# Dr Efstathios (Stathis) Giotis

# *Curriculum Vitae*

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**Academic positions and education**

* **2020-Present:** Lecturer in molecular virology,University of Essex, School of Life Sciences.
* **2020-Present:** Honorary Senior Research fellow, Imperial College London
* **2012-2020:** Research fellow in molecular virology/transcriptomics, Imperial College London
* **2009-2012:** Research fellow in molecular microbiology,Royal Veterinary College London & School of Veterinary Medicine, University of Copenhagen, Denmark (EU-FP7)
* **2006-2007:** Postdoctoral associate in immunogenetics,Roslin Institute, Edinburgh
* **2005-2006:** Research assistant in molecular microbiology,Illinois State University, USA
* **2002-2006:** PhD in molecular microbiologyUlster University and Illinois State University.
* **2001-2002:** MSc in biotechnology Ulster University
* **1995-2001:** Doctor of Veterinary Medicine (DVM)Aristotle University of Thessaloniki, Greece.

**Evidence of esteem:**

* **2023:** Member of the UKRI/BBSRC pool of experts
* **2021:** Chairing at the Avian Pathogens meeting 2021 Microbiology Society UK
* **2021:** External collaborator for the Laboratory of Animal Health, Agriculture University of Ioannina
* **2020:** Invited seminar at the Pirbright Institute Scientific Seminars 2020
* **2020:** Reviewed risk assessments for the establishment of a bat colony, Univ. Brunei Darussalam
* **2019:** Invited seminar in Peter Medawar Building Seminars, University of Oxford
* **2019:** Quest editor for ‘Frontiers in Cellular and Infection Microbiology’ special issue on bat viruses
* **2019:** Invited lecture for the MSc ‘Disease in Livestock ecosystems’, University of Edinburgh
* **2018:** Invited commentary/opinion article from the Journal of Avian Pathology
* **2016:** Invited lectures from City U. H. Kong for an MOOC course (VPH) at FutureLearn website.
* **2016:** Invited presentation in Malaysia (British council UK-Malaysia Vaccinology Workshop 2016)
* **2016:** Invited presentation at the BVPA meeting on viral vaccines and vaccination (Harrogate)
* **2013 & 2014:** Invited workshops on infectious diseases at the Vet. School, Kandy-Sri Lanka
* **2011-Present:** Member of the editorial board of the Journal of Food Research
* **2010-Present:** Reviewed research grants applications for: DHSC/UKRI Global Effort on COVID-19 Health Res competition 2020-College of Experts, BBSRC, MRC and Greek Education Ministry
* **2009-Present:** Reviewed more than 30 papers for: Nature, J Virol, PLOS Pathogens, Frontiers etc.

**Current and previous funding** (Total: £288,326)

* **2023:** New Lab Grant ($1,000) from Bon Opus Biosciences. Awarded in October 2023.
* **2022:** Health Research and Support Fund, University of Essex (£5,800) Manipulation of intracellular signalling and cell bioenergetics by SARS-CoV-2 variants
* **2022:** Rapid and Agile Fund scheme, University of Essex (£46,960) Development of novel therapeutics for COVID-19 variants.
* **2022:** Petroleum Technology Development Fund (PTDF/20PHD165; £58,800, Three-year PhD studentship in virology: Comparative innate immune responses in seasonal coronaviruses.
* **2021:** Global Challenges Research Fund (£35,700)A metagenomic approach to identify alternative reservoir hosts of Lassa virus and related arenaviruses in Nigeria.
* **2021:** Industrial grant from Elentec ltd (£4,727) project entitled: “Antiviral solutions – Development of solutions based on electrochemically generated metallic nanoparticles to demonstrate efficiency in eliminating bacteria and viruses”
* **2021:** Industrial grant from Blueberry Therapeutics Ltd, UK (£4,339) ‘Validation of an antiviral nanopolymer compound developed by Blueberry Therapeutics and confirm antiviral effects of the polymer against SARS-CoV-2’.
* **2020:** Daiwa Foundation Award (£7,000) Identify HBV-mediated gene expression changes of induced pluripotential stem cell-derived hepatocytes with RNA-sequencing
* **2018:** Welcome-Trust (215073/Z/18/Z; £52,000, Four-Year PhD studentship in basic science): Comparative molecular virological analysis of Caribbean and S. American Vs Pacific Zika viruses
* **2015:** Houghton Trust (£10,000) to study ‘Chicken embryonic stem cells as vaccine substrates’
* **2007:** Research project grant (£35,000) from Eadgene
* **2006:** Excellence award (£5,000) from A. Daskalopoulos Institute, Athens
* **2005:** Excellence training grant (£25,000) from ESCMID.

