

Haralabia BOLETI	Principal Investigator (Researcher grade B)
-------------------------	--

Scientific Education

- **B.Sc. in Chemistry** National University of Athens, Athens, Greece **1985**
- **M.Sc. in Biochemistry** University of Alberta, Edmonton, Canada **1990**
- **Ph.D. in Molecular Cell Biology** European Molecular Biology Laboratory (EMBL), University of Heidelberg, Heidelberg, Germany **1995**

Languages:

- *Greek (mother tongue)*
- *English (fluent)*
- *French (very good)*
- *German (basic)*

Career Focus

My main interest lies in the research of pathogenesis of infectious diseases and in particular in the study of pathogen-host cell interactions using molecular cellular biology and modern light microscopy imaging techniques. I am keen in exploring the translational aspect of this field of research.

Professional Profile

- May 2010-Current** **Researcher B** (tenure)
*Head to the “Intracellular Parasitism group, Department of Microbiology
Scientific co-responsible of the Light Microscopy Facility
Hellenic Pasteur Institute, Athens, Greece*
- Jan 2002- May 2010** **Researcher C** (tenured track), *Department of Microbiology
Scientific co-responsible of the Light Microscopy Facility
Hellenic Pasteur Institute, Athens, Greece*
- Jan 2000 -Dec 2001** **Associate Scientist**, *Hellenic Pasteur Institute, Athens, Greece*
- Oct 1996 - Dec 1999** **EMBO and ARC Post-Doctoral Fellow**, *Pasteur Institute, Paris, France*
- Jun 1996 - Sep 1996** **Visiting Post-Doctoral Fellow**
Dep. of Biochemistry, U. of Alberta, Edmonton, Canada
- Jul 1995 - Feb 1996** **Post-doctoral Fellow**, *EMBL, Heidelberg, Germany*
- Jan 1991 – Jul 1995** **Pre-doctoral Fellow**, *EMBL, Heidelberg, Germany*
- Jan 1987 - Dec 1990** **Graduate Teaching and Research Assistant**
Dep. of Biochemistry, U. of Alberta, Edmonton, Canada.
- Sept 1986 - Dec 1986** **Graduate Teaching Assistant**, *Dep. of Chemistry, U. of Alberta, Edmonton, Canada*

Research Publications

Peer-reviewed

H-index 12	Number of citations (on the 3/2021) 828 (web of science) 865 (Scopus)
	Number of citations (excluded self cited and by the co-authors) 818 (Web of Science) and 725 (Scopus)
Ave Impact Factor (A): 5.547 ; Ave Impact Factor (B): 5,722	

A) *Journal Impact factor of the publication year or, when not available, of the closest year to the publication*

B) *Journal Impact factor in 2020/2021*

- Papadaki A., Tziouvara O., Kotopouli A., Koumarianou P., Doukas A., Rios P., Tardieux I., Köhn M., **Boleti H.** (2021). The *Leishmania donovani* LDBPK_220120.1 gene encodes for an atypical Dual Specificity Lipid-like phosphatase expressed in promastigotes and amastigotes; Substrate specificity, intracellular localizations and putative role(s). *Frontiers in Cellular and Infection Microbiology, section Parasite and Host, in press.* (IF 4.123, citations _)
- Chavdoula E., Habel D.M., Roupakia E., Markopoulos G.S., Vasilaki E., Kokkalis A., Polyzos A.P, **Boleti H.**, Thanos D., Klinakis A., Kolettas E., Marcu K.B. (2019). CHUK/IKKalpha loss in lung epithelial cells enhances NSCLC growth associated with HIF up-regulation. *Life Science Alliance*, 2(6). (IF: 2,622, Citations:1) <http://doi.org/10.26508/lsa.201900460>
- Papadaki A. and **Boleti H.** (2019). Measurement of Acid Ecto-phosphatase Activity in Live *Leishmania donovani* Parasites. *BioProtocols (A peer-reviewed protocol journal)* following journals' invitation <https://bioprotocol.org/e33843> .
- Frakolaki E, Kalliampakou KI, Kaimou P, Moraiti M, Kolaitis N, Boleti H, Koskinas J, Vassilacopoulou D, Vassilaki N. (2019). Emerging Role of l-Dopa Decarboxylase in *Flaviviridae* Virus Infections. *Cells* 8(8). pii:E837. doi: 10.3390/cells8080837.PMID:31387309 <https://www.mdpi.com/2073-4409/8/8/837> (IF2019: 4.829, IF2021: 4.366; Citations: 3).
- Doukas A, Karena E, Botou M, Papakostas K, Papadaki A, Tziouvara O, Xingi E, Frillingos S, **Boleti H.** (2019). Heterologous expression of the mammalian sodium-nucleobase transporter rSNBT1 in *Leishmania tarentolae*. *Biochim Biophys Acta Biomembr.* 1861(9):1546-1557. doi:10.1016/j.bbamem.2019.07.001. Epub 2019 Jul 5.PMID:31283918 (IF2019: 3.495, IF2021: 3,411; Citations: 1) <https://www.sciencedirect.com/science/article/pii/S0005273619301452?via%3Dihub>
- Braliou GG, Kontou PI, **Boleti H**, Bagos PG. (2019). Susceptibility to leishmaniasis is affected by host SLC11A1 gene polymorphisms: a systematic review and meta-analysis. *Parasitol Res.* 118(8):2329-2342 doi:10.1007/s00436-019-06374-y. Review. PMID: 31230160 <https://link.springer.com/article/10.1007%2Fs00436-019-06374-y> (IF2019:1.641; 5Y IF:1.843,Citations:3)
- Vakrakou AG, Boiu S, Ziakas PD, Xingi E, **Boleti H**, Manoussakis MN.(2018). Systemic activation of NLRP3 inflammasome in patients with severe primary Sjögren's syndrome fueled by inflammagenic DNA accumulations. *J Autoimmun.* 91:23-33. PMID: 29551295; DOI: [10.1016/j.jaut.2018.02.010](https://doi.org/10.1016/j.jaut.2018.02.010) (IF2018: 7,543, IF2021: 6.658: Citations: 31)
- Papadaki A, Politou AS, Smirlis D, Kotini MP, Kourou K, Papamarcaki T, **Boleti H.** (2015). The *Leishmania donovani* histidine acid ecto-phosphatase **LdMacP**: insight into its structure and function. *Biochem J.* 467(3):473-86. DOI: [10.1042/BJ20141371](https://doi.org/10.1042/BJ20141371) (IF2015: 3.562, IF2021: 4,097; Citations: 6)

