

Prof Marc Chadeau-Hyam

Imperial College School of Public Health
 White City Campus London W12 0BZ, UK
 Birth Date: 07/03/1976

Phone:
 French: +33 (0)6 86 46 98 68
 UK: +44 (0)7595 600 337
 m.chadeau@imperial.ac.uk

**PROFESSOR AND GROUP LEAD IN COMPUTATIONAL EPIDEMIOLOGY,
 BIostatISTICS AND MACHINE LEARNING.**

RESEARCH AND PROFESSIONAL PROFILE

Marc Chadeau-Hyam is a distinguished statistician for his translational research devising reproducible and interpretable methods for the characterisation of the Exposome via omics profiling and integration. He has been involved as lead statistician in multiple large-scale projects exploring biological signatures of external insults. He is involved in the Real-time Assessment of Community Transmission (REACT) Study as lead statistician and contributed to the real-time monitoring of the SARS-CoV-2 epidemic in England. His group includes 20 multidisciplinary scientists focusing on the analysis of data from mega-sized and/or deeply phenotyped studies. He created and leads an MSc in Health data analytics, which attracts 40 to 60 (medical) students per year .

POSITIONS HELD

- | | |
|---------------------|--|
| 2020-present | Professor in Computational Epidemiology and Biostatistics
<i>Imperial College, London. School of Public Health, Department of Epidemiology and Biostatistics (SPH/EBS)</i> |
| 2019-present | Honorary Professor
<i>SciencesPo, Paris. School of Public Affairs</i> |
| 2018-2020 | Reader in Computational Epidemiology and Exposome Science
<i>Imperial College, London (SPH/EBS).</i> |
| 2015-2018 | Senior Lecturer in Statistical Bioinformatics
<i>Imperial College, London (SPH/EBS).</i> |
| 2013-present | Honorary Professor Position <i>Utrecht University.</i>
Institute for Risk Assessment Sciences |
| 2011-2015 | Lecturer in Statistical Bioinformatics <i>Imperial College, London.</i>
<i>Imperial College, London (SPH/EBS).</i> |
| 2009-11 | Research Fellow
<i>Imperial College, London (SPH/EBS).</i> |
| 2006-08 | Research Associate
<i>Imperial College, London (SPH/EBS).</i> |
| 2005-06 | Postdoctoral position <i>(personal EU grant) LSHTM, London.</i> |

EDUCATION

- | | |
|----------------|--|
| 2001-05 | PhD in Biostatistics (Distinction) <i>INSERM, Paris</i>
<i>Title: ‘Two approaches to model the epidemic of vCJD in France’</i> |
| 2000-01 | MSc in Biostatistics (Distinction) <i>Masters (‘D.E.A’) of Public Health,</i>
<i>major in biostatistics, University of Paris Sud, Villejuif.</i> |
| 1997-00 | DEng in food sciences, major in statistics, <i>ENITIAA, one of the French</i>
<i>‘grande école’ specialised in food sciences, Nantes.</i> |

COLLABORATIONS/ OTHER ACTIVITIES

External	Cambridge University (UK), University of California, Berkeley (USA), Harvard University, Boston (USA), IARC, Utrecht University (NL), Tromsø University (Norway), INSERM - UPS (Fce), Pasteur Institute (Fce), INRAE (Fce)
Memberships	- <i>ANSES (France)</i> : Member of the expert group on animal TSE (2007-11) - <i>Royal Statistical Society</i> : Fellow (2014-present) - <i>L'Oréal Exposome Board</i> : Member (2019-present) - <i>Associate Editor</i> : Frontiers in Public Health (2019-present), Exposome, Elsevier
Reviewing	- <i>Journals</i> : Lancet, Lancet Oncology, Int J Epidemiol, Int J Cancer, Statistics and Computing, Science, Nature NEJM, ... - <i>Grants</i> : EU H2020, UKRI, Medical Research Council, Cancer Research UK, French Institute for Cancer (INCa)
Awards	- Queen's Anniversary Prize for COVID-19 response (including REACT study team, 2022) - Imperial President's Medal for Outstanding Research Team (to REACT study team, 2021)

COMPLETED FUNDING (AS PI/CO-PI)

EU- Neuroprion Network of Excellence (2005-2006). Modelling of the French vCJD epidemic (£23,000; PI)

Fondation pour la Recherche Medicale (2006). Postdoctoral grant 'Modelling of the French vCJD epidemic' (£21,000; PI)

EU-FP7 (2009-2013). EnviroGenoMarkers: Genomics biomarkers of Environmental health (£600K, Role Co-Investigator)

Fondation pour la Recherche Medicale (2012-13). Postdoctoral grant 'A Pilot Study to Characterise the Main Exposome Features in Relation to Non-Hodgkin's Lymphoma' (£21,000; PI)

Fondation de France (2013-15). Postdoctoral fellowship 'Investigating methylation markers of lifestyle and environmental exposures' (£52,000; PI)

EU-FP7 (2012-2016). Exposomics - Application of omic techniques to the study of environmental exposures and chronic disease (€9M, Role: Co-PI, and WP leader - £175K)

Chilean Ministry of Education (2015-19). PhD Fellowship (£75K, PI)

EU-H2020 (2015-2019). LifePath - Lifecourse biological pathways underlying social differences in healthy ageing (€6M, Role: Co-PI, and WP leader - £250K)

Cancer Research UK (2016-2019). Mechanomics: Investigating molecular mechanisms involved in smoking-induced lung cancer (£300K, Role: PI)

Norwegian Research Council (2017-2021). Identifying biomarkers of metastatic lung cancer using Gene expression, DNA methylation and microRNAs in blood. (€1.1M, Role Co-PI; £90K).

ONGOING FUNDING (AS PI/CO-PI)

MRC (2019-2024). MRC- Using metabolomics to investigate the metabolic signatures and associated pathways linked to short-term exposure to air pollutants. Role: Co-PI, £30K)

MRC (2020-2024). MRC - Exposure to particulate matter on the London Underground in healthy subjects and patients with chronic respiratory disease. Role: Co-PI, £60K)

RCN - Norwegian Research Council (2019-2026). Healthy Choices and the social gradient. (€5M, Role Local-PI; £500K).

EU-H2020 (2020-2025). EXposome Powered tools for healthy living in urban Settings - EXPANSE (€12M, Role: Local-PI, and WP leader - £980K)

EU-H2020 (2020-2025). Dynamic longitudinal exposome trajectories in cardiovascular and metabolic Non-communicable diseases - LongITools (€12M, Role: Local-PI, and WP leader - £750K)

MRC (2020-2025). UK-Korea partnership on molecular phenotypes of asthma - PRISM (£2M, Role: Co-PI, and WP leader - £350K)

Horizon Europe (2023-2028). DISCERN project: Discovering the causes of three poorly understood cancers in Europe (€12M, Role: Local-PI, and WP leader - £650K)

Horizon Europe (2024-2030). STAGE project: Stay Healthy Through Ageing: An Integrated Life-Course Approach for Person-Centred Solutions and Care for Ageing with Multi-morbidity in the European Regions (€20M). Role: Local-PI, and WP leader - £950K)

UKRI (2023-2025). AI-RESPIRE: AI for Personalised Respiratory Health and Pollution. Role: Co-PI, and WP leader - £100K)

TEACHING AND SUPERVISION

Teaching	- Imperial College: Lectures/Practicals (BSc, MSc)
Organisation	- Programme Director : MSc Health Data Analytics Dept of Epidemiology and Biostatistics, SPH, Imperial College
	- Director of the 'Exposome Analytics' short course (6 editions)
Team Supervision	- 25 MSc Students(8 Ongoing)
(Currently 19 staff)	- 18 PhD students (12 as primary, 10 completed)
	- 9 Research Assistants
	- 19 post-doc researchers (12 completed)
	- 3 Lecturers
PhD Assessment	- Examiner (Internal and external) of 18 PhD in Biostatistics

LANGUAGES

French	Native language.
English	Fluent.
Spanish	Notions.

PUBLICATIONS

TOTAL: 227 ; ACCEPTED: 195, H-INDEX: 61 ; I₁₀-INDEX: 148 - # CITATIONS: 13,879

**Joint first author ; **Joint last author.*

Published

1. Chia SB, Johnson BJ, Hu J, Valença-Pereira F, Chadeau-Hyam M, Guntoro F, Montgomery H, Boorgula MP, Sreekanth V, Goodspeed A, Davenport B, De Dominici M, Zaberezhnyy V, Schleicher WE, Gao D, Cadar AN, Petriz-Otaño L, Papanicolaou M, Beheshti A, Baylin SB, Guarneri JW, Wallace DC, Costello JC, Bartley JM, Morrison TE, Vermeulen R, Aguirre-Ghiso JA, Rincon M, DeGregori J (2025). *Respiratory viral infections awaken metastatic breast cancer cells in lungs. Nature*, doi:10.1038/s41586-025-09332-0
2. **Whitaker M, Rodrigues S, Cooke G, Virlon B, Donnelly CA, Ward H, Elliott P, Chadeau-Hyam M (2025). *How COVID-19 affected academic publishing: a 3-year study of 17 million research papers. International Journal of Epidemiology* 2025 ; 54(3): dyaf058.
3. **Bowden SJ, Bodinier B, Paraskevaidi M, Kalliala I, Nasioutziki M, Ellis LB, Zuehlke RC, Flanagan JM, Kyrgiou M, Chadeau-Hyam M. (2025). *DNA methylation signatures of cervical pre-invasive and invasive disease: An epigenome-wide association study. International Journal of Cancer* 2025 ; 157(2): 305-16.
4. Parsons RE, Douglas P, Ashworth D, Hansell AL, Sepai O, Chadeau-Hyam M, Toledano MB. (2025). *Polychlorinated dibenzo-dioxin/furan and polychlorinated biphenyl concentrations in the human milk of individuals living near municipal waste incinerators in the UK: Findings from the Breast milk, Environment, Early-life, and development (BEED) human biomonitoring study. Environmental Research* 2025 ; 267: 120588.
5. Atchison CJ, Gilby N, Pantelidou G, Clemens S, Pickering K, Chadeau-Hyam M, Ashby D, Barclay WS, Cooke GS, Darzi A, Riley S, Donnelly CA, Ward H, Elliott P. (2025) *Strategies to Increase Response Rate and Reduce Nonresponse Bias in Population Health Research: Analysis of a Series of Randomized Controlled Experiments during a Large COVID-19 Study. JMIR Public Health Surveill* 2025 ; 11: e60022.
6. Makrufardi F, Peng S-W, Chung KF, Chadeau-Hyam M, Lee K-Y, Hsiao T-C, Ho K-F, Rusmawatiningsih D, Murni IK, Arguni E, Wang Y-H, Ho S-C, Yang F-M, Chuang K-J, Lin S-C, Chuang H-C. (2025). *Extreme temperatures modulate gene expression in the airway epithelium of the lungs in mice and asthma patients. Frontiers in Medicine* 2025 ; Volume 12 - 2025.
7. **Peng F-J, Lin C-A, Wada R, Bodinier B, Iglesias-Gonzalez A, Palazzi P, Streel S, Guillaume M, Chadeau-Hyam M, Appenzeller BMR (2025). *Cardiovascular risk factors in relation to hair polycyclic aromatic hydrocarbons in the NESCAV study. Environment International* 2024 ; 194: 109170.
8. Mills C, Chadeau-Hyam M, Elliott P, Donnelly CA. (2024). *The utility of wastewater surveillance for monitoring SARS-CoV-2 prevalence. PNAS Nexus* 2024 ; 3(10): pgae438.
9. **Bodinier B, Rodrigues S, Karimi M, Filippi S, Chiquet J, Chadeau-Hyam M (2024). *Stability Selection and Consensus Clustering in R: The R Package sharp. Journal of Statistical Software*, 112(5), 1-27. doi:10.18637/jss.v112.i05
10. Onwuka JU, Guida F, Langdon R, Johansson M, Severi G, Milne RL, Dugue P-A, Southey MC, Vineis P, Sandanger T, Nost T, Chadeau-Hyam M, Relton C, Robbins HA, Suderman M, Johansson M (2024). *Blood-based DNA methylation markers for lung cancer prediction. BMJ Oncology*, 3(1), e000334. doi:10.1136/bmjonc-2024-000334

11. **Elliott J, Bodinier B, Whitaker M, Wada R, Cooke G, Ward H, Tzoulaki I, Elliott P, Chadeau-Hyam M (2024). *Sex inequalities in cardiovascular risk prediction. Cardiovascular Research.* doi:10.1093/cvr/cvae123
12. **Cheng SL, Hedges M, Keski-Rahkonen P, Chatziioannou AC, Scalbert A, Chung KF, Sinharay R, Green DC, de Kok TMCM, Vlaanderen J, Kyrtopoulos SA, Kelly F, Portengen L, Vineis P, Vermeulen RCH, Chadeau-Hyam M, Dagnino S (2024). *Multimic Signatures of Traffic-Related Air Pollution in London Reveal Potential Short-Term Perturbations in Gut Microbiome-Related Pathways. Environmental Science and Technology, 58(20).* doi:10.1021/acs.est.3c09148
13. **Vermeulen R, Bodinier B, Dagnino S, Wada R, Wang X, Silverman D, Albanes D, Freedman N, Rahman M, Bell D, Chadeau-Hyam M, Rothman N (2024). *A prospective study of smoking-related white blood cell DNA methylation markers and risk of bladder cancer. European Journal of Epidemiology, 39(4).* doi:10.1007/s10654-024-01110-y
14. Hampshire A, Azor A, Atchison C, Trender W, Hellyer PJ, Giunchiglia V, Husain M, Cooke GS, Cooper E, Lound A, Donnelly CA, Chadeau-Hyam M, Ward H, Elliott P (2024). *Cognition and Memory after Covid-19 in a Large Community Sample. New England Journal of Medicine, 390(9).* doi:10.1056/NEJMoa2311330
15. **Wada R, Peng F-J, Lin C-A, Vermeulen R, Iglesias-Gonzalez A, Palazzi P, Bodinier B, Streel S, Guillaume M, Vuckovic D, Dagnino S, Chiquet J, Appenzeller BMR, Chadeau-Hyam M (2024). *Hair-Derived Exposome Exploration of Cardiometabolic Health: Piloting a Bayesian Multitrait Variable Selection Approach. Environmental Science and Technology, 58(12).* doi:10.1021/acs.est.3c08739
16. Neufcourt L, Castagne R, Wilsgaard T, Grimsgaard S, Chadeau-Hyam M, Vuckovic D, Ugarteche-Perez A, Farbu EH, Sandanger TM, Delpierre C, Kelly-Irving M (2024). *Educational patterning in biological health seven years apart: Findings from the TromsÅ, Study. Psychoneuroendocrinology, 160, 106670.* doi:10.1016/j.psyneuen.2023.106670
17. Borges MC, Clayton GL, Freathy RM, Felix JF, Fernandez-Sanles A, Soares AG, Kilpi F, Yang Q, Meechan RRC, Richmond RC, Liu X, Skotte L, Irizar A, Hattersley AT, Bodinier B, Scholtens DM, Nohr EA, Bond TA, Hayes MG, West J, Tyrrell J, Wright J, Bouchard L, Murcia M, Bustamante M, Chadeau-Hyam M, Jarvelin M-R, Vrijheid M, Perron P, Magnus P, Gaillard R, Jaddoe VWV, Lowe WL, Feenstra B, Hivert M-F, Sorensen TIA, Haberg SE, Serbert S, Magnus M, Lawlor DA (2024). *Integrating multiple lines of evidence to assess the effects of maternal BMI on pregnancy and perinatal outcomes. BMC Medicine, 22(1), 32.* doi:10.1186/s12916-023-03167-0
18. **Peng F-J, Lin C-A, Wada R, Bodinier B, Iglesias-Gonzalez A, Palazzi P, Streel S, Guillaume M, Vuckovic D, Chadeau-Hyam M, Appenzeller BMR (2024). *Association of hair polychlorinated biphenyls and multiclass pesticides with obesity, diabetes, hypertension and dyslipidemia in NESCAV study. Journal of Hazardous Materials, 461, 132637.* doi:10.1016/j.jhazmat.2023.132637
19. Chung MK, House JS, Akhtari FS, Makris KC, Langston MA, Islam KT, Holmes P, Chadeau-Hyam M, Smirnov AI, Du X, Thessen AE, Cui Y, Zhang K, Manrai AK, Motsinger-Reif A, Patel CJ, Members of the Exposomics Consortium (2024). *Decoding the exposome: data science methodologies and implications in exposome-wide association studies (ExWASs). Exposome, 4(1).* doi:10.1093/exposome/osae001
20. Hedges M, Priestman M, Chadeau-Hyam M, Sinharay R, Kelly FJ, Green DC (2023). *Characterising a mobile reference station (MoRS) to quantify personal exposure to air quality. Atmospheric Environment, 315, 120160.* doi:10.1016/j.atmosenv.2023.120160

