

CURRICULUM VITAE

Name: Prof Jason S. Carroll, PhD FMedSci
Office Address: Cancer Research UK Cambridge Institute
University of Cambridge
Robinson Way, Cambridge, UK, CB2 0RE
E-Mail: jason.carroll@cruk.cam.ac.uk
Lab website: <http://www.carroll-lab.org.uk/>

Publication metrics: *Citations:* 26,217
H-Score: 72

Education:

2002 Ph.D. (Cancer Research) The Garvan Institute and
University of New South Wales, Sydney, Australia

1997 B.Sc. Hons (Molecular Biology) University of Melbourne (1st Class
Honours), Melbourne, Australia

Professional Experience:

2020 - Academic lead, Breast cancer programme, Cambridge Cancer
Centre

2019- Professor of Molecular Oncology, University of Cambridge

2016-2019 Director of Research (Professorial level), University of Cambridge

2017- Associate Lecturer, Department of Pathology, University of
Cambridge

2010- Senior Group Leader, Cancer Research UK Cambridge
Institute, University of Cambridge

2007- Faculty, Department of Oncology, University of Cambridge

2013- Fellow, Clare College, University of Cambridge

2006-2010 Junior Group Leader, Cancer Research UK, Cambridge Research
Institute

2005-2006 Instructor of Medicine, Harvard Medical School, Boston, MA

2002-2006 Research Associate, Department of Medical Oncology, Dana-
Farber Cancer Institute and Harvard Medical School, Boston, MA

1997-1998 Research Assistant, Genomics Disorders Research Centre,
St. Vincent's Institute of Medical Research, Melbourne, Australia

Industry Experience:

2017- 2020 Founder and Chief Scientific Officer, Azeria Therapeutics Limited

Awards and Honours:

1998-2002 Australian Postgraduate Award
2002 Freedman Foundation Fellowship Award
2002 Garvan Institute Annual Thesis Award
2005 Dana-Farber/Harvard Cancer Center symposium award
2009 British Association for Cancer Research: Frank Rose Young Scientist of the year award
2010 EMBO Young Investigator award
2012 Cancer Research UK Future leaders award
2013 AACR Outstanding Investigator Award
2014 Susan G. Komen Scholarship winner
2014 Louis-Jeantet Young Investigator Career Award
2015 European Journal of Endocrinology Award
2016 Komen Scholar
2016 EMBO membership
2016 Society for Endocrinology Medal Lecture
2017 Fellow, Academy of Medical Sciences
2018 SBUR Leland W. K. Chung lecture
2019 Connie Johnson Memorial award

Funding:

1998-2002 Australian Postgraduate Award
2002 Freedman Foundation Fellowship Award
2003 Peter Doherty Fellowship (declined)
2003-2007 Department of Defense Postdoctoral Fellowship
2009-2011 Breast Cancer Campaign Project grant
2009-2014 ERC Starting grant
2006- CRUK core funding
2014-2015 Louis-Jeantet Young Investigator Award
2015-2020 ERC Consolidator award
2016-2019 Komen Scholarship
2020-2023 Prostate Cancer UK grant
2020-2023 Breast Cancer Now grant

Supervised PhD students:

2007-2011 Caryn Ross-Innes
2009-2013 Jessica Robinson
2009-2013 Hisham Mohammed
2011-2015 Kamila Jozwik
2013-2016 Adam Nelson: Clinical fellow
2013-2016 Simon Johnston: Clinical fellow
2014-2015 Sarah Jurmeister
2014-2015 Karan Wadhwa

2015-2019	Rebecca Broome
2015-2019	Silvia Glont
2016-2021	Eva Papachristou
2016-2019	Sanjeev Kumar: Clinical Fellow
2020-2024	Danya Cheeseman
2020-2024	Giacomo Borsani
2021-2025	Catarina Pelicano

Professional activities:

Senior editor: *Molecular Cancer Research*
 Associate Editor: *Oncogene*
 Scientific Editor: *BBA Reviews on Cancer*
 Editorial board: *Endocrinology journal*
 Editorial board: *Nucleic Acids Research*
 Editorial board: *Cancer Research*
 Board member: *Trends in Endocrinology and Metabolism*
 Board member: *ecancer medical science*
 Board member: *Open Biology*
 Member: BACR and EACR
 Member: Society for Endocrinology
 Member: The Biochemical Society
 Member: European Society for Endocrinology
 Member: American Association for Cancer Research

Publications:

1. **Carroll, J.S**, Prall, O.W.J, Musgrove, E.A and Sutherland, R.L. A Pure Estrogen Antagonist Inhibits Cyclin E-Cdk2 Activity in MCF-7 Breast Cancer Cells and Induces Accumulation of p130-E2F4 Complexes Characteristic of Quiescence. *J Biol Chem.*, 2000; 275: 38221-9.
2. Prall, O.W.J, **Carroll, J.S** and Sutherland, R.L. A low abundance pool of nascent p21 is targeted by estrogen to activate cyclin E-Cdk2. *J Biol Chem.*, 2001, 276: 45433-42
3. **Carroll, J.S**, Swarbrick, A, Musgrove, E. A and Sutherland, R.L., Mechanisms of growth arrest by *c-myc* antisense oligonucleotides in MCF-7 breast cancer cells: Implications for the anti-proliferative effects of antiestrogens. *Cancer Res.* 2002, 62: 3126-31
4. Hui, R, Finney, G.L, **Carroll, J.S**, Lee, C.S, Musgrove, E.A and Sutherland, R.L. Constitutive cyclin D1 but not cyclin E confers acute resistance to antiestrogens in T-47D breast cancer cells. *Cancer Res.* 2002, 62: 6916-23
5. Doisneau-Sixou, S.F, Cestac, P, Chouini, S, **Carroll, J.S**, Hamilton, A.D, Sebt, S.M, Poirot, M, Balaguer, P, Faye, J.C, Sutherland, R.L and Favre, G. Contrasting effects of prenyltransferase estrogen-dependent cell cycle progression and estrogen receptor-mediated activity in MCF-7 cells. *Endocrinology.* 2003, 144: 989-98