9. Kostomoiri M., Zikos C., Benaki D., Triantis C., Sagnou M., Paravatou-Petsotas M., Papadaki A., **Boleti H.**, Papadopoulou M., Pirmettis I., Pelecanou M., Livanou E. (2015). New labeled derivatives of the neuroprotective peptide colivelin: synthesis, characterization, and first in vitro and in vivo applications. *Arch Biochem Biophys.* 567:83-93. DOI: [10.1016/j.abb.2014.12.027](https://doi.org/10.1016/j.abb.2014.12.027) (IF2015: 2,807, IF2021:3.391; Citations:3)
10. Athanasopoulos A., **Boleti H.**, Scazzocchio C., Sophianopoulou V. (2013). Eisosome distribution and localization in the meiotic progeny of *Aspergillus nidulans*. *Fungal Genet Biol.* 53:84-96. DOI: [10.1016/j.fgb.2013.01.002](https://doi.org/10.1016/j.fgb.2013.01.002) (IF2013: 3,262, IF2021: 3,071; Citations: 10)
11. Kalliampakou K. Kouri E., **Boleti H.**, Pavli O., Maurousset L., Udvardi M., Katinakis P., Rémi Lemoine, and Flemetakakis E. (2011). Cloning and functional characterization of LjPLT4, a plasma membrane xylitol H⁺-symporter from *Lotus japonicus*. *Mol. Memb. Biol.* 28(1):1-13. DOI: [10.3109/09687688.2010.500626](https://doi.org/10.3109/09687688.2010.500626) (IF2011: 3,230, IF2021:2.5; Citations: 5)
12. **Boleti H.**, Smirlis D., Dalagiorgou G., Meurs E., Christoforidis S., & Mavromara.P. (2010). ER targeting and retention of the HCV NS4B protein relies on the concerted action of multiple structural features including its transmembrane domains. *Mol. Memb. Biol.* 27(1):50-74. DOI: [10.3109/09687680903426208](https://doi.org/10.3109/09687680903426208) (IF2010:2.713, IF2021: 2.5; Citations: 13)
13. Smirlis D, **Boleti H**, Gaitanou M, Soto M, Soteriadou K. (2009). *Leishmania donovani* RAN-GTPase interacts at the nuclear rim with linker histone H1. *Biochem J.* 10;424(3):367-74. DOI: [10.1042/BJ20090576](https://doi.org/10.1042/BJ20090576) (IF2009: 5.348, IF2021:4,097; Citations: 9)
14. Karanasios E, **Boleti H**, Simos G. (2008). Incorporation of the Arc1p tRNA-binding domain to the catalytic core of MetRS can functionally replace the yeast Arc1p-MetRS complex. *J Mol Biol.* 381(3):763-71. DOI: [10.1016/j.jmb.2008.06.044](https://doi.org/10.1016/j.jmb.2008.06.044) (IF2008: 4.262, IF2021: 4,76; Citations: 7)
15. Vassilaki N, **Boleti H**, Mavromara P. (2008). Expression studies of the HCV-1a core+1 open reading frame in mammalian cells. *Virus Res.* 133(2):123-35. DOI: [10.1016/j.virusres.2007.10.019](https://doi.org/10.1016/j.virusres.2007.10.019) (IF: 2.710, IF2021: 2,934; Citations: 19)
16. Vassilaki N, **Boleti H.** and Mavromara P. (2007). Expression studies of the core+1 protein of the hepatitis C virus 1a in mammalian cells: the influence of the core protein and proteasomes on the intracellular levels of core+1. *FEBS J.* 274(16):4057-74 DOI: [10.1111/j.1742-4658.2007.05929.x](https://doi.org/10.1111/j.1742-4658.2007.05929.x) (IF2007: 3.682, IF2021:4.392; Citations: 23)
17. Ibrahim-Granet, O., Philippe,B., **Boleti, H.**, Boisvieux-Ulrich, E., Prévost, MC., Grenet, D., Stern, M., and JP Latgé. (2003). Phagocytosis and intracellular fate of *Aspergillus fumigatus* conidia in alveolar macrophages. *Infection and Immunity*, 71(2):891-903 DOI: [10.1128/iai.71.2.891-903.2003](https://doi.org/10.1128/iai.71.2.891-903.2003) (IF2003:4.153, IF2021:3.201; Citations: 177)
18. **Boleti. H.**, Karsenti, E. Vernos, I. (2001). The use of dominant negative mutants to study the function of mitotic motors in the in vitro spindle assembly assay in *Xenopus* egg extracts. *Methods in Molecular Biology*, 164, 173-89. DOI: [10.1385/1-59259-069-1:173](https://doi.org/10.1385/1-59259-069-1:173) (IF2021:10,710, Citations: 2)
19. **Boleti, H.**, Ojcius, D. and Dautry-Varsat, A. (2000). Fluorescent labelling of intra-cellular bacteria in living host cells. *J. Microbiological Methods*, 1;40 (3): 265-274. DOI: [10.1016/s0167-7012\(00\)00132-9](https://doi.org/10.1016/s0167-7012(00)00132-9) (IF2000:1.659, IF2021:1,707; Citations: 29)
20. Poupel, O., **Boleti H.**, Axisa, S., and Tardieux, I. (2000). Toxofilin, a novel actin binding protein from *Toxoplasma gondii*, sequesters actin monomers and caps actin filaments. *J. Mol. Biol. of the Cell*, 11(1): 355-68. doi: [10.1091/mbc.11.1.355](https://doi.org/10.1091/mbc.11.1.355) (IF2000:7.612, IF2021:3.791; Citations:64)

