CURRICULUM VITAE

PART I: General Information

**Date Prepared:** 07/18/2014

**Name** Anindya Dutta, M.D., Ph.D.

**Office Address** Dept. of Biochemistry and Molecular Genetics, Jordan 1240

Cancer Center

University of Virginia School of Medicine

1300 Jefferson Park Ave, Box 800733

Charlottesville, VA 22908

Tel: (434) 924-1227

Fax: (434) 924-5069

ad8q@virginia.edu

Admin. Asst, Nancy Rush: (434) 924-1940

**Citizen** U.S.A.

# Education

1975-1981 M.B.B.S. (U.S. equivalent: M.D.) Christian Medical College, Vellore, University of Madras, India.

1983-1989 Ph.D. The Rockefeller University, New York. Mentor: H. Hanafusa.

Regulation of transcription from the Rous sarcoma virus LTR.

# Postdoctoral training

1981-1982 Residency in Medicine, Christian Medical College Hospital, Vellore, India.

1989-1992 American Cancer Society Postdoctoral Fellow. Cold Spring Harbor

Laboratory, New York. Mentor: Bruce Stillman

Regulation of G1-S transition by phosphorylation of RPA.

1992-1993 Residency in Anatomic Pathology. Brigham and Women's

Hospital, Boston.

# Licensure and Certification

1985 Certified by Educational Commission of Foreign Medical

Graduates (ECFMG), Princeton.

# Academic Appointments

10/1/93 -6/30/99 Assistant Professor in Pathology, Brigham and Women’s Hospital,

Harvard Medical School

7/1/99-6/30/03 Associate Professor in Pathology, Brigham and Women’s Hospital,

Harvard Medical School

7/1/03- Harry F. Byrd Professor in Biochemistry and Molecular Genetics,

Professor in Pathology, University of Virginia Medical School,

9/1/11- Chairman, Dept. of Biochemistry and Molecular Genetics, UVA

**Administrative Appointments**

7/1/03- Director of Functional Genomics, Mellon Prostate Cancer Research

Institute, University of Virginia.

7/1/04-9/1/11 Member, Executive Committee, Biochemistry Graduate Program

7/1/06-11/1/13 Member, Executive Committee, Cancer Center, UVA; Co-leader of

Molecular Genetics program of the Cancer Center Support Grant.

7/1/06-11/1/13 Co-director Genetics and epigenetics program of Cancer Center

Support Grant, UVA

2007, ’11, ‘12 Search Committee, Asst. Profs of Biochemistry and Bioinformatics,

UVA

2009- Assoc. Director, UVA Medical Scientist Training Program

2009 Search Committee, Chair of Pediatrics, UVA

2012 Review Committee, Dept. of Cell Biology, UVA

2012 Search Committee, Chair of Pathology, UVA

2013 Chair, Faculty compensation committee, UVA

# Hospital Appointments

10/1/93 – 6/30/03 Staff, Department of Pathology, Brigham and Women’s Hospital

**B. Outside Service Related to Professional Work:**

1997-2005 Scientific Advisory Committee, Ruttenberg Cancer Center, Mount Sinai School of Medicine, New York.

1998-’00 Study Section, Molecular Genetics II, Breast Cancer Research Program, U.S.

‘03, ‘05-‘06 Armed Forces.

1998, 2000 Study Section, Ovarian Cancer III, Ovarian Cancer Research Program, U.S. Armed Forces.

1996, 1998 Ad Hoc member of Study Section for R13 grants, National Cancer Institute.

1999 Member Special emphasis panel, National Cancer Institute

1999 Ad Hoc Reviewer, American Cancer Society.

2000 Ad Hoc Reviewer, Biochemistry Study Section, National Institutes of Health.

2002 Ad Hoc Reviewer, Austrian Science Fund

2002 Organizer and Chair: Pathobiology for basic scientists. “Growth and Development”. April 22. Annual meeting of American Society for Investigative Pathology (ASIP), New Orleans

2002 Program committee for Annual meeting of ASIP 2003 and 2004.

2002-03 Ad Hoc Reviewer, Alliance for Cancer Gene Therapy

2003 Organizer and Chair. Trends in Experimental Pathology Symposium: “Cell cycle”, April 13, Annual meeting of ASIP. San Diego.

2003 Session chair. Cold Spring Harbor meeting on Eukaryotic DNA replication

2003 Organizer, "Factors controlling re-replication ", American Society for Cell Biology (ASCB) annual meeting, 2003

2003 Organizer and Chair, DNA replication symposium, American Society for Biochemistry and Molecular Biology (ASBMB)/IUBMB annual meeting, 2004

2004 Chair. Growth Factors and their regulation. Annual meeting ASIP. Washington DC

2004 Ad Hoc Reviewer, Cancer and Molecular Pathology Study Section, National Institutes of Health.

2004 Reviewer, Section of Cell Growth, NICHD, Sept 23-24

2005 Organizer and Chair, Experimental manipulation of gene expression workshop, Annual meeting ASIP, 2005, San Diego.

2005 Reviewer for Cancer Research U.K.

ENCODE analysis workshop co-chair for Chromatin and Replication, NHGRI

2006 Organizer and chair: Symposium on S phase and cancer, AACR annual meeting, Washington DC

2007 Reviewer for Wellcome Trust, U.K.

Reviewer for Cancer Genetics study section, NIH

Reviewer for European Union Commission’s FP7 program for research

Session chair, Cell cycle meeting, Salk Institute, San Diego.

2008 Reviewer for the CCSD study section, NIH, for Danish councils for independent research, and for the American Association for Advancement of science on behalf of King Abdulaziz city for science and technology (KACST)

2009 Program Committee, ASBMB annual meeting, New Orleans

2009 Session Chair, Eukaryotic DNA replication, Cold Spring Harbor

2010 Reviewer for Austrian Science Fund

Reviewer on Molecular Genetics C Study Section, CSRS study section, NIH

Reviewer for Cancer Research UK

2011- Advisory board, DBT-Wellcome Trust, India

2012 Reviewer for Cancer Research UK

2013 Vice Chair, Gordon Research Conference on “Cell growth and proliferation”

2013 Co-organizer, Cold Spring Harbor meeting on “Eukaryotic DNA replication and

genome maintenance”

2013 Co-organizer, NCI workshop on “Chromosome Architecture in human cancer”

2014 Chair, Cold Spring Harbor meeting on “Cell cycle”

2014 Reviewer, for CNRS/INSERM, ATP-Avenir program, France

2014 Co-organizer, 2nd Pontin/Reptin workshop, Oeiras, Portugal

2015 Chair, Gordon Research Conference on “Cell growth and proliferation”

2015 Co-organizer, Cold Spring Harbor meeting on “Eukaryotic DNA replication and

genome maintenance”

2016 Vice Chair, Gordon Research Conference on “Genomic Instability”

Professional Societies

American Society for Biochemistry and Molecular Biology

American Society of Microbiology

American Association for the Advancement of Science

American Society for Investigative Pathology

American Association for Cancer Research

American Society for Cell Biology

### C. Editorial Boards

Member: Journal of Biological Chemistry (July 2001-Sept 2006)

Cancer Biology and Therapy (Associate Editor Jan 2002- Apr 2014)

Journal of Biochemistry (June 2006-Dec 2009)

Journal of Molecular Cell Biology (2009-)

Cancer Research, Senior Editor (Jan 2010-Dec 2011)

Ad Hoc Reviewer: American Journal of Pathology

Blood

British Journal of Cancer

Cancer Cell

Cancer Research

Cell

Cell Biology International

Current Biology

EMBO Journal

Experimental Cell Research

Gene

Genes and Development

Genome Research

Journal of Cell Biology

Journal of Cell Science

Journal of Clinical Investigation

Journal of Stem Cells

Molecular and Cellular Biology

Molecular Biology of the Cell

Molecular Cell

Nature

Nature Cell Biology

Nature Genetics

Nature Structural and Molecular Biology

Nucleic Acids Research

Oncogene

Proceedings of the National Academy of Sciences U.S.A.

