PUBLICATIONS:

Metrics (Jun 2010):
refereed publications: **51**; total citations: **2,140**; citations/paper: **42,4;** total journal impact factor: **437,6**; *h* index: **24**

A. REFEREED PAPERS:

1. Economou, A., Roussis, A., Millioni, D. and Katinakis, P. (1989)
Patterns of protein synthesis in the moderately halophilic bacterium *Deleya halophilia* in response to sudden changes in external salinity.
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2. Economou, A., Hawkins, F.K.L., Downie, J.A. and Johnston, A.W.B. (1989)
Transcription of *rhiA* a gene on a *Rhizobium leguminosarum* bv. *viciae* Sym plasmid requires *rhiR* and is repressed by flavonoids that induce *nod* genes.
Molecular Microbiology 3, 87-91.

3. Economou, A., Hamilton, W.D.O., Johnston, A.W.B. and Downie, J.A. (1990)
The *Rhizobium* nodulation gene *nodO* encodes a Ca^{2+}-binding protein that is exported without N-terminal cleavage and is homologous to haemolysin and related proteins.
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4. Surin, B.P., Watson, J.M., Hamilton, W.D.O., Economou, A., and Downie, J.A. (1990)
Molecular characterization of the nodulation gene *nodT* from two biovars of *Rhizobium leguminosarum.*
Molecular Microbiology 4, 245-252.

5. Scheu, A.K., Economou, A., Hong, G.F., Ghelani, S., Johnston, A.W.B., and Downie, J.A. (1992)
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6. Cubo, T., Economou, A., Murphy, G., Johnston, A.W.B., And Downie, A.J. (1992)
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Microbiology 140, 2341-2347.

8. Economou, A. and Wickner, W. (1994)
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Cell 78, 835-843.

See also related News &Views Minreview by: Schekman R. Translocation gets a push. Cell. 1994 78(6):911-913.

9. Douville, K.D., Price, A., Eichler, J., Economou, A. and Wickner. W. (1995)
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Journal of Biological Chemistry, 270 , 20106-20111.

10. Economou, A. , Pogliano,J.P., Beckwith, J., Oliver, D.B. and Wickner, W. (1995)
SecA membrane cycling at SecYEG is driven by distinct ATP binding and hydrolysis events and is regulated by SecD and SecF.
Cell 83 , 1171-1181.

11. Wickner, W, Leonard, M.R. and Economou, A. (1995)
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(invited review)

12. Barny, M.-A., Schoonejans, E., Economou, A., Johnston A.W.B. and Downie, J.A. (1996)
The C-terminal domain of the *Rhizobium leguminosarum* chitin synthase NodC is important for function and determines the orientation of the N-terminal region in the inner membrane.
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13. Price, A., Economou, A., Duong, F. and Wickner, W.(1996)
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14. Shilton, B., Svergun, D.I., Volkov, V.V., Koch, M.H.J, Cusack, S. and Economou, A. (1998)
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Molecular Microbiology 27: 511-518.

16. Rodelas, B., Lithgow, J.L., Wisniewski-Dye, F., Hardman, A., Wilkinson, A., Economou, A., Williams, P. and Downie, J.A. (1999)
Analysis of quorum-sensing-control of rhizosphere-expressed (*rhi*) genes in *Rhizobium leguminosarum* biovar *viciae*
Journal of Bacteriology 181, 3816-3823.

17. Karamanou, S., Vrontou, E., Sianidis, G., Baud, C, T. Roos, Kuhn, A., Politou, A. and Economou, A. (1999)
A molecular switch in SecA protein couples ATP hydrolysis to protein translocation.
Molecular Microbiology 34, 1133-1145.

18. Economou, A. (1999)
Follow the leader: bacterial protein export through the Sec translocase
Trends in Microbiology 7: 315-319**.** *(invited review)*

19. Economou, A. (2000)
Bacterial protein translocase: a unique molecular machine with an army of substrates.
FEBS Letters 476, 18-21. *(invited review)*

20. Pozidis, C., Lammertyn, E., Politou, A., Anné, J., Tsiftsoglou, A., Sianidis, G. and Economou, A. (2001)
Protein secretion biotechnology in *Streptomyces lividans*: large-scale production of tumor necrosis factor alpha.
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21. Sianidis, G., Karamanou, S., Vrontou, E., Boulias, K., Repanas, K., Kyrpides, N., Politou, A.S. and Economou, A. (2001)
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25. Baud, C., Karamanou, S., Sianidis, G., Vrontou, E., Politou, A. and Economou, A. (2002)
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Journal of Biological Chemistry 277, 13724-13731.