21. **Boleti, H.**, Benmerah, A., Ojcius, D., Cerf-Bensussan, N., Dautry-Varsat, A. (1999). *Chlamydia* infection of epithelial cells expressing dynamin and Eps15 mutants: clathrin-independent entry into cells and dynamin dependent productive growth. *J. of Cell Science*, 112:1487-1496. PMID: 10212143 (IF2000:5.723, IF2021:4.573; Citations76) <https://pubmed.ncbi.nlm.nih.gov/10212143/>
22. Wittmann T., **Boleti H.**, Antony C., Karsenti E, and Vernos I. (1998). A leucine zipper targets Xklp2 to a dynein/dynactin containing complex that accumulates at microtubule minus ends during mitosis. *J. Cell Biol.* 143 (3), 673-685. doi: [10.1083/jcb.143.3.673](https://doi.org/10.1083/jcb.143.3.673) (IF2000: 13.323, IF2021:8.811, Citations:155)
23. **Boleti H.**, Karsenti E., Vernos I. (1996). Xklp2, a new *Xenopus* centrosomal Kinesin Like Protein Required for centrosome separation during mitosis. *Cell*, 84: 49-59. DOI: [10.1016/s0092-8674\(00\)80992-7](https://doi.org/10.1016/s0092-8674(00)80992-7) (IF2000: 31.701, IF2021: 38.637; Citations:128)
24. Karsenti E., **Boleti H.**, Vernos, I. (1996). The role of microtubule dependent motors in centrosome movements and spindle pole organization during mitosis. *Seminars in Cell & Devel. Biol.*, 7, 367-378 (IF2010: 5.909, IF2021: 6.691; Citations: 28) <https://doi.org/10.1006/scdb.1996.0046>
25. **Boleti H.**, Coe, I., Baldwin S.A., Young J.D., Cass C.E. (1997). Molecular Identification of the equilibrative NBMPR-sensitive (es) nucleoside transporter and demonstration of an equilibrative NBMPR-insensitive (ei) transport activity in human erythroleukemia (K562) cells. *Neuropharmacology J.*, 36 (9), 1167-117. DOI: [10.1016/s0028-3908\(97\)00136-6](https://doi.org/10.1016/s0028-3908(97)00136-6) (IF2000: 4.061, IF2021: 4.431, Citations: 71)

Published conference proceedings

1. Saridaki A, Sapountzis P, Siozios S, Ioannidis, **Boleti, H.**, Bourtzis K. (2008). Wolbachia ankyrins and their potential role on Drosophila-Wolbachia symbiosis. *FEBS J.* 275: 266-266 Supplement: Suppl. 1 (IF:3,325, Citations:)
2. **Boleti, H.** & Cass. C.E. (1992). Nitrobenzylthioinosine-insensitive nucleoside transport processes of K562 cells. *Proc. Amer. Assoc. Cancer Res.*, 33:18
3. **Boleti H.**, Cass, CE. (1991). Nucleoside transport in K562 human erythroleukemia cells. *Int. J. Purine and Pyrimidine Res.*, 2:35

Theses defended:

1. **MSc thesis Title: Nucleoside Transport in K562 human leukemia cells.**
05/06/1991, Department of Biochemistry, University of Alberta, Edmonton, Canada. *Supervisor: Dr.C.Cass.*
Committee members: Drs J Wiener, M. Michalak, J. Young <https://www.bac-lac.gc.ca/eng/services/theses/Pages/item.aspx?idNumber=29028157>
2. **PhD thesis Title: Molecular and Functional Characterization of Xklp2: a Xenopus Microbutule motor from the Kinesis-Like Protein family.**
05/07/1995, Naturwissenschaftlich-Mathematischen Gesamtfakultät der Ruprecht-Karls Universität, Heidelberg, Germany.
Supervisors at EMBL: Drs E. Karsenti and I. Vernos. Committee members: Prof Drs K. Simons and F. Wieland

Reviews-Electronic publications:

1. **Boleti H.** & Robotis, J.F (2004). Viral Hepatitis . *xPharm 1.0*, edited by S.J. Enna dn David, B. Bylund, Published by, Inc. Elsevier. <http://www.sciencedirect.com/science/article/pii/B978008055232360875X>
2. **Boleti H.** (2004). Chlamydia Infections. *xPharm 1.0*, edited by S.J. Enna dn David, B. Bylund, Published by, Inc. Elsevier. <http://www.sciencedirect.com/science/article/pii/B9780080552323609286>
3. **Boleti, H.**, Thomaidou, D. (2004). Modern imaging techniques of multiple parameter light microscopy. *BIO*, 10: 58-59 (Greek journal for Biotechnology, the environment and the man).

Grants

International

As Scientific responsible

2000-2002: International network of Pasteur Institutes mobility grant

Title: Structural and functional studies of the Hepatitis C non-structural NS4B protein.

Scientific responsible: H. Boleti

Budget (salary and research costs): 73,367€

2003-2005 : ACIP (Actions Concertées des Instituts Pasteur)

Title: Etudes des genotypes du virus de l'hepatite C en Asie du Sud-Est et développement de methodes diagnostiques moleculaires spécifiques »

Coordinators: **Dr H. Boleti** - Dr P. Mavromara; Member Instituts: Hellenic Pasteur Institute, Institut Pasteur Paris, IP Vietnam, Cambodge, St. Petersburg

Budget for HPI: 10,000 €

2013 RIIP (Institut Pasteur International Network) Regional course:

Title: “Digital image processing/analysis tools in Light Microscopy: From the basics and beyond”

Coordinator/main organizer: **H. Boleti;**

Budget for HPI: 45,000 €

2013-2015: PLATON Greek French R&T transnational cooperation/GSRT

Title: **LeishPhosphoTox:** Molecular and functional characterization of specific **phosphatases from the anthrozoonotic intracellular protozoan parasites *Leishmania donovani* and *Toxoplasma gondii*** and investigation of their role in the parasite interaction with host cells; Exploration of their potential as drug targets.

Head of Greek team: **H. Boleti;** Head of French team: I. Tardieux

Budget: 30,000 €

2014-2016: IKYDA (State Scholarship Foundation grant for Greek-German Collaboration)

Title: **LeishPhospho:** Molecular characterization of specific phosphatases from the protozoan parasites *Leishmania donovani* and investigation of their potential as drug targets.