6. Doisneau-Sixou, S.F, Sergio, C.M, **Carroll, J.S**, Hui, R, Musgrove, E.A and Sutherland, R.L. Estrogen and antiestrogen regulation of cell cycle progression in breast cancer cells. **Endocrine Related Cancer**. 2003, 10: 179-86
7. **Carroll, J.S**, Lynch, D.K, Swarbrick, A, Renoir, J-M, Sarcevic, B, Daly, R.J, Musgrove, E.A and Sutherland, R.L. p27(Kip1) induces quiescence and growth factor insensitivity in tamoxifen-treated breast cancer cells. **Cancer Res**. 2003, 63:4322-6
8. Mawson, A, Lai, A, **Carroll, J.S**, Sergio, C.M, Mitchell, C.J and Sarcevic, B. Estrogen and insulin/IGF-I cooperatively stimulate cell cycle progression in MCF-7 breast cancer cells through regulation of c-Myc and cyclin D1. **Mol Cell Endo.** 2005, 229:161-73
9. **Carroll, J.S**, Liu, X.S, Brodsky, A.S, Meyer, C.A, Li, W, Szary, A.J, Eeckhoute, J, Shao, W, Hestermann, E.V, Geistlinger, T.R, Fox, E.A, Silver, P.A and Brown, M. Chromosome-wide mapping of Estrogen Receptor binding reveals long-range regulation requiring the Forkhead protein FoxA1. **Cell**. 2005, 122:33-43
10. Wang, Q, **Carroll, J.S** and Brown, M. Novel special and temporal recruitment of Androgen Receptor and its coactivators leads to chromosomal looping and polymerase tracking. **Mol Cell**, 2005, 19:631-42
11. Carroll, D.K, **Carroll, J.S**, Sofer, A, Cheng, F, Brown, M, Mills, A.A, Brugge, J.S and Ellisen, L.W. p63 regulates an adhesion program and cell survival in epithelial cells. **Nature Cell Biol.**, 2006, 8:551-61
12. **Carroll, J.S** and Brown, M. Estrogen Receptor Target Gene: an Evolving Concept. **Mol Endocrinol.**, 2006, 20:1707-14
13. Johnson, W. E, Li, W, Meyer, C. A, Gottardo, R, **Carroll, J. S**, Brown, M and Liu, X. S. MAT: Model-based analysis of tiling-arrays for ChIP-chip, **Proc Natl Acad Sci USA**, 2006, 103:12457-62
14. Eeckhoute, J, **Carroll, J.S**, Geistlinger, T.R, Torres-Arzayus, M.I and Brown, M. Combinatorial transcriptional network required for estrogen regulation of cyclin D1 and cell cycle progression in breast cancer cells, **Genes Dev.**, 2006, 20:2513-26
15. **Carroll, J.S**, Meyer, C.A, Song, J, Li, W, Geistlinger, T.R, Eeckhoute, J, Brodsky, A.S, Keeton, E.K, Fertuck, K.C, Hall, G.F, Wang, Q, Bekiranov, S, Sementchenko, V, Fox, E.A, Silver, P.A, Gingeras, T.R, Liu, X.S and Brown, M. Genome-wide analysis of Estrogen Receptor binding sites, **Nature Genetics**, 2006, 38:1289-97
16. Wang, Q, Li, W, Liu, X.S, **Carroll, J.S**, Janne, O.A, Chinnaiyan, A.M, Pienta, K.J and Brown, M. A transcriptional regulatory network governs prostate cancer growth and survival, **Mol Cell**, 2007, 27:380-92
17. Schmelzle, T, Mailloux, A.A, Overholtzer, M, **Carroll, J.S**, Solimini, N.L, Lightcap, E.S, Veiby, O.P and Brugge, J.S. Functional role and oncogene-regulated expression of the BH3-only proapoptotic factor Bmf in mammary epithelial anoikis. **Proc Natl Acad Sci USA**, 2007, 104: 3787-92

18. Eeckhoute, J, Keeton, E.K, Lupien, M, Krum, S.A, **Carroll, J.S** and Brown, M. Positive cross-regulatory loop ties GATA-3 to estrogen receptor alpha expression in breast cancer. **Cancer Res.**, 2007, 67:6477-83
19. Green, K.A and **Carroll, J.S.** Oestrogen Receptor mediated transcription and the influence of co-factors and chromatin state. **Nature Reviews Cancer**, 2007, 7:713-22
20. Krum, S. A, Miranda-Carboni, G. A, Hauschka, P. V, **Carroll, J. S**, Lane, T. F, Freedman, L. P, and Brown, M. Estrogen protects bone by inducing Fas ligand in Osteoblasts to regulate Osteoclast survival. **EMBO J**, 2008, 27:535-45
21. Lupien, M, Eeckhoute, J, Meyer, C. A, Wang, Q, Zhang, Y, Li, W, **Carroll, J. S**, Liu, X. S and Brown, M. FoxA1 translates epigenetic signatures into enhancer driven lineage-specific transcription. **Cell**, 2008, 132:958-70
22. Dietz, S.C and **Carroll, J.S.** Interrogating the genome to understand ER transcription in breast cancer cells. **Expert Reviews in Molecular Medicine**. 2008, 1;10:e10
23. Johnson, D.S, Li, W, Gordon, D.B, Bhattacharjee, A, Curry, B, Ghosh, J, Brizuela, L, **Carroll, J.S**, Brown, M et. al. Systematic evaluation of variability in ChIP-chip experiments using predefined DNA targets. **Genome Research**, 2008. 18:393-403
24. Li, W, **Carroll, J.S**, Brown, M and Liu X.S. xMAN: extreme MApping of OligoNucleotides. **BMC Genomics**, 2008, 9:S20
25. Holmes, K.A, Song, J.S, Liu, X.S, Brown, M and **Carroll, J.S.** Nkx3-1 and LEF-1 function as transcriptional inhibitors of Estrogen Receptor activity, **Cancer Res.**, 2008, 68: 7380-85
26. Krum, S.A, Miranda-Carboni, G.A, Lupien, M, Eeckhoute, J, **Carroll, J.S** and Brown, M. Unique ER-alpha cistromes control cell type-specific gene regulation. **Mol Endocrinol.**, 2008, 22: 2393-406.
27. Hurtado, T, Holmes, K.A, Geistlinger, T.R, Hutcheson, I.A, Nicholson, R.I, Brown, M, Jiang, J, Howat, W, Ali, S and **Carroll, J.S.** Regulation of ERBB2 by oestrogen receptor-PAX2 determines response to tamoxifen. **Nature**, 2008, 456: 663-7.
28. Bhat-Nakshatri, P, Wang, G, Appaiah, H, Luktuke, N, **Carroll, J.S**, Geistlinger, T.R, Brown, M, Badve, S, Liu, Y and Nakshatri, H. AKT alters genome-wide Estrogen Receptor alpha binding and impacts estrogen signalling in breast cancer. **Mol Cell Biol.**, 2008, 28: 7487-503
29. Xia, X, Lemieux, M, Li, W, **Carroll, J. S**, Brown, M, Liu, X. S and Kung, A. L. Integration of chromatin binding and gene expression identifies 2-oxyglutarate-Fe(2+) dioxygenases as primary HIF-1 targets and reveals determinants of hypoxic responses. **Proc Natl Acad Sci USA**, 2009, 106: 4260-5
30. Nucera C, Eeckhoute J, Finn S, **Carroll J. S**, Ligon A. H, Priolo C, Fadda G, Toner M, Sheils O, Attard M, Pontecorvi A, Nose V, Loda M and Brown M. FOXA1 Is a Potential Oncogene in Anaplastic Thyroid Carcinoma. **Clin Cancer Res**. 2009, 15: 3680-9