26. Economou, A. (2002)
Bacterial secretome: the assembly manual and operating instructions.
Molecular Membrane Biology 19*,* 159-169. *(invited review)*

27. Pozidis, C., Chalkiadaki, A., Gomez-Serrano, A., Stahlberg, H., Brown, I., Tabakaki, N., Lustig. A., Sianidis, G., Politou, S.A.,Engel, A., Panopoulos, N.J., Mansfield, J., Pugsley, T., Karamanou, S. and Economou, A. (2003)
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28. Vrontou, E., Karamanou, S., Baud, C., Sianidis, G. and Economou, A.
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29. Papanikou, E., Karamanou, S., Baud, C., Sianidis, G., Frank, M. and Economou, A. (2004)
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Special Issue on Bacterial Protein Secretion, R. Dalbey and A. Economou (Guest Editors) *(invited review)*

31. Baud, C., Papanikou, E., Karamanou, S., Sianidis, G., Kuhn, A. and Economou, A. (2005)
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FEBS Letters 579, 1267-1271.

33. Papanikou, E., Baud, C., Karamanou, S., Sianidis, G., Frank, M., Keramissanou, D., Kalodimos, C.G., Kuhn, A. and Economou, A. (2005)
Identification of the preprotein binding domain of SecA.
Journal of Biological Chemistry 280, 43209-43217.

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35. Mueller, S., Pozidis, C., Stone, R., Meesters, C., Engel, A., Economou, A. and Stahlberg, H., (2006)
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38. Papanikolau, Y., Papadovassilaki, M., Raveli, R., Cusack, S., Economou, A. and Petratos, K. (2006) Crystal structure of dimeric SecA of *E.coli*, the preprotein translocase motor. **Journal of Molecular Biology 366**, 1545-1557.

39. Economou, A., Christie, P.J., Fernandez, R.C., Palmer, T., Plano' G.V. and Pugsley' A.P. (2006) Secretion by numbers: protein traffic in prokaryotes. **Molecular Microbiology 62,** 308-319.

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41. Gelis, I., Bonvin, A.M.J.J., Keramisanou, D., Koukaki, M. Gouridis, G., Karamanou, S., Economou' A. and Kalodimos' C.G. (2007) Structural basis for signal sequence recognition by the 204kDa translocase motor SecA determined by NMR. **Cell 131,** 756-769.

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43. Karamanou, S., Bariami, V., Papanikou, E., Kalodimos, C.G. and Economou, A. (2008) Assembly of the translocase motor onto the protein-conducting channel. **Molecular Microbiology 70**, 311-322.

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45. Gouridis, G. Karamanou, S, Gelis, I., Kalodimos, C. and Economou, A. (2009) Signal peptides are allosteric activators of the protein translocase. **Nature 462**, 363-36**.**

46. Sardis, M.F. and Economou, A. (2010) SecA: a tale of two protomers. **Molecular Microbiology 76,** 1070 - 1081. *(invited review)*

47. Gouridis G, Karamanou S, Koukaki M, Economou A. (2010) *In vitro* assays to analyze translocation of the model secretory preprotein alkaline phosphatase. **Methods Mol Biol. 619**, 157-172.

48. Kapellios, E.A., Karamanou, S., Sardis, M-F., Aivaliotis, M., Economou, A. and Pergantis, S.P. (2011) Using nanoelectrospray ion mobility spectrometry (GEMMA) to determine the size and relative molecular mass of proteins and protein assemblies: a comparison with MALLS and QELS. **Analytical Bioanalytical Chemistry 399,** 2421-2433.

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B. REFEREED CONFERENCE PAPERS

1. Schenkman,L, Koukaki, M., Karamanou, S. and Economou, A. (2007) The P. CÉZANNE Project: Innovative approaches to continuous glucose monitoring in diabetics. **Conf Proc IEEE Eng Med Biol Soc. 1,** 6060-6063.

2. Kapellios, E.A., Karamanou, S., Sardis, M-F., Aivaliotis, M., Pergantis, S.P. and Economou, A (2009) Nanoelectrospray Differential Ion Mobility Spectrometry for Protein Sizing and Molecular Mass Determination: Method Development and Validation 18th International Mass Spectrometry Conference, Bremen 2009 (https://www.imsc-bremen-2009.de:2220/ConfTool/)

3. Gouridis, G., Karamanou, S., Chatzi, C., Sardis, M.F. Gelis, I., Kalodimos, C.G. and A.Economou (2009) Recognition specificity and promiscuity in the secretome.
Cancer Genomics Proteomics 6:51-71
THIRD INTERNATIONAL CONFERENCE OF THE HELLENIC PROTEOMICS SOCIETY
From Proteomics Research to Clinical Practice
March 30 - April 1, 2009 Nafplio, Greece
4. Papanastasiou, M., Sardis, M.-F., Aivaliotis, M., Karamanou, S. and Economou, A. (2010) Comprehensive Characterization of the Inner Membrane Proteome of *Escherichia coli* Using a nanoLC-LTQ Orbitrap MS. 58th ASMS Conference on Mass Spectrometry, Utah.
5. Aivaliotis, M., Balabanidou, V., Papanastasiou, M., Karamanou, S and Economou, A. (2010) Global and targeted complexome analysis of the cytosolic proteome of Enteropathogenic *Escherichia coli* using Native-PAGE combined with nLC-LTQ Orbitrap MS. 58th ASMS Conference on Mass Spectrometry, Utah.
6. Aivaliotis, M., Papanastasiou, M. and Economou, A.(2010) Study of non-covalent protein complexes using a top-down approach on a hybrid LTQ-Orbitrap mass spectrometer. 58th ASMS Conference on Mass Spectrometry, Utah.