Science

# Honors and Awards

2015 Outstanding Investigator Award, American Society for Investigative

Pathology.

2014 Mentor, Forbeck Scholars’ Retreat

2014 Elected Vice-chair (2016) and Chair (2018) Gordon Research

Conference on “Genomic instability”

2013 Graduate student invitee, U. California, Irvine

2012 UVA Team Science Award

2012 UVA Millipub award (one paper with > 1000 citations)

2011 Elected Vice-chair (2013) and Chair (2015) Gordon Research

Conference on “Cell growth and proliferation

2011 Outstanding Achievement Award, Society of American-Asian

Scientists in Cancer Research.

2009 Ranbaxy Research Award in Basic Biomedical Sciences, New Delhi.

2009 Graduate student invitee, Southern Illinois University

2007 Elected Fellow, American Association for the Advancement of

Science

2007 Graduate student invitee, University of Pennsylvania

2005 Keynote, Forbes Research Symposium, Virginia Commonwealth U.

2004- Faculty of 1000

2003- Harry F. Byrd Professor, University of Virginia

2001-2004 Research Scholar, American Cancer Society

1993-1996 Junior Faculty Award, American Cancer Society.

1994-1998 Research Career Development Award, U.S. Army Breast Cancer

Research Program.

1995-1997 Breast Cancer Research Scholar, Massachusetts Dept. of

Public Health.

1996 Visiting Scholar, Japan Society for the Promotion of Science

1990-1992 Postdoctoral Fellowship, American Cancer Society

1981 Best Outgoing Student, Christian Medical College, Vellore, India

1975 National Merit Scholar, National Science Talent Scholar, India

**Recent Presentations (since 2007) (168 before 2007)**

2007

New York University Medical School, New York, Jan 16

Keystone meeting on microRNAs, Keystone, Jan 30

Burnham Institute, San Diego, Feb 5

Molecular Medicine Triconference, San Francisco, Mar 1

Ohio State University, Columbus, Mar 14

Stanford University, Palo Alto, April 5

NIH workshop on “MicroRNAs in cellular development”. Annapolis, April 23-24

ASBMB Annual meeting, Washington DC, April 30

University of Pennsylvania, Philadelphia, May 7; Graduate Students invitee.

ENCODE talk, May 18

Cistrome meeting on Genome tiling arrays, Harvard Medical School, May 31-Jun 1.

Gordon Research Conference, “Cell Growth and Proliferation”, Maine, June 24-28

Salk Institute meeting, “Cell Cycle”, San Diego, July 13-17

University of Nebraska, Omaha, Sept. 13

Case-Western Reserve University, Cleveland, Oct 29

Forbeck symposium on microRNAs, Hilton Head, SC, Nov 1-4

Millennium Pharmaceuticals, Cambridge, Dec 5

2008

Kyushu University, Fukuoka, Japan, March 24-26

Moffitt Cancer Center, Tampa, Research Grand Rounds, April 23

European Institute of Oncology, Milan, June 24

NCI symposium “Targeting DNA replication and repair pathways in Cancer Therapeutics",

Bethesda, Sep 3-5

Forbeck Scholar Retreat on MicroRNAs, Lake Geneva, Sep. 11-13

AACR symposium on Molecular Diagnostics, Philadelphia, Sep. 22-25

Human Genome Organization Annual Meeting, Hyderabad, Sep. 27-30

High Throughput genome-wide screens, Bangalore, Oct 1-2

ICGEB, New Delhi, Oct 6

Netherlands Cancer Institute, Amsterdam, Oct 7

MGH Cancer Center, Harvard, Oct 15

2009

Keystone Symposium on The Many Faces of Ubiquitin, Jan 11-16

University of North Carolina, Jan 27

ACTREC, Mumbai, Feb 9

Bose Institute, Kolkata, Feb 11

JNU-Uppsala Conference in Molecular Medicine, New Delhi, Feb 13-14

University of Sussex, Feb 16

Keystone Symposium on Genome Instability and DNA repair, Mar 1-6

University of North Texas, March 26

University of West Virginia, March 31

ASBMB annual meeting, DNA replication and repair, New Orleans, April 19

APS annual meeting, MicroRNAs in muscle physiology, New Orleans, April 22

Institute Curie, Paris, June 17

Gordon Research Conference, Maine, July 5-9

Cold Spring Harbor meeting on DNA replication and repair, Sep 1-5

Indiana University, Sep 11

Southern Illinois University, Sep 25

McGill University, Oct 6

Harvard School of Public Health, Jack Little symposium, Oct 23-24

University of Munich, Nov. 2

National Institute of Immunology, New Delhi, Nov. 5

CDFD, Hyderabad, Nov 6

Northwestern University, Nov 24

Duke University, Dec 9

2010

University of Hawaii, Jan 6

UVA Center for Public Health Seminar, Feb 1

Lineberger symposium, University of North Carolina, April 28-29

Genentech, May 10

Jiao-dong University, Shanghai, June 21

Beijing University, Beijing, June 29

ICGEB, Trieste, Aug 31

EMBO Workshop, Interface between the Ubiquitin family and the DNA damage response,

Sep 1-5

St. Louis University, Sep. 20

ASBMB symposium, Tahoe City, Transcriptional Regulation by Chromatin and RNA

Polymerase II, Oct Sep 30-Oct 4

Virginia Commonwealth University, Nov 3

University of Illinois Champaign-Urbana, Nov. 10

Duke University, Dec 2

2011

Keystone Symposium, Genomic instability, Jan 30-Feb 4

Keystone Symposium, DNA replication and recombination, Feb 27-Mar 4

University of Colorado, Denver, Mar 4

Gordon conference, Cell Growth and Proliferation, Jun 26-Jul 1

CNIO, Madrid, Jul 8

CRG, Barcelona, Jul 18

DNA tumor virus meeting, Trieste, Jul 19-23

DNA replication and genome stability, Cold Spring Harbor, Sep 6-10

U Texas Health Sciences Center, San Antonio, Sep 13

Wake Forest School of Medicine, Winston-Salem, Oct 13

International Society of Biophysics annual meeting, Beijing, Sep 30-Oct 3

UVA Cell biology seminar, Nov 16

Cancer Institute of New Jersey, Nov 30

The Molecular Biology Society of Japan annual meeting, Yokohama, Dec 13-16

2012

Vellore Winter Symposium, Cancer and Stem Cells, Jan 5-7

IICB, Kolkata, Jan 9

Max Planck Institute, Munich, Feb 6

IGIB, New Delhi, Feb 7

International AT Workshop, New Delhi, Feb 7-11

University of Cincinnati, Mar 5

Annual meeting AACR, Chicago, Mar 31- Apr 4

Annual meeting, British Society for Cell Biology, Warwick, UK, Apr 15-17

NCCS, Pune, India, Apr 27

NCI Workshop on Virus and DNA damage, Bethesda, Sep 11, 12

Keynote Speaker, Pontin-Reptin meeting, Bordeaux, Oct 17-19

UVA Genome Sciences seminar, Oct 24

Oklahoma Medical Research Foundation, Nov 8

U. California, Davis, Dec 6

2013

U. California, Irvine, Jan 16

ICESP Molecular Oncology meeting, Sao Paulo, Brazil, Feb 5

UVA School of Medicine Research Retreat, Feb 9

U. Indiana, Bloomington, Apr 4

UVA Center for Genomics Retreat, Apr 29

NIH, NIGMS, PRAT Fellows Program, May 3

Mayo Clinic, Rochester, May 10

Indian Institute Of Science, Bangalore, June 20

Goethe University, Frankfurt, June 21

Gordon Research Symposium, Keynote, June 23

Gordon Research Conference, Molecular Genetics of Cell Proliferation, Jun 23-27

Cold Spring Harbor meeting on Eukaryotic DNA replication, Sep 9-13

Christopher Newport University, Sep 20.

