

# Publications

## Selected Fellows' Publications 2020–21

**Altehenger, J** (2020). 'Industrial and Chinese: Exhibiting Mao's China at the Leipzig Trade Fairs'. *J Contemp Hist* 55(4): 845–70

**Altehenger, J** (2021). 'Dictionaries post-1949' in JW Chen *et al.* (eds) *Literary Information in China: A History* (Columbia)

**Ash, R** (2021). 'The staging of death: Tacitus' Agrippina the Younger and the dramatic turn' in A Damtoft Poulsen and A Jönsson (eds) *Usages of the Past in Roman Historiography* (Leiden), pp.197–224

**Barr, AJ** (2021). 'Testing Bell inequalities in Higgs boson decays', arXiv:2106.01377

ATLAS collaboration *et al.* and **AJ Barr** (2021). 'Search for new phenomena in events with two opposite-charge leptons, jets and missing transverse momentum in  $pp$  collisions at  $\sqrt{s}=13$  TeV with the ATLAS detector'. *J High Energy Phys* 165

ATLAS collaboration *et al.* and **AJ Barr** (2020). 'Performance of the missing transverse momentum triggers for the ATLAS detector during Run-2 data taking'. *J High Energy Phys* 80

**Barron, HC** (2021). 'Neural inhibition for continual learning and memory'. *Curr Opin Neurobiol* 67, 85–94

**Barron, HC, et al.** (2020). 'Neuronal computation underlying inferential reasoning in humans and mice'. *Cell* 183(1): 228–43

**Barron, HC, et al.** (2021). 'Cross-species neuroscience: closing the explanatory gap'. *Phil Trans R Soc B* 376(1815), 20190633

**Barron, HC, R Auksztulewicz and K Friston** (2020). 'Prediction and memory: a predictive coding account'. *Prog Neurobiol* 192: 101821

Heinze, K, *et al.* and **HC Barron** (2020). 'Impaired inhibitory processing: a new therapeutic target for autism and psychosis?'. *Brit J Psychiat* 218(6): 295–8

Arone, GZ and **DLB Brantner** (2021). 'The action of Young subgroups on the partition complex'. *Publ.math.IHES* arXiv:1801.01491

**Costiner, L** (2021). 'A newly-discovered illuminated manuscript of the *Meditationes Vitae Christi* produced in fifteenth-century Veneto (Vatican City, Biblioteca Apostolica, MS Reg. Lat. 478)' in H Flora and P Toth (eds) *Meditationes Vitae Christi Reconsidered: New Perspectives on Text and Image* (Brepols)

**Costiner, L** (2021). 'An illuminated fifteenth-century Milanese manuscript of the "Meditationes Vitae Christi"'. *Burlington Mag* 163: 324–31

Aubry, M (moderator), **L Costiner** and S James (2021). 'Artificial intelligence and art history: a necessary debate?'. *Histoire de l'art* 87: 1–6

Fominykh, M, *et al.* and **L Costiner** (2020). 'Model augmented reality curriculum'. *ITiCSE-WGR '20: Proceedings of the Working Group Reports on Innovation and Technology in Computer Science Education* 131–49 doi: 10.1145/3437800.3439205

Gonzalez Carabarin, L, and **L Costiner** (2021). 'An unsupervised learning approach to text line detection in complex illuminated Medieval manuscripts' in S Reinsone *et al.* (eds) *Post-Proceedings of the 5th Conference Digital Humanities in the Nordic Countries 2020. CEUR Workshop Proceedings, April 2021*

Frost, JN, *et al.* and **SJ Draper** (2021). 'Hepcidin-mediated hypoferremia disrupts immune responses to vaccination and infection'. *Med* 2(2): 164–79 e12

Milne, K, *et al.* and **SJ Draper** (2021). 'Mapping immune variation and *var* gene switching in naive hosts infected with *Plasmodium falciparum*'. *eLife* 10

Minassian, AM, *et al.* and **SJ Draper** (2021). 'Reduced blood-stage malaria growth and immune correlates in humans following RH5 vaccination'. *Med* 2(6): 701–19.e19

Nielsen, CM, *et al.* and **SJ Draper** (2021). 'Protein/ASO<sub>1</sub> vaccination elicits stronger, more Th2-skewed antigen-specific human T follicular helper cell responses than heterologous viral vectors'. *Cell Rep Med* 2(3): 100207

