Curriculum Vitae		
Name	Zoi Lygerou	
Position	Associate Professor	
Address	Laboratory of General Biology, School of Medicine,	
	University of Patras, GR26500, Rio, Patras, Greece	
telephone: (+) 30 2610 997610 fax: (+) 30 2610 991769 e-mail: <u>lygerou@med.upatras.gr</u> , lab webpage: <u>http://ccl.med.upatras.gr/</u>		
Place of Birth	Thessaloniki, Greece	
Date of Birth	06/01/70	
Marital Status	Married, 2 children	
FACULTY POSITION:		
2009- today	Associate Professor in Biology, School of Medicine, University of Patras, Greece	
2004-2009	Assistant Professor in Biology, School of Medicine, University of Patras, Greece	
1999-2004	Lecturer in Biology, School of Medicine, University of Patras, Greece	
POSTDOCTORAL RESEARCH:		
1996-1999	Imperial Cancer Research Fund, Cell Cycle Laboratory, Group Leader Paul Nurse. Project: "Cell Cycle Control and the regulation of DNA replication in fission yeast"	
Nov 1995-April 1996	EMBL, Heidelberg, Gene Expression Program, Group Leader Bertrand Seraphin Project: "Identification and characterization of the human Pop1 protein: an autoantigenic protein subunit of RNase P and RNase MRP ribonucleoprotein complexes"	
EDUCATION:		
1991-1995	PhD. EMBL Heidelberg, Gene Expression Program, Group: Iain Mattaj, Supervisor Bertrand Seraphin. Project: "Studies of the composition, biogenesis and function of snRNP particles in the yeast Saccharomyces cerevisiae" PhD (Dr Rer Nat) awarded by the University of Heidelberg (Magna cum laude)	
1987-1991	Diploma in Biology. Department of Biology, University of Athens, Greece. Grade "Excellent"	
	1990-1991: Diploma Research, National Hellenic Research Foundation, Athens, Greece 1990: Practical Training, University of Caen, France 1989: Practical Training, National Hellenic Research Foundation, Athens, Greece	
FELLOWSHIPS:		
EMBL pre-doctoral fellowship (1991-1995)		
European Union TMR post-doctoral fellowship (1996-1998)		
Imperial Cancer Research Fund post-doctoral fellowship (1998-1999)		
AWARDS:		
ERC Consolidator Grant 2012-2017		
SET-Routes University Ambassador (2007-)		
EMBO Young Investigator 2001 Best-achievement awards for every year of University studies and High-School studies		
best demovement awards for every year or oniversity studies and fingi-senoor studies		

# **RESEARCH GRANTS (Primary Investigator)**

## International:

### **European Research Council** (ERC-StG-2011). 2012-2017. Budget €1.530.000

<u>Title:</u> From Genome Integrity to Genome Plasticity: Dynamic Complexes Controlling Once Per Cell Cycle Replication

**FP7-REGPOT-2011**- Developing Research Potential Grant SEE-DRUG. 2012-2015. Budget €3.500.000, Member <u>Title</u>: Establishment of a centre of excellence for structure-based drug target characterization: strengthening the capacity of South-Eastern Europe.

Association for International Cancer Research . Research Grant Nov 2009- Nov 2012. Budget 101.000 GBP <u>Title</u>: Dynamic Complexes Maintaining Genome Integrity

#### HYGEIA (FP6-NEST-STREP-04995). 2005-2008

<u>Title:</u> Hybrid Systems for Biochemical Network Modeling and Analysis Collaborating teams: ETH-Zurich (J. Lygeros, Co-ordinator), UniPatras (Z. Lygerou, S.Taraviras), INRIA (H. de Jong), EMBL (J. Wittbrodt), Pavia (G. Ferrari-Trecate), Rockefeller (P. Nurse).