**Teaching and Supervision**

* **2021:** Fellow of the Higher Education Academy (FHEA)
* **2020-present:** Lectures for the UoE modules: Immunity in Health and Disease, Issues in Biomedical Science, Molecular and Developmental Immunology, Microbiology and Medical Microbiology
* **2022-present: (**Co-)-Supervisor of 3 PhD students (main supervisor for Tukur Abdullahi and Riaz Somji, UoE and co-supervisor of a Wellcome-Trust 4-year PhD student (Alanna Gallagher, ICL)
* **2020-present:** Supervisor of two MRes students at UoE (Tiffany Teoh and Dami Ogunjinmi)
* **2020-present:** Project supervisor for MSc students at the UoE MSc in Biotechnology and Molecular Medicine (4 yearly on average) and ICL MSc in Virology (1 yearly)
* **2016-present:** Tutor/assessor for the MSc’s in virology, immunology and genomic medicine (ICL)
* **2012-present:** Co-supervisor of (completed projects): 3 PhD students (ICL, RVC), 15 MSc students (MSc Molecular Biology & Pathology of viruses, ICL (9); Molecular Biotechnology, UoE (3), MRes, UoE (2)), 12 visiting scholars & 21 undergraduate students (ICL, RVC, UoE)
* **2009-present:** Part-time lecturer/examiner for the Univ. London MSc/PG in VPH
* **2008-present:** Lecturer for the virtual learning MSc and Postgraduate diplomas in VPH and Risk analysis provided by UU and the Univ. College of Dublin (approx. 30-40 students per year)
* **2009-2012:** Lectures/tutorials for VetSci/VetMed (RVC)
* **2002-present:** Laboratory demonstrations in microbiology/virology & immunology (UU, UoE, ICL).

**Outreach and Engagement**

* **2020-present:** Contributed to articles and public discussions for BBC, BBC Radio Essex & London, CNN, Reuters, Politico and Straits Times on the coronavirus pandemic and monkeypox virus
* **2020:** Presented an X-Wow lecture without borders on zoonoses for the X-WOW social enterprise for digital pathologists
* **2020:** Contributed to a documentary on the COVID-19 pandemic by Outpost Pictures (Poppy Chandler) production (08.07.2020)
* **2020:** Participated in a virtual public discussion on Pandemic, Environment, Agrifood: Social and Political Challenges organised by the Kapodistrian University of Athens and CONEF (30.06.2020)
* **2020:** Participated in an artistic virtual project (The Great Disorder) on the pandemic by Statement Art; Director Oliver Squirrell and founding artists Siris Hill and Nicolas Ruston on 01.07.2020
* **2020:** Interviewed by SkyNews on the role of bats & SARS-CoV-2
* **2019/2020:** Member of the CREST academy: scientific mentoring and support to help students aged 16–18 successfully undertake and submit a project for a British CREST award
* **2015/2016:** (Co-)authored/managed websites as community resources: AvianVirusResearch (<http://AvianVirusResearch.org>) and ChISG Browser (<http://cisbic.bioinformatics.ic.ac.uk/skinner>).
* **2013/2014:** Presentation at the Cheltenham science festival (Understanding virus-chicken battle)
* **2011:** Participated in the RVC **educational training program in schools in Potters Bar area**
* **2010:** Contributed/participated in a podcast (EU-FP7) on infection of animals with MRSA ST398
* **2009-2012:** Member of the EU-funded communication/technology testing platform for the risk management and control of MRSA ST398 in animals (<http://www.fp7-pilgrim.eu> )
* **2003-Present:** Presented in > 60 scientific meetings (oral/poster format).
* **2018-**Present: Member of Microbiology Society, World Society for Virology, European Society of Clinical Microbiology and Infectious Diseases (member of the ESCMID Study Group on Respiratory Viruses) and Greek association of Veterinarians.

**Publication summary and selected publications:**

I (co-) authored 36 peer-reviewed journal articles (20 as lead author, 14 as corresponding author, 4 as final author) [Google scholar citations (October 2023): 1449; *h*-index: 19, *i*-index: 25]

**Chapters**

* Giotis ES, Skinner MA (2021) Fowlpox virus and other avipoxviruses (Poxviridae). In: Bamford DH Zuckerman M (eds.) Encyclopedia of Virology, 4th Edition, 2, 343–348. Oxford: Academic Press.
* **Giotis ES** *et al* (2010) Standardisation and optimisation of...Book: ***Microorganisms in industry and environment*** Scientific and Industrial Research to Consumer Product, 441-445.