Head of Greek team: **H. Boleti;** Head of German team: M. Kohn;

Budget: 10,000 €

2016 RIIP (Institut Pasteur International Network) International course:

Title: “Cell Biology and infection: Digital Image Processing/Analysis Tools for Quantitative Light Microscopy Imaging” Coordinator/main organizer - **H. Boleti;**

Budget for HPI: 28,000 €

2020-2023 Yersin Calmette Doctoral Fellowship, Institut Pasteur International Network.

Fellowship awarded to Mr Daniel Carrasco Navarro. Start date: 1/10/2020

Supervisor of PhD student: **H. Boleti;** Grant duration: 36 months;

Budget: 60,000€

As collaborator/member of the scientific teams

2003-2005: INSERM-FRANCE

Title: New molecular tools for the purification of human primary hepatocytes infected with HCV: approaches for the study of molecular interactions between HCV and its cellular host in presence or in the absence of an antiviral treatment». Collaboration with the Hepacivirus lab: Institut Pasteur Paris

Budget for H. Boleti: 5,000 €

2003-2006: PTR (Program Transversaux-Institut Pasteur

Title: Implications of HCV diversity in the diagnosis and pathogenesis of virus infection

Coordinator: P. Mavromara-Molecular Virology lab-Hellenic Pasteur Institute Member Institutes: Hellenic Pasteur Institut, Insitut Pasteur Paris and Pasteur Institutes of Cambodge, Vietnam, St. Petersburg, Cameroun, Romania

2015-2017 Institut Pasteur International Network Program ACIP:

Title: "Identification of broad-spectrum naturally derived inhibitors against hepatotropic viruses (DENV, YFV, HBV) under culture conditions simulating liver normoxic and metabolic microenvironment. The interplay between virus and hepatic normoxia as a possible disease determinant". Coordinator: Dr Niki Vasilaki. Collaborating Institut Pasteur (IP) partners: C. Neuveut (IP Paris, Unité des Hépacivirus et Immunité Innée), M. Windisch (IP Korea, Applied Molecular Virology), Prof. P. Mavromara (HPI, Molecular Virology), **Dr H. Boleti** (HPI, Intracellular Parasitism and Light Microscopy Unit). Other collaborators: Prof. R. Bartenschlager (Department of Infectious Diseases, Heidelberg, Germany), Prof. A. L. Skaltsounis (Professor and President of Faculty of Pharmacy, Athens, Greece), Prof. Zoidis (Faculty of Pharmacy, Athens, Greece)

Greek government or HPI funded programs

As Scientific responsible/coordinator

2002-2004 Hellenic Pasteur Institute Research grant

Title: Development of molecular and cellular tools for the study of the biochemical properties and the biological function of the NS4B non-structural protein of the Hepatitis C virus

Personal grant for H. Boleti;

Budget: 10,000 €

2004-2006 Competitive grant from the Greek General Secretariat of Research and Technology in the context of the European program "Human Networks for training in Research and Technology" –Establishment of the *Greek Light Microscopy Network*. Title: "Applications of Light Microscopy in Biomedical research and Diagnosis" Collaboration with the U. of Ioannina & the U. of Crete

Coordinator of the project and of the Network: H. Boleti;

Budget: 68,000 €

2008-2010 Hellenic Pasteur Institute Research grant

Title: Phagocytosis of intracellular pathogens by neutrophils and macrophages. The role of apoptotic neutrophils in the establishment of infection.

Scientific Responsible: H. Boleti,

Budget: 8,000 €

2019-2021 Ministry of Development and Investment/grant Code EBBM103."Supporting researchers with emphasis on young researchers – B cycle"- "Human Resources Development, Education and Lifelong Learning" on Priority Axis 6, co-funded by the European Social Fund (ESF).

Title: *In vitro* study of the anticancer properties of polyphenols from Greek olive oil.

Coordinator: H. Boleti;

Budget: 45,500€ (Duration 15 months)

2019-2023 H.F.R.I (Hellenic Foundation for Research and Innovation) PhD grant (*Olympia Tziouvara*)

Title: "PI phosphatases and PI binding proteins of the *Leishmania* protozoan parasite: Characterization of two representative molecules and study of their role in the parasite life cycle and in the infection of the mammalian host"

Supervisor of PhD student: **H. Boleti**; Grant duration: 30 months;

Budget: 27,000 €

As collaborator, member of the scientific team

2006-2007 Grant from General Secretariat of Research and Technology in the context of the Program "OPEN DOORS" Member of the scientific team. Organization of courses for Secondary school education teachers.

Budget of this activity of the project: 8,000 €

2012-2015 THALIS grant. Ministry of Education Lifelong Learning and Religion

Haralabia Boleti, PhD *Curriculum vitae 2021*

EVOTRANS, Membrane transport: Structure-function and evolutionary relationships. WP1. Study of the NAT/NCS2 transporters expressed in different organisms to understand how highly homologous transporters assume strikingly different specificities within the same family and how distantly related transporter of different families share common binding-site architectures and motifs. **WP1.2** Expression of the homologous NAT mammalian transporters in the *Leishmania tarentolae* organism.

Budget for 'Intracellular parasitism team': 40,000 €

2013-2015 **KRIPIS I:** DEVELOPMENT GRANTS FOR RESEARCH INSTITUTIONS/Greek GSRT
Title: Infectious Diseases and Neurodegenerative in the 21st century. From the study of basic mechanisms in the development of translational research and cutting edge methodologies targeting diagnosis, prevention and treatment. **Subproject EE2.5:** Mechanisms of *L. donovani* parasite survival in host macrophages and identification of virulence factors. **Subproject EE 4.5:** Identification, validation characterization of potential molecular targets for anti-leishmanial drug development.

Budget for 'Intracellular parasitism team': 68,180 €

2017-2019 **KRIPIS II:** DEVELOPMENT GRANTS FOR RESEARCH INSTITUTIONS/Greek General Secretariat for Research and Technology
Title: "Infectious, autoimmune and neurodegenerative diseases: study of the pathogenetic mechanisms and development of diagnostic, prognostic and therapeutic approaches" **Subproject IIE 3.3:** Structural and functional characterization of the Tyrosine and Phosphoinositide phosphatase *LdTyrPIP₂₂* of the protozoan parasite *Leishmania donovani* (M4-M24) with aim to point out new chemotherapeutical targets from antileishmanial drugs (Coordinator Hellenic Pasteur Institute).