## **HFSP Young Investigator Grant** 2002-2005

<u>Title</u>: Controlling the onset of S-phase: interactions at the heart of origin licensing Collaborative team: Z. Lygerou (Principal Applicant), P. Bastiaens (EMBL, co-applicant), H. Nishitani (Kyoto School of Medicine, co-applicant)

EMBO Young Investigator Award 2001-2004 Title. Control over S-phase onset: from yeast to human cells

#### Association for International Cancer Research . Research Grant 2000-2003 <u>Title</u>: Regulation of S-Phase onset in fission yeast and human cells

#### National:

**Thalis: Reinforcing R&D through Programs of basic and applied research**, Greek Ministry of Education, , June 2012-June 2015, Funding €00.000, Co-Ordinator

Title: "Cell cycle variations: comparing the stem cell and cancer cell life cycles"

**Thalis: Reinforcing R&D through Programs of basic and applied research**, Greek Ministry of Education, , April 2012-April 2015, Funding 600.000, Member

Title: "Aging and longevity: interactions of genetic and environmental factors'

Heracleitous II: Reinforcing the Human Research Potential through Graduate Research, Greek Ministry of Education, D.276.001.016, Funding €45.000, Sept 2011-Sept 2013 <u>Title:</u> "Idas, a novel protein related to the cell cycle regulator Geminin: functional studies in human cells and model organisms"

Heracleitous II: Reinforcing the Human Research Potential through Graduate Research, Greek Ministry of Education D.276.001.017, Funding €45.000, Oct 2011-Sept 2013 <u>Title:</u> "Studies of the prereplicative complex in live human cells and its implication in carcinogenesis"

General Secretariat of Research and Technology, 2006-

Matching Funds for Program HYGEIA

**Pythagoras II Research Grant**, 2005-2007 <u>Title</u>: The role of the cell cycle regulator Geminin during cell senescence

**Program K. Karatheodori 2005**, University of Patras, 2005-2008 <u>Title</u>: The licensing regulator Cdt1 and the DNA damage response

**Program K. Karatheodori 2000**, University of Patras, 2000-2003 <u>Title:</u> The cell cycle regulator Cdt1: molecular mechanism of function and clinical applications

Empeirikio Foundation, Research Award 2001 <u>Title</u> Studies of HsCdt1 in normal and cancer cells

## **Research Activities**

PI of a team studying cell cycle control in human cells and fission yeast, currently numbering 11 members.

We study the control mechanisms which safeguard genomic stability by ensuring once per cell cycle replication in eukaryotic cells and how defects in this control may lead to tumorigenesis. The process of duplication of a cell's genetic content must be precisely regulated in time and space, and must promptly respond to intracellular and extracellular cues such as DNA damage or differentiation signals. Chromatin associated multi-subunit protein complexes lie at the heart of the temporal and spatial regulation of timely DNA replication. We are interested to understand how these complexes are formed and controlled in the different aspects of the life of normal cells, and how their misregulation may be linked to genomic instability and malignant transformation. To this end, we combine advanced live-cell imaging of protein interactions within cells to molecular-cell biology studies in human cells, genetic studies in fission yeast, analyses of tumor specimens and modelling of biological networks.

Current projects include:

- Studies of protein-protein and protein-DNA interactions and modifications at S-phase onset by advanced livecell imaging techniques

- Visualising rereplication in single fission yeast cells
- Licensing complexes and the DNA damage response in stem cells
- Cdt1 and Geminin during replicative senescence
- Geminin during apoptosis, differentiation and development
- Geminin regulation by intracellular localization
- Idas and Lynckeas, novel regulators of the cell cycle and differentiation in vertebrates.
- Cdt1 and Geminin misregulation in cancer cells and their contribution to tumorigenesis
- Modelling of DNA replication

**International collaborations:** Paul Nurse UK-CMRI, Philippe Bastiaens MPI-Dortmund, John Lygeros ETH-Zurich, Hideo Nishitani – Hyogo University, Japan, Tasos Perrakis-Netherlands Cancer Institute, Amsterdam, Julian Blow – Welcome Trust Center, Dundee

#### **Teaching Activities**

Supervisor of 11 PhD Theses (7 completed- G. Xouri, V. Roukos, M. Dimaki, M. Iliou, P. Kotsantis, E. Symenidou, D. Pefani, 4 in progress – M. Rapsomaniki, M. Arbi, N. Giakoumakis, A. Kanellou)

Supervisor of 20 Master's Diploma Theses (MSc, 13 in Basic Medical Sciences –11 completed, 5 in Bioinformatics- 4 completed, 2 in Biomedical Engineering –completed)

Supervisor of 7 Undergraduate Diploma Theses (from the Biology Department, Patras University, 5 completed)

Member in over 25 PhD Examination Committees and over 35 MSc Examination Committees (other than as supervisor) in Greece and abroad

Postgraduate teaching:

Director of Studies at the Interdepartmental Postgraduate Program "Life Sciences Informatics", Patras University Co-ordinator of the postgraduate courses "Computational methods for genomic and proteomic analysis",

"Methodologies in Basic Medical Sciences I and II", "Current Literature Analysis", "Molecular Biology-Molecular Medicine", "Complementary skills in biomedical research"

First and Second year teaching in 4 Postgraduate Programs organized by the Medical School, University of Patras: "Applications of Basic Medical Sciences", "Clinical Specializations", "Life Sciences Informatics" and "BioMedical Engineering"

Participation as invited lecturer in Postgraduate Programs run by the University of Athens, Crete and Cyprus

Participation as invited lecturer in courses to Medical Doctors under specialization, Participation in Life-longlearning programs for Pathologists and Oncologists

Participation as invited lecturer in courses to High School Biology Teachers

Undergraduate teaching: First and second semester Biology teaching to Medical Students at Patras University

Active involvement in introducing innovative teaching methods at pregraduate and postgraduate level at Patras Medical School (small group teaching, problem based learning, e-learning, complementary skills).

Member in several committees for the development of undergraduate and postgraduate curricula, faculty development and faculty and curriculum assessment

**Other Activities** 

Elected member of the Directing Board of the Research Committee of the University of Patras (2013-today)

Director of Studies at the Interdepartmental Postgraduate Program "Life Sciences Informatics", Patras University (2012-today)

Head of the Confocal Microscopy facility (together with S. Taraviras)

Coordinator of European Student Exchange and Credit Transfer for Patras Medical School (ECTS coordinator, 2004-2006)

Active involvement in the organization of a new interdisciplinary Master's-PhD Program in Life Sciences Informatics at the University of Patras. Member of the Program's Co-ordinating Committee and Interdepartmental Committee from its inauguration. Director of Studies (since 2012).

Active involvement in application for funding and purchasing of major research equipment for Patras Medical School (Confocal Microscope, Microarray Scanning System, Real Time PCR). Member of the relevant equipment purchase committees. Active involvement in setting up the corresponding facilities (management scheme, knowledge transfer). Member of the Common Equipment Institutional Committee.

Stakeholder in the ESFRI Project Eurobioimaging. Proof-of-Concept site for General Access bioimaging

Editor for Frontiers in Biosciences

Participation in the translation to Greek of Genes VIII (Lewin) and The Cell: a molecular approach (Cooper)

Organization of the following Symposia: 1<sup>st</sup> Cell cycle Mini-Symposium 2001 – Patras, 2<sup>nd</sup> Cell Cycle Mini-Symposium 2005– Athens, Biotechnology Colloquium 2009 - Patras, Advanced Light Microscopy Symposium 2010 – Patras

Member of the Organising Committee of the Women in Science Section of the 33<sup>rd</sup> FEBS-IUBMB Congress, 2008 and the 58<sup>th</sup> Meeting of the Greek Society for Biochemistry and Molecular Biology, 2007

Chairperson in several national and international meetings

Reviewer of Research Grants for the:

European Research Council (ERC) Human Frontiers Science Program (HFSP) Medical Research Council, UK (MRC) Cancer Research UK BBSRC - UK Association for International Cancer Research (AICR) Portuguese Research Ministry Estonian Research Council Greek Ministry of Education Greek Scholarship Foundation

Reviewer of EMBO Short and Long Term Fellowships

Reviewer for the Journals Development, Journal of Cell Biology, Molecular Biology of the Cell, Nucleic Acid Research, Journal of Cell Science, Trends in Cell Biology, British Journal of Cancer, Molecular Carcinogenesis, Cancer Letters, International Journal of Biochemistry and Cell Biology, PlosOne, Bioinformatics, Nature Communications.

## **Invited Lectures**

- 1. International Workshop on Ageing and Cancer Cell Biology, Athens, June 2013
- 2. EMBO Conference on Fission Yeast, Pombe 2013, London UK, June 2013
- 3. The Replicon Meeting, Pasteur Institute, France, March 2013
- 4. Genome Stability Center, Sussex University, UK, November 2012
- 5. Presentation of the ERC Program Ideas, National Hellenic Research Foundation, October 2012
- 6. Presentation of the ERC Program Ideas, 37th FEBS Congress, Seville, September 2012