**Refereed full papers**

1. Diego C, Neto M, Bethany A, Da Costa KAS, Del Rosario J, Ameh V, Sabeta C, Derveni M, Arran H, Wright E, Scott S, Giotis, ES\*, Banyard AC\*, Temperton N\*(2023) Serological evidence of virus infection in Eidolon helvum fruit bats: Implications for Bushmeat Consumption in Nigeria Frontiers in Public Health, 11.  \*Final co-authors.
2. Giotis ES, Cil, E, Brooke GN (2022). Use of antiandrogens as therapeutic agents in COVID-19 patients ***Viruses*** 14, 2728.
3. Zhang Z, Penn R, Barclay WS, Giotis ES (2022). Naïve human macrophages are refractory to SARS-CoV-2 infection and exhibit a modest inflammatory response in early infection. **Viruses** 14*,* 441.
4. Leach DA, Mohr A, Giotis ES, Cil E, Isak AM, Yates LL, Barclay WS, Zwacka RM, bevan CL and Brooke GN (2021). The antiandrogen enzalutamide downregulates TMPRSS2 and reduces cellular entry of SARS-CoV-2 in human lung cells ***Nature Communications***12,4068.
5. Asfor AS, Nazki S, Reddy VRAP, Campbell E, Dulwich KL, Giotis ES, Skinner MA, Broadbent AJ (2021). Transcriptomic Analysis of inbred chicken lines reveals infectious bursal disease severity is associated with greater bursal inflammation in vivo and more rapid induction of pro-inflammatory responses in primary bursal cells stimulated ex vivo ***Viruses***13: 933.
6. Giotis ES\*, Matthews DA and Smith J (2021). Editorial: Host innate immune responses to infection by avian- and bat-borne viruses. ***Frontiers in Cellular Infection Microbiology*** 11:651289.
7. Oliveira M, Rodrigues DR, Guillory V, Kut E, Giotis ES, Skinner MA, Guabiraba R, Bryant CE, Ferguson (2021) Chicken cGAS senses fowlpox virus infection and regulates macrophage effector functions. ***Frontiers in Immunology*** 1, 11: 613079.
8. Giotis ES\*, Laidlaw SM, Bidgood SR, Albrecht D, Burden JJ, Robey RC, Mercer J, Skinner MA (2020) Modulation of early host innate immune response by an avipox vaccine virus’ lateral body protein. **Biomedicines** 8, 634.
9. Liu, PJ, Harris, JM, Marchi, E*,* D’ Arienzo V, Michler T, Wing PAC, Magri A, Ortega-Prieto AM, Klundert M, Wettengel J, Durantel D, Dorner M, Klenerman P, Protzer U, Giotis ES, McKeating JA (2020) Hypoxic gene expression in chronic hepatitis B virus infected patients is not observed in state-of-the-art in vitro and mouse infection models. ***Scientific Reports***10,14101.
10. Giotis ES\* (2020) Inferring the urban transmission of bat influenza viruses ***Frontiers in Cellular Infection Microbiology*** 10, 264.
11. Dulwich KL, Asfor A, Gray AG, Giotis ES, Skinner MA, Broadbent A (2020) The stronger downregulation of innate antiviral responses by a very virulent strain of IBDV, compared to a classical strain, is mediated by VP4. ***Frontiers in Cellular Infection Microbiology*** 10, 315.
12. Giotis ES\*, Carnell G, Young EF, Ghanny S, Soteropoulos P, Wang L-F, Barclay WS, Skinner MA, Temperton N (2019) Entry of the bat influenza H17N10 virus into mammalian cells is enabled by the MHC class II HLA-DR receptor. ***Nature microbiology***, 4: 2035-2038.
13. Giotis ES\*, Montillet G, Pain B, Skinner MA (2019) Chicken embryonic-stem cells are permissive to poxvirus recombinant vaccine vectors ***Genes (Basel)*** 20: 10(3).
14. Giotis ES\*, Skinner MA (2019) Spotlight on avian pathology: fowlpox virus. ***Avian Pathology*** 2019; 48(2):87-90.
15. Mariatulqabtiah AR, Majid NN, Giotis ES *et al* (2019) Inoculation of fowlpox…***Asia-Pacific Journal of Molecular Biology and Biotechnology*** 27, 84-94.
16. Giotis ES\*, Scott A, Rothwell L, Talbot R, Todd D, Burt DW, Glass EJ, Kaiser P (2018) CAV evades host immune responses in transformed lymphocytes. ***Journal of General Virology*** 99: 321-7.
17. Giotis ES, Ross CS, Robey RC, Nohturfft A, Goodbourn S, Skinner MA (2017) Constitutively elevated levels of SOCS1 suppress innate immune responses in DF-1 cells ***Scientific Reports*** 7: 17485.
18. Dulwich KD, Giotis ES (Joint first authors), Gray AG, Nair V, Skinner MA, Broadbent AJ (2017) Differential gene expression in chicken primary B cells infected ex vivo with attenuated and very virulent strains of infectious bursal disease virus (IBDV). ***Journal of General Virology*** 98: 2918-30