Budget for 'Intracellular parasitism team': 22,900 €

2018-2020 **BIOIMAGING GR:** "Hellenic Research Infrastructure for the Imaging and Observation of Fundamental Processes in Biology and Medicine" (MIS 5002755) under the Action "Reinforcement of the Research and Innovation Infrastructure", funded by the Operational Program "Competitiveness, Entrepreneurship and Innovation" (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund). *Responsible for 2WPs of the HPIs participation in the Infrastructure Network.*

2018-2020 «**INSPIRED:** The National Research Infrastructure on Integrated Structural Biology, Drug Screening Efforts and Drug target functional characterization. MIS code 5002550 WP.2.1, WP 2.2

Sponsorships and Funding from private institutions

2011 Sponsorship from Genesis Pharma pharmaceutical company to the Intracellular parasitism research group supporting research on the investigation of mechanisms by which the protozoan parasite *Leishmania donovani* infects humans and domestic animals and causes the disease of Kala azar

Scientific responsible: H. Boleti; *Budget for 'Intracellular parasitism team': 15,000 €*

2014 Sponsorship from Abbvie Pharmaceutical Company to the "Intracellular parasitism" group supporting its research projects against Leishmaniasis.

Scientific responsible: H. Boleti; *Budget for 'Intracellular parasitism team': 5,000 €*

2019 Donation from WORLD OLIVE CENTER FOR HEALTH (WOCH) for the study "In vitro study of the anticancer properties of polyphenols from Greek olive oil"

Scientific responsible: H. Boleti; *Budget: 4,500 €*

As collaborator, member of the scientific team

2016-2017 **Asklepios Gilead Sciences Hellas grant 2016:** "Characterization of new synthetic and natural compounds with broad-spectrum anti-viral activity as inhibitors of Hepatitis B virus in a cell culture model

simulating the *in vivo* normoxic microenvironment. Importance of liver normoxia for HBV replication and the efficiency of inhibitors" *Scientific responsible*: Dr. Niki Vasilaki; *Collaborators*: C. Neuveut (IP Paris, Unité des Hépacivirus et Immunité Innée), M. Windisch (IP Korea, Applied Molecular Virology), A. L. Skaltsounis, G. Zoidis and V. Myrianthopoulos (Faculty of Pharmacy, University of Athens, Greece), H. Boleti (HPI, Intracellular Parasitism and Light Microscopy Unit)

Teaching Experience

Over the course of my training and work, I have acquired significant teaching experience.

It consists of:

- **Supervision** of 4 PhD theses [2 defended: Nov 2008 (shared PhD student in collaboration with Dr K. Bourtzis, U. of Ioannina) and April 2015. Two ongoing, started on 1/1/2018 and 1/10/2020], 6 MSc theses [defended in: Jan. 2014 (U. of Athens), Jan. 2015 (U. of Athens), June 2015 (U. of Montpellier), March 2017 (U. of Athens) and June 2017 (U. of Grenoble) and May 2021 (U. of Athens)], 2 diploma theses (2003 (U. of Montpellier) & 2009 (U. of Athens)] and of the practical training of 12 other post-graduate and undergraduate students (<https://www.pasteur.gr/xaralampia-boleti/> Lab members)
- **Formal lectures** and seminars directed towards postgraduate students pursuing a career in Biochemistry and Medicine and laboratory technicians
- **Practical teaching** in the laboratory to both Biochemistry, Medicine and Dietetics undergraduate students and postgraduate students on subjects related to Biochemistry, Molecular and Cell Biology as well as Light Microscopy techniques
- **Teaching** of Secondary Education teachers on advances in biosciences (<https://www.pasteur.gr/epimorfotika-seminaria-erevna-ke-technologias/>).
- **Lectures** on “Study of the cellular anatomy with advanced Imaging techniques of Fluorescent microscopy”, Chemistry Department, MSc in “Biochemistry”, University of Athens
- **Lectures** on the “Biotechnological applications of the system of *Leishmania tarentolae*” (Biology Department, MSc in “Microbial Biotechnology” University of Athens and Medical School, University of Ioannina, MSc in Molecular-Cellular Biology and Biotechnology)
- **Lectures** “Molecular Mechanisms of the host cells targeted by intracellular pathogens” Biology Department, MSc in “Applications of Biology in Biomedical research”, University of Athens)
- **Lectures** “The technology of Fluorescent proteins. From the jellyfish and corals to the laboratories of Biology and Medicine”, Medical School, MSc in “Biotechnology”, University of Ioannina) and in *Bioimaging symposia* (<http://mgn.upatras.gr/bioimaging2010/>).
- **Member** of four 3-member PhD committees and of one 7-member PhD committee

Management/Organization Experience

Organization of Conferences/Courses/Workshops

- **Organizer** of a Practical Workshop on Light Microscopy. A workshop addressed to scientists working at the Pasteur Institute in Paris. With the collaboration of ZEISS, Leica and Photonic Science (Paris, April 1998).
- **Organizer** of Practical Workshops on "Applications of Light Microscopy on Biomedical Research and Diagnosis" addressed to Biologists and Medical Doctors in Greece. Hellenic Pasteur Institute (Athens, May 2004 and April 2005)
- **Coordinator** of a series of workshops on Light Microscopy in the context of a program financed by the Greek General Secretariat of Research and Technology in the context of the European program "Human Networks for training in Research and Technology". As a result, The Greek Light Microscopy Network was established having as members the universities of Ioannina, Crete and Athens, the Hellenic Pasteur Institute, the Institute for Biomedical Research in Ioannina and three private companies (2004-2006) (<https://www.pasteur.gr/epimorfotika-seminaria-erevna-ke-technologias/>)