NCI workshop on Genomic Instability, Nov 12, 13

National Health Research Institute, Taiwan, Dec. 9,10

National Tsinghua University, Taiwan, Dec. 11

2014

NSF Research Coordination Network meeting on epigenetics, Madison, WI, May 2-3

Cold Spring Harbor meeting on Cell Cycle, May 13-17

Gordon Research Conference, Genomic Instability, Jul 6-11

Koc University, Istanbul, Jul 14

Eastern Virginia Medical School, Norfolk, Sep 8

Forbeck Scholar Retreat, Lake Geneva, Sep 11-13

Sloan Kettering Institute, New York, Sep 26

Pontin-Reptin meeting, ITQB, Oeiras, Portugal, Oct 9-11

**Currently active grants**

1) NIH R01 CA60499 (Dutta)

MCM8-9 and genomic stability

This project studies anomalies of replication factors and their regulation that lead to genomic instability seen in cancers.

2) NIH P01 CA104106-06 (Bryce Paschal, Dan Theodorescu)

(Dutta, leader of Project 3)

Project 3: Androgens and MicroRNAs in Prostate Cancer

Identification of the role of microRNAs during prostate cancer progression and in the androgen-driven gene expression program.

3) NIH R01 CA166054 (Dutta)

Effect of anti-S phase agents on human chromosomes

Investigates how anti-S phase agents used in chemotherapy impinge on the cell-cycle apparatus

4) NIH R01 GM84465 (Dutta)

Degradation of TIP60 by two viral oncoproteins

This project will study the degradation of the TIP60 lysine acetyl transferase complex by oncoproteins from HPV and adenovirus.

5) Fellowships active in the lab:

Pankaj Kumar, Ph.D., DOD Prostate Cancer postdoctoral fellowship

Laura Dillon, Ph.D., Ovarian Cancer Research Foundation postdoctoral fellowship

Jordan Anaya, NIH F31 NRSA

Brian Reon, NIH Cancer Training grant

**Past Mentees**

Junjie Chen Professor, M.D. Anderson Medical Center

Ellen Winchester Software Engineer, Broad Institute

Yi-Ling Lin Asst. Professor, University of California Los Angeles

Partha Saha Assoc. Professor, Saha Institute, Kolkata

David Garcia Quintana Assoc. Professor, Autonomous University, Barcelona

Kenichi Yoshida Assoc. Professor, Meiji University

Suman Dhar Professor, J. Nehru University, New Delhi

Chinweike Ukomadu Asst. Professor, BWH, Harvard Medical School

Zophonias Jonsson Asst. Professor, University of Iceland

Sandeep Saxena Asst. Professor, Natl. Instt. Immunology, New Delhi

Takeshi Senga Assoc. Professor, Nagoya University

James Wohlschlegel Assoc. Professor, University of California Los Angeles

Uma Sivaprasad Asst. Professor, University of Cincinnati

Yuichi Machida Asst. Professor, Mayo Clinic, Rochester

Christopher M. Taylor Assoc. Professor, LSU Health Sciences, New Orleans

Yong Sun Lee Asst. Professor, University of Texas, Galveston

Clark Chen Asst. Professor, UCSD

Xiaobo Qiu Professor, Beijing Normal University

Wenge Zhu Asst. Professor, George Washington University

Kenta Terai Asst. Professor, U. of Tokyo

Jie Lin Sr. Research Technologist, St. Jude’s, Memphis, TN

Sudhakar Jha Asst. Professor, Cancer Science Inst., NUS, Singapore

Jamie Teer Asst. Member, Moffitt Cancer Center, Tampa, FL

Mignon Keaton Research-coordinator, Duke U., Durham, NC

Tarek Abbas Asst. Professor, Radiation Oncology, U. of Virginia

Neerja Karnani Investigator, ASTAR Clinical Sciences Instt, Singapore

Jonghoon Park Scientist, LG Life Sciences, Daejon, S. Korea.

Ashish Gupta Asst. Professor, Shiv Nadar University, New Delhi

Ankit Malhotra Assoc. Computational Scientist, Jackson Genomics Ctr.

Amir Jazaeri (Asst., Assoc. Prof) Assoc. Prof of Gynecologic Oncology, M.D. Anderson C. Ctr.

# Bibliography

**A. Original Articles in Refereed Journals**

1. Dutta A, Wang L-H, Hanafusa T, Hanafusa H. Partial nucleotide sequence of Rous sarcoma virus-29 provides evidence that the original Rous sarcoma virus was replication defective. J Virol. 1985; 55, 728-735.

2. Dutta A, Majumder H K. Effects of monosaccharides on uptake of Leishmania donovani promastigotes by murine macrophages. Indian Jl Biochem Biophys. 1986; 23, 1-4.

3. Dutta A, Dorai T, Hanafusa H. The putative trans-activator in the MA gag region of Rous sarcoma virus is not required for cell transformation. J Virol. 1988; 62, 4767-4769.

4. Prywes R, Dutta A, Cromlish J A, Roeder R G. Phosphorylation of serum response factor, a factor that binds to the serum response element upstream of the c-fos promoter. Proc Natl Acad Sci USA. 1988; 85, 7206-7210.

5 Dutta A, Stoeckle M Y, Hanafusa H. Serum and v-src increase the level of CCAAT binding factor required for transcription from a retroviral LTR. Genes & Dev. 1990; 4, 243-254.

6. Dutta A, Hamaguchi M, Hanafusa H. Serum independence of transcription from the promoter of an avian retrovirus in v-src transformed cells is a primary, intracellular effect of increased tyrosine phosphorylation. Proc Natl Acad Sci U S A. 1990; 87, 608-612.

7. Dutta A, Stillman B. cdc2 family kinases phosphorylate a human cell DNA replication factor, RPA, and activate DNA replication. EMBO J. 1992; 11, 2189-2199.

8. Dutta A, Ruppert J M, Aster J C, Winchester E. Inhibition of DNA replication factor RPA by p53. Nature. 1993; 365, 79-82. (Accompanied by News and Views piece in Nature)

9. Chen J, Jackson P K, Kirschner M W, and Dutta A. Separate domains of p21 involved in the inhibition of cdk kinase and PCNA. Nature. 1995; 374, 386-388

10. Dutta A, Chandra R, Leiter L M, Lester S. Cyclins as markers of tumor proliferation and angiogenesis: immunocytochemical studies in breast cancer. Proc Natl Acad Sci USA. 1995; 92, 5386-5390.

11. Keshav K F, Chen C, Dutta A. Rpa4, a homolog of the 34 kDa subunit of the replication protein A complex. Mol. Cell. Biol. 1995; 15, 3119-3128.

12. Chen J, Peters R, Saha P, Lee P, Theodoras A, Pagano M, Wagner G, Dutta A. A 39 amino acid fragment of the cell cycle regulator p21 is sufficient to bind PCNA and partially inhibit DNA replication in vivo. Nucleic Acids Research. 1996; 24, 1727-1733.