- 7. 22nd IUBMB & 37th FEBS Congress Seville, September 2012
- 8. 12<sup>th</sup> EMBO-EYSF meeting, Istanbul Turkey, June 2012
- 9. International Workshop on Picobiology, University of Hyogo, Japan, February 2012
- 10. Biology Department, University of Athens, February 2012
- 11. Workshop on the Biology of Cancer, organized by the Hellenic Oncology Academy, Athens, February 2012
- 12. London Research Institute, Cancer Research UK, London, July 2011
- 13. University of Oxford, Department of Zoology, Oxford, July 2011
- 14. European Light Microscopy Initiative Meeting 2011, Alexandroupoli, Greece, June 2011
- 15. Institute of Stem Cell Research, Helmholtz Zentrum Muenchen, German Research Center for Environmental Health, Munich, October 2010
- 16. Advanced Light Microscopy Symposium "Imaging Biomolecules in Time and Space", Patras, September 2010
- 17. National Center for Scientific Research "Dimokritos", Institute of Biology, Athens, February 2010
- 18. Centre for Genome Damage and Stability, Sussex, UK, October 2009
- 19. National Institute for Medical Research, London, UK, July 2009
- 20. Biomedical Research Foundation of the Academy of Athens, Athens, Mai 2009
- 21. BRFAA Course on Recent Advances and Applications in Multidimensional Confocal Microscopy, Mai 2009
- 22. HSBMB Colloquium on Cell Communication and Signaling, Thessaloniki, 3-4 April 2009
- 23. Biology Department, University of Crete, January 2009
- 24. National Hellenic Research Foundation, Athens, Greece, 21st November 2008
- 25. SET-Routes University Ambassador Program, Athens, Greece, 11th November 2008
- 26. Copenhagen University, Department of Biology, Denmark, 13th October 2008
- 27. EPFL Life Science Symposium "Cancer and the Cell Cycle", Lausanne, Switzerland, August 21-23, 2008
- 28. Wellcome Trust Center for Gene Regulation and Expression, Dundee, UK, July 2008
- 29. University of Cyprus, Department of Biology, 10<sup>th</sup> April 2008
- 30. Medical School, University of Ioannina, Greece, 21st January 2008
- 31. Cancer Colloquia, St Andrews, UK, 20th November 2007
- 32. The National Institute for Medical Research, Mill Hill, London, UK, 12th October 2007
- 33. Cancer Research UK, Clare Hall Laboratories, London, UK, 11th October 2007
- 34. PhD Summer Course on Systems Biology, Siena, Italy, 8th July 2007
- 35. The Netherlands Cancer Institute, Amsterdam, 14<sup>th</sup> March 2007
- 36. Department of Molecular Biology, University of Geneva, 27th February 2007
- 37. The Hutchison/MRC Research Center, Cambridge, 7th August 2006
- 38. Radiation Oncology and Biology, University of Oxford, MRC Harwell, Oxford, 3rd August 2006
- 39. Biology Department, University of Athens, Greece, January 2006
- 40. Institute of Molecular Oncology, Tufts University, Boston, USA, June 2005
- 41.1st Biosciences Meeting of the University of Patras , Mai 2005, Patras
- 42. ISREC Meeting on the Molecular Biology of Cancer, January 2005, Lausanne, Switzerland
- 43. National Institute for Medical Research (NIMR), MRC, Mill Hill, 20 July 2004
- 44. DNA Replication Workshop, Marie Curie Research Institute, Surray, April 2004
- 45. Cancer Research UK, London Laboratories, 27 July 2004
- 46. 13th Balkan Biochemical and Biophysical Days. Kussantasi, Invited Lecture 15 October 2003.
- 47. Institute for Molecular Biology and Biotechnology, Crete, 18th December 2003
- 48. Center for Biomedical Studies A. Fleming, Vari, Greece, 10th September 2003
- 49.54<sup>th</sup> Meeting of the Hellenic Society for Biochemistry and Molecular Biology, Invited Lecture, October 2002
- 50. Cancer Research UK, London Laboratories, 23 July 2002
- 51. National Institute for Medical Research (NIMR), MRC, Mill Hill, 18 July 2001
- 52. EMBL, Heidelberg, Germany, 20 February 2001
- 53. Pombe 2000. A Genetical Society Meeting. Imperial Cancer Research Fund, London. July 2000