21. **Asamoah K, Chung KF, Kermani NZ, Bodinier B, Dahlen S-E, Djukanovic R, Bhavsar PK, Adcock IM, Vuckovic D, Chadeau-Hyam M (2024). *Proteomic signatures of eosinophilic and neutrophilic asthma from serum and sputum*. *eBioMedicine*, 99, 104936. doi:10.1016/j.ebiom.2023.104936
22. Cascarano A, Mur-Petit J, Hernandez-Gonzalez J, Camacho M, Eadie NDT, Gkontra P, Chadeau-Hyam M, Vitria J, Lekadir K. (2023) *Machine and deep learning for longitudinal biomedical data: a review of methods and applications*. *Artificial Intelligence Review*. doi:10.1007/s10462-023-10561-w
23. Atehortua A, Gkontra P, Camacho M, Diaz O, Bulgheroni M, Simonetti V, Chadeau-Hyam M, Felix JF, Sebert S, Lekadir K (2023). *Cardiometaabolic risk estimation using exposome data and machine learning*. *International Journal of Medical Informatics*, 179, 105209. doi:10.1016/j.ijmedinf.2023.105209
24. Alcolea JA, Donat-Vargas C, Chatzioannou AC, Keski-Rahkonen P, Robinot N, Molina AJ, Amiano P, Gomez-Acebo I, Castano-Vinyals G, Maitre L, Chadeau-Hyam M, Dagnino S, Cheng SL, Scalbert A, Vineis P, Kogevinas M, Villanueva CM (2023). *Metabolomic Signatures of Exposure to Nitrate and Trihalomethanes in Drinking Water and Colorectal Cancer Risk in a Spanish Multicentric Study (MCC-Spain)*. *Environmental Science and Technology*, 57(48). doi:10.1021/acs.est.3c05814
25. Atchison CJ, Davies B, Cooper E, Lound A, Whitaker M, Hampshire A, Azor A, Donnelly CA, Chadeau-Hyam M, Cooke GS, Ward H, Elliott P (2023). *Long-term health impacts of COVID-19 among 242,712 adults in England*. *Nature Communications*, 14(1), 6588. doi:10.1038/s41467-023-41879-2
26. Bortz J, Guariglia A, Klaric L, Tang D, Ward P, Geer M, Chadeau-Hyam M, Vuckovic D, Joshi PK (2023). *Biological age estimation using circulating blood biomarkers*. *Communications Biology*, 6(1). doi:10.1038/s42003-023-05456-z
27. **Bodinier B, Vuckovic D, Rodrigues S, Filippi S, Chiquet J, Chadeau-Hyam M (2023). *Automated calibration of consensus weighted distance-based clustering approaches using sharp*. *Bioinformatics*, 39(11), btad635. doi:10.1093/bioinformatics/btad635
28. Ward H, Atchison C, Whitaker M, Davies B, Ashby D, Darzi A, Chadeau-Hyam M, Riley S, Donnelly CA, Barclay W, Cooke GS, Elliott P (2023). *Design and Implementation of a National Program to Monitor the Prevalence of SARS-CoV-2 IgG Antibodies in England Using Self-Testing: The REACT-2 Study*. *American Journal of Public Health*, 113(11). doi:10.2105/AJPH.2023.307381
29. Oosterwegel MJ, Ibi D, Portengen L, Probst-Hensch N, Tarallo S, Naccarati A, Imboden M, Jeong A, Robinot N, Scalbert A, Amaral AFS, van Nunen E, Gulliver J, Chadeau-Hyam M, Vineis P, Vermeulen R, Keski-Rahkonen P, Vlaanderen J (2023). *Variability of the Human Serum Metabolome over 3 Months in the EXPOsOMICS Personal Exposure Monitoring Study*. *Environmental Science and Technology*. doi:10.1021/acs.est.3c03233
30. Whitaker M, Davies B, Atchison C, Barclay W, Ashby D, Darzi A, Riley S, Cooke G, Donnelly CA, Chadeau-Hyam M, Elliott P, Ward H (2023). *SARS-CoV-2 rapid antibody test results and subsequent risk of hospitalisation and death in 361,801 people*. *Nature Communications*, 14(1), 4957. doi:10.1038/s41467-023-40643-w
31. **Eales O, de Oliveira Martins L, Page A, Wang H, Bodinier B, Tang D, Haw D, Jonnerby LJA, Atchison C, Ashby D, Barclay W, Taylor G, Cooke G, Ward H, Darzi A, Riley S, Elliott P, Donnelly C, Chadeau-Hyam M (2023). *Dynamics and scale of the SARS-CoV-2 variant Omicron epidemic in England*. *Nature Communications*, 13, 4375. doi:10.1038/s41467-022-32096-4

32. Bowden SJ, Doulgeraki T, Bouras E, Markozannes G, Athanasiou A, Grout-Smith H, Kechagias KS, Ellis LB, Zuber V, Chadeau-Hyam M, Flanagan JM, Tsilidis KK, Kalliala I, Kyrgiou M (2023). *Risk factors for human papillomavirus infection, cervical intraepithelial neoplasia and cervical cancer: an umbrella review and follow-up Mendelian randomisation studies. BMC Medicine, 21(1), 274. doi:10.1186/s12916-023-02965-w*
33. **Bodinier B, Filippi S, Nost TH, Chiquet J, Chadeau-Hyam M (2023). *Automated calibration for stability selection in penalised regression and graphical models. Journal of the Royal Statistical Society. Series C: Applied Statistics. doi:10.1093/jrssc/qlad058*
34. Brewer HR, Chadeau-Hyam M, Johnson E, Sundar S, Flanagan J, Hirst Y (2023). *Cancer Loyalty Card Study (CLOCS): feasibility outcomes for an observational case-control study focusing on the patient interval in ovarian cancer. BMJ Open, 13(6), e066022. doi:10.1136/bmjopen-2022-066022*
35. Borges MC, Clayton G, Freathy RM, Felix JF, Fernandez-Sanles A, Soares AG, Kilpi F, Yang Q, McEachan RRC, Richmond RC, Liu X, Skotte L, Irizar A, Hattersley AT, Bodinier B, Scholtens DM, Nohr EA, Bond TA, Hayes MG, West J, Tyrrell J, Wright J, Bouchard L, Murcia M, Bustamante M, Chadeau-Hyam M, Jarvelin M-R, Vrijheid M, Perron P, Magnus P, Gaillard R, Jaddoe VWV, Lowe WL, Feenstra B, Hivert M-F, Sorensen TIA, Haberg SE, Serbert S, Magnus M, Lawlor DA (2023). *The impact of BMI on pregnancy and perinatal outcomes in 497,932 women. Bjog-An International Journal Of Obstetrics And Gynaecology, 130.*
36. Eales O, Haw D, Wang H, Atchison C, Ashby D, Cooke GSS, Barclay W, Ward H, Darzi A, Donnelly CAA, Chadeau-Hyam M, Elliott P, Riley S (2023). *Dynamics of SARS-CoV-2 infection hospitalisation and infection fatality ratios over 23 months in England. PLoS Biology, 21(5), e3002118. doi:10.1371/journal.pbio.3002118*
37. **Elliott P, Whitaker M, Tang D, Eales O, Steyn N, Bodinier B, Wang H, Elliott J, Atchison C, Ashby D, Barclay W, Taylor G, Darzi A, Cooke GS, Ward H, Donnelly CA, Riley S, Chadeau-Hyam M (2023). *Design and Implementation of a National SARS-CoV-2 Monitoring Program in England: REACT-1 Study. American Journal of Public Health, 113(5). doi:10.2105/AJPH.2023.307230*
38. Atchison CJ, Whitaker M, Donnelly CA, Chadeau-Hyam M, Riley S, Darzi A, Ashby D, Barclay W, Cooke GS, Elliott P, Ward H (2023). *Characteristics and predictors of persistent symptoms post-COVID-19 in children and young people: a large community cross-sectional study in England. Archives of Disease in Childhood, 108(7). doi:10.1136/archdischild-2022-325152*
39. Lee J-H, Dixey P, Bhavsar P, Raby K, Kermani N, Chadeau-Hyam M, Adcock IM, Song W-J, Kwon H-S, Lee S-W, Cho YS, Chung KF, Kim T-B (2023). *Precision Medicine Intervention in Severe Asthma (PRISM) study: molecular phenotyping of patients with severe asthma and response to biologics. ERJ Open Research, 9(2). doi:10.1183/23120541.00485-2022*
40. Rothwell JA, Besevic J, Dimou N, Breeur M, Murphy N, Jenab M, Wedekind R, Viallon V, Ferrari P, Achaintre D, Gicquiau A, Rinaldi S, Scalbert A, Huybrechts I, Prehn C, Adamski J, Cross AJ, Keun H, Chadeau-Hyam M, Boutron-Ruault M-C, Overvad K, Dahm CC, Nost TH, Sandanger TM, Skeie G, Zamora-Ros R, Tsilidis KK, Eichelmann F, Schulze MB, van Guelpen B, Vidman L, Sanchez M-J, Amiano P, Ardanaz E, Smith-Byrne K, Travis R, Katzke V, Kaaks R, Derksen JWG, Colorado-Yohar S, Tumino R, Bueno-de-Mesquita B, Vineis P, Palli D, Pasanisi F, Eriksen AK, Tjonneland A, Severi G, Gunter MJ (2023). *Circulating amino acid levels and colorectal cancer risk in the European Prospective Investigation into Cancer and Nutrition and UK Biobank <i>cohorts</i>. BMC Medicine, 21(1), 80. doi:10.1186/s12916-023-02739-4*

41. Brewer HR, Hirst Y, Chadeau-Hyam M, Johnson E, Sundar S, Flanagan JM (2023). *Association Between Purchase of Over-the-Counter Medications and Ovarian Cancer Diagnosis in the Cancer Loyalty Card Study (CLOCS): Observational Case-Control Study. JMIR Public Health and Surveillance*, 9. doi:10.2196/41762
42. Petrovic D, Carmeli C, Sandoval JL, Bodinier B, Chadeau-Hyam M, Schrepft S, Ehret G, Dhayat NA, Ponte B, Pruijm M, Vineis P, Gonseth-Nussle S, Guessous I, McCrory C, Bochud M, Stringhini S (2023). *Life-course socioeconomic factors are associated with markers of epigenetic aging in a population-based study. Psychoneuroendocrinology*, 147, 105976. doi:10.1016/j.psyneuen.2022.105976
43. **Whitaker M, Elliott J, Bodinier B, Barclay W, Ward H, Cooke G, Donnelly CA, Chadeau-Hyam M, Elliott P (2022). *Variant-specific symptoms of COVID-19 in a study of 1,542,510 adults in England. Nature Communications*, 13(1), 6856. doi:10.1038/s41467-022-34244-2
44. Maitre L, Guimbaud J-B, Warembourg C, Guil-Oumrait N, Petrone PM, Chadeau-Hyam M, Vrijheid M, Basagana X, Gonzalez JR (2022). *State-of-the-art methods for exposure-health studies: Results from the exposome data challenge event. Environment International*, 168, 107422. doi:10.1016/j.envint.2022.107422
45. *Chadeau-Hyam M, Tang D, Eales O, Bodinier B, Wang H, Jonnerby J, Whitaker M, Elliott J, Haw D, Walters CE, Atchison C, Diggle PJ, Page AJ, Ashby D, Barclay W, Taylor G, Cooke G, Ward H, Darzi A, Donnelly CA, Elliott P (2022). *Omicron SARS-CoV-2 epidemic in England during February 2022: A series of cross-sectional community surveys. The Lancet Regional Health - Europe*, 21, 100462. doi:10.1016/j.lanepe.2022.100462
46. Vlaanderen J, Vermeulen R, Whitaker M, Chadeau-Hyam M, Hottenga J-J, de Geus E, Willemsen G, Penninx BWJH, Jansen R, Boomsma D (2022). *Impact of long-term exposure to PM2.5 on peripheral blood gene expression pathways involved in cell signaling and immune response. Environment International*, 168, 107491. doi:10.1016/j.envint.2022.107491
47. Gruzieva O, Jeong A, He S, Yu Z, de Bont J, Pinho MGM, Eze IC, Kress S, Wheelock CE, Peters A, Vlaanderen J, de Hoogh K, Scalbert A, Chadeau-Hyam M, Vermeulen RCH, Gehring U, Probst-Hensch N, Melen E (2022). *Air pollution, metabolites and respiratory health across the life-course. European Respiratory Review*, 31(165), 220038. doi:10.1183/16000617.0038-2022
48. **Elliott P, Eales O, Bodinier B, Tang D, Wang H, Jonnerby J, Haw D, Elliott J, Whitaker M, Walters CE, Atchison C, Diggle PJ, Page AJ, Trotter AJ, Ashby D, Barclay W, Taylor G, Ward H, Darzi A, Cooke GS, Chadeau-Hyam M, Donnelly CA (2022). *Dynamics of a national Omicron SARS-CoV-2 epidemic during January 2022 in England. Nature Communications*, 13(1), 4500. doi:10.1038/s41467-022-32121-6
49. **Eales O, Martins LDO, Page AJ, Wang H, Bodinier B, Tang D, Haw D, Jonnerby J, Atchison C, Ashby D, Barclay W, Taylor G, Cooke G, Ward H, Darzi A, Riley S, Elliott P, Donnelly CA, Chadeau-Hyam M (2022). *Dynamics of competing SARS-CoV-2 variants during the Omicron epidemic in England. Nature Communications*, 13(1), 4375. doi:10.1038/s41467-022-32096-4
50. Eales O, Page AJ, Martins LDO, Wang H, Bodinier B, Haw D, Jonnerby J, Atchison C, Ashby D, Barclay W, Taylor G, Cooke G, Ward H, Darzi A, Riley S, Chadeau-Hyam M, Donnelly CA, Elliott P (2022). *SARS-CoV-2 lineage dynamics in England from September to November 2021: high diversity of Delta sub-lineages and increased transmissibility of AY.4.2. BMC Infectious Diseases*, 22(1), 647. doi:10.1186/s12879-022-07628-4
51. Said S, Pazoki R, Karhunen V, Vosa U, Ligthart S, Bodinier B, Koskeridis F, Welsh P, Alizadeh BZ, Chasman DI, Sattar N, Chadeau-Hyam M, Evangelou E, Jarvelin M-R, Elliott