Haralabia Boleti, PhD *Curriculum vitae 2021*

- **Organizer** of three day workshops for secondary education teachers with the aim of offering training and information about the recent advances in the biomedical sciences in the context of the program “Open Doors” financed by the Greek Ministry of Development, Division for Research and Technology. The project was developed in collaboration with EMBL (2005-2007) <https://www.pasteur.gr/epimorfotika-seminaria-erevvas-ke-technologias/>
- **Co-organizer** of the SET ROUTES event “Opening Gateways to Science with Invited international speakers from research and science politics who talked about their career paths and their experiences on working in different scientific areas. The event was aimed at university undergraduate and post-graduate students and scientists from all levels http://www.set-routes.org/university/calendar/athens_nov08/index.html
- **Coordinator** of 3 different projects for the construction and scientific responsible of the Hellenic Pasteur Institute website. www.pasteur.gr (2009-2020)
- **Organizer** of two Institut Pasteur International Network regional and international courses on Digital Image Processing/Analysis Tools for Quantitative Light Microscopy Imaging (10-17 June 2013; <https://www.pasteur.gr/monada-fotomikroskopias/>) and (July 4-8, 2016; <https://www.pasteur.gr/monada-fotomikroskopias/>)

Awards/Honors

- Excellence Award from the Greek Ministry for Education for the academic year **1982-1983**
- The Greek Canadian Association Scholarship **1988**
- Graduate Teaching Assistantship and Research Assistantship, Dep. of Biochemistry, U. of Alberta. **1987-1991**
- EMBL pre-doctoral Fellowship **1991-1995**
- EMBL post-doctoral Fellowship **1995-1996**
- EMBO post-doctoral Fellowship **1996-1998**
- TMR post-doctoral Fellowship **1997-1999**
- Post-doctoral Fellowship Fondation pour la Recherche Médicale (FRM) **1998-1999**
- Post-doctoral Fellowship Association pour la Recherche contre le Cancer (ARC) **1998-1999**
- Mobility Research grant, The Pasteur Institute, Paris, France **2000-2002**
- EMBO short-term Fellowship **2000**
- Fellowship from the French Embassy in Greece (EGIDE) **2005**
- Poster award **2016**
at the 67^o Panhellenic conference of the Hellenic Society of Biochemistry and Molecular Biology, Ioannina, (25-27 Nov. 2017). Title: *LdPIBPnex*, a secreted nexin-like protein from the protozoan parasite *Leishmania donovani*. Authors: Drosos Kourounis, Amalia Papadaki, Olympia Tziouvara, Haralabia Boleti, Intracellular parasitism group, Hellenic Pasteur Institute

Memberships

- Founding member of the Greek Bioimaging Society (*recognized legally in spring 2016*)
- Member of the Hellenic Society of Biochemistry and Molecular Biology.
- Member of the Comité d'Animation Scientifique Internationale-Advisory Scientific committee-(COMASI) of the International Network of the Pasteur Institutes and Associated Institutes (2002-2005). The committee evaluated applications for the organization of international courses within the Pasteur Institute network as well as research proposals submitted for funding at the Direction des Affaires Internationales of the Institut Pasteur, Paris.
- SET-ROUTES School & University ambassador <http://www.set-routes.org/>
- Member of scientific committees for the organization of Microscopy meetings (ELMI meeting 2011)
- Member of the Jury for the 6th international scientific film festival. November 2011, Athens (<http://www.caid.gr/isffa/about.html>)

Conference participation

H. Boleti has presented results from her research work in 20 International and 16 National conferences as 13 oral and 28 poster presentations.

1. **ISCB-Africa ASBCB Conference on Bioinformatics 2021**
Title : Phylogenetic and structural analysis of the PX domain containing Phosphoinositide (PI) binding proteins in Kinetoplastida
Authors : Marina V. Petsana, Ahmed F. Roumia, Pantelis G. Bagos, Haralabia Boleti and Georgia G. Braliou
2. **20th International congress of the International Society of Ethnopharmacology**, virtual congress 18-20 April 2021
 - i. **Poster: Evaluation of the antiproliferative/cytotoxic action of olive oil polyphenols on human breast cancer.** Authors: A. Papakonstantinou, P. Koumariou, E. Melliou, P. Magiatis, H. Boleti
 - ii. **Poster: Evaluation of antiproliferative/cytotoxic action of olive oil polyphenols on human melanoma cancer.** Authors: P. Koumariou, A. Papakonstantinou, E. Melliou, P. Magiatis, H. Boleti
3. **2nd International Caparica Conference on Leishmania 2020**, Caparica, Portugal (26th- 28th Oct. 2020)
Invited oral presentation: *Leishmania tarentolae* as a model organism for heterologous expression of mammalian multi spanning membrane transporters. Pros and cons.
Authors: H. Boleti, A. Doukas, S. Friligos
4. **11th Hellenic Congress of Immunology** , Athens 5-7 Dec. 2019
Oral presentation title: Confocal Microscopy; Invited speaker: Boleti H.
5. **67th Conference of the Hellenic Society of Biochemistry and Molecular Biology**, Ioannina, (25-27 Nov. 2016)
Poster (prize): *LdPIBPnex*, a secreted nexin-like protein from the protozoan parasite *Leishmania donovani*.
Authors: Kourounis D, Papadaki A, Tziouvara O, **Boleti H.**
6. **67th Conference of the Hellenic Society of Biochemistry and Molecular Biology**, Ioannina (25-27 Nov. 2016)
Poster: *Study of LdTyrPIP₂₂, a Tyrosine and Phosphoinositide Phosphatase from Leishmania donovani*.
Authors: Tziouvara O, Kotopouli A., Papadaki A, **Boleti H.**
7. **66th Conference of Hellenic Society for Biochemistry & Molecular Biology**. Athens, Greece (11-13 Dec. 2015)
Oral presentation title: Biochemical characterization and subcellular localization of the tyrosine and phosphoinositide dual specificity phosphatase *LdPIP22*, a potential drug target from *Leishmania donovani*.
Authors: Papadaki A, Kotopouli A, Doukas A, Rios P, Tziouvara O, Koehn M, **Boleti H**
8. **Scientific Symposium of the Institut Pasteur International Network**. Paris, France (10-13 Sept. 2014).
Poster: The *Leishmania* membrane bound Histidine Acid Phosphatases (HAcPs) as putative virulence factors; Characterization of the *LdMAcP*, a Histidine Acid ecto-phosphatase from *L. donovani*. Authors: Papadaki A., **Boleti H.**
9. **64th Conference of Hellenic Society for Biochemistry and Molecular Biology**. Athens, Greece (6-9 Dec. 2013). Poster presentation.
Poster: Heterologous expression of the mammalian nucleobase transporter rSNBT1 in the LEXSY *Leishmania tarentolae* protein expression system. Authors: Doukas A, Papakostas K, Papadaki A, Frillingos S, **Boleti H.**
10. **Cost Action CM0801, 4th Annual Meeting**. Crete (Sept. 19-21 2012). Poster presentations.
 - 1) Poster: Study of specific *Leishmania* Atypical Lipid Phosphatases (ALPs) as putative virulence factors for parasite survival in host phagocytes and as potential drug targets. Authors: Kotopouli A, Papadaki A, Doukas A,

Papadacos K, Sgouras D, Galanopoulou N., Boleti H

2) Poster: Leishmanicidal activity assessment of olive tree extracts; Oleuropein, a powerful antioxidant is able to promote *L. donovani* cell death. Authors: Ioannis Kyriazis, Despina Smirlis, Papadaki A, Aligiannis N, Polychronopoulos P, Skaltsounis A.L, Dotsika E.