31. Wang, Q, Li, W, Zhang, Y, Yuan, X, Beroukhir, R, Wang, H, Wu, T, Lupien, M, **Carroll, J. S**, Manrai, A. K, Janne, O. A, Balk, S. B, Mehra, R, Chinnaiyan, A. M, Rubin, M. A, True, L, Fiorentino, M, Fiore, C, Loda, M, Kantoff, P. W, Liu, X. S and Brown, M. Reprogramming of Androgen Receptor function in androgen-independent prostate cancer, **Cell**, 2009, 138: 245-56
32. Bhat-Nakshatri, P, Wang, G, Collins, N, Thomson, M, Geistlinger, T. R, **Carroll, J. S**, Brown, M, Hammond, S, Srour, E, Liu, Y and Nakshatri, H. Estradiol-Regulated MicroRNAs Control Estradiol Response in Breast Cancer Cells, **Nucleic Acids Res.**, 2009, 37: 4850-4861
33. Caldon, C. E, Sergio, C. M, Schutte, J, Boersma, M. N, Sutherland, R. L, **Carroll, J. S** and Musgrove, E. A. Estrogen regulation of cyclin E2 requires cyclin D1, but not c-Myc. **Mol Cell Biol.**, 2009, 29: 4623-4639
34. Redmond A.M and **Carroll, J. S**. Defining and targeting transcription factors in cancer. **Genome Biology**, 2009, 10: 311.1-311.3
35. Ross-Innes, C. S, Stark, R, Holmes, K. A, Schmidt, D, Spyrou, C, Russell, R, Massie, C. E, Vowler, S. L, Eldridge, M and **Carroll, J. S**. Co-operative interaction between Retinoic Acid Receptor- α and Estrogen Receptor in breast cancer, **Genes Dev.**, 2010, 24: 171-182
36. Badve, S, Collins, N. R, Bhat-Nakshatri, P, Turbin, D, Leung, S, Thorat, M, Dunn, S. E, Geistlinger, T. R, **Carroll, J. S**, Brown, M, Bose, S, Teitell, M. A and Nakshatri, H. Subcellular Localization of Activated AKT in ER and PR Expressing Breast Cancers: Potential Clinical Implications, **Am J Path.**, 2010, 176: 2139-2149
37. Theodorou, V and **Carroll, J. S**. Estrogen receptor action in three dimensions – looping the loop. **Breast Cancer Res.**, 2010, 12: 303
38. Schmidt, D, Schwalie, P. C, Ross-Innes, C. S, Hurtado, A, Brown, G. D, **Carroll, J. S**, Flicek, P and Odom, D. T. A CTCF-independent role for cohesin in tissue-specific transcription. **Genome Research**, 2010, 20: 578-588
39. Choy, M-K, Movassagh, M, Siggins, L, Vujic, A, Goddard, M, Sanchez, A, Perkins, N, Figg, N, Bennett, M, **Carroll, J. S** and Foo, R. High-throughput sequencing identifies STAT3 as the DNA-associated factor for p53-NF-kappaB-complex-dependent gene expression in human heart failure. **Genome Medicine**, 2010, 2:37
40. Zwart, W, Theodorou, V and **Carroll, J. S**. Estrogen Receptor positive breast cancer: a multidisciplinary challenge. **WIREs, Systems biology and medicine**, 2010, 3:216-30
41. Thiruchelvam, P.T.R, Lai, C-F, Hua, H, Thomas, R.S, Hurtado, A, Hudson, W, Bayly, A.R, Kyle, F.J, Periyasamy, M, Photiou, A, Spivey, A.C, Ortlund, E.A, Whitby, R.J, **Carroll, J.S**, Coombes, R.C, Buluwela, L and Ali, S. The liver receptor homolog 1 Nuclear Receptor regulates estrogen receptor expression in breast cancer cells. **Breast Cancer Res Treat**, 2011, 127:385-96

42. Lupien, M, Meyer, C.A, Bailey, S.T, Eeckhoute, J, Cook, J, Westerling, T, Zhang, X, **Carroll, J.S**, Rhodes, D.R, Liu, X.S and Brown, M. Growth factor stimulation induces a distinct ER cistrome underlying breast cancer endocrine resistance. *Genes Dev.*, 2010, 24: 2219-27
43. Hurtado, A, Holmes, K.A, Ross-Innes, C.S, Schmidt, D and **Carroll, J.S**. FoxA1 is necessary and sufficient for programming Estrogen Receptor function and endocrine response. *Nature Genetics*, 2011, 43:27-33
44. Holmes, K.A, Hurtado, A, Brown, G.D, Launchbury, R, Ross-Innes, C.S, Hadfield, J, Odom, D.T and **Carroll, J.S**. TLE1 mediates Estrogen Receptor binding and transcriptional activity in breast cancer cells. *Proc Natl Acad Sci USA*, 2012, 109:2748-53
45. Meyer, K.B, Maia, A-T, O'Reilly, M, Ghousaini, M, Prathalingham, R, Porter-Gill, P, Ambs, S, Prokunina-Olsson, L, **Carroll, J** and Ponder B.A.J. A functional variant at a prostate cancer predisposition locus at 8q24 is associated with PVT1 expression. *PLOS Genetics*, 2011, 7:e1002165
46. Robinson, J.L.L, MacArthur, S, Ross-Innes, C.S, Tilley, W.D, Neal, D.E, Mills, I.G and **Carroll, J.S**. Androgen Receptor driven transcription in molecular apocrine breast cancer is mediated by FoxA1. *EMBO J*, 2011, 30: 3019-27
47. Holland, D.G, Burleigh, A, Git, A, Goldgraben, M.A, Perez-Mancera, P.A, Chin, S.F, Hurtado, A, Bruna, A, Ali, H.R, Greenwood, W, Dunning, M.J, Samarajiwa, S, Menon, S, Rueda, O.M, Lynch, A.G, McKinney, S, Ellis, I.O, Eaves, C.J, **Carroll, J.S**, Curtis, C, Aparicio, S and Caldas, C. ZNF703 is a common luminal B breast cancer oncogene that differentially regulates luminal and basal progenitors in human mammary epithelium. *EMBO Mol Med.*, 2011, 3: 167-80
48. Krijgsman, O, Roepman, P, Zwart, W, **Carroll, J.S**, Tian, S, de Snoo, F.A, Bender, R.A, Bernardis, R, Glas, A.M. A diagnostic gene profile for molecular subtyping of breast cancer associated with treatment response. *Breast Cancer Res. Treat*, 2011, 133: 37-47
49. Zwart, W, Theodorou, V, Kok, M, Canisius, S, Linn, S and **Carroll, J.S**. Estrogen Receptor co-factor-chromatin specificity in the transcriptional regulation of breast cancer. *EMBO J*, 2011, 30: 4764-76
50. Zaret, K.S and **Carroll, J.S**. Pioneer transcription factors: establishing competence for gene expression. *Genes Dev.*, 2011, 25: 2227-41
51. Ross-Innes, C.S, Brown, G. D and **Carroll, J.S**. A co-ordinated interaction between CTCF and ER in breast cancer cells, *BMC Genomics*, 2011, 12: 593
52. Ross-Innes, C.S, Stark, R, Teschendorff, A.E, Holmes, K.A, Ali, H.R, Dunning, M.J, Brown, G.D, Gojis, O, Ellis, I.O, Green, A.R, Ali, S, Chin, S.F, Palmieri, C, Caldas, C and **Carroll, J.S**. Differential oestrogen receptor binding is associated with clinical outcome in breast cancer. *Nature*, 2012, 481: 389-93