- P, Tzoulaki I, Dehghan A (2022). *Genetic analysis of over half a million people characterises C-reactive protein loci (vol 13, 2198, 2022). Nature Communications, 13(1), 3865. doi:10.1038/s41467-022-31706-5*
52. *Fecht D, Chadeau-Hyam M, Owen R, Gregson J, Halliday BP, Lota AS, Gulliver J, Ware JS, Pennell DJ, Kelly FJ, Shah ASV, Miller MR, Newby DE, Prasad SK, Tayal U (2022). *Exposure to Elevated Nitrogen Dioxide Concentrations and Cardiac Remodeling in Patients With Dilated Cardiomyopathy. Journal of Cardiac Failure, 28(6). doi:10.1016/j.cardfail.2021.11.023*
 53. *Chadeau-Hyam M, Eales O, Bodinier B, Wang H, Haw D, Whitaker M, Elliott J, Walters CE, Jonnerby J, Atchison C, Diggle PJ, Page AJ, Ashby D, Barclay W, Taylor G, Cooke G, Ward H, Darzi A, Donnelly CA, Elliott P (2022). *Breakthrough SARS-CoV-2 infections in double and triple vaccinated adults and single dose vaccine effectiveness among children in Autumn 2021 in England: REACT-1 study. eClinicalMedicine, 48, 101419. doi:10.1016/j.eclinm.2022.101419*
 54. **Elliott P, Eales O, Steyn N, Tang D, Bodinier B, Wang H, Elliott J, Whitaker M, Atchison C, Diggle PJ, Page AJ, Trotter AJ, Ashby D, Barclay W, Taylor G, Ward H, Darzi A, Cooke GS, Donnelly CA, Chadeau-Hyam M (2022). *Twin peaks: The Omicron SARS-CoV-2 BA.1 and BA.2 epidemics in England. Science, 376(6600), eabq4411. doi:10.1126/science.abq4411*
 55. **Petrovic D, Bodinier B, Dagnino S, Whitaker M, Karimi M, Campanella G, Haugdahl Nost T, Polidoro S, Palli D, Krogh V, Tumino R, Sacerdote C, Panico S, Lund E, Dugue P-A, Giles GG, Severi G, Southey M, Vineis P, Stringhini S, Bochud M, Sandanger TM, Vermeulen RCH, Guida F, Chadeau-Hyam M (2022). *Epigenetic mechanisms of lung carcinogenesis involve differentially methylated CpG sites beyond those associated with smoking. European Journal of Epidemiology, 37(6). doi:10.1007/s10654-022-00877-2*
 56. Wielscher M, Mandaviya PR, Kuehnelt B, Joeannes R, Mustafa R, Robinson O, Zhang Y, Bodinier B, Walton E, Mishra PP, Schlosser P, Wilson R, Tsai P-C, Palaniswamy S, Marioni RE, Fiorito G, Cugliari G, Karhunen V, Ghanbari M, Psaty BM, Loh M, Bis JC, Lehne B, Sotoodehnia N, Deary IJ, Chadeau-Hyam M, Brody JA, Cardona A, Selvin E, Smith AK, Miller AH, Torres MA, Marouli E, Gao X, van Meurs JBJ, Graf-Schindler J, Rathmann W, Koenig W, Peters A, Weninger W, Farlik M, Zhang T, Chen W, Xia Y, Teumer A, Nauck M, Grabe HJ, Doerr M, Lehtimäki T, Guan W, Milani L, Tanaka T, Fisher K, Waite LL, Kaseela S, Vineis P, Verweij N, van der Harst P, Iacoviello L, Sacerdote C, Panico S, Krogh V, Tumino R, Tzala E, Matullo G, Hurme MA, Raitakari OT, Colicino E, Baccarelli AA, Kahonen M, Herzig K-H, Li S, Conneely KN, Kooner JS, Kottgen A, Heijmans BT, Deloukas P, Relton C, Ong KK, Bell JT, Boerwinkle E, Elliott P, Brenner H, Beekman M, Levy D, Waldenberger M, Chambers JC, Dehghan A, Jarvelin M-R (2022). *DNA methylation signature of chronic low-grade inflammation and its role in cardio-respiratory diseases. Nature Communications, 13(1), 2408. doi:10.1038/s41467-022-29792-6*
 57. Ribeiro AI, Fraga S, Severi M, Kelly-Irving M, Delpierre C, Stringhini S, Kivimäki M, Joost S, Guessous I, Severi G, Giles G, Sacerdote C, Vineis P, Barros H (2022). *Association of neighbourhood disadvantage and individual socioeconomic position with all-cause mortality: a longitudinal multicohort analysis. The Lancet Public Health, 7(5).*
 58. Said S, Pazoki R, Karhunen V, Vosa U, Ligthart S, Bodinier B, Koskeridis F, Welsh P, Alizadeh BZ, Chasman D, Sattar N, Chadeau-Hyam M, Evangelou E, Jarvelin M-R, Elliott P, Tzoulaki I, Dehghan A (2022). *Genetic analysis of over half a million people characterises C-reactive protein loci. Nature Communications, 13(1), 2198. doi:10.1038/s41467-022-29650-5*
 59. Whitaker M, Elliott J, Chadeau-Hyam M, Riley S, Darzi A, Cooke G, Ward H, Elliott P (2022). *Persistent COVID-19 symptoms in a community study of 606,434 people in England.*

Nature Communications, 13(1), 1957. doi:10.1038/s41467-022-29521-z

60. *Chadeau-Hyam M, Wang H, Eales O, Haw D, Bodinier B, Whitaker M, Walters CE, Ainslie KEC, Atchison C, Fronterre C, Diggle PJ, Page AJ, Trotter AJ, Ashby D, Barclay W, Taylor G, Cooke G, Ward H, Darzi A, Riley S, Donnelly CA, Elliott P (2022). *SARS-CoV-2 infection and vaccine effectiveness in England (REACT-1): a series of cross-sectional random community surveys. The Lancet Respiratory Medicine*, 10(4). doi:10.1016/S2213-2600(21)00542-7
61. **Elliott P, Bodinier B, Eales O, Wang H, Haw D, Elliott J, Whitaker M, Jonnerby J, Tang D, Walters CE, Atchison C, Diggle PJ, Page AJ, Trotter AJ, Ashby D, Barclay W, Taylor G, Ward H, Darzi A, Cooke GS, Chadeau-Hyam M, Donnelly CA (2022). *Rapid increase in Omicron infections in England during December 2021: REACT-1 study. Science*, 375(6587). doi:10.1126/science.abn8347
62. *Woelfle T, Linkohr B, Waterboer T, Thorand B, Seissler J, Chadeau-Hyam M, Peters A (2022). *Health impact of seven herpesviruses on (pre)diabetes incidence and HbA1c: results from the KORA cohort. Diabetologia*, 65(8). doi:10.1007/s00125-022-05704-7
63. Ronkainen J, Nedelec R, Atehortua A, Balkhiyarova Z, Cascarano A, Vien ND, Elhakeem A, van Enckevort E, Soares AG, Haakma S, Halonen M, Heil KF, Heiskala A, Hyde E, Jacquemin B, Keikkala E, Kerckhoffs J, Klavus A, Kopinska JA, Lepeule J, Marazzi F, Motoc I, Naatanen M, Ribbenstedt A, Rundblad A, Savolainen O, Simonetti V, Eadie NDT, Tzala E, Ulrich A, Wright T, Zarei I, d'Amico E, Belotti F, Brunius C, Castleton C, Charles M-A, Gaillard R, Hanhineva K, Hoek G, Holven KB, Jaddoe VWV, Kaakinen MA, Kajantie E, Kavousi M, Lakka T, Matthews J, Mortari AP, Vaarasmaki M, Voortman T, Webster C, Zins M, Atella V, Bulgheroni M, Chadeau-Hyam M, Conti G, Evans J, Felix JF, Heude B, Jarvelin M-R, Kolehmainen M, Landberg R, Lekadir K, Parusso S, Prokopenko I, de Rooij SR, Roseboom T, Swertz M, Timpson N, Ulven SM, Vermeulen R, Juola T, Sebert S (2022). *LongITools: Dynamic longitudinal exposome trajectories in cardiovascular and metabolic noncommunicable diseases. Environmental Epidemiology*, 6(1), e184. doi:10.1097/EE9.0000000000000184
64. **Bowden S, Bodinier B, Paraskevaidi M, Kalliala I, Chaitrakulthong N, Mitra A, Tza-fetas M, Lathouras K, Nasioutziki M, Flanagan J, Chadeau-Hyam M, Kyrgiou M (2021). *Can methylation signals of cervical cancer enhance cervical screening?: an epigenome-wide association study on the Illumina 850k array. Cervical cancer*, 31. doi:10.1136/ijgc-2021-ESGO.17
65. Misra N, Bastien P, Bourokba N, Chadeau-Hyam M, Cavusoglu N (2021). *Metabolomics, a tool to construe skin phenotype. Journal Of Investigative Dermatology*, 141(10).
66. **Elliott J, Whitaker M, Bodinier B, Eales O, Riley S, Ward H, Cooke G, Darzi A, Chadeau-Hyam M, Elliott P (2021). *Predictive symptoms for COVID-19 in the community: REACT-1 study of over 1 million people. PLoS Medicine*, 18(9), e1003777. doi:10.1371/journal.pmed.1003777
67. Vlaanderen J, de Hoogh K, Hoek G, Peters A, Probst-Hensch N, Scalbert A, Melen E, Tonne C, de Wit GA, Chadeau-Hyam M, Katsouyanni K, Esko T, Jongsma KR, Vermeulen R (2021). *Developing the building blocks to elucidate the impact of the urban exposome on cardiometabolic-pulmonary disease. Environmental Epidemiology*, 5(4), e162. doi:10.1097/EE9.0000000000000162
68. **Dagnino S, Bodinier B, Guida F, Smith-Byrne K, Petrovic D, Whitaker MD, Nost TH, Agnoli C, Palli D, Sacerdote C, Panico S, Tumino R, Schulze MB, Johansson M, Keski-Rahkonen P, Scalbert A, Vineis P, Johansson M, Sandanger TM, Vermeulen RCH,

- Chadeau-Hyam M (2021). *Prospective Identification of Elevated Circulating CDCP1 in Patients Years before Onset of Lung Cancer*. *Cancer Research*, 81(13). doi:10.1158/0008-5472.CAN-20-3454
69. **Elliott J, Whitaker M, Bodinier B, Elliott P, Tzoulaki I, Chadeau-Hyam M (2021). *Complementary Variable Selection Methods Highlight Joint Contribution Of Cystatin C And Apolipoprotein B For Cardiovascular Risk Prediction*. *Circulation*, 143. doi:10.1161/circ.143.suppl_1.P030Circulation
 70. **Elliott J, Bodinier B, Whitaker M, Tzoulaki I, Elliott P, Chadeau-Hyam M (2021). *Cardiovascular Disease, Hypertension, Diabetes And Cystatin C Jointly Predict Covid-19 Mortality Alongside Age, Male Sex And Black Ethnicity*. *Circulation*, 143. doi:10.1161/circ.143.suppl_1.041
 71. Tayal U, Fecht D, Chadeau-Hyam M, Owen R, Gregson J, Halliday B, Lota A, Gulliver J, Ware J, Pennell D, Kelly F, Shah A, Miller M, Newby D, Prasad S (2021). *Air pollution and adverse cardiac remodelling in patients with dilated cardiomyopathy*. *Journal of the American College of Cardiology*, 77(18).
 72. **Bowden SJ, Bodinier B, Kalliala I, Zuber V, Vuckovic D, Doulgeraki T, Whitaker MD, Wielscher M, Cartwright R, Tsilidis KK, Bennett P, Jarvelin M-R, Flanagan JM, Chadeau-Hyam M, Kyrgiou M (2021). *Genetic variation in cervical preinvasive and invasive disease: a genome-wide association study*. *The Lancet Oncology*, 22(4).
 73. **Elliott J, Bodinier B, Whitaker M, Delpierre C, Vermeulen R, Tzoulaki I, Elliott P, Chadeau-Hyam M (2021). *COVID-19 mortality in the UK Biobank cohort: revisiting and evaluating risk factors*. *European Journal of Epidemiology*, 36(3). doi:10.1007/s10654-021-00722-y
 74. Carmeli C, Kutalik Z, Mishra PP, Porcu E, Delpierre C, Delaneau O, Kelly-Irving M, Bochud M, Dhayat NA, Ponte B, Pruijm M, Ehret G, Kaehonen M, Lehtimaeki T, Raitakari OT, Vineis P, Kivimaeki M, Chadeau-Hyam M, Dermitzakis E, Vuilleumier N, Stringhini S (2021). *Gene regulation contributes to explain the impact of early life socioeconomic disadvantage on adult inflammatory levels in two cohort studies*. *Scientific Reports*, 11(1), 3100. doi:10.1038/s41598-021-82714-2
 75. *Chadeau-Hyam M, Bodinier B, Vermeulen R, Karimi M, Zuber V, Castagne R, Elliott J, Muller D, Petrovic D, Whitaker M, Stringhini S, Tzoulaki I, Kivimaki M, Vineis P, Elliott P, Kelly-Irving M, Delpierre C (2020). *Education, biological ageing, all-cause and cause-specific mortality and morbidity: UK biobank cohort study*. *EClinicalMedicine*, 29-30, 100658. doi:10.1016/j.eclinm.2020.100658
 76. **Laine JE, Bodinier B, Robinson O, Plusquin M, Scalbert A, Keski-Rahkonen P, Robinot N, Vermeulen R, Pizzi C, Asta F, Nawrot T, Gulliver J, Chatzi L, Kogevinas M, Nieuwenhuijsen M, Sunyer J, Vrijheid M, Chadeau-Hyam M, Vineis P (2020). *Prenatal Exposure to Multiple Air Pollutants, Mediating Molecular Mechanisms, and Shifts in Birthweight*. *Environmental Science and Technology*, 54(22). doi:10.1021/acs.est.0c02657
 77. Maurel M, Castagne R, Berger E, Bochud M, Chadeau-Hyam M, Fraga S, Gandini M, Hutri-Kahonen N, Jalkanen S, Kivimaki M, Marmot M, McCrory C, Preisig M, Raitakari O, Ricceri F, Salmi M, Steptoe A, Vineis P, Delpierre C, Kelly-Irving M (2020). *Patterning of educational attainment across inflammatory markers: Findings from a multi-cohort study*. *Brain, Behavior, and Immunity*, 90. doi:10.1016/j.bbi.2020.09.002
 78. Sanikini H, Muller DC, Chadeau-Hyam M, Murphy N, Gunter MJ, Cross AJ (2020). *Anthropometry, body fat composition and reproductive factors and risk of oesophageal and gastric cancer by subtype and subsite in the UK Biobank cohort*. *PLoS ONE*, 15(10), e0240413. doi:10.1371/journal.pone.0240413