11. 62nd Conference of Hellenic Society for Biochemistry and Molecular Biology. Athens, Greece (9-11 Dec. 2011).

Poster: Study of specific *Leishmania* histidine acid phosphatases as putative virulence factors for parasite survival in host phagocytes and as potential drug targets. Authors: Papadaki A., Smirlis D., Kourou, K., Politou A.S., Boleti H.

12. Scientific International Meeting of Young Researchers from RIIP, Institut Pasteur, Paris, France (10 Nov. 2011).

Commented Poster (oral presentation): Phosphoinositide involvement in *Leishmania donovani* phagocytosis by Raw 264,7 macrophages. Authors: Amalia Papadaki, Haralabia Boleti

13. 60th Conference of the Hellenic Society of Biochemistry and Molecular Biology. Athens, 20-22 Nov. 2009

Poster: Generation of transgenic *Leishmania donovani* expressing the Red Fluorescent protein mRFP1: a tool for in vivo imaging of the parasite host cell interaction

Authors: Kotini M., Papadaki A., Smirlis D., Soteriadou K. Diallinas, G. & Boleti H. *Molecular Parasitology Laboratory & Light microscopy Unit Hellenic Pasteur Institute & Biology Dep. of Kapodistrian University of Athens, Botany Department*

14. 60th Conference of the Hellenic Society of Biochemistry and Molecular Biology, Athens, 20-22 Nov. 2009

Poster title: Phosphoinositide involvement in *Leishmania donovani* phagocytosis by Raw 264,7 macrophages

Authors: Amalia Papadaki, Maria Kotini, Despina Smirlis, Javier Pizarro-Cerda, Ketty Soteriadou & Haralabia Boleti, *Molecular Parasitology Laboratory and Light Microscopy Unit, Hellenic Pasteur Institute, Unité des Interactions Bactéries-Cellules, Institut Pasteur Paris*

15. 4th World congress in Leishmaniasis, Lucknow, India , 3-7 Feb. 2009

Oral presentation: The leishmanial Ran-GTPase system reveals an atypical Ran network

Authors: Despina Smirlis, Haralabia Boleti, Maria Gaitanou, Ketty Soteriadou *Laboratory of Molecular Parasitology, Department of Microbiology, Laboratory of Cellular and Molecular Neurobiology, Department of Biochemistry, Hellenic Pasteur Institute*

16. 1st Conference «MIKROVIOKOSMOS», Athens, 12-14 Dec. 2008

Poster: *Wolbachia* safe sex: The triggering factor for speciation, ecological diversity and applications.

Authors: Saridaki, P¹, Sapountzis, S^{1,2}, Siozios, P. Ioannidis¹, H. Boleti², S. Zabalou³, C.Savakis⁴ and K.Bourtzis¹ *Biochemistry and Molecular Biology Laboratory, Department of Environmental and Natural Resources Management, University of Ioannina, Agrinio; Molecular Parasitology Unit & Light Microscopy Unit, Hellenic Pasteur Institute, Athens, Greece.*

17. 23rd International conference of Entomology (ICE) Durban, S. Africa, 6-12 Jul. 2008

1) Oral presentation: Insect-*Wolbachia*-WO phage tripartite symbiotic interaction: exploring the role of phage.

Authors: P. Sapountzis, H. Boleti, S. R. Bordenstein, K. Bourtzis

2) Oral presentation: *Drosophila*-*Wolbachia* symbiotic interactions: exploring the role of ankyrins.

Authors: P. Sapountzis, S. Siozios, P. Ioannidis, A. Saridaki, H. Boleti, K.Bourtzis

18. 33rd FEBS conference, Athens, Jun 28- Jul. 3, 2008

Poster: *Wolbachia* ankyrins and their potential role on *Drosophila*-*Wolbachia* symbiosis. *FEBS Journal* 275:266.

Authors: Saridaki¹, P. Sapountzis^{1,2}, S. Siozios¹, P. Ioannidis¹, H. Boleti², and K. Bourtzis¹

Haralabia Boleti, PhD *Curriculum vitae 2021*

Biochemistry and Molecular Biology Laboratory, Department of Environmental and Natural Resources Management, University of Ioannina, Agrinio; Molecular Parasitology Unit & Light Microscopy Unit, Hellenic Pasteur Institute, Athens, Greece.