13. Lin Y-L, Chen C, Keshav K F, Winchester E, Dutta A. Dissection of functional domains of the human DNA replication protein complex Replication Protein A. J. Biol. Chemistry. 1996; 271, 17190-17198.

14. Leiter L M, Chen J, Marathe T, Tanaka M, Dutta A. Loss of transactivation and transrepression function, and not RPA binding, alters growth suppression by p53. Oncogene. 1996; 12, 2661-2668.

15. Henricksen L A, Carter T, Dutta A, Wold M S. Phosphorylation of human replication protein A by the DNA-dependent protein kinase is involved in the modulation of DNA replication. Nucleic Acids Research. 1996; 24, 3107-3112.

16. Chen J, Saha P, Kornbluth S, Dynlacht B, Dutta A. Cyclin binding motifs are essential for the function of p21/CIP1. Mol. Cell. Biol. 1996; 16, 4673-4682.

17. Mashal R D, Lester S, Corless C, Richie J P, Chandra R, Propert K J, Dutta A. Expression of cell-cycle regulated proteins in prostate cancer. Cancer Research. 1996; 56, 4159-4163.

18. Chen J, Chen S, Saha P and Dutta A. p21 disrupts the recruitment of human Fen1 by proliferating cell nuclear antigen into the DNA replication apparatus. Proc. Natl. Acad. Sci. USA. 1996; 93, 11597-11602.

19. Saha P, Eichbaum Q, Silberman E D, Mayer B J, Dutta A. p21/CIP1 and Cdc25A, competition between an inhibitor and an activator of cyclin dependent kinases. Mol. Cell. Biol. 1997; 17, 4338-4345.

20. Quintana DG, Hou ZH, Thome KC, Hendricks M, Saha P, Dutta A. Identification of a novel subunit of the human origin recognition complex with homology to yeast Orc4. J. Biol. Chemistry 1997; 272, 28247-28251.

21. Lin Y L, Shivji M K K, Chen C, Kolodner R, Wood R D, Dutta A. The evolutionarily conserved zinc finger motif in the largest sub-unit of human RPA is required for DNA replication and mismatch repair but not for nucleotide excision repair. J. Biol. Chemistry 1998; 273, 1453-1461.

22. Saha P, Chen J, Thome K C, Lawlis S J, Hou Z H, Hendricks M, Parvin J D, Dutta A. The human CDC6/Cdc18 associates with Orc1 and cyclin-cdk and is selectively eliminated from the nucleus at the onset of S phase. Mol. Cell. Biol. 1998; 18, 2758-2767.

23. Saha P, Thome K C, Yamaguchi R, Hou Z H., Weremowicz S and Dutta A. The human homolog of Saccharomyces cerevisiae CDC45. J. Biol. Chemistry 1998; 273, 18205-18209.

24. Renshaw A A, Loughlin K R, Dutta A. Cyclin A and Mib1 (Ki67) as markers of proliferation in primary renal neoplasms. Modern Pathology. 1998; 10, 963-966.

25. Quintana DG, Thome KC, Hou ZH, Ligon AH, Morton C C and Dutta A. ORC5L, a new member of the human Origin Recognition Complex, is deleted in uterine leiomyomas and malignant myeloid diseases. J. Biol. Chemistry 1998; 273, 27137-27145.

26. Qiu X B, Lin Y L, Thome K C, Pian P, Schlegel B P, Weremowicz S, Parvin J D, Dutta A. An Eukaryotic RuvB-like Protein (RUVBL1) Essential for Growth. J. Biol. Chemistry 1998; 273, 27786-27793.

27. Quade B J, Park J J, Crum C P, Sun D, Dutta A. In vivo cyclin E expression as a marker for early cervical neoplasia. Modern Pathology. 1998; 11, 1238-1246.

28. Pinto S, Quintana D G, Smith P, Mihalik R M, Hou Z -H, Boynton S, Jones C J, Hendricks M, Velinzon K, Wohlschlegel J A, Austin R J, Lane W S, Tully T\* and Dutta A\*. latheo encodes a subunit of the Origin Recognition Complex and disrupts neuronal proliferation and adult olfactory memory when mutant. Neuron. 1999; 23, 45-54. \* Co-corresponding authors.

29. Datta M W, Renshaw A A, Dutta A, Hoffman M A and Loughlin KR. Evaluation of cyclin expression in testicular germ cell tumors: cyclin E correlates with tumor type, advanced clinical stage, and pulmonary metastasis. Modern Pathology. 2000; 13, 667-672

30. Dhar S K and Dutta A. Identification of the human ORC6 homolog. J. Biol. Chemistry. 2000; 275, 34983-34988..

31. Thome K C, Dhar S K, Quintana D G, Delmolino L, Shahsafaei A and Dutta A. Subsets of human ORC subunits are expressed in non-proliferating cells and associate with non-ORC proteins. J. Biol. Chemistry. 2000; 275, 35233-35241.

32. Yamaguchi R and Dutta A. Proteasome inhibitors alter the orderly progression of DNA synthesis in S phase of HeLa cells and lead to re-replication of DNA. Exptl. Cell Research. 2000; 261, 271-283.

33. Wohlschlegel J A, Dwyer B, Dhar S K, Cvetic C, Walter J and Dutta A. Inhibition of eukaryotic DNA replication by geminin binding to Cdt1. Science. 2000; 290, 2309-2312. (Accompanied by Perspectives essay in Science)

34. Takeda D, Wohlschlegel J A, and Dutta A. A bipartite substrate recognition motif for cyclin-dependent kinases. J. Biol. Chemistry. 2001; 276, 1993-1997.

35. Jonsson Z O, Dhar S K, Narlikar G, Auty R, Wagle N, Pellman D, Pratt R E, Kingston R and Dutta A. Rvb1p and Rvb2p are essential components of a chromatin remodeling complex that regulates transcription of over 5% of yeast genes. J. Biol. Chemistry. 2001; 276,16279-16288.

36. Yoshida K, Kuo F, George E L, Sharpe A H and Dutta A. Requirement of CDC45 for postimplantation mouse development. Mol. Cell. Biol. 2001; 21, 4598-4603.

37. Wohlschlegel J A, Dwyer B, Takeda D and Dutta A. A mutational analysis of the Cy motif from p21 reveals sequence degeneracy and specificity for different cyclin-dependent kinases. Mol. Cell. Biol. 2001; 21, 4868-4874.

38. Delmolino L M, Saha P and Dutta A. Multiple mechanisms regulate subcellular localization of human CDC6: NLS, NES and phosphorylation. J.Biol. Chemistry. 2001; 276, 26947-26954.

39. Dhar S K, Delmolino L M and Dutta A. Architecture of the human Origin Recognition Complex. J Biol. Chemistry, 2001; 276, 29067-29071.

40. Dhar S K, Yoshida K, Machida Y, Khaira P, Chaudhuri B, Wohlschlegel J A, Leffak M, Yates J and Dutta A. Replication from oriP of Epstein-Barr Virus requires human ORC and is inhibited by geminin. Cell, 2001; 106, 287-296.

41. Chaudhuri B, Xu H, Todorov I, Dutta A and Yates J L. Human DNA replication initiation factors, ORC and MCM, associate with oriP of Epstein-Barr virus. . Proc Natl Acad Sci U S A. 2001; 98, 10085-10089.

42. Wohlschlegel J A, Dhar SK, Prokhorova TA, Dutta A\* and Walter J\*. Xenopus Mcm10 binds to origins of DNA replication after Mcm2-7 and stimulates binding of Cdc45. Molecular Cell. 2002; 9, 233-240. \* Co-corresponding authors. (F1000)

43 Wohlschlegel J A, Kutok J L , Weng A P and Dutta A. Expression of geminin as a marker of cell proliferation in normal tissues and malignancies. Am. J. Pathology 2002; 161, 267-273.