53. Jozwik K. M and **Carroll, J.S.** Pioneer factors in hormone dependent cancers. *Nature Reviews Cancer*, 2012, 12: 381-5
54. Natrajan R, Mackay A, Lambros MB, Weigelt B, Wilkerson PM, Manie E, Grigoriadis A, A'hern R, van der Groep P, Kozarewa I, Popova T, Mariani O, Turajlic S, Furney SJ, Marais R, Rodruigues DN, Flora AC, Wai P, Pawar V, McDade S, **Carroll J**, Stoppa-Lyonnet D, Green AR, Ellis IO, Swanton C, van Diest P, Delattre O, Lord CJ, Foulkes WD, Vincent-Salomon A, Ashworth A, Henri Stern M, Reis-Filho JS. A whole-genome massively parallel sequencing analysis of BRCA1 mutant oestrogen receptor-negative and -positive breast cancers, 2012, *J. Pathol.*, 227: 29-41
55. Robinson J. L, **Carroll J. S.** FoxA1 is a key mediator of hormonal response in breast and prostate cancer. *Front Endocrinol.* 2012; 3:68.
56. Hickey T.E, Robinson J.L, **Carroll J.S**, Tilley W.D. Minireview: The Androgen Receptor in Breast Tissues: Growth Inhibitor, Tumor Suppressor, Oncogene? *Mol Endocrinol.* 2012, 26:1252-67
57. Theodorou V, Stark R, Menon S and **Carroll J.S.** GATA3 acts upstream of FOXA1 in mediating ESR1 binding by shaping enhancer accessibility, *Genome Research*, 2012, 44: 1176-7
58. Meyer K.B and **Carroll J.S.** FOXA1 and breast cancer risk, *Nature Genetics*, 2012, 44:1176-7
59. Magnani, L, Carroll, J, Zwart, W and Palmieri, C. ChIPing away at breast cancer. *Lancet Oncol.*, 2012, 13: 1185-7
60. Kalyuga M, Gallego-Ortega D, Lee H.J, Roden D.L, Cowley M.J, Caldon C.E, Stone A, Allerdice S.L, Valdes-Mora F, Launchbury R, Statham A.L, Armstrong N, Alles M.C, Young A, Egger A, Au W, Piggitt C.L, Evans C.J, Ledger A, Brummer T, Oakes S.R, Kaplan W, Gee J.M, Nicholson R.I, Sutherland R.L, Swarbrick A, Naylor M.J, Clark S.J, Carroll J.S and Ormandy C.J. ELF5 Suppresses Estrogen Sensitivity and Underpins the Acquisition of Antiestrogen Resistance in Luminal Breast Cancer. *PLoS Biol.* 2012, 10: e1001461
61. Sanders, D.A, Ross-Innes, C-S, Beraldi, D, **Carroll, J.S** and Balasubramaniam, S. Genome-wide mapping of FOXM1 binding reveals co-binding with oestrogen receptor alpha in breast cancer cells. *Genome Biol.*, 2013, 14: R6.
62. Mohammed, H, D'Santos, C, Serandour, A.A, Ali, H.R, Brown, G.D, Atkins, A, Rueda, O.M, Holmes, K.A, Theodorou, V, Robinson, J.L.L, Zwart, W, Saadi, A, Ross-Innes, C.S, Chin, S-F, Menon, S, Stingl, J, Palmieri, C, Caldas, C and **Carroll, J.S.** Endogenous purification reveals GREB1 as a key estrogen receptor regulatory factor. *Cell Reports*, 2013, 3: 342-9.
63. Robinson J.L, Holmes K.A, **Carroll J.S.** FOXA1 mutations in hormone-dependent cancers. *Front Oncol.* 2013;3:20.