- Rahikainen, R, *et al.* and **SJ Draper** (2021). 'Overcoming symmetry mismatch in vaccine nanoassembly through spontaneous amidation'. *Angew Chem Int Ed Engl* 60(1): 321–30
- Dunn, FS** *et al.* (2021). 'The developmental biology of *Charnia masoni* demonstrates the eumetazoan affinity of the Ediacaran rangeomorphs'. *Sci Adv* (in press)
- Erban, R**, and R van Gorder (2021). 'On the sum of positive divisors functions'. *Res Number Theory* 7(25). doi: 10.1007/s40993-021-00240-6
- G Enciso, **R Erban** and J Kim (2021). 'Identifiability of stochastically modelled reaction networks'. *Eur J Appl Math*: 1–23
- Fine, G** (2021). *Essays in Ancient Epistemology* (OUP)
- Gildea, R**, and I Tames (eds) (2020). *Fighters across Frontiers: Transnational Resistance in Europe, 1936–48* (Manchester University Press)
- Ibba F, *et al.* and **V Gouverneur** (2020). 'Impact of multiple hydrogen bonds with fluoride on catalysis: insight from NMR spectroscopy'. *J Am Chem Soc* 142(46): 19731–44
- Josephson, B, *et al.* and **V Gouverneur** (2020). 'Light-driven post-translational installation of reactive protein side chains'. *Nature* 585: 530–7
- Kee, CW, *et al.* and **V Gouverneur** (2020). '<sup>18</sup>F–Trifluoromethanesulfinate enables direct C–H <sup>18</sup>F–trifluoromethylation of native aromatic residues in peptides'. *J Am Chem Soc* 142(3): 1180–5
- Roagna, G, *et al.* and **V Gouverneur** (2020). 'Hydrogen bonding phase-transfer catalysis with ionic reactants: enantioselective synthesis of  $\gamma$ -fluoroamines'. *J Am Chem Soc* 142(33): 14045–51
- Sap, JBl, *et al.* and **V Gouverneur** (2020). 'Organophotoredox hydrodefluorination of trifluoromethylarenes with translational applicability to drug discovery'. *J Am Chem Soc* 142(20): 9181–7
- Bullock, PR, and **DM Grimley** (eds.) (2021) *Music's Nordic Breakthrough: Aesthetics, Modernity, and Cultural Exchange, 1890–1930* (Boydell Press: Woodbridge)
- Gruen, ES** (2020). *Ethnicity in the Ancient World: Did it Matter?* (Berlin: De Gruyter)
- Gruen, ES** (2020). 'The Sibylline Oracles and resistance to Rome' in JJ Price and K Berthelot (eds), *The Future of Rome: Roman, Greek, Jewish and Christian Visions* (Cambridge University Press), pp. 189–205
- Gruen, ES** (2020). 'Judaism in the Diaspora' in M Henze and RA Werline (eds), *Early Judaism and its Modern Interpreters* (Atlanta: SBL Press), pp. 69–91
- Gruen, ES** (2021). 'Jewish Voices on Rome and Roman Imperialism' in AM Berlin and PJ Kosmin (eds), *The Middle Maccabees: Archaeology, History, and the Rise of the Hasmonean Kingdom* (Atlanta: SBL Press), pp. 379–90
- Scott, RHH, *et al.* and **SM Hooker** (2020). 'Electron trapping and reinjection in prepulse-shaped gas targets for laser-plasma accelerators'. *Phys Rev Accel Beams* 23(11)
- Picksley, A, *et al.* and **SM Hooker** (2020). 'Meter-scale conditioned hydrodynamic optical-field-ionized plasma channels'. *Phys Rev E*, 102(5)
- Baral, S, *et al.* and **S Gupta** (2020). 'Leveraging epidemiological principles to evaluate Sweden's Covid-19 response'. *Ann Epidemiol* 54: 21–6
- Dejnirattisai, W, *et al.* and **S Gupta** (2021). 'The antigenic anatomy of SARS-CoV-2 receptor binding domain'. *Cell* 184(8): 2183–200.e22
- Pinotti, F, *et al.* and **S Gupta** (2021). 'Potential impact of individual exposure histories to endemic human coronaviruses on age-dependent severity of Covid-19'. *BMC Med* 19(1)
- Pinotti, F, *et al.* and **S Gupta** (2021) 'Real-time seroprevalence and exposure levels of emerging pathogens in infection-naïve host populations'. *Sci Rep* 11: 5825
- Swarthout, TD, *et al.* and **S Gupta** (2020). 'High residual carriage of vaccine-serotype *Streptococcus pneumoniae* after introduction of pneumococcal conjugate vaccine in Malawi'. *Nat Commun* 11(1): 2222
- Alam, N, and **MK Higgins** (2020). 'A spike with which to beat Covid-19?'. *Nat Rev Microbiol* 18, 414
- Campeotto, I, *et al.* and **MK Higgins** (2020). 'The structure of the cysteine-rich domain of *Plasmodium falciparum* P113 identifies the location of the RH5 binding site'. *mBio* 11(5). e01566–20
- Gérard, SF, *et al.* and **MK Higgins** (2020). 'Structure of the inhibited state of the Sec translocon'. *Mol Cell* 79(3): 406–15.e7
- Harrison, TE, *et al.* and **MK Higgins** (2020). 'Structure of the Plasmodium-interspersed repeat proteins of the malaria parasite'. *Proc Natl Acad Sci USA* 117(50) 32098–104
- Harrison, TE, *et al.* and **MK Higgins** (2020). 'Structural basis for RIFIN-mediated activation of LILRB1 in malaria'. *Nature* 587: 309–12
- Dai, Y, R Pracana and **PWH Holland** (2020). 'Divergent genes in gerbils: prevalence, relation to GC-biased substitution, and phenotypic relevance'. *BMC Evol Biol* 20, 134
- Dai, Y, S Trigueros and **PWH Holland** (2021). 'Compromised function of the pancreatic transcription factor PDX1 in a lineage of desert rodents'. *J Mammal Evol* doi: 10.1007/s10914-021-09544-x