Publication Record:		
Number of Scientific Publications	43	
Original Research Articles	29	
Reviews	11	
Book chapters	1	
Peer reviewed conference papers	2	
Number of articles where first author	10	
Number of articles where corresponding author	13	
Publications within the last 5 years	15	
Mean journal impact factor (original articles)	7	
Total Citations	>2000	
h-index	22	
Number of presentations in scientific meetings	>100	

# Google Scholar Profile: Zoi Lygerou

## **Publication list**

- Symeonidou IE, Kotsantis P, Roukos V, Rapsomaniki MA, Grecco HE, Bastiaens P, Taraviras S, Lygerou Z. Multi-step loading of human Mini-Chromosome Maintenance Proteins in live human cells. J Biol. Chem. 2013, Oct 24, epublished ahead of print
- Caillat C, Pefani ED, Gillespie PJ, Taraviras S, Blow JJ, Lygerou Z, Perrakis A. The Geminin and Idas coiled coils preferentially form a heterodimer that inhibits Geminin function in DNA replication licensing. J Biol. Chem. 2013, Oct 2, epublished ahead of print
- 3. Dimaki M., Xouri G., Symeonidou I.E., Sirinian H., Nishitani H., Taraviras S. and Lygerou Z. Cell-cycle dependent subcellular translocation of human Geminin. <u>J Biol. Chem.</u> 2013, 288(33):23953-63
- 4. Iliou M, Kotantaki P, Karamitros D, Spella M, Taraviras S and Lygerou Z. Reduced Geminin levels promote cellular senescence. <u>Mech Ageing Dev.</u> 2013, 134:10-23
- 5. Symeonidou I-E, Taraviras S and Lygerou Z. Control over DNA Replication in time and space, <u>FEBS J</u>., 2012, 586:2803-2812 (review)
- 6. Rapsomaniki M-A, Kotsantis P, Symeonidou I-E, Giakoumakis N-N, Taraviras S and Lygerou Z. easyFRAP: an interactive, easy-to-use tool for qualitative and quantitative analysis of Fluorescence Recovery After Photobleaching data. <u>Bioinformatics</u> 2012, 28(13):1800-1
- Stathopoulou A, Roukos V, Petropoulou C, Kotsantis P, Karantzelis N, Nishitani H, Lygerou Z, Taraviras S. Cdt1 is differentially targeted for degradation by anticancer chemotherapeutic drugs. <u>PLoS One</u>. 2012;7(3):e34621.
- 8. Karamitros D, Kotantaki P, Lygerou Z, Kioussis D, Taraviras S. (2011) T cell proliferation and homeostasis: an emerging role for the cell cycle inhibitor geminin. <u>Crit Rev Immunol</u>. 2011;31(3):209-31.
- 9. Spella M, Kyrousi C, Kritikou E, Stathopoulou A, Guillemot F, Koussis D, Pachnis, Lygerou Z, Taraviras S (2011). Geminin regulates cortical progenitor proliferation and differentiation. <u>Stem Cells</u>, 29:1269-1282
- Pefani DE, Dimaki M, Spella M, Karantzelis N, Mitsiki E, Kyrousi C, Symeonidou IE, Perrakis A, Taraviras S, Lygerou Z. (2011). Idas, a novel phylogenetically conserved geminin-related protein, binds to geminin and is required for cell cycle progression. J. Biol. Chem, 286:23234-46
- 11. Roukos V, Kinkhabwala A, Colombelli J, Kotsantis P, Taraviras S, Nishitani H, Stelzer E, Bastiaens P, and Lygerou Z (2011). Dynamic Recruitment of the Licensing Factor Cdt1 to Sites of DNA Damage J. Cell