64. Zwart W, Koornstra R, Wesseling J, Rutgers E, Linn S, **Carroll J.S.** A carrier assisted ChIP-seq method for estrogen receptor-chromatin interactions from breast cancer core needle biopsy samples. *BMC Genomics*. 2013, 14:232
65. Bhat-Nakshatri, P, Song, E. K, Collins, N.R, Uversky, V.N, Dunker, A.K, O'Malley, B.W, Geistlinger, T.R, **Carroll, J.S**, Brown, M and Nakshatri, H. Interplay between estrogen receptor and AKT in Estradiol-induced alternative splicing. *BMC Med Genomics*. 2013, 6:21
66. Lai C.F, Flach K.D, Alexi X, Fox S.P, Ottaviani S, Thiruchelvam P.T, Kyle F.J, Thomas R.S, Launchbury R, Hua H, Callaghan H.B, **Carroll J.S**, Charles Coombes R, Zwart W, Buluwela L, and Ali S. Co-regulated gene expression by oestrogen receptor α and liver receptor homolog-1 is a feature of the oestrogen response in breast cancer cells. *Nucleic Acids Res*. 2013, 41:10228-40
67. Redmond A.M and **Carroll J.S.** Enhancer-derived RNAs: 'spicing up' transcription programs. *EMBO J*. 2013,32:2096-8
68. Eccles S.A, Aboagye E.O, Ali S, Anderson A.S, Armes J, Berditchevski F, Blaydes J.P, Brennan K, Brown N.J, Bryant H.E, Bundred N.J, Burchell J.M, Campbell A.M, **Carroll J.S**,Tutt A.N, Velikova G, Walker R.A, Watson C.J, Williams K.J, Young L.S, Thompson A.M. Critical research gaps and translational priorities for the successful prevention and treatment of breast cancer. *Breast Cancer Res*. 2013, 15:R92.
69. Mohammed H and **Carroll J.S.** Approaches for assessing and discovering protein interactions in cancer. *Mol Cancer Res*. 2013, 11:1295-302
70. **Carroll J.S.** Steroids, nuclear receptors and breast cancer. Preface. *Mol Cell Endocrinol*. 2014, 382:623.
71. Robinson J. L, Hickey T.E, Warren A.Y, Vowler S.L, Carroll T, Lamb A.D, Papoutsoglou N, Neal D.E, Tilley W.D and **Carroll J.S.** Elevated levels of FOXA1 facilitate androgen receptor chromatin binding resulting in a CRPC-like phenotype. *Oncogene*. 2013. doi: 10.1038/onc.2013.508.
72. Serandour A.A, Brown G.D, Cohen J.D and **Carroll J.S.** Development of an Illumina-based ChIP-exonuclease method provides insight into FoxA1-DNA binding properties. *Genome Biol*. 2013,14(12):R147
73. Nelson A.W, Tilley W.D, Neal D.E, **Carroll J.S.** Estrogen receptor beta in prostate cancer: friend or foe? *Endocr Relat Cancer*. 2014, 440:138-150
74. Ji Z, Mohammed H, Webber A, Ridsdale J, Han N, **Carroll J.S**, Sharrocks A.D. The forkhead transcription factor FOXK2 acts as a chromatin targeting factor for the BAP1-containing histone deubiquitinase complex. *Nucleic Acids Res*. 2014, 42: 6232-42
75. Owens T.W, Rogers R.L, Best S.A, Ledger A, Mooney A.M, Ferguson A, Shore P, Swarbrick A, Ormandy C.J, Simpson P.T, **Carroll J.S**, Visvader J.E and Naylor M.J. Runx2 is a novel regulator of mammary epithelial cell fate in development and breast cancer. *Cancer Res*. 2014 Sep 15;74: 5277-8

76. Rosell M, Nevedomskaya E, Stelloo S, Nautiyal J, Poliandri A, Steel J.H, Wessels L.F, **Carroll J.S**, Parker M.G, Zwart W. Complex formation and function of estrogen receptor α in transcription requires RIP140. **Cancer Res.** 2014 Oct 1;74(19): 5469-7
77. Redmond A.M, Byrne C, Bane F.T, Brown G.D, Tibbitts P, O'Brien K, Hill A.D, **Carroll J.S**, Young L.S. Genomic interaction between ER and HMGB2 identifies DDX18 as a novel driver of endocrine resistance in breast cancer cells. **Oncogene.** 2015, 34: 3871-80
78. Johnston S.J and **Carroll J.S**. Transcription factors and chromatin proteins as therapeutic targets in cancer. **Biochim Biophys Acta.** 2015; 1855:183-192
79. Mohammed H, Russell, I. A, Stark, R, Rueda, O.M, Hickey, T.E, Tarulli, G.A, Serandour, A.A.A, Birrell, S.N, Burna, A, Saadi, A, Menon, S, Hadfield, J, Pugh, M, Raj, G.V, Brown, G.D, D'Santos, C, Robinson, J.L.L, Silva, G, Launchbury, R Perou, C.M, Stingl, J, Caldas, C, Tilley, W.D and **Carroll J.S**. Progesterone receptor modulates estrogen receptor- α action in breast cancer. **Nature**, 2015, 523: 313-317
80. Zwart W, Flach K.D, Rudraraju B, Abdel-Fatah T.M, Gojjs O, Moore D, Nevedomskaya E, Opdam M, Droog M, Hofland I, Chan S.Y, Shaw J, Ellis I.O, Coombes R.C, **Carroll J.S**, Ali S, Palmieri C. SRC3 phosphorylation at Serine 543 is a positive independent prognostic factor in ER positive breast cancer. **Clin Cancer Res.** 2016, 22:479-91
81. Periyasamy M, Patel H, Lai C.F, Nguyen V.T, Nevedomskaya E, Harrod A, Russell R, Remenyi J, Ochocka A.M, Thomas R.S, Fuller-Pace F, Győrffy B, Caldas C, Navaratnam N, **Carroll J.S**, Zwart W, Coombes R.C, Magnani L, Buluwela L, Ali S. APOBEC3B-Mediated Cytidine Deamination Is Required for Estrogen Receptor Action in Breast Cancer. **Cell Rep.** 2015, 13:108-2
82. D'Santos C, Taylor C, **Carroll J.S**, Mohammed H. RIME proteomics of estrogen and progesterone receptors in breast cancer. **Data Brief.** 2015 Sep 3;5:276-80
83. Baird R.D and **Carroll JS**. Understanding Oestrogen Receptor Function in Breast Cancer and its Interaction with the Progesterone Receptor. New Preclinical Findings and their Clinical Implications. **Clin Oncol** (R Coll Radiol). 2015, 28: 1-3
84. Holmes KA, Brown G.D and **Carroll J.S**. Chromatin Immunoprecipitation-Sequencing (ChIP-seq) for Mapping of Estrogen Receptor-Chromatin Interactions in Breast Cancer. **Methods Mol Biol.** 2016;1366:79-98
85. Shu, S, Lin, C.Y, He, H.H, Witwicki, R.M, Roberts, J.M, Tabassum, D.P, Liang, Y, Ekram, M.B, Doherty, E, Brown, J, Mohammed, H, D'Santos, C, McKeown, M, Ott, C, Qi, J, Ni, M, Rao, P.K, Duarte, M, Wu, S-Y, Chiang, C-M, Anders, L, Young, R.A, **Carroll, J.S**, Long, H, Brown, M, Liu, S.X, Meyer, C.A, Bradner, J.E and Polyak, K. Response and resistance to BET bromodomain inhibitors in triple negative breast cancer. **Nature**, 2016, 29 :413-7
86. Mohammed, H, Taylor, C, Brown, G, Papachristou, E, **Carroll, J.S** and D'Santos, C. Rapid Immunoprecipitation Mass spectrometry of Endogenous protein (RIME) for analysis of chromatin complexes. **Nature Protocols**, 2016, 11: 316-326