Lewin, TD, AH Royall and **PWH Holland** (2021). 'Dynamic molecular evolution of mammalian homeobox genes: duplication, loss, divergence and gene conversion sculpt PRD class repertoires', *J Mol Evol* 89(6): 396–414

Xu, F. *et al.* and **PWH Holland** (2021). 'Evidence from oyster suggests an ancient role for Pdx in regulating insulin gene expression in animals', *Nat Commun* 12, 3117

**King, AJ** (2020). 'Feedback systems: descending pathways and adaptive coding in the auditory system' in B Fitzsch (ed.) and B Grothe (vol ed.) *The Senses: A Comprehensive Reference*, vol 2 (Elsevier, Academic Press), pp. 732–48

**King, AJ.** and KMM Walker (2020). 'Listening in complex acoustic scenes', *Curr Opin Physiol* 18: 63–72

Lohse, M. *et al.* and **AJ King** (2021). 'Subcortical circuits mediate communication between primary sensory cortical areas in mice', *Nat Commun* 12(1), 3916

Rahman, M, BDB Willmore, **AJ King** and NS Harper (2020). 'Simple spectral transformations capture auditory input to cortex', *Proc Natl Acad Sci USA* 117(45): 28442–51

**Lemos, I** (2021). 'The transition from the Late Bronze to the Early Iron Age in Euboea and the Euboean Gulf' in M D'Acunto and T Cinquantaquattro (eds), *Euboica II. Euboeans in the Northern Aegean and Central Italy* (Naples) pp. 37–54

**Lemos, I,** A Mazarakis Ainian and V Vlachou (2020). *Excavations at Oropos, The Protogeometric and Sub-Protogeometric Period (10th – 9th centuries BC)* (University of Thessaly Press) (in Greek with English translation)

**Lucey, M** (2021). 'How You Read *Madame Bovary*', *Representations* 156 (to be published November 2021)

Garlick, R, **K Orkin** and S Quinn (2020). 'Call me maybe: experimental evidence on frequency and medium effects in microenterprise surveys', *World Bank Econ Rev* 34(2): 418–43

Gerard, F, C Imbert and **K Orkin** (2020). 'Social protection response to the Covid-19 crisis: options for developing countries', *Oxford Rev Econ Pol* 36(S1): S281–96

Burton, RB, *et al.* and **DJ Paterson** (2020). 'Optical interrogation of sympathetic neuronal effects on macroscopic cardiomyocyte network dynamics', *iScience* 23(7): 101334

Davis, H, N Herring and **DJ Paterson** (2020). 'Downregulation of M current is coupled to membrane excitability in sympathetic neurons before the onset of hypertension', *Hypertension* 76(6): 1915–23

Herring, N, and **DJ Paterson** (2021). 'The heart's little brain: shedding new light and clarity on the "black box"', *Circ Res* 128(9): 1297–9

Sverrisdottir, YB, *et al.* and **DJ Paterson** (2020). 'Human dorsal root ganglion stimulation reduces sympathetic outflow and long-term blood pressure', *JACC Basic Transl Sci* 5(10): 973–85

**Payne, J** (2020). 'The institutional design of financial supervision and financial stability' in F Amtenbrink and C Herrmann (eds) *The EU Law of Economic and Monetary Union* (OUP)

**Payne, J,** and L Gullifer (2021). 'Intermediated securities: the European perspective' in JH Binder and P Saguato (eds) *The Law and Regulation of Financial Market Infrastructure: A Trans-Atlantic Perspective on Securities and Derivatives Markets* (OUP)