Science, 124:422-432

- 12. **Zoi Lygerou**, K. K. Koutroumpas and John Lygeros (2011). DNA Replication. Encyclopedia of Systems Biology, in press
- Karamitros D, Kotantaki P, Lygerou Z, Veiga-Fernandes H, Pachnis V, Kioussis D, Taraviras S (2010). Life without geminin. <u>Cell Cycle</u>. 9(16):3181-5.
- Karamitros D, Kotantaki P, Lygerou Z, Veiga-Fernandes H, Pachnis V, Kioussis D, Taraviras S. (2010) Differential Geminin Requirement for Proliferation of Thymocytes and Mature T Cells. J Immunol. 184(5):2432-41
- 15. De Marco V, Gillespie PJ, Li A, Karantzelis N, Christodoulou E, Klompmaker R, van Gerwen S, Fish A, Petoukhov MV, Iliou MS, Lygerou Z, Medema RH, Blow JJ, Svergun DI, Taraviras S, Perrakis A. (2009). Quaternary structure of the human Cdt1-Geminin complex regulates DNA replication licensing. <u>Proc Natl Acad Sci U S A</u>. 106(47):19807-12
- J. Lygeros, K. Koutroumpas, S. Dimopoulos, I. Legouras, P. Kouretas, C. Heichinger, P. Nurse, Z. Lygerou (2008) Stochastic hybrid modelling of DNA replication across a complete genome. <u>Proc Natl Acad Sci</u> <u>USA</u>, 105:12295-12300.
- 17. E.Cinquemani, V.Roukos, **Z.Lygerou**, J.Lygeros (2008) "Numerical analysis of FRAP experiments for DNA replication and repair". *Proceedings of the 47th IEEE Conference on Decision and Control*, Cancun, Mexico, December 2008, peer reviewed conference paper.
- K. Koutroumpas, Z. Lygerou, J. Lygeros (2008). Parameter Identification for a DNA Replication Model. *Proceedings of the IEEE International Conference on BioInformatics and BioEngineering*, Athens, October 2008, peer reviewed conference paper
- Liontos M, Koutsami M, Sideridou M, Evangelou K, Kletsas D, Levy B, Kotsinas A, Nahum O, Zoumpourlis V, Kouloukoussa M, Lygerou Z, Taraviras S, Kittas C, Bartkova J, Papavassiliou AG, Bartek J, Halazonetis TD, Gorgoulis VG. (2007) Deregulated overexpression of hCdt1 and hCdc6 promotes malignant behavior. <u>Cancer Res.</u> 67:10899-909.
- Xouri G, Dimaki M, Bastiaens PI, Lygerou Z. (2007) Cdt1 interactions in the licensing process: a model for dynamic spatiotemporal control of licensing. <u>Cell Cycle</u>. 6:1549-1552. (Extra Views)
- Spella M, Britz O, Kotantaki P, Lygerou Z, Nishitani H, Ramsay RG, Flordellis C, Guillemot F, Mantamadiotis T, Taraviras S. (2007) Licensing regulators Geminin and Cdt1 identify progenitor cells of the mouse CNS in a specific phase of the cell cycle. <u>Neuroscience.</u> 147:373-387.
- G. Xouri, A. Squire, M. Dimaki, B. Geverts, P. J. Verveer, S. Taraviras, H. Nishitani, A. B. Houtsmuller, P. I. H. Bastiaens, Z. Lygerou.(2007) Dynamic chromatin association of Cdt1 throughout G1 leads to Geminin recruitment onto chromatin. <u>EMBO J</u>, 26:1303-1314.
- V. Roukos, M. S. Iliou, H. Nishitani, M. Gentzel, M. Wilm, S. Taraviras, Z. Lygerou (2007) Geminin cleavage during apoptosis by caspase-3 alters its binding ability to the SWI/SNF subunit Brahma. J. Biol. Chem, 282:9346-9357
- P. Kouretas, K. Koutroumpas, J. Lygeros, and Z. Lygerou (2006) Stochastic Hybrid Modelling of Biochemical processes. In <u>Automation and Control Engineering Series</u>, vol. 24, no. 9083, Stochastic Hybrid Systems, Cassandras and Lygeros eds., CRC Press (book chapter)
- 25. Legouras, G. Xouri, S. Dimopoulos, J. Lygeros, Z. Lygerou.(2006) DNA replication in the fission yeast: Robustness in the face of uncertainty. <u>Yeast</u>, 23 (13): 951-962 (review)
- Nishitani H, Sugimoto N, Roukos V, Nakanishi Y, Saijo M, Obuse C, Tsurimoto T, Nakayama KI, Nakayama K, Fujita M, Lygerou Z, Nishimoto T. (2006). Two E3 ubiquitin ligases, SCF-Skp2 and DDB1-Cul4, target human Cdt1 for proteolysis. <u>EMBO J.</u> 25(5):1126-36
- 27. Karakaidos, P., S. Taraviras, L. Vassiliou, P. Zacharatos, N. Kastrinakis, D. Kougiou, M. Kouloukoussa, H. Nishitani, A. Papavasileiou, Z. Lygerou<sup>e</sup> and V. Gorgoulis<sup>e</sup> (2004). Overexpression of the replication licensing regulators hCdt1 and hCdc6 characterizes a subset of Non-Small-Cell Lung Carcinomas: Synergistic effect with mutant p53 on tumor growth and chromosomal instability-evidence of E2F-1 transcriptional control over hCdt1. <u>American Journal of Pathology</u>, 165 (4): 1351-1365 <sup>e</sup> corresponding authors
- Nishitani, H., Lygerou, Z., Nishimoto, T. (2004). Proteolysis of DNA replication Licensing Factor Cdt1 in S-phase is performed independently of Geminin through its N-terminal region. J. Biol. Chem. 279:30807-