79. Vineis P, Robinson O, Chadeau-Hyam M, Dehghan A, Mudway I, Dagnino S (2020). *What is new in the exposome ?*. *Environment International*, 143, 105887. doi:10.1016/j.envint.2020.105887
80. *Chadeau-Hyam M, Bodinier B, Elliott J, Whitaker MD, Tzoulaki I, Vermeulen R, Kelly-Irving M, Delpierre C, Elliott P (2020). *Risk factors for positive and negative COVID-19 tests: a cautious and in-depth analysis of UK biobank data*. *International Journal of Epidemiology*, 49(5). doi:10.1093/ije/dyaa134
81. Petrovic D, Carmeli C, Bodinier B, Chadeau-Hyam M, Ehret G, Dhayat N, Ponte B, Pruijm M, Bochud M, Stringhini S (2020). *Exploring the relation between socioeconomic position and DNA methylation in a European population*. *European Journal Of Public Health*, 30.
82. *Alfano R, Chadeau-Hyam M, Ghantous A, Keski-Rahkonen P, Chatzi L, Perez AE, Herceg Z, Kogevinas M, de Kok TM, Nawrot TS, Novoloaca A, Patel CJ, Pizzi C, Robinot N, Rusconi F, Scalbert A, Sunyer J, Vermeulen R, Vrijheid M, Vineis P, Robinson O, Plusquin M (2020). *A multi-omic analysis of birthweight in newborn cord blood reveals new underlying mechanisms related to cholesterol metabolism*. *Metabolism: Clinical and Experimental*, 110, 154292. doi:10.1016/j.metabol.2020.154292
83. Mancini FR, Laine JE, Tarallo S, Vlaanderen J, Vermeulen R, van Nunen E, Hoek G, Probst-Hensch N, Imboden M, Jeong A, Gulliver J, Chadeau-Hyam M, Nieuwenhuijsen M, de Kok TM, Piepers J, Krauskopf J, Kleinjans JCS, Vineis P, Naccarati A (2020). *microRNA expression profiles and personal monitoring of exposure to particulate matter*. *Environmental Pollution*, 263, 114392. doi:10.1016/j.envpol.2020.114392
84. **Castagne R, Kelly-Irving M, Krogh V, Palli D, Panico S, Sacerdote C, Tumino R, Hebls DGJ, Kleinjans JCS, de Kok TMCM, Georgiadis P, Kyrtopoulos SA, Vermeulen R, Stringhini S, Vineis P, Chadeau-Hyam M, Delpierre C (2020). *A multi-omics approach to investigate the inflammatory response to life course socioeconomic position*. *Epigenomics*, 12(15). doi:10.2217/epi-2019-0261
85. **Petrovic D, Haba-Rubio J, Vargas CDM, Kelly-Irving M, Vineis P, Kivimaki M, Nyberg S, Gandini M, Bochud M, Vollenweider P, d'Errico A, Barros H, Fraga S, Goldberg M, Zins M, Steptoe A, Delpierre C, Heinzer R, Carmeli C, Chadeau-Hyam M, Stringhini S (2020). *The contribution of sleep to social inequalities in cardiovascular disorders: a multi-cohort study*. *Cardiovascular Research*, 116(8). doi:10.1093/cvr/cvz267
86. Appenzeller BMR, Chadeau-Hyam M, Aguilar L (2020). *Skin exposome science in practice : current evidence on hair biomonitoring and future perspectives*. *Journal of the European Academy of Dermatology and Venereology*, 34. doi:10.1111/jdv.16640
87. Tayal U, Fecht D, Chadeau-Hyam M, Gulliver J, Ware J, Cook S, Prasad S (2020). *Residential exposure to fine particulate matter air pollution is associated with impaired cardiac phenotypes in dilated cardiomyopathy*. *ACHD/Valve Disease/Pericardial Disease/Cardiomyopathy*, 106. doi:10.1136/heartjnl-2020-BCS.3
88. *Robinson O, Chadeau Hyam M, Karaman I, Climaco Pinto R, Ala-Korpela M, Handakas E, Fiorito G, Gao H, Heard A, Jarvelin M-R, Lewis M, Pazoki R, Polidoro S, Tzoulaki I, Wielscher M, Elliott P, Vineis P (2020). *Determinants of accelerated metabolomic and epigenetic aging in a UK cohort*. *Aging Cell*, 19(6), e13149. doi:10.1111/accel.13149
89. **Dagnino S, Bodinier B, Grigoryan H, Rappaport SM, Karimi M, Guida F, Polidoro S, Edmands WB, Naccarati A, Fiorito G, Sacerdote C, Krogh V, Vermeulen R, Vineis P, Chadeau-Hyam M (2020). *Agnostic Cys34-albumin adductomics and DNA methylation: Implication of N-acetylcysteine in lung carcinogenesis years before diagnosis*. *International Journal of Cancer*, 146(12). doi:10.1002/ijc.32680

90. Vineis P, Avendano-Pabon M, Barros H, Bartley M, Carmeli C, Carra L, Chadeau-Hyam M, Costa G, Delpierre C, D'Errico A, Fraga S, Giles G, Goldberg M, Kelly-Irving M, Kivimaki M, Lepage B, Lang T, Layte R, MacGuire F, Mackenbach JP, Marmot M, McCrory C, Milne RL, Muennig P, Nusselder W, Petrovic D, Polidoro S, Ricceri F, Robinson O, Stringhini S, Zins M (2020). *Special Report: The Biology of Inequalities in Health: The Lifepath Consortium. Frontiers in Public Health, 8, 118. doi:10.3389/fpubh.2020.00118*
91. Laine JE, Baltar VT, Stringhini S, Gandini M, Chadeau-Hyam M, Kivimaki M, Severi G, Perduca V, Hodge AM, Dugue P-A, Giles GG, Milne RL, Barros H, Sacerdote C, Krogh V, Panico S, Tumino R, Goldberg M, Zins M, Delpierre C, Vineis P (2020). *Reducing socioeconomic inequalities in all-cause mortality: a counterfactual mediation approach (vol 49, pg 497, 2020). International Journal of Epidemiology, 49(2). doi:10.1093/ije/dyaa008*
92. Laine J, Baltar VT, Stringhini S, Gandini M, Chadeau-Hyam M, Kivimaki M, Severi G, Perduca V, Hodge AM, Dugue P-A, Giles GG, Milne RL, Barros H, Sacerdote C, Krogh V, Panico S, Tumino R, Goldberg M, Marie Z, Cyrille D, Vineis P (2020). *Reducing socioeconomic inequalities in all-cause mortality: a counterfactual mediation approach. International Journal of Epidemiology, 49(2). doi:10.1093/ije/dyz248*
93. Elliott J, Bodinier B, Bond TA, Chadeau-Hyam M, Evangelou E, Moons KGM, Dehghan A, Muller DC, Elliott P, Tzoulaki I (2020). *Predictive accuracy of a polygenic risk score-enhanced prediction model vs a clinical risk score for coronary artery disease. JAMA - Journal of the American Medical Association, 323(7). doi:10.1001/jama.2019.22241*
94. Sanikini H, Muller DC, Sophiea M, Rinaldi S, Agudo A, Duell EJ, Weiderpass E, Overvad K, Tjonneland A, Halkjaer J, Boutron-Ruault M-C, Carbonnel F, Cervenka I, Boeing H, Kaaks R, Kuehn T, Trichopoulou A, Martimianaki G, Karakatsani A, Pala V, Palli D, Mattiello A, Tumino R, Sacerdote C, Skeie G, Rylander C, Chirlaque Lopez M-D, Sanchez M-J, Ardanaz E, Regner S, Stocks T, Bueno-de-Mesquita B, Vermeulen RCH, Aune D, Tong TYN, Klieemann N, Murphy N, Chadeau-Hyam M, Gunter MJ, Cross AJ (2020). *Anthropometric and reproductive factors and risk of esophageal and gastric cancer by subtype and subsite: Results from the European Prospective Investigation into Cancer and Nutrition (EPIC) cohort. International Journal of Cancer, 146(4). doi:10.1002/ijc.32386*
95. Preston GW, Dagnino S, Ponzi E, Sozeri O, van Veldhoven K, Barratt B, Liu S, Grigoryan H, Lu SS, Rappaport SM, Chung KF, Cullinan P, Sinharay R, Kelly FJ, Chadeau-Hyam M, Vineis P, Phillips DH (2020). *Relationships between airborne pollutants, serum albumin adducts and short-term health outcomes in an experimental crossover study. Chemosphere, 239, 124667. doi:10.1016/j.chemosphere.2019.124667*
96. Brewer HR, Hirst Y, Sundar S, Chadeau-Hyam M, Flanagan JM (2020). *Cancer Loyalty Card Study (CLOCS): protocol for an observational case-control study focusing on the patient interval in ovarian cancer diagnosis. BMJ open, 10(9), e037459. doi:10.1136/bmjopen-2020-037459*
97. Bowden SJ, Kalliala I, Veroniki AA, Arbyn M, Mitra A, Lathouras K, Mirabello L, Chadeau-Hyam M, Paraskevaidis E, Flanagan JM, Kyrgiou M (2019). *The use of human papillomavirus DNA methylation in cervical intraepithelial neoplasia: A systematic review and meta-analysis. EBioMedicine, 50. doi:10.1016/j.ebiom.2019.10.053*
98. Bowden S, Kalliala I, Veroniki A, Arbyn M, Mitra A, Lathouras K, Mirabello L, Chadeau-Hyam M, Paraskevaidis E, Flanagan J, Kyrgiou M (2019). *The use of human papillomavirus dna methylation in cervical intraepithelial neoplasia: a systematic review and meta-analysis. Poster exhibition Day 1, 29. doi:10.1136/ijgc-2019-ESGO.113*
99. *Castagne R, Chadeau-Hyam M, Karimi M, Stringhini S, Vineis P, Delpierre C, Kelly-Irving

- M (2019). *Social patterning of inflammation over the lifecourse and its relationship with mortality*. *European Journal of Public Health*, 29.
100. Carmeli C, Kutalik Z, Kelly-Irving M, Delpierre C, Bochud M, Kivimaki M, Vineis P, Chadeau-Hyam M, Dermitzakis E, Stringhini S (2019). *Early life socioeconomic position and adult systemic inflammation: the role of gene regulation*. *European Journal Of Public Health*, 29.
 101. Bowden S, Kalliala I, Wielscher M, Bodinier B, Flanagan J, Chadeau-Hyam M, Jarvelin M-R, Kyrgiou M (2019). *Cervical intraepithelial neoplasia and cervical cancer: a genome wide association study (gwas) of the uk biobank cohort*. *Poster exhibition Day 1*, 29. doi:10.1136/ijgc-2019-ESGO.78
 102. *Chadeau-Hyam M, Karimi M, Castagne R, Bodinier B, Delpierre C, Kelly-Irving M (2019). *A socially patterned Biological Health Score and mortality in Understanding Society and UKBiobank*. *European Journal of Public Health*, 29.
 103. Krauskopf J, van Veldhoven K, Chadeau-Hyam M, Vermeulen R, Carrasco-Turigas G, Nieuwenhuijsen M, Vineis P, de Kok TM, Kleijnans JCS (2019). *Cell-free, circulating microRNAs reflect air pollution-induced environmental health risks*. *Toxicology Letters*, 314.
 104. Tzoulaki I, Castagne, Boulange CL, Karaman I, Chekmeneva E, Evangelou E, Ebbels TMD, Kaluarachchi MR, Chadeau-Hyam M, Mosen D, Dehghan A, Moayyeri A, Ferreira DLS, Guo X, Rotter JI, Taylor KD, Kavousi M, De Vries PS, Lehne B, Loh M, Hofman A, Nicholson JK, Chambers J, Gieger C, Holmes E, Tracy R, Kooner J, Greenland P, Franco OH, Herrington D, Lindon JC, Elliott P (2019). *Serum metabolic signatures of coronary and carotid atherosclerosis and subsequent cardiovascular disease*. *European Heart Journal*, 40(34). doi:10.1093/eurheartj/ehz235
 105. **Castagne R, Kelly-Irving M, Kyrtopoulos SA, Vineis P, Chadeau-Hyam M, Delpierre C (2019). *A multi-omics approach to investigate the inflammatory response of life course socioeconomic position: findings from epic-Italy*. *Oral Presentations*, 73. doi:10.1136/jech-2019-SSMabstracts.84
 106. **Karimi M, Castagne R, Delpierre C, Albertus G, Berger E, Vineis P, Kumari M, Kelly-Irving M, Chadeau-Hyam M (2019). *Early-life inequalities and biological ageing: a multi-system Biological Health Score approach in Understanding Society*. *Journal of Epidemiology and Community Health*, 73(8). doi:10.1136/jech-2018-212010
 107. Krauskopf J, van Veldhoven K, Chadeau-Hyam M, Vermeulen R, Carrasco-Turigas G, Nieuwenhuijsen M, Vineis P, de Kok TM, Kleijnans JC (2019). *Short-term exposure to traffic-related air pollution reveals a compound-specific circulating miRNA profile indicating multiple disease risks*. *Environment International*, 128. doi:10.1016/j.envint.2019.04.063
 108. McCrory C, Leahy S, Ribeiro AI, Fraga S, Barros H, Avendano M, Vineis P, Layte R, Alenius H, Baglietto L, Bartley M, Bellone M, Berger E, Bochud M, Candiani G, Carmeli C, Carra L, Castagne R, Chadeau-Hyam M, Cima S, Costa G, Courtin E, Delpierre C, D'Errico A, Donkin A, Dugue P-A, Elliott P, Fagherazzi G, Fiorito G, Gandini M, Gares V, Gerbouin-Rerolle P, Giles G, Goldberg M, Greco D, Guida F, Hodge A, Karimi M, Karisola P, Kelly M, Kivimaki M, Laine J, Lang T, Laurent A, Lepage B, Lorsch D, Machell G, Mackenbach J, Marmot M, Milne R, Muennig P, Nusselder W, Petrovic D, Polidoro S, Preisig M, Recalcati P, Reinhard E, Ribeiro AI, Ricceri F, Robinson O, Valverde JR, Severi G, Simmons T, Stringhini S, Terhi V, Than J, Vergnaud A-C, Vigna-Taglianti F, Vollenweider P, Zins M (2019). *Maternal educational inequalities in measured body mass index trajectories in three European countries*. *Paediatric and Perinatal Epidemiology*, 33(3). doi:10.1111/ppe.12552
 109. Fiorito G, McCrory C, Robinson O, Carmeli C, Rosales CO, Zhang Y, Colicino E, Dugue P-A, Artaud F, McKay GJ, Jeong A, Mishra PP, Nost TH, Krogh V, Panico S, Sacerdote C,

