-998 (2002).

34. Hakimi MA, Speicher DW, **Shiekhattar R**. The motor protein kinesin-1 links neurofibromin and merlin in a common cellular pathway of neurofibromatosis. **J. Biol Chem** 277; 36909-12 (2002).

35. Hakimi MA, Bochar D, Chenoweth J, Mandel G, **Shiekhattar R**. A core-BRAF35 Complex Containing Histone Deacetylase Mediates Repression of Neuron-Specific Genes. **PNAS** 99; 7420-7425 (2002).

36. Lo WS, Duggan L, Emre NC, Belotserkovskya R, Lane WS, **Shiekhattar R**, Berger SL. Snf1-a Histone Kinase that Works in Concert with Histone Acetyltransferase Gcn5 to Regulate Transcription. **Science** 293; 1142-1146 (2001).

37. Marmorstein LY, Kinev AV, Chan GK, Bochar DA, Beniya H, Epstein JA, Yen TJ, **Shiekhattar R.** A Human BRCA2 Complex Containing a Structural DNA-binding Component Influences Cell Cycle Progression. **Cell** 104; 247-257 (2001).

38. Bochar DA, Wang L, Beniya H, Kinev A, Xue Y, Lane WS, Wang W, Kashanchi F, **Shiekhattar R**. BRCA1 is associated with a human SWI/SNF-related complex: Linking Chromatin Remodeling to Breast Cancer. **Cell** 102; 257-256 (2000).

39. Guenther MG, Lane WS, Fischle W, Verdin E, Lazar MA, **Shiekhattar R**. A coreSMRT Corepressor Complex containing HDAC3 and TBL1, a WD40 Repeat Protein Linked to Deafness. **Genes and Development** 14; 1048-1057 (2000).

40. Schang LM, Hwang GH, Dynlacht DB, Speicher DW, Bantly A, Schaffer PA, Shilatifard A, Ge H, **Shiekhattar R.** Human PC4 is a substrate-specific Inhibitor of RNA polymerase II Phosphorylation. **J Biol Chem** 275; 6071-6074 (2000).

41. Bochar DA, Savard J, Wang W, Lafleur DW, Moore P, Cote J, **Shiekhattar R.** A novel family of chromatin remodeling factors related to Williams syndrome transcription factor. **PNAS** 97; 1038-1043 (2000).

42. Schmidt AE, Miller T, Schmidt SL, **Shiekhattar R**, Shilatifard A. Cloning and characterization of the EAP30 subunit of the ELL complex that confers derepression of transcription by RNA polymerase II. **J Biol Chem** 274; 21981-5 (1999).

43. Bochar D, Pan ZQ, Knight R, Fisher RP, Shilatifard A, **Shiekhattar R.** Inhibition of transcription by the trimeric cyclin-dependent kinase 7 complex. **J Biol Chem** 274; 13162-13166 (1999).

44. Zerby D, Chen CJ, Poon E, Lee D, **Shiekhattar R**, Lieberman PM. The amino-terminal C/H1 domain of CREB binding protein mediates zta transcriptional activation of latent Epstein-Barr virus. **Mol Cell Biol** 19; 1617-1626 (1999).

45. Lambert PF, Kashanchi F, Radonovich MF, **Shiekhattar R**, Brady JN. Phosphorylation of P53 serine 15 increases interaction with CBP. **J Biol Chem** 273; 33048-53 (1998).

46. **Shiekhattar R**, Maldonado E, Sheldon M, Cho H, Drapkin R, Rickert P, Lees E, Anderson CW, Linn S, Reinberg DA. Human RNAPII complex containing components required for transcriptional activation and DNA repair. **Nature** 381; 86-89 (1996).

47. **Shiekhattar R**, Mermelstein F, Fisher RP, Drapkin R, Dynlacht B, Wessling HC, Morgan DO, Reinberg D. Cdk-activating kinase complex is a component of human transcription factor TFIIH. **Nature** 374; 283-287 (1995).