19. Tierney M, Gallagher AM, Giotis ES, Pentieva K (2017) An online survey on consumer knowledge and understanding of added sugars ***Nutrients*** 9 (1): 37-43.
20. Long JS, Giotis ES, Moncorgé O, Frise R, Mistry B, James J, Morisson M, Iqbal M, Vignal A, Skinner MA, Barclay WS (2016) Species difference in ANP32A underlies influenza A virus polymerase host restriction ***Nature***, 529:101-104.
21. Giotis ES, Robey RC, Skinner NG, Tomlinson CD, Goodbourn S, Skinner MA (2016) Chicken interferome: Avian interferon-stimulated genes identified by microarray & RNA-seq of primary chick embryo fibroblasts treated with a chicken type I interferon (IFN-α) ***Vet Res***, 47 (1), 75.
22. Giotis ES\*, Rothwell L, Scott A, Todd D, Burt DW, Glass EJ, Kaiser P (2015) Transcriptomic profiling of virus-host interactions following CAV infection in vivo ***PLoS One***, 10: e0134866.
23. Kennedy TG, Giotis ES\*, McKevitt A (2014) Microbial assessment of an upward and downward dehiding technique in a commercial beef processing plant ***Journal of Meat Science*** 97(4): 486-9.
24. Wheatley P, Giotis ES\*, McKevitt A (2014) Effects of slaughtering operations on carcass contamination in an Irish pork production plant***. Irish Veterinary Journal*** 67(7): 1.
25. Laidlaw S, Robey R, Davies M, Giotis ES, Ross C, Buttigieg K, Goodbourn S, Skinner MA (2013) Genetic screen of a mutant poxvirus library identifies an ankyrin repeat protein involved in blocking induction of avian type I interferon. ***Journal of Virology*** 87(9): 5041-5052.
26. Porphyre T, Giotis ES, Lloyd DH, Stärk KDC (2012) [A metapopulation model to assess the capacity of spread of meticillin-resistant *S. aureus* ST398 in humans](http://dx.plos.org/10.1371/journal.pone.0047504) ***PLoS One*** 7 (10); e47504.
27. Giotis, ES, Loeffler A, Knight-Jones T, Lloyd DH (2012) Development of a skin colonisation model in gnotobiotic piglets for the study of the microbial ecology of MRSA ST398.***Journal of Applied Microbiology***113 (4), 992-1000.
28. Carson M, Meredith AL, Shaw DJ, Giotis ES, Lloyd DH, Loeffler A (2012) Foxes as potential wildlife reservoir for multidrug-resistant staphylococci ***Journal of Vector Zoonotic Diseases***12(7): 583-587.
29. Giotis ES, Loeffler A, Lindsay J, Lloyd DH (2011) Reduced sensitivity of oxacillin-screening agar for the detection of MRSA ST398 from colonised pigs. ***Journal of Clinical Microbiology*** 49(8): 310.
30. Giotis ES\*, Muthayian A, Wilkinson BJ, Blair IS, McDowell DA (2010) Transcriptomic analysis of the Alkaline-Tolerance Response in *L. monocytogenes* 10403S. ***Journal of Foodborne Pathogens Diseases***7(10): 1147-57.
31. **Giotis ES\*,** McDowell DA, Blair IS (2009) Effects of short-term alkaline adaptation on surface properties of Listeria monocytogenes 10403S ***Open Food Science Journal*** 3, 62-65.
32. Singh K, Giotis ES, Chamberlain NR, Stuart MK, Wilkinson BJ (2008) Insertional inactivation of branched-chain keto dehydrogenase in *S. aureus* leads to altered membrane fatty acid composition and increased susceptibility to stresses. ***Journal of Applied Environmental Microbiology*** 74: 5882-90.
33. Giotis ES, Muthayian A, Wilkinson BJ, Blair IS, McDowell DA (2008) Genomic and proteomic analysis of the Alkali-Tolerance Response in *L. monocytogenes* 10403S ***BMC Microbiology*** 8:102**.**
34. Giotis ES, Julotok M, Wilkinson BJ, Blair IS, McDowell DA (2008) Role of sigB factor in the Alkaline Tolerance Response of *L. monocytogenes* 10403S and cross protection to subsequent ethanol and osmotic stress. ***Journal of Food Protection*** 71(7): 1481-1485**.**
35. Giotis ES, McDowell DA, Blair IS (2007) Morphological changes of *L. monocytogenes* when subjected in mild alkaline conditions. ***International Journal of Food Microbiology*** 120(3): 250-8**.**
36. Giotis ES, McDowell DA, Blair IS, Wilkinson BJ (2007) Role of branched-chain fatty acids in pH stress tolerance in *L. monocytogenes.* ***Journal of Applied Environmental Microbiology*** 73: 997-1001**.**