- Tumino R, Palli D, Matullo G, Guarrera S, Gandini M, Bochud M, Dermitzakis E, Muka T, Schwartz J, Vokonas PS, Just A, Hodge AM, Giles GG, Southey MC, Hurme MA, Young I, McKnight AJ, Kunze S, Waldenberger M, Peters A, Schwettmann L, Lund E, Baccarelli A, Milne RL, Kenny RA, Elbaz A, Brenner H, Kee F, Voortman T, Probst-Hensch N, Lehtimäki T, Elliot P, Stringhini S, Vineis P, Polidoro S, Alberts J, Alenius H, Avendano M, Baltar V, Bartley M, Barros H, Bellone M, Berger E, Blane D, Bochud M, Candiani G, Carmeli C, Carra L, Castagne R, Chadeau-Hyam M, Cima S, Clavel-Chapelon F, Costa G, Courtin E, Delpierre C, D'Errico A, Manolis, Dermitzakis, Dugue P-A, Elovainio M, Elliott P, Fagherazzi G, Fiorito G, Fraga S, Gandini M, Gares V, Gerbouin-Rerolle P, Giles G, Goldberg M, Greco D, Guessous I, Haba-Rubio J, Heinzer R, Hodge A, Joost S, Karimi M, Kelly-Irving M, Kahonen M, Karisola P, Khenissi L, Kivimäki M, Krogh V, Laine J, Lang T, Laurent A, Layte R, Lepage B, Lorsch D, MacGuire F, Machell G, Mackenbach J, Marmot M, de Mestral C, McCrory C, Miller C, Milne R, Muennig P, Nusselder W, Panico S, Petrovic D, Lourdes, Pilapil, Polidoro S, Preisig M, Pulkki-Raback L, Raitakari O, Ribeiro AI, Ricceri F, Recalcati P, Reinhard E, Robinson O, Valverde JR, Saba S, Sacerdote C, Santegoets F, Satolli R, Simmons T, Severi G, Shipley MJ, Stringhini S, Tabak A, Terhi V, Tieulent J, Tumino R, Vaccarella S, Vigna-Taglianti F, Vineis P, Vollenweider P, Vuilleumier N, Zins M (2019). *Socioeconomic position, lifestyle habits and biomarkers of epigenetic aging: a multi-cohort analysis. Aging, 11(7). doi:10.18632/aging.101900*
110. Reimann B, Janssen BG, Alfano R, Ghantous A, Espin-Perez A, de Koko TM, Saenen ND, Cox B, Robinson O, Chadeau-Hyam M, Penders J, Herceg Z, Vineis P, Nawrot TS, Plusquin M (2019). *The Cord Blood Insulin and Mitochondrial DNA Content Related Methyloome. Frontiers in Genetics, 10, 325. doi:10.3389/fgene.2019.00325*
 111. Berger E, Castagne R, Chadeau-Hyam M, Bochud M, D'Errico A, Gandini M, Karimi M, Kivimäki M, Krogh V, Marmot M, Panico S, Preisig M, Ricceri F, Sacerdote C, Steptoe A, Stringhini S, Tuminczy R, Vineis P, Delpierre C, Kelly-Irving M (2019). *Multi-cohort study identifies social determinants of systemic inflammation over the life course. Nature Communications, 10, 773. doi:10.1038/s41467-019-08732-x*
 112. Alfano R, Guida F, Galobardes B, Chadeau-Hyam M, Delpierre C, Ghantous A, Henderson J, Herceg Z, Jain P, Nawrot TS, Relton C, Vineis P, Castagne R, Plusquin M (2019). *Socio-economic position during pregnancy and DNA methylation signatures at three stages across early life: epigenome-wide association studies in the ALSPAC birth cohort. International Journal of Epidemiology, 48(1). doi:10.1093/ije/dyy259*
 113. **van Veldhoven K, Kiss A, Keski-Rahkonen P, Robinot N, Scalbert A, Cullinan P, Chung KF, Collins P, Sinharay R, Barratt BM, Nieuwenhuijsen M, Rodoreda AA, Carrasco-Turigas G, Vlaanderen J, Vermeulen R, Portengen L, Kyrtopoulos SA, Ponzi E, Chadeau-Hyam M, Vineis P (2019). *Impact of short-term traffic-related air pollution on the metabolome - Results from two metabolome-wide experimental studies. Environment International, 123. doi:10.1016/j.envint.2018.11.034*
 114. Niedzwiecki MM, Walker DI, Vermeulen R, Chadeau-Hyam M, Jones DP, Miller GW (2019). *The Exposome: Molecules to Populations. Annual Review of Pharmacology and Toxicology, 59. doi:10.1146/annurev-pharmtox-010818-021315*
 115. Espin-Perez A, Hebels DGJ, Kiviranta H, Rantakokko P, Georgiadis P, Botsivali M, Bergdahl IA, Palli D, Spath F, Johansson A, Chadeau-Hyam M, Kyrtopoulos SA, Kleinjans JCS, de Kok TMCM (2019). *Identification of Sex-Specific Transcriptome Responses to Polychlorinated Biphenyls (PCBs). Scientific Reports, 9, 746. doi:10.1038/s41598-018-37449-y*
 116. Alfano R, Herceg Z, Nawrot TS, Chadeau-Hyam M, Ghantous A, Plusquin M (2018). *The*

Impact of Air Pollution on Our Epigenome: How Far Is the Evidence ? (A Systematic Review). Current environmental health reports, 5(4). doi:10.1007/s40572-018-0218-8

117. **Campanella G, Gunter MJ, Polidoro S, Krogh V, Palli D, Panico S, Sacerdote C, Tumino R, Fiorito G, Guarrera S, Iacoviello L, Bergdahl IA, Melin B, Lenner P, de Kok TMCM, Georgiadis P, Kleinjans JCS, Kyrtopoulos SA, Bueno-de-Mesquita HB, Lillycrop KA, May AM, Onland-Moret NC, Murray R, Riboli E, Verschuren M, Lund E, Mode N, Sandanger TM, Fiano V, Trevisan M, Matullo G, Froguel P, Elliott P, Vineis P, Chadeau-Hyam M (2018). *Epigenome-wide association study of adiposity and future risk of obesity-related diseases. International Journal of Obesity, 42(12). doi:10.1038/s41366-018-0064-7*
118. Takeuchi F, Akiyama M, Matoba N, Katsuya T, Nakatochi M, Tabara Y, Narita A, Saw W-Y, Moon S, Spracklen CN, Chai J-F, Kim Y-J, Zhang L, Wang C, Li H, Li H, Wu J-Y, Dorajoo R, Nierenberg JL, Wang YX, He J, Bennett DA, Takahashi A, Momozawa Y, Hirata M, Matsuda K, Rakugi H, Nakashima E, Isono M, Shirota M, Hozawa A, Ichihara S, Matsubara T, Yamamoto K, Kohara K, Igase M, Han S, Gordon-Larsen P, Huang W, Lee NR, Adair LS, Hwang MY, Lee J, Chee ML, Sabanayagam C, Zhao W, Liu J, Reilly DF, Sun L, Huo S, Edwards TL, Long J, Chang L-C, Chen C-H, Yuan J-M, Koh W-P, Friedlander Y, Kelly TN, Wei WB, Xu L, Cai H, Xiang Y-B, Lin K, Clarke R, Walters RG, Millwood IY, Li L, Chambers JC, Kooner JS, Elliott P, van der Harst P, Chen Z, Sasaki M, Shu X-O, Jonas JB, He J, Heng C-K, Chen Y-T, Zheng W, Lin X, Teo Y-Y, Tai E-S, Cheng C-Y, Wong TY, Sim X, Mohlke KL, Yamamoto M, Kim B-J, Miki T, Nabika T, Yokota M, Kamatani Y, Kubo M, Kato N (2018). *Interethnic analyses of blood pressure loci in populations of East Asian and European descent. Nature Communications, 9, 5052. doi:10.1038/s41467-018-07345-0*
119. **Sandanger TM, Nost TH, Guida F, Rylander C, Campanella G, Muller DC, van Dongen J, Boomsma D, Johansson M, Vineis P, Vermeulen R, Lund E, Chadeau-Hyam M (2018). *DNA methylation and associated gene expression in blood prior to lung cancer diagnosis in the Norwegian Women and Cancer cohort. Scientific Reports, 8, 16714. doi:10.1038/s41598-018-34334-6*
120. Espin-Perez A, Krauskopf J, Chadeau-Hyam M, van Veldhoven K, Chung F, Cullinan P, Piepers J, van Herwijnen M, Kubesch N, Carrasco-Turigas G, Nieuwenhuijsen M, Vineis P, Kleinjans JCS, de Kok TMCM (2018). *Short-term transcriptome and microRNAs responses to exposure to different air pollutants in two population studies. Environmental Pollution, 242. doi:10.1016/j.envpol.2018.06.051*
121. Mostafavi N, Vermeulen R, Ghantous A, Hoek G, Probst-Hensch N, Herceg Z, Tarallo S, Naccarati A, Kleinjans JCS, Imboden M, Jeong A, Morley D, Amaral AFS, van Nunen E, Gulliver J, Chadeau-Hyam M, Vineis P, Vlaanderen J (2018). *Acute changes in DNA methylation in relation to 24 h personal air pollution exposure measurements: A panel study in four European countries. Environment International, 120. doi:10.1016/j.envint.2018.07.026*
122. Krauskopf J, Caiment F, van Veldhoven K, Chadeau-Hyam M, Sinharay R, Chung KF, Cullinan P, Collins P, Barratt B, Kelly FJ, Vermeulen R, de Kok TM, Kleinjans JCS (2018). *Short-term exposure to ambient motor vehicle emissions perturb the human circulating miRNA genome. Toxicology Letters, 295. doi:10.1016/j.toxlet.2018.06.560*
123. *Vermeulen R, Hosnijeh FS, Bodinier B, Portengen L, Liqueur B, Garrido-Manriquez J, Lokhorst H, Bergdahl IA, Kyrtopoulos SA, Johansson A-S, Georgiadis P, Melin B, Palli D, Krogh V, Panico S, Sacerdote C, Tumino R, Vineis P, Castagne R, Chadeau-Hyam (2018). *Pre-diagnostic blood immune markers, incidence and progression of B-cell lymphoma and multiple myeloma: Univariate and functionally informed multivariate analyses. International Journal of Cancer, 143(6). doi:10.1002/ijc.31536*

124. Espin-Perez A, Portier C, Chadeau-Hyam M, van Veldhoven K, Kleinjans JCS, de Kok TCM (2018). *Comparison of statistical methods and the use of quality control samples for batch effect correction in human transcriptome data. PLoS ONE, 13(8), e0202947.* doi:10.1371/journal.pone.0202947
125. Berger E, Delpierre C, Hosnijeh FS, Kelly-Irving M, Portengen L, Bergdahl IA, Johansson A-S, Krogh V, Palli D, Panico S, Sacerdote C, Tumino R, Kyrtopoulos SA, Vineis P, Chadeau-Hyam M, Vermeulen R, Castagne R (2018). *Association between low-grade inflammation and Breast cancer and B-cell Myeloma and Non-Hodgkin Lymphoma: findings from two prospective cohorts. Scientific Reports, 8, 10805.* doi:10.1038/s41598-018-29041-1
126. **Guida F, Nost TH, Relton C, Brennan P, Sandanger TM, Chadeau-Hyam M, Johansson M (2018). *Lung cancer risk prediction using DNA methylation markers. Cancer Research, 78(13).* doi:10.1158/1538-7445.AM2018-2209
127. **Jain P, Vineis P, Liquet B, Vlaanderen J, Bodinier B, van Veldhoven K, Kogevinas M, Athersuch TJ, Font-Ribera L, Villanueva CM, Vermeulen R, Chadeau-Hyam M (2018). *A multivariate approach to investigate the combined biological effects of multiple exposures. Journal of Epidemiology and Community Health, 72(7).* doi:10.1136/jech-2017-210061
128. Vlaanderen J, Portengen L, Chadeau-Hyam M, Szpiro A, Gehring U, Brunekreef B, Hoek G, Vermeulen R (2019). *Error in air pollution exposure model determinants and bias in health estimates. Journal of Exposure Science and Environmental Epidemiology, 29(2).* doi:10.1038/s41370-018-0045-x
129. *Plusquin M, Chadeau-Hyam M, Ghantous A, Alfano R, Bustamante M, Chatzi L, Cuenin C, Gulliver J, Herceg Z, Kogevinas M, Nawrot TS, Pizzi C, Porta D, Relton CL, Richiardi L, Robinson O, Sunyer J, Vermeulen R, Vriens A, Vrijheid M, Henderson J, Vineis P (2018). *DNA Methylome Marks of Exposure to Particulate Matter at Three Time Points in Early Life. Environmental Science and Technology, 52(9).* doi:10.1021/acs.est.7b06447
130. Castagne R, Gares V, Karimi M, Chadeau-Hyam M, Vineis P, Delpierre C, Kelly-Irving M (2018). *Allostatic load and subsequent all-cause mortality: which biological markers drive the relationship? Findings from a UK birth cohort. European Journal of Epidemiology, 33(5).* doi:10.1007/s10654-018-0364-1
131. Krauskopf J, Caiment F, van Veldhoven K, Chadeau-Hyam M, Sinharay R, Chung KF, Cullinan P, Collins P, Barratt B, Kelly FJ, Vermeulen R, Vineis P, de Kok TM, Kleinjans JC (2018). *The human circulating miRNome reflects multiple organ disease risks in association with short-term exposure to traffic-related air pollution. Environment International, 113.* doi:10.1016/j.envint.2018.01.014
132. Stringhini S, Carmeli C, Jokela M, Avendano M, McCrory C, d'Errico A, Bochud M, Barros H, Costa G, Chadeau-Hyam M, Delpierre C, Gandini M, Fraga S, Goldberg M, Giles GG, Lassale C, Kenny RA, Kelly-Irving M, Paccaud F, Layte R, Muennig P, Marmot MG, Ribeiro AI, Severi G, Steptoe A, Shipley MJ, Zins M, Mackenbach JP, Vineis P, Kivimaki M (2018). *Socioeconomic status, non-communicable disease risk factors, and walking speed in older adults: multi-cohort population based study. BMJ (Online), 360, k1046.* doi:10.1136/bmj.k1046
133. Turner MC, Vineis P, Seleiro E, Dijmarescu M, Balshaw D, Bertollini R, Chadeau-Hyam M, Gant T, Gulliver J, Jeong A, Kyrtopoulos S, Martuzzi M, Miller GW, Nawrot T, Nieuwenhuijsen M, Phillips DH, Probst-Hensch N, Samet J, Vermeulen R, Vlaanderen J, Vrijheid M, Wild C, Kogevinas M (2018). *EXPOsOMICS: final policy workshop and stakeholder consultation. BMC Public Health, 18, 260.* doi:10.1186/s12889-018-5160-z
134. **Robinson O, Keski-Rahkonen P, Chatzi L, Kogevinas M, Nawrot T, Pizzi C, Plusquin M, Richiardi L, Robinot N, Sunyer J, Vermeulen R, Vrijheid M, Vineis P, Scalbert A,