87. Asim, M, Massie, C.E, Orafidiya, F, Pertega-Gomes, N, Warren, A.Y, Esmaeli, M, Selth, L.A., Zecchini, H.I, Luko, K, Qureshi, A, Baridi, A, Menon, S, Madhu, B, Escriu, C, Lyons, S, Vowler, S.L, Zecchini, V.R, Shaw, G, Hessenkemper, W, Russell, R, Mohammed, H, Stefanos, N, Lynch, A.G, Grigorenko, E, D'Santos, C, Taylor, C, Lamb, A, Sriranjani, R, Yang, J, Stark, R, Dehm, S.M, Rennie, P.S, **Carroll, J.S**, Griffiths, J.R, Tavare, S, Mills, I.G, McEwen, I.J, Baniahmad, A, Tilley, W.D and Neal, D.E. Choline kinase alpha as an androgen receptor chaperone and prostate cancer therapeutic target. **JNCI**, 2015, 108: doi: 10.1093/jnci/djv371
88. Heckman M.G, Robinson J.L, Tzou K.S, Parker A.S, Wu K.J, Hilton T.W, Howat W.J, Miller J.L, Kreinest P.A, Pisansky T.M, Schild S.E, Peterson J.L, Vallow L.A, **Carroll J.S** and Buskirk S.J. An Examination of the Association between FOXA1 Staining Level and Biochemical Recurrence following Salvage Radiation Therapy for Recurrent Prostate Cancer. **PLoS One**. 2016, 11(3):e0151785
89. **Carroll J.S**. Mechanisms of oestrogen receptor (ER) gene regulation in breast cancer. **Eur J Endocrinol**. 2016, 175(1):R41-9
90. McNair C, Urbanucci A, Comstock C.E, Augello M.A, Goodwin J.F, Launchbury R, Zhao S.G, Schiewer M.J, Ertel A, Karnes J, Davicioni E, Wang L, Wang Q, Mills I.G, Feng F.Y, Li W, **Carroll J.S** and Knudsen K.E. Cell cycle-coupled expansion of AR activity promotes cancer progression. **Oncogene**. 2017, 36: 1655-68
91. Hu D.G, Selth L.A, Tarulli G.A, Meech R, Wijayakumara D, Chanawong A, Russell R, Caldas C, Robinson J.L, **Carroll J.S**, Tilley W.D, Mackenzie P.I, Hickey T.E. Androgen and Estrogen Receptors in Breast Cancer Coregulate Human UDP-Glucuronosyltransferases 2B15 and 2B17. **Cancer Res**. 2016 Oct 1;76(19):5881-5893
92. Jozwik, K, Chernukhin, I, Serandour, A.A, Nagarajan, S and **Carroll J.S**. FOXA1 directs H3K4 monomethylation at enhancers via recruitment of the methyltransferase MLL3. **Cell Reports**, 2016, 17: 2715-2723
93. **Carroll, J.S**, Hickey, T.E, Tarulli, G, Williams, M and Tilley, W.D. Deciphering the divergent roles of progestogens in breast cancer, **Nature Reviews Cancer**, 2017, 17: 54-64
94. Nelson A.W, Groen A.J, Miller J.L, Warren A.Y, Holmes K.A, Tarulli G.A, Tilley W.D, Katzenellenbogen B.S, Hawse J.R, Gnanapragasam V.J and **Carroll J.S**. Comprehensive assessment of estrogen receptor beta antibodies in cancer cell line models and tissue reveals critical limitations in reagent specificity. **Mol Cell Endocrinol**. 2017, 440:138-150.
95. Overman J, Fontaine F, Moustaqil M, Mittal D, Sierecki E, Sacilotto N, Zuegg J, Robertson AA, Holmes K, Salim AA, Mamidyala S, Butler MS, Robinson AS, Lesieur E, Johnston W, Alexandrov K, Black BL, Hogan BM, De Val S, Capon RJ, **Carroll JS**, Bailey TL, Koopman P, Jauch R, Smyth MJ, Cooper MA, Gambin Y, Francois M. Pharmacological targeting of the transcription factor SOX18 delays breast cancer in mice. **Elife**. 2017, 6. pii: e21221. doi: 10.7554/eLife.21221
96. Carnesecchi J, Forcet C, Zhang L, Tribollet V, Barenton B, Boudra R, Cerutti C, Billas IM, Sérandour AA, **Carroll JS**, Beaudoin C, Vanacker JM. ERR α induces H3K9

demethylation by LSD1 to promote cell invasion. *Proc Natl Acad Sci U S A*. 2017, 114: 3909-14

97. Dubois-Chevalier, J, Dubois, V, Dehondt, H, Mazrooei, P, Mazuy, C, Sérandour, A.A, Gheeraert, C, Guillaume,P, Baugé, E, Derudas, B, Hennuyer, N, Paumelle, R, Marot, G, **Carroll, J.S**, Lupien, M, Staels, B, Lefebvre, P and Eeckhoutte, J. The logic of transcriptional regulator recruitment architecture at cis-regulatory modules controlling liver functions. *Genome Research*, 2017, 27: 985-996

98. Paltoglou, S, Das, R, Townley, S.L, Hickey, T.E, Tarulli, G.A, Coutinho, I, Fernandes, R, Hanson, A.R, Denis, I, **Carroll, J.S**, Dehm, S.M, Raj, G.V, Plymate, S.R, Tilley, W.D, Selth, L.A. Novel Androgen Receptor Coregulator GRHL2 Exerts Both Oncogenic and Antimetastatic Functions in Prostate Cancer. *Cancer Res*. 2017, 77:3417-3430

99. Jeselsohn, R, Cornwell, M, Pun, M, Buchwalter, G, Nguyen, M, Bango, C, Huang, Y, Kuang, Y, Paweletz, C, Fu, X, Nardone, A, De Angelis, C, Detre, S, Dodson, A, Mohammed, H, **Carroll, J.S**, Bowden, M, Rao, P, Long, H.W, Li, F, Dowsett, M, Schiff, R and Brown, M. Embryonic transcription factor SOX9 drives breast cancer endocrine resistance. *Proc Natl Acad Sci U S A*. 2017;114(22):E4482-E4491

100. Michailidou K, Lindström S, Dennis J, Beesley J, Hui S, Kar S, Lemaçon A, Soucy P, Glubb D, Rostamianfar A, Bolla MK, Wang Q, Tyrer.....and Easton DF. Association analysis identifies 65 new breast cancer risk loci. *Nature*, 2017, 551: 92-94

101. Browne, A.L, Charmsaz, S, Varešlija, D, Fagan, A, Cosgrove, N, Cocchiglia, S, Purcell, S, Ward, E, Bane, F, Hudson, L, Hill, A.D, **Carroll, J.S**, Redmond, A.M and Young, L.S. Network analysis of SRC-1 reveals a novel transcription factor hub which regulates endocrine resistant breast cancer. *Oncogene*. 2018, 37: 2008-21