30816

- 29. Xouri G, Lygerou Z<sup>c</sup>, Nishitani H, Pachnis V, Nurse P., Taraviras S.<sup>c</sup> (2004) Cdt1 and geminin are down-regulated upon cell cycle exit and are over-expressed in cancer-derived cell lines.. <u>Eur. J. Biochem. The FEBS Journal</u> 271(16):3368-78 corresponding authors
- Nishitani H., Lygerou, Z. (2004). DNA replication licensing. <u>Frontiers in Bioscience</u>, 9:2115-2132 (review)
- Nishitani H., Lygerou, Z. (2002) Control of DNA replication licensing in a cell cycle. <u>Genes to Cells</u> 7, 523-534 (review)
- 32. Nishitani, H., Taraviras, S., Lygerou, Z. and Nishimoto, T. (2001). The human homologue of Cdt1, a nuclear protein essential for replication licensing, accumulates in G1 and is destabilized after initiation of S phase in HeLa cells. J. Biol. Chem. 276:44905-44911
- Yanow, S., Lygerou, Z and P. Nurse (2001) Expression of Cdc18/Cdc6 and Cdt1 during G2 phase induces initiation of DNA replication. <u>EMBO J.</u> 20: 4648-4656
- 34. Lygerou, Z and P. Nurse (2000) License withheld: blocking DNA replication onset by Geminin. <u>Science</u>, 290: 2271-2273 (Perspective)
- 35. Nishitani, H., Lygerou, Z.\*, Nishimoto, T. and P. Nurse (2000) The Cdt1 protein is required to license DNA for replication in fission yeast <u>Nature</u>, 404:625-628 \*equally contributing first author and corresponding author
- Lygerou, Z and P. Nurse (2000) "Controlling S-Phase in fission yeast" <u>Cold Spring Harbor Symposia on</u> <u>Quantitative Biology</u>. vol LXV:323-331 (review)
- Lygerou, Z.\* and P. Nurse (1999). The fission yeast origin recognition complex is constitutively associated with chromatin and is differentially modified through the cell cycle. <u>J. Cell Sci</u>, 112:3703-3712 \*corresponding author
- Lygerou, Z., G. Christophides and B. Séraphin. (1999). A novel genetic screen for snRNP assembly factors in yeast identifies a conserved protein, Sad1p, also required for pre-mRNA splicing. <u>Mol Cell Biol</u>, 19:2008-2020
- 39. Lygerou, Z., H. Pluk., W.J. van Venrooij and B. Séraphin (1996). hPop1: an autoantigenic protein subunit shared by the human RNase P and RNase MRP ribonucleoproteins. <u>EMBO J.</u>, 15:5936-5948
- 40. Lygerou, Z., C. Allmang, D. Tollervey and B. Séraphin (1996). Accurate processing of a eukaryotic precursor ribosomal RNA by ribonuclease MRP in vitro. <u>Science</u>, 272: 268-270
- Lygerou, Z., C. Conesa, P. Lesage, R. Swanson, A. Ruet, M. Carlson, A. Sentenac and B.Séraphin (1994). The yeast BDF1 gene encodes a transcription factor involved in the expression of a broad class of genes including snRNAs. <u>Nucleic Acids Res.</u> 22:5332-5340.
- 42. Lygerou, Z., P. Mitchell, E. Petfalski, B. Séraphin and D. Tollervey. (1994). The POP1 gene encodes a protein component common to the RNase MRP and RNase P ribonucleoproteins. <u>Genes & Development</u> 8:1423-1433.
- Lygerou, Z., S. Kandels-Lewis, B. Séraphin. (1993). Le role des snRNP dans l'épissage des ARN prémessagers. <u>Médecine/Sciences</u> 9:165-170. (review)