- Chadeau-Hyam M (2018). *Cord Blood Metabolic Signatures of Birth Weight: A Population-Based Study*. *Journal of Proteome Research*, 17(3). doi:10.1021/acs.jproteome.7b00846
135. **Castagne R, Chadeau-Hyam M (2019). *Univariate Statistical Modeling, Multiple Testing Correction, and Visualization in Metabolome-Wide Association Studies*. *Handbook Of Metabolic Phenotyping*. doi:10.1016/B978-0-12-812293-8.00008-6
 136. **Preston GW, Plusquin M, Sozeri O, van Veldhoven K, Bastian L, Nawrot TS, Chadeau-Hyam M, Phillips DH (2017). *Refinement of a Methodology for Untargeted Detection of Serum Albumin Adducts in Human Populations*. *Chemical Research in Toxicology*, 30(12). doi:10.1021/acs.chemrestox.7b00186
 137. Fiorito G, Polidoro S, Dugue P-A, Kivimaki M, Ponzi E, Matullo G, Guarnera S, Assumma MB, Georgiadis P, Kyrtopoulos SA, Krogh V, Palli D, Panico S, Sacerdote C, Tumino R, Chadeau-Hyam M, Stringhini S, Severi G, Hodge AM, Giles GG, Marioni R, Linner RK, O'Halloran AM, Kenny RA, Layte R, Baglietto L, Robinson O, McCrory C, Milne RL, Vineis P (2017). *Social adversity and epigenetic aging: a multi-cohort study on socioeconomic differences in peripheral blood DNA methylation*. *Scientific Reports*, 7, 16266. doi:10.1038/s41598-017-16391-5
 138. **van Veldhoven K, Keski-Rahkonen P, Barupal DK, Villanueva CM, Font-Ribera L, Scalbert A, Bodinier B, Grimalt JO, Zwiener C, Vlaanderen J, Portengen L, Vermeulen R, Vineis P, Chadeau-Hyam M, Kogevinas M (2018). *Effects of exposure to water disinfection by-products in a swimming pool: A metabolome-wide association study*. *Environment International*, 111. doi:10.1016/j.envint.2017.11.017
 139. Espin-Perez A, Font-Ribera L, van Veldhoven K, Krauskopf J, Portengen L, Chadeau-Hyam M, Vermeulen R, Grimalt JO, Villanueva CM, Vineis P, Kogevinas M, Kleinjans JC, de Kok TM (2018). *Blood transcriptional and microRNA responses to short-term exposure to disinfection by-products in a swimming pool*. *Environment International*, 110. doi:10.1016/j.envint.2017.10.003
 140. Vineis P, Avendano-Pabon M, Barros H, Chadeau-Hyam M, Costa G, Dijmarescu M, Del-pierre C, D'Errico A, Fraga S, Giles G, Goldberg M, Zins M, Kelly-Irving M, Kivimaki M, Lang T, Layte R, Mackenbach JP, Marmot M, McCrory C, Carmeli C, Milne RL, Muennig P, Nusselder W, Polidoro S, Ricceri F, Robinson O, Stringhini S (2017). *The biology of inequalities in health: the LIFEPAth project*. *Longitudinal and Life Course Studies*, 8(4). doi:10.14301/llcs.v8i4.448
 141. **Georgiadis P, Liampa I, Hebels DG, Krauskopf J, Chatziioannou A, Valavanis I, de Kok TMCM, Kleinjans JCS, Bergdahl IA, Melin B, Spaeth F, Palli D, Vermeulen RCH, Vlaanderen J, Chadeau-Hyam M, Vineis P, Kyrtopoulos SA (2017). *Evolving DNA methylation and gene expression markers of B-cell chronic lymphocytic leukemia are present in pre-diagnostic blood samples more than 10 years prior to diagnosis*. *BMC Genomics*, 18, 728. doi:10.1186/s12864-017-4117-4
 142. **Plusquin M, Guida F, Polidoro S, Vermeulen R, Raaschou-Nielsen O, Campanella G, Hoek G, Kyrtopoulos SA, Georgiadis P, Naccarati A, Sacerdote C, Krogh V, Bueno-de-Mesquita HB, Verschuren WMM, Sayols-Baixeras S, Panni T, Peters A, Hebels DG, Kleinjans J, Vineis P, Chadeau-Hyam M (2017). *DNA methylation and exposure to ambient air pollution in two prospective cohorts*. *Environment International*, 108. doi:10.1016/j.envint.2017.08.006
 143. **Castagne R, Boulange CL, Karaman I, Campanella G, Ferreira DLS, Kaluarachchi MR, Lehne B, Moayyeri A, Lewis MR, Spagou K, Dona AC, Evangelos V, Tracy R, Greenland P, Lindon JC, Herrington D, Ebbels TMD, Elliott P, Tzoulaki I, Chadeau-Hyam M (2017).

Improving Visualization and Interpretation of Metabolome-Wide Association Studies: An Application in a Population-Based Cohort Using Untargeted ¹HNMR Metabolic Profiling. Journal of Proteome Research, 16(10). doi:10.1021/acs.jproteome.7b00344

144. Barrera-Gomez J, Agier L, Portengen L, Chadeau-Hyam M, Giorgis-Allemand L, Siroux V, Robinson O, Vlaanderen J, Gonzalez JR, Nieuwenhuijsen M, Vineis P, Vrijheid M, Vermeulen R, Slama R, Basagana X (2017). *A systematic comparison of statistical methods to detect interactions in exposome-health associations. Environmental Health: A Global Access Science Source*, 16, 74. doi:10.1186/s12940-017-0277-6
145. Vlaanderen J, van Veldhoven K, Font-Ribera L, Villanueva CM, Chadeau-Hyam M, Portengen L, Grimalt JO, Zwiener C, Heederik D, Zhang X, Vineis P, Kogevinas M, Vermeulen R (2017). *Acute changes in serum immune markers due to swimming in a chlorinated pool. Environment International*, 105. doi:10.1016/j.envint.2017.04.009
146. Mostafavi N, Vlaanderen J, Portengen L, Chadeau-Hyam M, Modig L, Palli D, Bergdahl IA, Brunekreef B, Vineis P, Hebels DG AJ, Kleinjans JCS, Krogh V, Hoek G, Georgiadis P, Kyrtopoulos SA, Vermeulen R (2017). *Associations Between Genome-wide Gene Expression and Ambient Nitrogen Oxides. Epidemiology*, 28(3). doi:10.1097/EDE.0000000000000628
147. Vlaanderen J, Leenders M, Chadeau-Hyam M, Portengen L, Kyrtopoulos SA, Bergdahl IA, Johansson A-S, Hebels DDG AJ, de Kok TMCM, Vineis P, Vermeulen RCH (2017). *Exploring the nature of prediagnostic blood transcriptome markers of chronic lymphocytic leukemia by assessing their overlap with the transcriptome at the clinical stage. BMC Genomics*, 18, 239. doi:10.1186/s12864-017-3627-4
148. Chatziioannou A, Georgiadis P, Hebels DG, Liampa I, Valavanis I, Bergdahl IA, Johansson A, Palli D, Chadeau-Hyam M, Siskos AP, Keun H, Botsivali M, de Kok TMCM, Perez AE, Kleinjans JCS, Vineis P, Kyrtopoulos SA (2017). *Blood-based omic profiling supports female susceptibility to tobacco smoke-induced cardiovascular diseases. Scientific Reports*, 7, 42870. doi:10.1038/srep42870
149. Kelly RS, Kiviranta H, Bergdahl IA, Palli D, Johansson A-S, Botsivali M, Vineis P, Vermeulen R, Kyrtopoulos SA, Chadeau-Hyam M (2017). *Prediagnostic plasma concentrations of organochlorines and risk of B-cell non-Hodgkin lymphoma in enviromarkers: a nested case-control study. Environmental Health: A Global Access Science Source*, 16, 9. doi:10.1186/s12940-017-0214-8
150. Stringhini S, Carmeli C, Jokela M, Avendano M, Muennig P, Guida F, Ricceri F, d'Errico A, Barros H, Bochud M, Chadeau-Hyam M, Clavel-Chapelon F, Costa G, Delpierre C, Fraga S, Goldberg M, Giles GG, Krogh V, Kelly-Irving M, Layte R, Lasserre AM, Marmot MG, Preisig M, Shipley MJ, Vollenweider P, Zins M, Kawachi I, Steptoe A, Mackenbach JP, Vineis P, Kivimaki M (2017). *Socioeconomic status and the 25 x 25 risk factors as determinants of premature mortality: a multicohort study and meta-analysis of 1.7 million men and women. The Lancet*, 389(10075). doi:10.1016/S0140-6736(16)32380-7
151. McCrory C, O'Leary N, Fraga S, Ribeiro AI, Barros H, Kartiosuo N, Raitakari O, Kivimaki M, Vineis P, Layte R (2017). *Socioeconomic differences in children's growth trajectories from infancy to early adulthood: evidence from four European countries. Journal of Epidemiology and Community Health*, 71(10). doi:10.1136/jech-2016-208556
152. **Castagne R, Kelly-Irving M, Campanella G, Guida F, Krogh V, Palli D, Panico S, Sacerdote C, Tumino R, Kleinjans J, de Kok T, Kyrtopoulos SA, Lang T, Stringhini S, Vermeulen R, Vineis P, Delpierre C, Chadeau-Hyam M (2016). *Biological marks of early-life socioeconomic experience is detected in the adult inflammatory transcriptome. Scientific Reports*, 6, 38705. doi:10.1038/srep38705

153. Escher BI, Hackermuller J, Polte T, Scholz S, Aigner A, Altenburger R, Boehme A, Bopp SK, Brack W, Busch W, Chadeau-Hyam M, Covaci A, Eisentraeger A, Galligan JJ, Garcia-Reyero N, Hartung T, Hein M, Herberth G, Jahnke A, Kleinjans J, Kluever N, Krauss M, Lamoree M, Lehmann I, Luckenbach T, Miller GW, Mueller A, Phillips DH, Reemtsma T, Rolle-Kampczyk U, Schueuermann G, Schwikowski B, Tan Y-M, Trump S, Walter-Rohde S, Wambaugh JF (2017). *From the exposome to mechanistic understanding of chemical-induced adverse effects. Environment International*, 99. doi:10.1016/j.envint.2016.11.029
154. Baglietto L, Ponzi E, Haycock P, Hodge A, Assumma MB, Jung C-H, Chung J, Fasanelli F, Guida F, Campanella G, Chadeau-Hyam M, Grankvist K, Johansson M, Ala U, Provero P, Wong EM, Joo J, English DR, Kazmi N, Lund E, Faltus C, Kaaks R, Risch A, Barrdahl M, Sandanger TM, Southey MC, Giles GG, Johansson M, Vineis P, Polidoro S, Relton CL, Severi G (2017). *DNA methylation changes measured in pre-diagnostic peripheral blood samples are associated with smoking and lung cancer risk. International Journal of Cancer*, 140(1). doi:10.1002/ijc.30431
155. *Vineis P, Chadeau-Hyam M, Gmuender H, Gulliver J, Herceg Z, Kleinjans J, Kogevinas M, Kyrtopoulos S, Nieuwenhuijsen M, Phillips DH, Probst-Hensch N, Scalbert A, Vermeulen R, Wild CP (2017). *The exposome in practice: Design of the EXPOsOMICS project. International Journal of Hygiene and Environmental Health*, 220(2). doi:10.1016/j.ijheh.2016.08.001
156. Agier L, Portengen L, Chadeau-Hyam M, Basagana X, Giorgis-Allemand L, Siroux V, Robinson O, Vlaanderen J, Gonzalez JR, Nieuwenhuijsen MJ, Vineis P, Vrijheid M, Slama R, Vermeulen R (2016). *A Systematic Comparison of Linear Regression-Based Statistical Methods to Assess Exposome-Health Associations. Environmental Health Perspectives*, 124(12). doi:10.1289/EHP172
157. **Castagne R, Delpierre C, Kelly-Irving M, Campanella G, Guida F, Krogh V, Palli D, Panico S, Sacerdote C, Tumino R, Kyrtopoulos S, Hosnijeh FS, Lang T, Vermeulen R, Vineis P, Stringhini S, Chadeau-Hyam M (2016). *A life course approach to explore the biological embedding of socioeconomic position and social mobility through circulating inflammatory markers. Scientific Reports*, 6, 25170. doi:10.1038/srep25170
158. Georgiadis P, Hebels DG, Valavanis I, Liampa I, Bergdahl IA, Johansson A, Palli D, Chadeau-Hyam M, Chatziioannou A, Jennen DGJ, Krauskopf J, Jetten MJ, Kleinjans JCS, Vineis P, Kyrtopoulos SA (2016). *Omics for prediction of environmental health effects: Blood leukocyte-based cross-omic profiling reliably predicts diseases associated with tobacco smoking. Scientific Reports*, 6, 20544. doi:10.1038/srep20544
159. **Liquet B, Bottolo L, Campanella G, Richardson S, Chadeau-Hyam M (2016). *R2GUESS: A Graphics Processing Unit-Based R Package for Bayesian Variable Selection Regression of Multivariate Responses. Journal of Statistical Software*, 69(2).
160. **Hosnijeh FS, Portengen L, Spath F, Bergdahl IA, Melin B, Mattiello A, Masala G, Sacerdote C, Naccarati A, Krogh V, Tumino R, Chadeau-Hyam M, Vineis P, Vermeulen R (2016). *Soluble B-cell activation marker of sCD27 and sCD30 and future risk of B-cell lymphomas: A nested case-control study and meta-analyses. International Journal of Cancer*, 138(10). doi:10.1002/ijc.29969
161. Fasanelli F, Baglietto L, Ponzi E, Guida F, Campanella G, Johansson M, Grankvist K, Johansson M, Assumma MB, Naccarati A, Chadeau-Hyam M, Ala U, Faltus C, Kaaks R, Risch A, De Stavola B, Hodge A, Giles GG, Southey MC, Relton CL, Haycock PC, Lund E, Polidoro S, Sandanger TM, Severi G, Vineis P (2015). *Hypomethylation of smoking-related genes is associated with future lung cancer in four prospective cohorts. Nature Communications*, 6, 10192. doi:10.1038/ncomms10192