102. Jurmeister, S, Ramos-Montoya, A, Sandi, C, Pértega-Gomes, N, Wadhwa, K, Lamb, A.D, Dunning, M.J, Attig, J, **Carroll, J.S**, Fryer, L.G, Felisbino, S.L and Neal, D.E. Identification of potential therapeutic targets in prostate cancer through a cross-species approach. *EMBO Mol Med*. 2018, doi: 10.15252/emmm.201708274

103. Michaloglou, C, Crafter, C, Siersbæk, R, Delpuech, O, Curwen, J.O, Carnevalli, L.S, Staniszewska, A.D, Polanska, U.M, Cheraghchi-Bashi, A, Lawson, M, Chernukhin, I, McEwen, R, **Carroll, J.S** and Cosulich, S.C. Combined inhibition of mTOR and CDK4/6 is required for optimal blockade of E2F function and long term growth inhibition in estrogen receptor positive breast cancer. *Mol Cancer Ther*. 2018, 17: 908-20

104. Papachristou, E.K , Kishore, K, Holding, A.N, Harvey, K, Roumeliotis, T.I, Chilamakuri, C.S.R, Omarjee, S, Chia, K-M, Swarbrick, A, Lim, E, Markowitz, F, Eldridge, M, Siersbaek, R, D'Santos, C.S and **Carroll, J.S**. Quantitative Multiplexed Rapid Immunoprecipitation Mass spectrometry of Endogenous proteins (qPLEX-RIME) for monitoring the Dynamics of Chromatin-Associated Complexes, *Nature Communications*, 2018, 9:2311. doi: 10.1038

105. Serandour, A.A, Mohammed, H, Miremadi, A, Mulder, K.W and **Carroll J.S**. TRPS1 regulates estrogen-receptor binding and histone acetylation at enhancers. *Oncogene*, 2018, doi: 10.1038/s41388-018-0312-2

106. Rouhimoghadam, M, Safarian, S, **Carroll, J.S**, Sheibani, N, Bidkhorji, G Tamoxifen-Induced Apoptosis of MCF-7 Cells via GPR30/PI3K/MAPKs Interactions: Verification by ODE Modeling and RNA Sequencing. *Front Physiol*. 2018 Jul 11;9:907

107. Centenera, M.M, Hickey, T.E, Jindal ,S, Ryan, N.K, Ravindranathan, P, Mohammed, H, Robinson, J.L, Schiewer, M.J, Ma, S, Kapur, P, Sutherland, P.D, Hoffmann, C.E, Roehrborn, C.G, Gomella, L.G, **Carroll, J.S**, Birrell, S.N, Knudsen, K.E, Raj, G.V, Butler, L.M, Tilley, W.D. A patient-derived explant (PDE) model of hormone-dependent cancer. *Mol Oncol*. 2018 Sep;12(9):1608-1622
108. Siersbæk, R, Kumar, S, **Carroll, J.S**. Signaling pathways and steroid receptors modulating estrogen receptor α function in breast cancer. *Genes Dev*. 2018 Sep 1;32(17-18):1141-1154
109. Warren, A.Y, Massie, C.E, Watt, K, Luko, K, Orafidiya, F, Selth, L.A, Mohammed, H, Chohan, B.S, Menon, S, Baridi, A, Zhao, W, Escriu, C, Pungsrinont, T, D'Santos, C, Yang, X, Taylor, C, Qureshi, A, Zecchini, V.R, Shaw, G.L, Dehm, S.M, Mills, I.G, **Carroll, J.S**, Tilley, W.D, McEwan, I.J, Baniahmad, A, Neal, D.E, Asim M. A reciprocal feedback between the PDZ binding kinase and androgen receptor drives prostate cancer. *Oncogene*. 2018 Sep 20. doi: 10.1038/s41388-018-0501
110. Reese, J.M, Bruinsma, E.S, Nelson, A.W, Chernukhin, I, **Carroll, J.S**, Li, Y, Subramaniam, M, Suman, V.J, Negron, V, Monroe, D.G, Ingle, J.N, Goetz, M.P, Hawse, J.R. ER β -mediated induction of cystatins results in suppression of TGF β signaling and inhibition of triple-negative breast cancer metastasis. *Proc Natl Acad Sci U S A*. 2018 Oct 9;115(41):E9580-E9589
111. Debaize, L, Jakobczyk, H, Avner, S, Gaudichon, J, Rio, A.G, Sérandour, A.A, Dorsheimer, L, Chalmel, F, **Carroll, J.S**, Zörnig, M, Rieger, M.A, Delalande, O, Salbert, G, Galibert, M.D, Gandemer, V and Troadec, M.B. Interplay between transcription regulators RUNX1 and FUBP1 activates an enhancer of the oncogene c-KIT and amplifies cell proliferation. *Nucleic Acids Res*. 2018, 46:11214-1122
112. Walsh, S.J, Omarjee, S, Galloway, W.R.J.D, Kwan, T.T, Sore, H.F, Parker, J.S, Hyvönen, M, Carroll, J.S and Spring, D.R. A general approach for the site-selective modification of native proteins, enabling the generation of stable and functional antibody-drug conjugates. *Chem Sci*. 2018, 10:694-700
113. Glont ,S. E, Chernukhin, I and **Carroll J.S**. Comprehensive Genomic Analysis Reveals that the Pioneering Function of FOXA1 Is Independent of Hormonal Signaling. *Cell Rep*. 2019, 26:2558-2565
114. Goodman, M.L, Trinca, G.M, Walter, K.R, Papachristou, E.K, D'Santos, C.S, Li, T, Liu, Q, Lai, Z, Chalise, P, Madan, R, Fan, F, Markiewicz, M.A, Jin, V.X, **Carroll, J.S** and Hagan, C.R. Progesterone Receptor Attenuates STAT1-Mediated IFN Signaling in Breast Cancer. *J Immunol*. 2019. pii: ji1801152
115. Glont, S.E, Papachristou, E.K, Sawle, A, Holmes, K.A, **Carroll, J.S** and Siersbaek R. Identification of ChIP-seq and RIME grade antibodies for Estrogen Receptor alpha. *PLoS One*. 2019, 14:e0215340
116. Peluffo, G, Subedee, A, Harper, N.W, Kingston, N, Jovanović, B, Flores, F, Stevens, L.E, Beca, F, Trinh, A, Chilamakuri, C.S.R, Papachristou, E.K, Murphy, K, Su, Y, Marusyk, A, D'Santos, C.S, Rueda, O.M, Beck, A.H, Caldas, C, **Carroll, J.S** and Polyak, K. *EN1* Is a Transcriptional Dependency in Triple-Negative Breast Cancer Associated with Brain Metastasis. *Cancer Res*. 2019, 79: 4173-4183