44. Ukomadu C and Dutta A. Inhibition of cdk2 activating phosphorylation by mevastatin. J. Biol. Chemistry 2003; 278, 4840-4846.

45. Vaziri C, Saxena S, Jeon Y, Lee C, Murata K, Machida Y, Wagle N, Hwang D S and Dutta A. A p53 dependent checkpoint pathway prevents re-replication. Molecular Cell 2003; 11, 997-1008. (Cover Image)

46. Ukomadu C and Dutta A. p21 dependent inhibition of colon cancer cell growth by mevastatin is independent of inhibition of G1 cyclin-dependent kinases. J. Biol. Chem. 2003; 278, 43586

47. Saxena S, Jonsson Z O and Dutta A. Small RNAs with imperfect match to endogenous mRNA repress translation: implications for off-target activity of siRNA in mammalian cells. J. Biol. Chem. 2003; 278, 44312-44319.

48. Yoshida K, Oyaizu N, Dutta A and Inoue I. The destruction box of human Geminin is critical for proliferation and tumor growth in human colon cancer cells. Oncogene. 2004; 23, 58-70.

49. Zhu W, Chen Y and Dutta A. Re-replication by depletion of geminin is seen regardless of p53 status and activates a G2/M checkpoint. Mol. Cell. Biol. 2004; 24, 7140-7150. (Cover Image)

50. Saxena S, Yuan P, Dhar SK, Senga T, Takeda D, Robinson H, Kornbluth SA, Swaminathan K and Dutta A. A dimerized coiled-coil domain and an adjoining part of geminin interact with two sites on Cdt1 for replication inhibition. Molecular Cell, 2004; 15, 245-258.

51. Jónsson Z O, Jha S, Wohlschlegel J A and Dutta A. Rvb1p/Rvb2p recruit Arp5p and assemble a functional Ino80 chromatin remodeling complex. Molecular Cell, 2004; 16, 465-477.

52. ENCODE Project Consortium. The ENCODE (ENCyclopedia Of DNA Elements) Project. Science, 2004;306, 636-640.

53. Lee YS, Kim HK, Chung S, Kim KS, and Dutta A. Depletion of human microRNA miR-125b reveals that it is critical for the proliferation of differentiated cells but not for the down-regulation of putative targets during differentiation. J Biol Chem. 2005; 280, 16635-16641.

54. Jeon Y, Bekiranov S, Karnani N, Kapranov P, Ghosh S, MacAlpine D, Lee C, Hwang DS, Gingeras T and Dutta A. Temporal profile of replication of human chromosomes. Proc. Natl. Acad. Sci. USA. 2005; 102, 6419-6424.

55. Takeda D Y, Parvin J D and Dutta A. Degradation of Cdt1 during S phase is SKP2 independent and is required for efficient progression of mammalian cells through S phase. J. Biol. Chem. 2005; 280, 23416-23423.

56. Machida Y J, Teer J K and Dutta A. Acute reduction of an ORC subunit in human cells reveals a requirement of ORC for CDK2 activation. J. Biol. Chem. 2005; 280, 27624-27630.

57. Takeda D Y, Shibata Y, Parvin J D and Dutta A. Recruitment of ORC or CDC6 is sufficient to create an artificial origin of replication in mammalian cells. Genes & Development. 2005; 19, 2827-36. (Research Highlight in Nature Reviews Genetics and Nature Reviews MCB; F1000) PMC1315390

58. Senga T, Sivaprasad U, Zhu W, Park J H, Arias E E, Walter J C and Dutta A. PCNA is a co-factor for Cdt1 degradation by CUL4/DDB1 mediated N-terminal ubiquitination. J. Biol. Chem. 2006; 281, 6246-52. (F1000)

59. Teer J K, Machida Y J, Labit H, Novac O, Hyrien O, Marheineke K, Zannis-Hadjopoulos M and Dutta A. Proliferating human cells hypomorphic for Orc2 and pre-RC formation have a defect in p53 activation and CDK2 kinase activation. J. Biol. Chem. 2006; 281, 6253-60.

60. Ernkvist M, Aase K, Ukomadu C, Wohlschlegel J, Blackman R, Veitonmaki N, Bratt A, Dutta A and Holmgren L p130-Angiomotin associates with actin and controls endothelial cell shape. FEBS Journal, 2006; 273, 2000-11

61. Zhu W and Dutta A. An ATR, BRCA1 mediated Fanconi Anemia pathway is required for activating the G2/M checkpoint and DNA damage repair upon re-replication. Mol. Cell. Biol. 2006; 26, 4601-11.

62. Kim HK, Lee YS, Sivaprasad U, Malhotra A and Dutta A. Muscle-specific microRNA miR-206 promotes muscle differentiation. J. Cell Biol. 2006; 174, 677-687. (Cover Image and News Highlight in JCB; Research Highlight in Nature, 2006: 443, 4-5; F1000) PMC2064311

63. Machida Y J, Machida Y, Chen Y, Gurtan A, Kupfer G M, D’Andrea A D and Dutta A. UBE2T is the E2 in the Fanconi Anemia Pathway and Undergoes Negative Autoregulation. Molecular Cell, 2006; 23, 589-96.

64. Sivaprasad U, Abbas T and Dutta A. Differential efficacy of HMG CoA reductase inhibitors on the cell cycle of prostate cancer cells. Molecular Cancer Therapeutics, 2006; 5: 2310-6.

65. Machida Y J, Chen Y, Machida Y, Malhotra A, Sarkar S and Dutta A. Targeted Comparative RNAi (TARCOR) Analysis Reveals Differential Requirement of Genes Essential for Cell Proliferation. Mol. Biol. Cell. 2006; 17: 4837–4845.

66. Karnani N, Taylor C M, Malhotra A and Dutta A. Pan-S replication patterns and chromosomal domains defined by genome tiling arrays of ENCODE genomic areas. Genome Research, 2007; 17 : 865-76. (F1000 citation)

67. Machida YJ and Dutta A. The APC/C Inhibitor, Emi1, Is Essential for Prevention of Rereplication. Genes & Development, 2007; 21:184-194. (F1000 citation) PMC1770901

68. Abbas T, Jha S, Sherman NE and Dutta A. Autocatalytic Phosphorylation of CDK2 at the Activating Thr160. Cell Cycle, 2007; 6:843-52. (F1000 citation)

69. Lee YS and Dutta A. The tumor suppressor microRNA *let-7* represses the HMGA2 oncogene. Genes & Development, 2007; 21:1025-30. (Accompanied by a Perspectives essay). PMC1855228

70. ENCODE project consortium. Identification and analysis of functional elements in 1% of the human genome by the ENCODE pilot project consortium. Nature, 2007; 447: 799-816. (Our group provided and analyzed the DNA replication data for the consortium; F1000 citation.) **[PMC2212820](http://www.pubmedcentral.gov/articlerender.fcgi?tool=nihms&artid=2212820" \o "PMC: #2212820" \t "aux)**

71. Zhu W, Ukomadu C, Jha S, Senga T, Dhar SK, Wohlschlegel JA, Nutt LK, Kornbluth S and Dutta A. Mcm10 and And-1/CTF4 recruit DNA polymerase α to chromatin for initiation of DNA replication. . Genes & Development, 2007; 21:2288-99. (F1000 citation)

72. Lin JJ and Dutta A. ATR pathway is the primary pathway for activating G2/M checkpoint induction after re-replication. J. Biol. Chem. 2007; 282:30357-62 (Highlighted as “Research Highlight” in Nature Structural and Molecular Biology, 14:1061)

73. Alpi A, Langevin F, Mosedale G, Machida YJ, Dutta A and Patel KJ. UBE2T, the FA core complex and FANCD2 are recruited independently to chromatin: A basis for the regulation of FANCD2 monoubiquitination. Mol Cell Biol. 2007; 27:8421-30

74. Deng Z, Dheekollu J, Broccoli D, Dutta A and Lieberman PM. The Origin Recognition Complex Localizes to Telomere Repeats and Prevents Telomere-Circle Formation. Current Biology. 2007; 17:1989-95.