- 19. 5th International conference of Wolbachia.** Kolympari, Crete, Greece, Jun. 9-14, 2008
1) Poster title: A novel tool to study insect-Wolbachia-phage interactions.
Authors: P. Sapountzis, H. Boleti, SR. Bordenstein and K. Bourtzis
2) Poster title: Drosophila-Wolbachia symbiotic associations: exploring the role of wRi ankyrins.
Authors: P. Sapountzis, S. Siozios, P. Ioannidis, A. Saridakis, H. Boleti, S. Andersson & K. Bourtzis
- 20. 30th Annual Scientific conference of Greek Society of Biological Sciences.** Thessaloniki, May 22-24, 2008
Oral Presentation: Study of ER Anchoring and Retention sequences of the HCV virus NS4B protein: Fusion of NS4B with the plasma membrane enzyme CD39 reveals an experimental system for the recognition of ER retention signals.
Authors: Boleti H^{1,2}, Smyrlis D², Christophoridis S³, Mavromara P⁴
¹Light Microscopy Unit, ²Molecular Parasitology Lab., ⁴ Molecular Virology Lab., Hellenic Pasteur Institute., ³Biological Chemistry La. Medical School Ioannina & Biomedical Research Institute, FoRTH, Ioannina
- 21. 59th Congress of Greek Biochemical Society,** Athens, 7-9 Dec. 2007
Oral Presentation: The leishmanial Ran-GTPase system reveals an atypical Ran network
Authors: Smirlis D^a, Boleti H^a, Gaitanou M^b, Soteriadou K^a
^aLaboratory of Molecular Parasitology, Department of Microbiology, ^bLaboratory of Cellular & Molecular Neurobiology, Department of Biochemistry, Hellenic Pasteur Institut
- 22. Light Microscopy Day).** Greek Network of Light Microscopy) & Hellenic Pasteur Institute. Athens, 21 Jan. 2006
Oral presentation: When the microbes conquer the host cells. Authors: Boleti H.
- 23. 57th Congress of Greek Biochemical Society.** Athens, 9-11 Dec 2005
Oral Presentation: Signals for insertion and retention of the NS4B Hepatitis C virus protein to the endoplasmic reticulum. Authors: Boleti H, Ntalagiorgou G., Mavromara P.-Molecular Virology Laboratory-Hellenic Pasteur Institute
- 24. 57th Congress of Greek Biochemical Society.** Athens, 9-11 Dec. 2005
Poster: Lotus japonicus: Nodule expressed putative polyol transporters
Authors Kaliampakou K. I. ¹, Efrose R. C. ², Demou M., Stedel C.¹, Boleti H³, Flemetakis E.¹ & Katinakis P. ¹
¹Agricultural U. of Athens, Dep of Agriculture Biotechnology, ² National Research Centre Democritus, ³ Hellenic Pasteur Institute, Microbiology Department
- 25. Congress of the International Network of Pasteur Institutes.** Ho-Chi-Minh-Ville, Viet-Nam, 22-24 Oct 2001
Invited speaker: Interaction of the Hepatitis C virus with its host cells: Study of the non-structural NS4B protein.
Authors: H.Boleti, P. Mavromara- Molecular Viorology laboratory,-Hellenic pasteur Institute
- 26. 1st Conference of ELSO (European life sciences Organization).** Geneva, Switzerland, 2-6 Sep.2000
Poster: Vesicular traffic between the *C. psittaci* inclusion and Golgi intersects a retrograde traffic pathway between Golgi and ER.
Authors: H. Boleti, D. Ojcius, A. Dautry Varsat- Unité de Biologie des Interactions Cellulaires, Institut Pasteur, Paris.
- 27. 3rd Conference of EMBO fellows.** Heidelberg, Germany, 11-13 Jul 1999
Oral presentation: Expression of dynamin and Eps15 mutants had no effect on the entry of *Chlamydia* into epithelial cells but the dynamin mutant inhibited the *Chlamydia* productive growth.

Haralabia Boleti, PhD *Curriculum vitae 2021*

Authors: *H.Boleti, D. Ojcius, A. Dautry-Varsat - Unité de Biologie des Interactions Cellulaires, Institut Pasteur, Paris.*

28. 2nd Conference of ECBO (European Cell Biology Organization). Bologna, Italy 8-11 May, 1999

Poster: *Chlamydia* entry into epithelial cells is independent of dynamin or Eps15 function but the productive growth of *Chlamydia* is inhibited by a dynamin I mutant.

Authors: *H.Boleti, D. Ojcius, A. Dautry Varsat - Unité de Biologie des Interactions Cellulaires, Institut Pasteur, Paris*

29. 2nd Conference Louis Pasteur in Infectious diseases. Paris, France, 8-10 Oct 1998.

Poster: Characterization of *Chlamydia* entry into epithelial cells.

Authors: *H. Boleti D. Ojcius, A. Dautry Varsat- Unité de Biologie des Interactions Cellulaires, Institut Pasteur, Paris*

30. 25th Annual conference of the Greek Biochemical Society, Athens, 10-11 Jan 1997

Oral presentation: Biochemical characterization of a new Microtubule motor protein from the kinesin family.

Authors: *H.Boleti, I. Vernos, E. Karsenti - Dep. of Cell Biology, EMBL, Heidelberg, Germany*

31. 18th Annual conference of the Greek Society of Biology, Kalamata, Greece, 17-19 Apr. 1996

Oral presentation: Η Xklp2, μία πρωτεΐνη κινητήρας των μικροσωληνίσκων του *Xenopus laevis* είναι απαραίτητη για την συγκρότηση της μιτωτικής ατράκτου (Xklp2, a microtubule motor protein from *Xenopus laevis* is essential for mitotic spindle assembly). Authors: *H.Boleti, I. Vernos, E. Karsenti - Dep. Of Cell Biology, EMBL, Heidelberg, Germany*

32. Congress of the American Society of Cell Biology, Washington D.C. H.P.A. 11-14, Dec 1995

Poster: Xklp2, A *Xenopus* Kinesin-Like Protein localised on centrosomes and the mitotic spindle, is essential for bipolar spindle assembly. Authors: *H.Boleti, I. Vernos, E. Karsenti - Dep. Of Cell Biology, EMBL, Heidelberg, Germany*

33. 4th European conference of Cell Biology. Prague, Czech Republic, 26 Jun-1 Jul 1994

Poster: Xklp2, a *Xenopus* "KLP" localized on the centrosome and mitotic spindle.

Authors: *H.Boleti, I. Vernos, E. Karsenti - Dep. Of Cell Biology, EMBL, Heidelberg, Germany*

34. ENII (European Network of Immunology Institutes) Congress. Les Embiez, France, 20-24 May 1992

Poster: Intracellular transport and processing of the MHC class II glycoproteins and the associated invariant chain. Authors: *H. Boleti, B. Dobberstein - Dep. Of Cell Biology, EMBL, Heidelberg, Germany*

35. 6th International Congress on «Differentiation of Normal and Neoplastic cells» Vancouver, Canada, 29 July-2 Aug. 1990

Poster: Nucleoside transport in K562 human leukemia cells.

Authors: *H. Boleti, C.E. Cass - Dep. of Biochemistry, U. of Alberta, Canada*