- Gullifer, L, and J **Payne** (2020). 'Intermediated securities and investor protection', *Law Quart Rev* 201 [Case Note]
- Gullifer, L, and J **Payne** (2020). *Corporate Finance Law: Principles and Policy*, 3rd edn (Hart)
- Phillips, P** (2020). 'The Masses of Giovanni Pierluigi da Palestrina', *Music Times* autumn: 3–72
- Radda, G** (2020). *My Life in Science: Not an Autobiography* (self-published)
- Rawson, J**, J. KV Chugunov, Y Grebnev and H Limin (2020). 'Shang culture and its contacts with Mongolia: a perspective from burial patterns at Yinxu' in Beijing Daxue Chutu Wenxian Yanjiusuo (ed), *Bronzes and Bronze Inscriptions* (Shanghai Guji Chubanshe), pp. 1–38
- Rawson, J**, et al. (2020). 'Chariotry and prone burials: reassessing late Shang China's relationship with its northern neighbours', *J World Prehist* 33(2): 135–68
- Liu, C, et al. and J **Rawson** (2020). 'Metallurgy at the crossroads: new analyses of copper-based objects at Tianshanbeilu, eastern Xinjiang, China', *Acta Geol Sin-Engl* 94(3): 594–602
- Sawyer, D** (2021). 'Form, time, and the "First English Sonnet"', *Chaucer Rev* 56(3): 193–224
- Bott, AFA, et al. and AA **Schekochihin** (2021). 'Time-resolved turbulent dynamo in a laser plasma', *Proc Natl Acad Sci* 118(11): e2015729118
- Hosking, DN, AA **Schekochihin** and SA Balbus (2020). 'Elasticity of tangled magnetic fields', *J Plasma Phys* 86(5): 905860511
- Ivanov, PG, AA **Schekochihin** et al. (2020). 'Zonally dominated dynamics and Dimits threshold in curvature-driven ITG turbulence', *J Plasma Phys* 86(5): 855860502
- Kawazura, YA, AA **Schekochihin** et al. (2020). 'Ion versus electron heating in compressively driven astrophysical gyrokinetic turbulence', *Phys Rev X* 10: 041050
- Kunz, MW, J Squire, AA **Schekochihin** and E Quataert (2020). 'Self-sustaining sound in high-beta collisionless plasma', *J Plasma Phys* 86(6): 905860603
- Aru, J, et al. and A **Scott** (2020). 'Exceptional graphs for the random walk', *Ann Inst H Poincaré (B) Probab Statist* 56(3): 2017–27
- Bonamy, M, N Morrison and A **Scott** (2020). 'Partitioning the vertices of a torus into isomorphic subgraphs', *J Comb Theory A* 174: 105252
- Chudnovsky, M, A **Scott** et al. (2020). 'Proof of the Kalai-Meshulam conjecture', *Israel J Math* 238: 639–61
- Chudnovsky, M, A **Scott** et al. (2020). 'Pure pairs. I. Trees and linear anticomplete pairs', *Adv Math* 375: 107396
- Goldschmidt, C, S Griffiths and A **Scott** (2020). 'Moderate deviations of subgraph counts in the Erdős-Rényi random graphs  $G(n, m)$  and  $G(n, p)$ ', *T Am Math Soc* 373: 5517–85
- Dooley, K, H **Shue**, et al. (2021). 'Ethical choices behind quantifications of fair contributions under the Paris Agreement', *Nat Clim Chang* 11: 300–305
- Shue, H** (2021). *The Pivotal Generation: Why We Have A Moral Responsibility to Slow Climate Change Right Now* (Princeton)
- Stubbins Bates, E** (2020). 'The British Army's training in international humanitarian law', *J Conflict Security Law* 25(2): 291–315
- Stubbins Bates, E** (2020). '"Impossible or disproportionate burden": the UK's approach to the investigatory obligation under Articles 2 and 3 ECHR', *Eur Hum Right Law Rev* 5: 499–511
- Kastrati G, I **Tracey** et al. (2021). 'Genetic Influence on Nociceptive Processing in the Human Brain – A Twin Study' *Cereb Cortex* bhab206
- Soni A, I **Tracey** et al. (2020). 'Hospitalization in fibromyalgia: a cohort-level observational study of in-patient procedures, costs and geographical variation in England' *Rheumatology* 59(8):2074–2084
- Peberdy, R, and P **Waller** (eds) (2021). *A Dictionary of British and Irish History* (Wiley Blackwell)
- Walworth, J** (2020). *Merton College Library: An Illustrated History* (Oxford: Bodleian Library)
- Walworth, J** (2021). 'Private press books, & two kinds of academic library: a personal view', *Matrix* 36: 51–4
- Whitworth, MH** (2020). 'Literature and science' in J Frow et al. (eds) *Oxford Encyclopaedia of Literary Theory* (OUP)