C. BOOK CHAPTERS AND SCIENTIFIC EDITING

1. Economou, A. and Downie, J.A. (1992)
The nodulation of legumes by rhizobia,
in: "Nitrogen Fixation and its Research in China" Hong. G.F. (ed.) Berlin, Springer-Verlag, pp. 315-341.
2. Wickner, W, Leonard, M.R. and Economou, A. (1995) On the road to translocase, in: Protein Kinesis: the dynamics of Protein Traficking and Stability. Cold Spring Harbor Symposia on Quantitative Biology, Vol. LX, Cold Spring Harbor Press. pp. 285-290.
3. Bernard Dixon (1995) Power unseen: how microbes rule the world.
Translation into Greek: M. Astropekaki. 2002. Scientific editor: A.Economou
Crete Univeristy Press
4. Brock biology of Microorganisms (2002)
Translation into Greek Volume A (2005) and Volume B (2007): Scientific editor/Translation team co-ordinator: A.Economou
Crete Univeristy Press.
5. Understanding our Microbial Planet,-Metagenomics initiative, US National Academy of Sciences (Greek translation, 2009); Scientific editor: A.Economou.
Crete Univeristy Press.
6. Gouridis,G., Karamanou, S., Koukaki, M. and Economou, A. (2010)
Characterization of a secretory substrate for *in vivo* and *in vitro* studies.
in Protein Secretion (2010) Economou, A. (editor), In the series: Methods in Molecular Biology (Humana Press).

D. INVITED CONFERENCE PAPERS:

1. Johnston, A.W.B., Davies, E.O., Hamilton, W.D.O., Economou, A., Burn, J.E., Hawkins, F.K.L., Latchford, J.W. and Hong, G.F. (1988)
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3. Johnston, A.W.B., Davies, E.O., Economou, A., Burn, J.E. and Downie, J.A. (1989)
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4. Johnston, A.W.B., Latchford, J.W., Davies, E.O., Economou, A., and Downie, J.A. (1990)
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Genetic and biochemical studies on the nodulation genes of *Rhizobium leguminosarum* bv. *viciae,* in: "Proceedings of the 5th International Symposium on the Molecular Genetics of Plant-Microbe Interactions" Hennecke, H. and Verma, D.P.S. (eds), Kluwer Academic Publishers, Dordrecht, The Netherlands. pp. 134-141.

7. Downie, J.A., Barny, M.-A., Cubo, T.-M., Davies, A., Economou, A., Firmin, J.L., Johnston, A.W.B, Marie, C., Mavridou, A., Rimilla, R., Scheu, A.-K., Sutton, J.M., and Wilson, K.E. (1992) Host recognition in the *Rhizobium leguminosarum*-pea symbiosis, in: "Perspectives in plant-cell recognition", Collow, J. & Green, J. (eds), Cambridge University Press. pp. 257-266.

8. Economou, A., Karamanou, S., Vrontou, E., Sianidis, G., Ross, T., Kuhn, A., Pozidis, C. and Baud, C. (1999) Bacterial protein secretion: molecular mechanism and biotechnology. Proceedings of the DLR/GSRT meeting on “Molecular aspects of Biotechnology”, December 7-9, 1998, Tuebingen, Germany.

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10. Anne, J., Bosmans, E., Bron, S., Economou, A., Engels, J.W., Martin, H.F., Mazodier, P. and Mellado, R. (1999) Characterization of the secretory pathway of Streptomyces lividans and its modulation for overproduction of heterologous proteins. Proceedings of the European Union Biotech meeting on regulation of the cell factory, Verona, 21-23 March 1999.

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13. Baud, C., Sioumpara, M., Bolis, D., Sianidis, G., Krambovitis, E., Karamanou, S., Politou, A.S. and Economou, A. (2000) The molecular mechanism of SecA-signal peptide interaction. Proceedings of the Hellenic Society for Molecular Biology and Biochemistry, Thessaloniki.

14. Chalkiadaki, A., Gomez-Serrano, A., Tabakaki, A., Boulias, K., Sianidis, G., Panopoulos, N.J., Yphantis, D., Politou' A.S. and Economou, A. (2000) Type III protein translocase: molecular characterization of the ATPase subunit. Proceedings of the Hellenic Society for Molecular Biology and Biochemistry, Thessaloniki.

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