

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.
Photocopy this page or follow this format for each person.

NAME Mark Ptashne		POSITION TITLE Ludwig Chair of Molecular Biology at Sloan-Kettering Institute	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Reed College, Portland, Oregon	B.A.	1961	Chemistry
Harvard University, Cambridge, MA	Ph.D.	1968	Molecular Biology

RESEARCH AND PROFESSIONAL EXPERIENCE: Concluding with present position, list, in chronological order, previous employment, experience, and honors. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. If the list of publications in the last three years exceeds two pages, select the most pertinent publications. **DO NOT EXCEED TWO PAGES.**

A. Positions Held:

1965-1968 Junior Fellow of Harvard Society of Fellows
 1968-1971 Lecturer, Biochemistry and Molecular Biology, Harvard University
 1971 Professor, Biochemistry and Molecular Biology, Harvard University
 1980-1983 Chairman, Biochemistry and Molecular Biology, Harvard University
 1980 Scientific Co-Founder of Genetics Institute with Tom Maniatis
 1993 Appointed Herchel Smith Professor of Molecular Biology, Harvard University
 1997 Ludwig Chair of Molecular Biology at Sloan-Kettering Institute

Honors:

1968 Ledlie Award of Harvard University (with W. Gilbert)
 1973-1974 Guggenheim Fellow
 1975 Harvey Lecturer, Columbia University, New York
 1975 Eli Lilly Award in Biological Chemistry
 1977 le Prix Charles-Leopold Mayer, l'Academie des Sciences, Paris, France
 (with W. Gilbert)
 1979 US Steel Foundation Award in Molecular Biology
 1985 Gairdner Foundation International Award (with C. Yanofsky)
 1985 Louisa Gross Horwitz Prize of Columbia University (with D. Brown)
 1988 Feodor Lynen Lecturer, Miami, Florida
 1989 George Drummond Memorial Lecturer, Canada
 1990 General Motors Cancer Research Foundation Sloan Prize
 1993 Bertil Aberg Lecturer, Royal Swedish Academy, Stockholm
 1997 Lasker Award for Basic Research

Honorary Societies

Phi Beta Kappa
 1977 Fellow, American Academy of Arts and Sciences
 1977 Fellow, The New York Academy of Arts and Sciences
 1979 Member, National Academy of Sciences

B. Selected peer-reviewed publications (in chronological order). Do not include publications submitted or in preparation

206) Floer, M. Bryant, G., Ptashne, M., (2008) HSP90/70 chaperones are required for rapid nucleosome removal upon induction of the GAL genes of yeast. PNAS Vol 105(8): 2975-80

205) Ptashne, M. (2008) Dispatches: "Transcription: A Mechanism for Short-Term Memory". Current Biology Vol. 18, No. 1 R25-R27.

204) Ptashne, M. (2007) My Word: "Repressors". Current Biology Vol. 17, No. 17 R740-R741

203) Ptashne, M. (2007) My Word: "Words". Current Biology Vol 17 No 14, R533-R535

202) Ptashne, M. (2007) My Word: "On Learning to Write". Current Biology Vol 17 No 11, R394-395

201) Ptashne, M. (2007) My Word: "On Speaking, Writing and Inspiration". Current Biology Vol 17 No 10, R348-349

200) Ptashne, M. (2007) Essay: "On the Use of the Word 'Epigenetic'". Current Biology Vol 17 No 7, R233-236

199) Ptashne, M. Forward to: From a to α Yeast as a Model for Cellular Differentiation (2007) by Hiten Madhani, Cold Spring Harbor, New York: Cold Spring Harbor Laboratory Press.

198) Ptashne, M. (2006) Lambda's Switch: Lessons from a Module Swap. Current Biology Vol. 16, No. 12 r459-r462

197) Ptashne, M. (2005) Regulation of transcription: from lambda to eukaryotes. Trends in Biochemical Sciences Vol. 30, No. 6 pgs 275-279.

196) Inspiring Science: Jim Watson and the Age of DNA (2003)
Edited By John Inglis, Cold Spring Harbor, New York: Cold Spring Harbor Laboratory Press.

195) Ansari, A., Ogirala, A., and Ptashne M. (2005) Transcriptional activating regions target substrates to a cyclin-dependent kinase. PNAS USA 102, 2346-2349

194) Ptashne, M. (2004) A Genetic Switch (Third Edition) Phage Lambda Revisited. Cold Spring Harbor, New York: Cold Spring Harbor Laboratory Press.