75. Teer JK and Dutta A. Human Cdt1 lacking the evolutionarily conserved region that interacts with MCM2-7 is capable of inducing re-replication. J. Biol. Chem. 2008; 283:6817-25.

76. Jha S, Shibata E and Dutta A. Human Rvb1/Tip49 is required for the HAT activity of TIP60/NuA4 and for the downregulation of phosphorylation on H2AX after DNA damage. Mol. Cell. Biol. 2008; 28:2690-700. PMC2293106

77. Lew DJ, Burke DJ and Dutta A. The immortal strand hypothesis: How could it work? Cell, 2008; 133:21-23.

78. Abbas T, Sivaprasad U, Terai K, Amador V, Pagano M and Dutta A. PCNA-dependent regulation of p21 ubiquitylation and degradation via the CRL4-cdt2 ubiquitin ligase complex. Genes & Development, 2008; 22:2496-506. **[PMC2546691](http://www.pubmedcentral.gov/articlerender.fcgi?tool=nihms&artid=2546691" \o "PMC: #2546691" \t "aux)**

79. Torreira E, Jha S, López-Blanco JR, Arias-Palomo E, Chacón P, Cañas C, Ayora S, Dutta A and Llorca O. Architecture of the pontin/reptin complex, essential in the assembly of several macromolecular complexes. Structure, 2008: 16:1511-20. **[PMC2577609](http://www.pubmedcentral.gov/articlerender.fcgi?tool=nihms&artid=2577609" \o "PMC: #2577609" \t "aux)**

80. Shibata Y, Malhotra A, Bekiranov S and Dutta A. Yeast genome analysis identifies chromosomal translocation, gene conversion events and several sites of Ty element insertion. Nucleic Acids Research, 2009: 37:6454-65. PMC2770650

81.     Lee YS, Shibata Y, Malhotra A and Dutta A. A novel class of small RNAs: tRNA-derived RNA fragments (tRFs).  Genes & Development, 2009; 23:2639-49. PMC2779758

82. Machida YJ, Machida Y, Vashisht A, Wohlschlegel JA and Dutta A. The Deubiquitinating Enzyme BAP1 Regulates Cell Growth via Interaction with HCF-1. J. Biol. Chem., 2009; 284:34179-88. PMC2797188

83.    Terai K, Abbas T, Jazaeri AA and Dutta A. CRL4Cdt2 E3 ubiquitin ligase monoubiquitinates PCNA to promote translesion DNA synthesis.  Molecular Cell, 2010; 37:143-149. PMC2818832

84. Karnani N, Taylor CM, Malhotra A and Dutta A. Genomic study of replication initiation in human chromosomes reveals the influence of transcription regulation and chromatin structure on origin selection. Mol. Biol. Cell. 2010; 21:393-404 PMC2814785

85. Jazaeri AA, Ferriss JS, Bryant JL, Dalton MS, Dutta A. [Evaluation of EVI1 and EVI1s (Delta324) as potential therapeutic targets in ovarian cancer.](http://www.ncbi.nlm.nih.gov/pubmed/20462630) Gynecol Oncol. 2010, 118:189-95

86. Sarkar S, Dey BKand Dutta A. MiR-322/424 and 503 are induced during muscle differentiation and promote cell-cycle quiescence and differentiation by downregulation of Cdc25A. Mol. Biol. Cell. 2010, 21:2138-49. PMC2893979

87. Jha S, Vande Pol S, Banerjee NS, Dutta AB, Chow LT, and Dutta A. Destabilization of TIP60 by human papillomavirus E6 results in attenuation of TIP60 dependent transcriptional regulation and apoptotic pathway. Molecular Cell, 2010, 38:700-11 (F1000 citation) PMC2886028

88. Shibata Y, Malhotra A and Dutta A. Detection of DNA fusion junctions for BCR-ABL translocations by Anchored ChromPET. Genome Med. 2010, 2:70. PMC3092121 (Highly Accessed)

89. Abbas T, Shibata E, Park J, Jha S, Karnani N and Dutta A. CRL4Cdt2 Regulates Cell Proliferation and Histone Gene Expression by Targeting PR-Set7/Set8 for Degradation. Molecular Cell, 2010, 40: 9-21. (Featured Article, F1000 citation, Perspective in Molecular Cell, Research Highlight in Nature Reviews MCB) PMC2966975

90. Lin JJ, Milhollen MA, Smith PG, Narayanan U and Dutta A. NEDD8-targeting drug MLN4924 elicits DNA rereplication by stabilizing Cdt1 in S phase, triggering checkpoint activation, apoptosis, and senescence in cancer cells. Cancer Research, 2010, 70:10310-20. PMC3059213

91. Dey BK, Gagan J and Dutta A. MiR-206 and -486 induce myoblast differentiation by downregulating Pax7. Mol. Cell Biol., 2011, 31:203-14. PMC3019853

92. Sun D, Lee YS, Malhotra A, Kim HK, Matecic M, Evans C, Jensen RV, Moskaluk CA and Dutta A. miR-99 family of microRNAs suppresses the expression of prostate specific antigen and prostate cancer cell proliferation. Cancer Research, 2011; 71:1313-24. PMC3523179

93. Mesner LD, Valsakumar V, Karnani N, Dutta A, Hamlin JL, Bekiranov S. Bubble-chip analysis of human origin distributions demonstrates on a genomic scale significant clustering into zones and significant association with transcription. Genome Res., 2011, 21:377-89. (F1000 citation) PMC3044852

94. Karnani N and Dutta A. The effect of the intra-S-phase checkpoint on origins of replication in human cells. Genes & Development, 2011; 25:621-33. PMC3059835

95. Keaton M and Dutta A. Nuclear Scaffold Attachment Sites within ENCODE Regions Associate with Actively Transcribed Genes, PLOS One, 2011; 6 : e17912. PMC3056778

96. Gagan JR, Dey BK, Layer R, Yan Z and Dutta A. MICRORNA-378 targets the myogenic repressor MyoR during myoblast differentiation, J. Biol. Chem., 2011; 286:19431-8. PMC3103322

97. Shibata E, Abbas T, Huang X, Wohlschlegel JA and Dutta A. Selective ubiquitylation of p21 and Cdt1 by UbcH8 and Ube2G ubiquitin-conjugating enzymes via the CRL4-Cdt2 ubiquitin ligase complex. Mol. Cell Biol., 2011; 31:3136-45 PMC3147600

98. Van Rechem C, Black JC, Abbas TA, Allen A, Rinehart CA, Yuan GC, Dutta A, Whetstine JR. The SKP1 - Cul1 - F-box and Leucine-rich repeat protein 4 (SCF-FbxL4) ubiquitin ligase regulates lysine demethylase 4A (KDM4A)/Jumonji domain-containing 2A (JMJD2A). J Biol Chem. 2011; 286:30462-70. PMC3162406