162. Kato N, Loh M, Takeuchi F, Verweij N, Wang X, Zhang W, Kelly TN, Saleheen D, Lehne B, Leach IM, Drong AW, Abbott J, Wahl S, Tan S-T, Scott WR, Campanella G, Chadeau-Hyam M, Afzal U, Ahluwalia TS, Bonder MJ, Chen P, Dehghan A, Edwards TL, Esko T, Go MJ, Harris SE, Hartiala J, Kasela S, Kasturiratne A, Khor C-C, Kleber ME, Li H, Mok ZY, Nakatochi M, Sapari NS, Saxena R, Stewart AFR, Stolk L, Tabara Y, Teh AL, Wu Y, Wu J-Y, Zhang Y, Aits I, Alves ADSC, Das S, Dorajoo R, Hopewell JC, Kim YK, Koivula RW, Luan J, Lyytikainen L-P, Nguyen QN, Pereira MA, Postmus I, Raitakari OT, Bryan MS, Scott RA, Sorice R, Tragante V, Traglia M, White J, Yamamoto K, Zhang Y, Adair LS, Ahmed A, Akiyama K, Asif R, Aung T, Barroso I, Bjorntjes A, Braun TR, Cai H, Chang L-C, Chen C-H, Cheng C-Y, Chong Y-S, Collins R, Courtney R, Davies G, Delgado G, Do LD, Doevendans PA, Gansevoort RT, Gao Y-T, Grammer TB, Grarup N, Grewal J, Gu D, Wander GS, Hartikainen A-L, Hazen SL, He J, Heng C-K, Hixson JE, Hofman A, Hsu C, Huang W, Husemoen LLN, Hwang J-Y, Ichihara S, Igase M, Isono M, Justesen JM, Katsuy T, Kibriya MG, Kim YJ, Kishimoto M, Koh W-P, Kohara K, Kumari M, Kwek K, Lee NR, Lee J, Liao J, Lieb W, Liewald DCM, Matsubara T, Matsushita Y, Meitinger T, Mihailov E, Milani L, Mills R, Mononen N, Mueller-Nurasyid M, Nabika T, Nakashima E, Ng HK, Nikus K, Nutile T, Ohkubo T, Ohnaka K, Parish S, Paternoster L, Peng H, Peters A, Pham ST, Pinidiyapathirage MJ, Rahman M, Rakugi H, Rolandsson O, Rozario MA, Ruggiero D, Sala CF, Sarju R, Shimokawa K, Snieder H, Sparso T, Spiering W, Starr JM, Stott DJ, Stram DO, Sugiyama T, Szymczak S, Tang WHW, Tong L, Trompet S, Turjanmaa V, Ueshima H, Uitterlinden AG, Umemura S, Vaarasmaki M, van Dam RM, van Gilst WH, van Veldhuisen DJ, Viikari JS, Waldenberger M, Wang Y, Wang A, Wilson R, Wong T-Y, Xiang Y-B, Yamaguchi S, Ye X, Young RD, Young TL, Yuan J-M, Zhou X, Asselbergs FW, Ciullo M, Clarke R, Deloukas P, Franke A, Franks PW, Franks S, Friedlander Y, Gross MD, Guo Z, Hansen T, Jarvelin M-R, Jorgensen T, Jukema JW, Kahonen M, Kajio H, Kivimaki M, Lee J-Y, Lehtimaki T, Linneberg A, Miki T, Pedersen O, Samani NJ, Sorensen TIA, Takayanagi R, Toniolo D, Ahsan H, Allayee H, Chen Y-T, Danesh J, Deary IJ, Franco OH, Franke L, Heijman BT, Holbrook JD, Isaacs A, Kim B-J, Lin X, Liu J, Maerz W, Metspalu A, Mohlke KL, Sanghera DK, Shu X-O, van Meurs JBJ, Vithana E, Wickremasinghe AR, Wijmenga C, Wolffenbuttel BHW, Yokota M, Zheng W, Zhu D, Vineis P, Kyrtopoulos SA, Kleinjans JCS, McCarthy MI, Soong R, Gieger C, Scott J, Teo Y-Y, He J, Elliott P, Tai ES, van der Harst P, Kooner JS, Chambers JC (2015). *Trans-ancestry genome-wide association study identifies 12 genetic loci influencing blood pressure and implicates a role for DNA methylation. Nature Genetics, 47(11). doi:10.1038/ng.3405*
163. van Veldhoven K, Polidoro S, Baglietto L, Severi G, Sacerdote C, Panico S, Mattiello A, Palli D, Masala G, Krogh V, Agnoli C, Tumino R, Frasca G, Flower K, Curry E, Orr N, Tomczyk K, Jones ME, Ashworth A, Sverdlow A, Chadeau-Hyam M, Lund E, Garcia-Closas M, Sandanger TM, Flanagan JM, Vineis P (2015). *Epigenome-wide association study reveals decreased average methylation levels years before breast cancer diagnosis. Clinical Epigenetics, 7, 67. doi:10.1186/s13148-015-0104-2*
164. **Stringhini S, Polidoro S, Sacerdote C, Kelly RS, van Veldhoven K, Agnoli C, Grioni S, Tumino R, Giurdanella MC, Panico S, Mattiello A, Palli D, Masala G, Gallo V, Castagne R, Paccaud F, Campanella G, Chadeau-Hyam M, Vineis P (2015). *Life-course socioeconomic status and DNA methylation of genes regulating inflammation. International Journal of Epidemiology, 44(4). doi:10.1093/ije/dyv060*
165. **Campanella G, Polidoro S, Di Gaetano C, Fiorito G, Guarrera S, Krogh V, Palli D, Panico S, Sacerdote C, Tumino R, Elliott P, Matullo G, Chadeau-Hyam M, Vineis P (2015). *Epigenetic signatures of internal migration in Italy. International Journal of Epidemiology, 44(4). doi:10.1093/ije/dyu198*

166. Assi N, Fages A, Vineis P, Chadeau-Hyam M, Stepien M, Duarte-Salles T, Byrnes G, Boumaza H, Knueppel S, Kuehn T, Palli D, Bamia C, Boshuizen H, Bonet C, Overvad K, Johansson M, Travis R, Gunter MJ, Lund E, Dossus L, Elena-Herrmann B, Riboli E, Jenab M, Viallon V, Ferrari P (2015). *A statistical framework to model the meeting-in-the-middle principle using metabolomic data: application to hepatocellular carcinoma in the EPIC study. Mutagenesis*, 30(6). doi:10.1093/mutage/gev045
167. Chambers JC, Loh M, Lehne B, Drong A, Kriebel J, Motta V, Wahl S, Elliott HR, Rota F, Scott WR, Zhang W, Tan S-T, Campanella G, Chadeau-Hyam M, Yengo L, Richmond RC, Adamowicz-Brice M, Afzal U, Bozaoglu K, Mok ZY, Ng HK, Pattou F, Prokisch H, Rozario MA, Tarantini L, Abbott J, Ala-Korpela M, Albetti B, Ammerpohl O, Bertazzi PA, Blancher C, Caiazzo R, Danesh J, Gaunt TR, de Lusignan S, Gieger C, Illig T, Jha S, Jones S, Jowett J, Kangas AJ, Kasturiratne A, Kato N, Kotea N, Kowlessur S, Pitkaeniemi J, Punjabi P, Saleheen D, Schafmayer C, Soininen P, Tai E-S, Thorand B, Tuomilehto J, Wickremasinghe AR, Kyrtopoulos SA, Aitman TJ, Herder C, Hampe J, Cauchi S, Relton CL, Froguel P, Soong R, Vineis P, Jarvelin M-R, Scott J, Grallert H, Bollati V, Elliott P, McCarthy MI, Kooner JS (2015). *Epigenome-wide association of DNA methylation markers in peripheral blood from Indian Asians and Europeans with incident type 2 diabetes: a nested case-control study. The Lancet Diabetes and Endocrinology*, 3(7). doi:10.1016/S2213-8587(15)00127-8
168. Mostafavi N, Vlaanderen J, Chadeau-Hyam M, Beelen R, Modig L, Palli D, Bergdahl IA, Vineis P, Hoek G, Kyrtopoulos SA, Vermeulen R (2015). *Inflammatory markers in relation to long-term air pollution. Environment International*, 81. doi:10.1016/j.envint.2015.04.003
169. **Guida F, Sandanger TM, Castagne R, Campanella G, Polidoro S, Palli D, Krogh V, Tumino R, Sacerdote C, Panico S, Severi G, Kyrtopoulos SA, Georgiadis P, Vermeulen RCH, Lund E, Vineis P, Chadeau-Hyam M (2015). *Dynamics of smoking-induced genome-wide methylation changes with time since smoking cessation. Human Molecular Genetics*, 24(8). doi:10.1093/hmg/ddu751
170. Johnson MR, Behmoaras J, Bottolo L, Krishnan ML, Pernhorst K, Santoscoy PL, Rossetti T, Speed D, Srivastava PK, Chadeau-Hyam M, Hajji N, Dabrowska A, Rotival M, Razzaghi B, Kovac S, Wanisch K, Grillo FW, Slaviero A, Langley SR, Shkura K, Roncon P, De T, Mattheisen M, Niehusmann P, O'Brien TJ, Petrovski S, von Lehe M, Hoffmann P, Eriksson J, Coffey AJ, Cichon S, Walker M, Simonato M, Danis B, Mazzuferi M, Foerch P, Schoch S, De Paola V, Kaminski RM, Cunliffe VT, Becker AJ, Petretto E (2015). *Systems genetics identifies Sestrin 3 as a regulator of a proconvulsant gene network in human epileptic hippocampus. Nature Communications*, 6, 6031. doi:10.1038/ncomms7031
171. Fages A, Ferrari P, Monni S, Dossus L, Floegel A, Mode N, Johansson M, Travis RC, Bamia C, Sanchez-Perez M-J, Chiodini P, Boshuizen HC, Chadeau-Hyam M, Riboli E, Jenab M, Elena-Herrmann B (2014). *Investigating sources of variability in metabolomic data in the EPIC study: the Principal Component Partial R^2 -square (PC-PR2) method. Metabolomics*, 10(6). doi:10.1007/s11306-014-0647-9
172. *Chadeau-Hyam M (2014). 0380 *Dynamics of exposure and disease progression: the use of compartmental models. Occupational and Environmental Medicine*, 71 Suppl 1. doi:10.1136/oemed-2014-102362.387
173. **Guida F, Campanella G, Sandanger T, Lund E, Vermeulen R, Vineis P, Chadeau-Hyam M (2014). 0220 *Identification of short-term, long-term and lifelong DNA methylation markers of exposure to tobacco smoke: evidence from EPIC and NOWAC studies. Occupational and Environmental Medicine*, 71 Suppl 1. doi:10.1136/oemed-2014-102362.92
174. *Chadeau-Hyam M, Vermeulen RCH, Hebels DGJ, Castagne R, Campanella G, Portengen L, Kelly RS, Bergdahl IA, Melin B, Hallmans G, Palli D, Krogh V, Tumino R, Sacerdote

- C, Panico S, de Kok TMCM, Smith MT, Kleinjans JCS, Vineis P, Kyrtopoulos SA (2014). *Predagnostic transcriptomic markers of Chronic lymphocytic leukemia reveal perturbations 10 years before diagnosis*. *Annals of Oncology*, 25(5). doi:10.1093/annonc/mdl056
175. **Kelly RS, Lundh T, Porta M, Bergdahl IA, Palli D, Johansson A-S, Botsivali M, Vineis P, Vermeulen R, Kyrtopoulos SA, Chadeau-Hyam M (2013). *Blood Erythrocyte Concentrations of Cadmium and Lead and the Risk of B-Cell Non-Hodgkin's Lymphoma and Multiple Myeloma: A Nested Case-Control Study*. *PLoS ONE*, 8(11), e81892. doi:10.1371/journal.pone.0081892
 176. *Chadeau-Hyam M, Tubert-Bitter P, Guihenneuc-Jouyaux C, Campanella G, Richardson S, Vermeulen R, De Iorio M, Galea S, Vineis P (2014). *Dynamics of the Risk of Smoking-Induced Lung Cancer <i>A Compartmental Hidden Markov Model for Longitudinal Analysis</i>*. *Epidemiology*, 25(1). doi:10.1097/EDE.0000000000000032
 177. Stamler J, Brown IJ, Yap IKS, Chan Q, Wijeyesekera A, Garcia-Perez I, Chadeau-Hyam M, Ebbels TMD, De Iorio M, Posma J, Daviglus ML, Carnethon M, Holmes E, Nicholson JK, Elliott P (2013). *Dietary and Urinary Metabonomic Factors Possibly Accounting for Higher Blood Pressure of Black Compared With White Americans Results of International Collaborative Study on Macro-/Micronutrients and Blood Pressure*. *Hypertension*, 62(6). doi:10.1161/HYPERTENSIONAHA.113.01810
 178. *Bottolo L, Chadeau-Hyam M, Hastie DI, Zeller T, Liqueur B, Newcombe P, Yengo L, Wild PS, Schillert A, Ziegler A, Nielsen SF, Butterworth AS, Ho WK, Castagne R, Munzel T, Tre-gouet D, Falchi M, Cambien F, Nordestgaard BG, Fumeron F, Tybjaerg-Hansen A, Froguel P, Danesh J, Petretto E, Blankenberg S, Tiret L, Richardson S (2013). *GUESS-ing Polygenic Associations with Multiple Phenotypes Using a GPU-Based Evolutionary Stochastic Search Algorithm*. *PLoS Genetics*, 9(8), e1003657. doi:10.1371/journal.pgen.1003657
 179. *Chadeau-Hyam M, Campanella G, Jombart T, Bottolo L, Portengen L, Vineis P, Liqueur B, Vermeulen RCH (2013). *Deciphering the complex: Methodological overview of statistical models to derive OMICS-based biomarkers*. *Environmental and Molecular Mutagenesis*, 54(7). doi:10.1002/em.21797
 180. **Vineis P, van Veldhoven K, Chadeau-Hyam M, Athersuch TJ (2013). *Advancing the application of omics-based biomarkers in environmental epidemiology*. *Environmental and Molecular Mutagenesis*, 54(7). doi:10.1002/em.21764
 181. **Vermeulen R, Chadeau-Hyam M (2012). *Dynamic Aspects of Exposure History-Do They Matter ?*. *Epidemiology*, 23(6). doi:10.1097/EDE.0b013e31826cc1cb
 182. Demetriou CA, Raaschou-Nielsen O, Loft S, Moller P, Vermeulen R, Palli D, Chadeau-Hyam M, Xun WW, Vineis P (2012). *Biomarkers of ambient air pollution and lung cancer: a systematic review*. *Occupational and Environmental Medicine*, 69(9). doi:10.1136/oemed-2011-100566
 183. Joffe M, Gambhir M, Chadeau-Hyam M, Vineis P (2012). *Causal diagrams in systems epidemiology*. *Emerging Themes in Epidemiology*, 9(1). doi:10.1186/1742-7622-9-1
 184. **Jasra A, De Iorio M, Chadeau-Hyam M (2011). *The time machine: a simulation approach for stochastic trees*. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 467(2132). doi:10.1098/rspa.2010.0497
 185. *Chadeau-Hyam M, Athersuch TJ, Keun HC, De Iorio M, Ebbels TMD, Jenab M, Sacerdote C, Bruce SJ, Holmes E, Vineis P (2011). *Meeting-in-the-middle using metabolic profiling - a strategy for the identification of intermediate biomarkers in cohort studies*. *Biomarkers*, 16(1). doi:10.3109/1354750X.2010.533285