193) Cheng, J., Gandolfi, M., and Ptashne, M. (2004) Activation of the Gal1 Gene of Yeast by Pairs of 'Non-Classical' Activators. Current Biology 14, 1675-1679.

192) Henri-Marc Bourbon, Andres Aguilera, Aseem Z. Ansari, Francisco J. Asturias, Arnold J. Berk, Stefan Bjorklund, T. Keith Blackwell, Tilman Borggreffe, Michael Carey, Marian Carlson, Joan W. Conaway, Ronald C. Conaway, Scott W. Emmons, Joseph D. Fondell, Leonard P. Freedman, Toshio Fukasawa, Claes M. Gustafsson, Min Han, Xi He, Paul K. Herman, Alan G. Hinnebusch, Steen Holmberg, Frank C. Holstege, Judith A. Jaehning, Young-Joon Kim, Laurent Kuras, Achim Leutz, John T. Lis, Michael Meisterernest, Anders M. Naar, Kim Nasmyth, Jeffrey D. Parvin, Mark Ptashne, Danny Reinberg, Hans Ronne, Ivan Sadowski, Hiroshi Sakurai, Matthias Sipiczki, Paul W. Sternberg, David J. Stillman, Randy Strich, Kevin Struhl, Jasper Q. Svejstrup, Simon Tuck, Fred Winston, Robert G. Roeder, and Roger D. Kornberg (2004)

A Unified Nomenclature for Protein Subunits of Mediator Complexes Linking Transcriptional Regulators to RNA Polymerase II
Molecular Cell 14: 553-557.

191) Ptashne, M. (2004) Two "What If" Experiments. Cell 116, S171-172

- 190) Bryant, G.O., and Ptashne, M. (2003) Independent Recruitment In Vivo by Gal4 of Two Complexes Required for Transcription. *Molecular Cell* 11, 1301-1309
- 189) Ptashne, M. Regulated recruitment and cooperativity in the design of biological regulatory systems. *Phil. Trans. R. Soc. Lond. A.* (2003) 361, 1223-1234
- 188) Saha, S., Ansari, A., Jarell, K., and Ptashne, M. (2003) RNA sequences that work as transcriptional activating regions. *Nucleic Acids Research* 31, 1565-1570
- 187) Ptashne, M. and Gann A. (2003) Signal transduction. Imposing specificity on kinases. *Science* 299, 1025-1027
- 186) Ptashne, M. and Gann, A. (2002) Imposing specificity by localization: Mechanism and evolvability. *Evolution as Computation (DIMACS Workshop)*, Landweber, L. and Winfree, W. (eds) 179-200, Springer.
- 185) Ptashne, M., Brent, R., and Gill, G. Modularity of Eukaryotic Transcription Activators Great Experiments (2002) http://www.ergito.com/main.jsp?book_abbrev=gtexpts&chap_aso=2&xect_aso=3
- 184) Cheng, J., Floer, M., Ononaji, P., Bryant, G., and Ptashne, M. (2002) Responses of four yeast genes to changes in the transcriptional machinery are determined by their promoters. *Curr. Biol.* 12, 1828-1832
- 183) Ansari, A., Koh, S., Zaman, Z., Bongards, C., Lehming, N., Young, R., and Ptashne, M. (2002) Transcriptional activating regions target a cyclin-dependent kinase. *PNAS USA* 99, 14706-14709
- 182) Arora, P., Ansari, A., Best, T., Ptashne, M. and Dervan, P. (2002) Design of artificial transcriptional activators with rigid Poly-L-proline Linkers. *J. Am. Chem. Soc.* 124, 13067-13071
- 181) Lu, Z., Ansari, A., Lu, X., Ogirala, A. and Ptashne, M. (2002) A target essential for the activity of a nonacidic yeast transcriptional activator. *PNAS USA* 99, 8591-8596
- 180) Cheng, X., Nevado, J., Lu, Z., and Ptashne, M. (2002) The TBP-inhibitory Domain of TAF145 limits the effects of nonclassical transcriptional activators. *Current Biology* 12, 934-937
- 179) Zaman, Z., Heid, C., and Ptashne, M. (2002) Telomere looping permits repression "at a distance" in yeast. *Current Biology* 12, 930-933
- 178) Ptashne, M and Gann, A. (2002) *Genes and Signals.* Cold Spring Harbor, New York: Cold Spring Harbor Laboratory Press.

C. Research Support:

Ongoing Research Support

5 R01 GM032308-24A1(PI) 4/01/06-3/31/10

NIH

Eukaryotic Gene Regulation As Studied In Yeast

The goal of this grant is to study Eukaryotic Gene Regulation in Yeast.