99. Jazaeri AA, Bryant JL, Park H, Li H, Dahiya N, Stoler MH, Ferriss JS, Dutta A. Molecular requirements for transformation of fallopian tube epithelial cells into serous carcinoma. Neoplasia. 2011; 13:899-911. PMC3201567

100. Shibata Y, Kumar P, Layer R, Willcox S, Gagan JR, Griffith JD, Dutta A. Extrachromosomal MicroDNAs and Chromosomal Microdeletions in Normal Tissues. Science. 2012; 336:82-6 F1000 citation. PMC3703515

101. Mueller AC, Sun D, Dutta A. The miR-99 family regulates the DNA damage response through its target SNF2H. Oncogene. 2013; 32:1164-72 PMC3407337

102. Dey BK, Gagan JR, Yan Z, Dutta A. MiR-26a is required for skeletal muscle differentiation and regeneration in mice. Genes & Development. 2012; 26:2180-2191. PMC3465739

103. Gagan JR, Dey BK, Layer R, Yan Z and Dutta A. Notch3 and Mef2c Are Mutually Antagonistic via Mkp1 and miR-1/206 in Differentiating Myoblasts. J. Biol. Chem. 2012; 287:40360-70. PMC3504751

104. Gupta A, Jha S, Engel DA, Ornelles DA and Dutta A. Tip60 degradation by adenovirus relieves transcriptional repression of viral transcriptional activator E1A. Oncogene. 2013; 32:5017-25. doi: 10.1038/onc.2012.534. [Epub ahead of print]

105. Jha S, Gupta A, Dar A and Dutta A. RVBs are required for assembling a functional TIP60 complex. Mol Cell Biol. 2013, 33:1164-74. PMC3592018

106. Sun D, Layer R, Mueller AC, Cichewicz M, Negishi M, Paschal BM and Dutta A. Regulation of several androgen-induced genes through the repression miR 99a/let-7c/miR 125-b-2 miRNA cluster in prostate cancer cells. Oncogene. 2014;33:1448-57 PMC3915043

107. Abbas T, Mueller AC, Shibata E, Keaton M, Rossi M and Dutta A.CRL1-FBXO11 promotes Cdt2 ubiquitylation and degradation and regulates Pr-Set7/Set8-mediated cellular migration. Molecular Cell. 2013. 49:1147-58. PMC3615078

108. Park J, Long DT, Lee KY, Abbas T, Shibata E, Negishi M, Luo Y, Schimenti JC, Gambus A, Walter JC and Dutta A. The MCM8-9 complex promotes RAD51 recruitment at DNA damage sites to facilitate homologous recombination. Mol Cell Biol. 2013; 33:1632-44. PMC3624244

109. Snow CJ, Dar A, Dutta A, Kehlenbach RH, Paschal BM. Defective nuclear import of Tpr in Progeria reflects the Ran sensitivity of large cargo transport. J Cell Biol. 2013; 201:541-57. PMC3653351

110. Malhotra A, Shibata Y, Hall IM and Dutta A. Chromosomal structural variations during progression of a prostate epithelial cell line to a malignant metastatic state inactivate the NF2, NIPSNAP1, UGT2B17 and LPIN2 genes. Cancer Biol. Therapy, 2013;.epub 10.4161/cbt.25329 PMC3909553

111. Dar A, Shibata E and Dutta A. Deubiquitination of Tip60 by USP7 Determines the Activity of the p53-Dependent Apoptotic Pathway. Mol Cell Biol. 2013; 33:3309-20. PMC3653351

112. Jazaeri AA, Shibata E, Park J, Bryant JL, Conaway MR, Modesitt SC, Smith PG, Milhollen MA, Berger AJ, Dutta A. Overcoming platinum resistance in preclinical models of ovarian cancer using the neddylation inhibitor MLN4924. Molecular Cancer Therapeutics. 2013; 12:1958-67. PMC3795967

113. Terai K, Shibata E, Abbas T, Dutta A. Degradation of p12 by CRL4Cdt2 E3 ligase inhibits fork progression after DNA damage. J Biol Chem. 2013; 288:30509-14. PMC3798521

114. Wagenseller AG, Shada A, D'Auria KM, Murphy C, Sun D, Molhoek KR, Papin JA, Dutta A, Slingluff CL Jr. MicroRNAs induced in melanoma treated with combination targeted therapy of Temsirolimus and Bevacizumab. J Transl Med. 2013 Sep 18;11(1):218. doi: 10.1186/1479-5876-11-218. PMC3853033

115. Dey BK, Pfeifer K, and Dutta A. The H19 long non-coding RNA gives rise to microRNAs miR-675-3p and -5p to promote skeletal muscle differentiation and regeneration. Genes & Development. 2014; 28:491-501. PMC3950346

116. Im JS, Keaton M, Lee KY, Kumar P, Park J and Dutta A. ATR checkpoint kinase and CRL1βTRCP collaborate to degrade ASF1a and thus repress genes overlapping with clusters of stalled replication forks. Genes & Development. 2014; 28:875-87. PMC4003279

117. Negishi M, Wongpalee SP, Sarkar S, Park J, Lee KY, Shibata Y, Reon BJ, Abounader R, Suzuki Y, Sugano S and Dutta A. A new lncRNA, APTR, associates with and represses the CDKN1A/p21 promoter by recruiting Polycomb proteins. PLoS One, 2014; 9: e95216. PMC3991591

118. Shibata E, Dar A and Dutta A. CRL4Cdt2 E3 Ubiquitin Ligase and PCNA Cooperate to Degrade Thymine DNA Glycosylase in S-phase. J Biol Chem. 2014, in press.

**“End of primary peer-reviewed papers.”**

**B. Reviews, Chapters and editorials**

1. Dutta A, Din S U , Brill S J, Stillman B. Phosphorylation of Replication Protein A: a role for cdc2 kinase in G1-S regulation. in The Cell Cycle, Cold Spring Harbor Symposium of Quantitative Biology. 1991; 56, 315-324.

2. Stillman B, Bell S P, Dutta A, and Marahrens Y. Studies on DNA replication and the cell cycle. in Regulation of the eukaryotic cell cycle, CIBA Foundation, Symposium 170, Wiley Publishers, Chichester. 1992; 147-160.

3. Dutta A. Trans-plication factors. Current Biology. 1993; 3, 709-712.

4. Dutta A and Winchester E. SV40 based in vitro DNA replication assay. in "Cell Cycle: Materials and Methods", ed. Michelle Pagano. Springer-Verlag. Heidelberg. 1995; 175-185.

5. Dutta A and Bell S P. Initiation of DNA replication in eukaryotic cells. Annual Review of Cell and Developmental Biology. 1997; 13, 293-332.

6. Dutta A. Regulation of S phase. in "Cell Cycle Control", ed. Michelle Pagano. Springer-Verlag. Heidelberg. 1998; 35-56.

7. Lin, Y-L and Dutta A. In vitro DNA replication. in “Current Protocols in Cell Biology”, ed. Mary Dasso. John Wiley and Sons. New York. 1998; Chapter 11, Unit 11.5.

8. Dutta A. Origin Recognition Complex and other eukaryotic initiator proteins. in “Experimental Medicine” special issue on DNA replication, ed. Takuya Ohashi and Akio Matsukage. Yodosha Co. Ltd. Tokyo. 1998; 16, 53-60.

9. Quintana D.G. and Dutta A. The metazoan origin recognition complex. Frontiers in Biosciences. 1999; 4, 805-815.

10. Bell S P. and Dutta A. Initiation of DNA replication in eukaryotic cells. Annual Review of Biochemistry. 2002; 71, 333-374.