186. *Bottolo L, Chadeau-Hyam M, Hastie DI, Langley SR, Petretto E, Tired L, Tregouet D, Richardson S (2011). *<i>ESS</i>: a C++ objected-oriented algorithm for Bayesian stochastic search model exploration. Bioinform., 27(4). doi:10.1093/bioinformatics/btq684*
187. **Vineis P, Chadeau-Hyam M (2011). *Integrating biomarkers into molecular epidemiological studies. Current Opinion in Oncology, 23(1). doi:10.1097/CCO.0b013e3283412de0*
188. Yap IKS, Brown IJ, Chan Q, Wijeyesekera A, Garcia-Perez I, Bictash M, Loo RL, Chadeau-Hyam M, Ebbeis T, De Iorio M, Maibaum E, Zhao L, Kesteloot H, Daviglus ML, Stamler J, Nicholson JK, Elliott P, Holmes E (2010). *Metabolome-Wide Association Study Identifies Multiple Biomarkers that Discriminate North and South Chinese Populations at Differing Risks of Cardiovascular Disease INTERMAP Study. Journal of Proteome Research, 9(12). doi:10.1021/pr100798r*
189. *Chadeau-Hyam M, Clarke PS, Guihenneuc-Jouyaux C, Cousens SN, Will RG, Ghani AC (2010). *An application of hidden Markov models to the French variant Creutzfeldt-Jakob disease epidemic. Journal of the Royal Statistical Society: Series C (Applied Statistics), 59. doi:10.1111/j.1467-9876.2010.00714.x*
190. *Chadeau-Hyam M, Ebbels TMD, Brown IJ, Chan Q, Stemler J, Huang CC, Daviglus ML, Ueshima H, Zhao L, Holmes E, Nicholson JK, Elliott P, De Iorio M (2010). *Metabolic Profiling and the Metabolome-Wide Association Study: Significance Level For Biomarker Identification. Journal of Proteome Research, 9(9). doi:10.1021/pr1003449*
191. *Chadeau-Hyam M, Hoggart CJ, O'Reilly PF, Whittaker JC, De Iorio M, Balding DJ (2008). *Fregene: Simulation of realistic sequence-level data in populations and ascertained samples. BMC Bioinform., 9, 364. doi:10.1186/1471-2105-9-364*
192. *Hoggart CJ, Chadeau-Hyam M, Clark TG, Lampariello R, Whittaker JC, De Iorio M, Balding DJ (2007). *Sequence-level population simulations over large genomic regions. Genetics, 177(3). doi:10.1534/genetics.106.069088*
193. *Chadeau-Hyam M, Alperovitch A (2005). *Risk of variant Creutzfeldt-Jakob disease in France. International Journal of Epidemiology, 34(1).*
194. *Chadeau-Hyam M, Alperovitch A (2005). *Variant Creutzfeldt-Jakob disease in France:: estimating the number of cases related to travel to the United Kingdom between 1980 and 1995. Revue d'Epidemiologie et de Sante Publique, 53(1). doi:10.1016/S0398-7620(05)84569-9*
195. *Chadeau-Hyam M, Tard A, Bird S, Le Guennec S, Bemrah N, Volatier JL, Alperovitch A (2003). *Estimation of the exposure of the French population to the BSE agent:: comparison of the 1980-95 consumption of beef products containing mechanically recovered meat in France and the UK, by birth cohort and gender. Statistical Methods in Medical Research, 12(3). doi:10.1191/0962280203sm330ra*

SELECTED ORAL PRESENTATIONS

1. *Questions, Achievements, and Perspectives for Exposome Analytics (Keynote)*. 55th Journées de la Statistique, French Statistical Society, Bordeaux, 29 May, 2024..
2. *Environmental, Psychosocial and Behavioural determinants of health (panel discussant)*. AF-CRO (French National Association of CROs for Clinical Sciences), Paris 25 January, 2024.
3. *Exposome Analytics for Respiratory outcomes (Keynote)*. 2024 International Symposium on Respiratory Medicine, Taipei, Taiwan, 14 January, 2024
4. *Investigating the embodiment of external exposome and its health consequences (Keynote)*. Health Inequality Workshop, Sommarøy, Norway, 8 January, 2024
5. *Exposome approaches: definitions, examples and perspectives (Keynote Lecture)*. National Institute for Nuclear Safety (IRSN), Paris, France, 28 November 2023.
6. *Environmental and psychosocial determinants of cancer risk: an Exposome approach (Keynote)*. Canceropole-GSO 19th annual meeting Arcachon, France. 22 November 2023.
7. *Exposome Analytics: methodological developments and needs (Keynote)*. 9th Channel Network Conference, Wageningen, International biometrics Society. 25 August, 2023.
8. *Stability Selection for Omics Data Screening and Integration: a Multi-omic Analysis of Lung Cancer Risk (Invited Lecture)*. University of Cambridge, 12 May 2023.
9. *Exposome Analytics: definitions, examples and perspectives (Invited Lecture)*. Exposome-NL symposium. 07 June 2023.
10. *Questions, Achievements, and Perspectives for Exposome Analytics (Keynote)*. ExposUM Exposome Centre Kick-off Meeting, Montpellier, France. 14 March 2023.
11. *"Exposome Analytics: Composite Scores, Embodiment, and Health Risk - Evidence for the UK Biobank Study (Keynote Lecture)*. ONE Health Conference- Open Science, Brussels (June, 2022).
12. *'Exposome Analytics: rationale, challenges and perspectives (Keynote Lecture)*. Exposome-NL Symposium, Utrecht (May, 2022).
13. *'Exposome Analytics: challenges and perspectives (Keynote Lecture)*. Luxembourg Institute of Health, Precision Public Health Webinar (November, 2021).
14. *'Graphical models for targeted OMICs integration: an application to Lung Carcinogenesis' (Keynote Lecture)*. INSERM-EMBL workshop, Academie des Sciences, Paris (September, 2021).
15. *'Multi-OMIC data integration: is that even possible ?' (Keynote Lecture)*. Columbia University, NYC, USA (July, 2021).
16. *'Exposome Analytics: Composite Scores, Embodiment and Health Risks (Keynote Lecture)*. European Human Exposome Network Conference (June, 2021).
17. *'Exposome Analytics: From molecules to Populations (Keynote Lecture)*. LKCMedicine - ICL workshop, Singapore (June, 2021).
18. *'Exposome Analytics: successes and current challenges (Keynote Lecture)*. Exposome Data Challenge, ISGlobal, Barcelona (April, 2021).
19. *'Composite scores, social embodiment and risk of CVD: Evidence from the UK Biobank cohort ?' (Keynote Lecture)*. Society of Toxicology - Risk Assessment Specialty Section webinar (February, 2021).

20. *'Exposome science in practice: methodological challenges and illustrations from two E.U. projects' (Invited Lecture).*, Centre for Epidemiology and Population Health, INSERM and CNRS, Villejuif, France (May, 2019).
21. *'Methodological Challenges in Exposome Science: illustrations from two E.U. projects' (Invited Talk).* Mount Sinai, Exposome Symposium, Brescia University, Italy (May, 2019).
22. *'Methodological Challenges in Exposome Science: illustrations from two E.U. projects' (Invited Talk).* Mount Sinai, Exposome Symposium, Brescia University, Italy (May, 2019).
23. *'Exposome Research: Statistical Models and Extensions' (Guest Lecture).* Big Data Manager PhD Course, University of Copenhagen, Denmark (May, 2018).
24. *'Methods and results from Exposomics project' (Keynote Lecture).* Embracing Exposure Science for Effective Public Health Protection for the Society of Toxicology (SOT), San Antonio (March 2018).
25. *'Lessons learnt from early exposome research: methods, results and perspectives' . (Keynote Lecture and session chair).* DOHaD research at the Exposome era. INSERM workshop, Paris (28-29 November, 2017).
26. *'Biostatistical/bioinformatics challenges in Exposome research' (Keynote Lecture).* HELIX Final meeting, Barcelona (31st October, 2017).
27. *' Exposome Research in practice : OMICs profiling and Integration' (Keynote Lecture).* Medicine / Data / Science meeting, London (28 September, 2017).
28. *' Exposome Research in practice : OMICs profiling and Integration' (Invited Talk).* Bordeaux Data Science conference, Bordeaux, 16 May, 2017).
29. *'An Exposome approach to investigate smoking induced lung cancer' (Keynote Lecture).* CR-UK Legacy Event, Bexley (23rd March, 2017).
30. *'First observations from Exposomics Project' (Invited Talk).* ISEES Exposome Symposium, Utrecht (11th October, 2016).
31. *'First observations from Exposomics Project' (Talk).* ISEE post-conference workshop, Rome (4th September, 2016).
32. *'Exposome in practice: Methodological overview of statistical models to derive OMICS- based biomarkers' (Keynote Lecture).* Ecole des Hautes Etudes en Sante Publique, Rennes France (8th June, 2016).
33. *'The Exposome in practice: Definition, Tools and Perspectives' (Keynote Lecture).* L'Oréal Research Symposium, Paris France (22nd June, 2016).
34. *'Molecular Epidemiology: Definition, Outputs and Perspectives' (Presentation).* MRC-PHE International Scientific Advisory Board meeting. Imperial College, London, Paris France (1st June, 2016).
35. *'From the exposome to the mechanome' (Seminar).* Institut Pasteur, Paris France (14th April, 2016).
36. *'Statistical developments for the exposome: a review' (Invited Lecture).* Diderot Mathematical Forum (DMF), University of Paris-Descartes , France(15th March, 2016).
37. *From the exposome to the Mechanome (Keynote Lecture).* Helmholtz Centre for Environmental Research, Leipzig, Germany (15 December, 2015)
38. *Socio-economic status and healthy ageing (Keynote Lecture).* University of Newcastle, UK-MEG Winter meeting, (Dec 1st, 2015),
39. *The Use of Compartmental Models: a Hidden Markov Model for Smoking- Induced Lung Cancer (Invited Seminar).* Mainz, Germany (5 November 2015)

40. *Exploring the sustainability of smoking-induced methylation changes after cessation (Invited Talk)*. EPIC statistical workshop - IARC -Lyon, 24 September 2015)
41. *A Compartmental Hidden Markov Model for the Longitudinal Analysis of the Risk of Smoking-Induced Lung Cancer (Invited Talk)*. OPERRA workshop - Munich, Germany (12 January 2015)
42. *Dynamics of exposure and disease progression: the use of compartmental models (Symposium Talk)*. EPICOH - Chicago, USA (25 June 2014)
43. *Statistical Models to analyse OMICS data (Invited Talk)*. Villard de Lans (Fce), HELIX-statistical Meeting (28 January, 2014)
44. *A Compartmental Hidden Markov Model for the Longitudinal Analysis of the Risk of Smoking-Induced Lung Cancer (Talk)*. EPICOH - Utrecht, The Netherlands (12 June 2013)
45. *Analysis of OMICS data from population studies (invited lecture)*. National Taiwan University symposium - Taipei, Taiwan (10/12 Apr. 2013)
46. *A longitudinal model for smoking induced-lung cancer: an application on a case control study nested in EPIC (invited talk)*. Workshop: 'Statistical Methods in Nutritional Epidemiology, with applications to the EPIC study' - IARC (Nov. 2012). Lyon, France.
47. *The use of HMM to model the longitudinal features of the risk of chronic disease (invited lecture)*. Workshop: 'HMM and Analysis of longitudinal cancer data' -University of Toulouse (October 2012). Toulouse, France.
48. *A Bayesian Predictive Model for Lung Cancer (invited lecture)*. CNRS-University of Marseille Lumini (September 2011). Marseille, France.
49. *An Analytical Strategy to Identify Markers in a Population Study: an Example Based on EnviroGenoMarkers Transcriptomic and Proteomic profiles (invited talk)*. European Environmental Mutagen Society (July 2011). Barcelona, Spain.
50. *A Quasi-Observed Markov Chain Model for Lung Cancer (invited talk)*. GDR-Statistics and Health (2011). Paris, France.
51. *Epigenetics in Environmental Epidemiology (invited talk)*. February 2011, Epigenetics Colloquium Meeting, Imperial College, Hammersmith Hospital.
52. *A Hidden Markov Model for Lung Cancer: Towards the Estimation of the 'Force of Exposure' and of Time to Diagnosis (talk)*. XXV International Biometric Conference (2010). Florianopolis, Brasil.
53. *Strategies to Analyse '-Omics Data': from T-test to a Fully Bayesian Variable Selection Approach*. March 2010, EnviroGenoMarkers Annual meeting, Santorini, Greece.
54. *Estimating the Risk of Secondary Transmission of vCJD (talk)*. XXIII International Biometric Conference (2006). Montréal, Québec, Canada.