11. Wohlschlegel J A, Dutta A and Dhar S K. ORC and the initiation of DNA replication. In Eukaryotic DNA Replication for ChemTracts - Biochemistry & Molecular Biology; ed M. L. Depamphilis. 2002; 15, 533-543.

12. Saxena S. and Dutta A. Geminin-Cdt1 balance is critical for genetic stability. In Mutation Research: Fundamental and Molecular Mechanisms of Mutagenesis- Stress Response; ed Nic Denko and Al Fornace, 2005; 569, 111-121.

13. Machida Y J and Dutta A. Cellular checkpoint mechanisms monitoring proper initiation of DNA replication. J. Biological Chemistry, 2005; 280, 6253-6256.

14. Blow J A and Dutta A. Preventing re-replication of chromosomal DNA. Nature Reviews Molecular Cell Biology, 2005; 6, 476-486.

15. Takeda D and Dutta A. DNA replication and progression through S phase. Oncogene, 2005; 24, 2827-2843.

16. Zhu W, Abbas T and Dutta A. DNA replication and genomic instability. "Genome instability and cancer development", ed. Erich Nigg, Series: [Advances in Experimental Medicine and Biology](http://www.springer.com/sgw/cda/frontpage/0,11855,4-127-69-33109167-0,00.html), 2005; 570, 249-279 .

17. Karnani N, Dutta A. Nuclear localization of RFC40 by RIalpha: a link between cellular signaling and proliferation. Cancer Biol Ther. 2005; 4, 438-9.

18. Teer, J.K. and Dutta, A. (2006) Regulation of S Phase. In: Kaldis, P. (ed.) Cell Cycle Regulation. Results and Problems in Cell Differentiation, vol. 42. Springer Berlin, Heidelberg, New York, pp 31-64.

19. Machida YJ, Hamlin JL and Dutta A. Right place, right time, and only once: replication initiation in metazoans. Cell. 2005; 123, 13-24.

20. Sivaprasad U, Dutta A and Bell SP. Assembly of Pre-replication Complexes. In *DNA replication and human disease* (ed. M.L. DePamphilis). Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York. 2006; pp. 63-88.

21. Abbas T and Dutta A. CDK2-Activating Kinase (CAK): More Questions than Answers. Cell Cycle. 2006; 5, 1123-1124.

22. Lee YS and Dutta A. MicroRNAs: small but potent oncogenes or tumor suppressors. Curr. Opinion in Investigational Drugs 2006; 7, 560-564.

23. Zhu W and Dutta A. Activation of fanconi anemia pathway in cells with re-replicated DNA. Cell Cycle. 2006; 5, 2306-2309

24. Dutta A. Chaotic license for genetic instability and cancer. Nature Genetics, 2007; 39, 10-11.

25. Sivaprasad U, Machida YJ and Dutta A. APC/C - the master controller of origin licensing? Cell Division, 2007; 2, 8.

26. Hook S, Lin JJ and Dutta A. Mechanisms to Control Rereplication and Implications for Cancer. Curr. Opinion Cell Biol. 2007; 19:663-71**. [PMC2174913](http://www.pubmedcentral.gov/articlerender.fcgi?tool=nihms&artid=2174913" \o "PMC: #2174913" \t "aux)**

27. Karnani N, Taylor CM and Dutta A. Microarray analysis of DNA replication timing. In *Microarray Analysis of the Physical Genome* (ed. J.R. Pollack), Methods in Molecular Biology. Humana Press. Springer Science. Totowa, New Jersey. 2009: 191-203.

28. Lee YS and Dutta A. MicroRNAs in cancer. Ann. Review of Pathology. 2009; 4:199-227 **[PMC2769253](http://www.pubmedcentral.gov/articlerender.fcgi?tool=nihms&artid=2769253" \o "PMC: #2769253" \t "aux)**

29. Abbas T and Dutta A. p21 in cancer: intricate networks and multiple activities. Nature Reviews Cancer. 2009; 9:400-414. **[PMC2722839](http://www.pubmedcentral.gov/articlerender.fcgi?tool=nihms&artid=2722839" \o "PMC: #2722839" \t "aux)**

30. Jha S and Dutta A. RVB1/RVB2: running rings around molecular biology. Molecular Cell. 2009; 34:521-33. **[PMC2733251](http://www.pubmedcentral.gov/articlerender.fcgi?tool=nihms&artid=2733251" \o "PMC: #2733251" \t "aux)**

31. Karnani N, Taylor CM, Dutta A. [Microarray analysis of DNA replication timing.](http://www.ncbi.nlm.nih.gov/pubmed/19488880?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=6) Methods Mol Biol. 2009;556:191-203.

32. Abbas T and Dutta A. CRL4Cdt2: Master Coordinator of Cell Cycle Progression and Genome Stability. Cell Cycle 2011; 10: 241 - 249. PMC3025761

33. Keaton M and Dutta A. Rad18 emerges as a critical regulator of the Fanconi Anemia pathway. Cell Cycle 2011; 10: 2414-5. PMC3233489

34. Mueller AC, Keaton M and Dutta A. DNA replication in the mirror: Mammalian Treslin-TopBP1 interaction reflects yeast Sld3-Dpb11. Current Biology 2011; 21:R638-40.

35. Zhang Y, Dutta A, Abounader R. The role of microRNAs in glioma initiation and progression. Front Biosci. 2012;17:700-12. PMC3278211

36. Gagan J, Dey BK, Dutta A. MicroRNAs regulate and provide robustness to the myogenic transcriptional network. Curr Opin Pharmacol. 2012; 12:383-8 PMC3369106

37. Dey BK, Mueller AC, Dutta A. Non-micro-short RNAs: the new kids on the block. Mol Biol Cell. 2012; 23:4664-7. PMC3521675

38. Abbas T, Keaton MA and Dutta A. Genomic Instability and Cancer. In *DNA replication and human disease* (ed. M.L. DePamphilis). Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York. 5(3):a012914. doi: 10.1101/cshperspect.a012914.. PMC3578360

39. Rosenbaum J., Baek SH, Dutta A, Houry WA, Huber O, Hupp TR and Matias PM. The emergence of the conserved AAA+ ATPases Pontin and Reptin on the signaling landscape. Science Signaling, 2013; 6:mr1. doi: 10.1126/scisignal.2003906.

40. Abbas T, Keaton M and Dutta A. Regulation of TGF-β signaling, exit from the cell cycle, and cellular migration through cullin cross-regulation: SCF-FBXO11 turns off CRL4-Cdt2. Cell Cycle. 2013;12:2175-82. PMC3755067

41. Im JS, Lee KY, Dillon LW and Dutta A. Human Primpol1: a novel guardian of stalled replication forks. EMBO Rep. 2013 Nov 5. doi: 10.1038/embor.2013.171. [Epub ahead of print]. PMC3981087

42. Dey BK, Mueller AC and Dutta A. Long non-coding RNAs: emerging regulators of differentiation, development, and disease. Transcription. 2014, in press.

**“End of Reviews/book chapters.”**

**C. Citation metric**

Web of Science, h index = 57 (Jly 2014)

**D. Patents**

1. Tully, T., Dutta A. and Broadie K. WO/2000/060078. Latheo encoded a subunit of the origin of recognition complex.

2. Dhar S.K and Dutta A. U.S. Patent no., 6,890,743. Geminin and Orc3N inhibit replication of herpesviruses, papillomaviruses and polyomaviruses.

3. Dutta A, Malhotra A and Shibata Y. U.S. Provisional Patent 61/099,943. Anchored Chrompets for Identifying Chromosomal Translocations in Disease.

4. Dutta A, Kumar P. U.S. Provisional Patent 61/691,081. Compositions and methods for using transfer RNA fragments as biomarkers for cancer