117. Nagarajan, S, Rao, S.V, Chernukhin, I, Sutton, J, Cheeseman, D, Dunn, S, Papachristou, E.K, Gonzalez Prada, J-E, Couturier, D-L, Kumar, S, Kishore, K, Chilamakuri, CSR, Glont, S-E, Goode, E.A, Brodie, C, Guppy, N, Natrajan, R, Bruna, A, Caldas, C, Russell, A.I, Siersbæk, R, Yusa, K and **Carroll, J. S.** ARID1A dictates HDAC1/BRD4 activity, intrinsic proliferative capacity and breast cancer treatment response. **Nature Genetics**, 2020, 52: 187-197
118. Redmond. A.M, Omarjee, S Chernukhin, I, Le Romancer, M and **Carroll J.S.** Analysis of HER2 Genomic Binding in Breast Cancer Cells Identifies a Global Role in Direct Gene Regulation. **PLoS One**, 2019, 14 (11), e0225180
119. Piggan, C.L, Roden, D.L, Law, A.M.K, Molloy, M.P, Krisp, C, Swarbrick, A, Naylor, M.J, Kalyuga, M, Kaplan, W, Oakes, S.R, Gallego-Ortega, D, Clark, S.J, **Carroll, J.S.**, Bartonicek, N and Ormandy, C.J. ELF5 Modulates the Estrogen Receptor Cistrome in Breast Cancer, **PLoS Genet**, 2020, 16 (1), e1008531
120. Pettigrew, T.R, Porter, R.J, Walsh, S.J, Housden, M.P, Lam N.Y.S, **Carroll, J.S.**, Parker J.S, Spring, D.R and Paterson, I. Total Synthesis and Biological Evaluation of Simplified Aplyronine Analogues as Synthetically Tractable Anticancer Agents, **Chem Commun**, 2020, 56 (10), 1529-1532
121. Fachal L et al, Fine-mapping of 150 breast cancer risk regions identifies 191 likely target genes. **Nat Genet.** 2020, 52(1):56-73
122. Shu, S, Wu, H.J, Ge, J.Y, Zeid, R, Harris, I.S, Jovanović, B, Murphy, K, Wang, B, Qiu, X, Endress, J.E, Reyes, J, Lim, K, Font-Tello, A, Syamala, S, Xiao, T, Reddy Chilamakuri, C.S, Papachristou, E.K, D'Santos, C, Anand, J, Hinohara, K, Li, W, McDonald, T.O, Luoma, A, Modiste, R.J, Nguyen, Q.D, Michel, B, Cejas, P, Kadoch, C, Jaffe, J.D, Wucherpfennig, K.W, Qi, J, Liu, X.S, Long, H, Brown, M, **Carroll, J.S.**, Brugge, J.S, Bradner, J, Michor, F and Polyak, K. **Mol Cell.** 2020:S1097-2765
123. Walsh, S.J, Iegre, J, Seki, H, Bargh, J.D, Sore, H.F, Parker, J.S, **Carroll J.S** and Spring, D.R. General dual functionalisation of biomacromolecules via a cysteine bridging strategy. **Org Biomol Chem.** 2020 May 20. doi: 10.1039/d0ob00907e
124. Hruschka, N, Kalisz, M, Subijana, M, Graña-Castro, O, Del Cano-Ochoa, F, Brunet, L.P, Chernukhin, I, Sagrera, A, De Reynies, A, Kloesch, B, Chin, S-F, Burgués, O, Andreu, D, Bermejo, B, Cejalvo, J.M, Sutton, J, Caldas, C, Ramón-Maiques, S, **Carroll, J.S.**, Prat, A, Real, F.X and Martinelli P. The GATA3 X308_Splice breast cancer mutation is a hormone context-dependent oncogenic driver. **Oncogene.** 2020. 39(32):5455-5467
125. Baker, L.A, Holliday, H, Roden, D, Krisp, C, Wu, S.Z, Junankar, S, Serandour, A.A, Mohammed, H, Nair, R, Sankaranarayanan, G, Law, A.M.K, McFarland, A, Simpson, P.T, Lakhani, S, Dodson, E, Selinger, C, Anderson, L, Samimi, G, Hacker, N.F, Lim, E, Ormandy, C.J, Naylor, M.J, Simpson, K, Nikolic, I, O'Toole, S, Kaplan, W, Cowley, M.J, **Carroll, J.S.**, Molloy, M and Swarbrick, A. Proteogenomic analysis of Inhibitor of Differentiation 4 (ID4) in basal-like breast cancer. **Breast Cancer Res.** 2020 Jun 11;22(1):63. doi: 10.1186/s13058-020-01306-6
126. Siersbæk, R, Scabia, V, Nagarajan, S, Chernukhin, I, Papachristou, E.K, Broome, R, Johnston, S.J, Joosten, S.E.P, Green, A.R, Kumar, S, Jones, J, Omarjee, S, Ruben,

A, Glont, S, Aitken, S.J, Kishore, K, Cheeseman, D, Rakha, E.A, D'Santos, C, Zwart, W, Russell, A, Brisken, C and **Carroll J.S.** IL6/STAT3 signaling hijacks ER enhancers to drive breast cancer metastasis. **Cancer Cell**, 2020, 38: 412-423

127. Wang, S, Somisetty ,V.S, Bai, B, Chernukhin, I, Niskanen, H, Kaikkonen, M.U, Bellet, M, **Carroll, J.S** and Hurtado, A. The proapoptotic gene interferon regulatory factor-1 mediates the antiproliferative outcome of paired box 2 gene and tamoxifen. **Oncogene**. 2020. doi: 10.1038/s41388-020-01435-4.

128. Charoenpattarapreeda, J, Walsh, S.J, **Carroll, J.S** and Spring, D.R. Expeditious Total Synthesis of Hemiasterlin through a Convergent Multicomponent Strategy and Its Use in Targeted Cancer Therapeutics. **Angew Chem Int Ed Engl**. 2020 Sep 7. doi: 10.1002/anie.202010090

129. Omarjee, S and Carroll, J.S. Targeting LSD1 and FOXA1 in prostate cancer. **Nat Genet**. 2020 Oct;52(10):1002-1003

130. Ali, F.R, Marcos, D, Chernukhin, I, Woods, L.M, Parkinson, L.M, Wylie, L.A, Papkovskaia, T.D, Davies, J.D, **Carroll, J.S** and Philpott, A. Dephosphorylation of the proneural transcription factor ASCL1 re-engages a latent post-mitotic differentiation programme in neuroblastoma. **Mol Cancer Res**. 2020 Oct 12:molcanres.0693.2020. doi: 10.1158/1541-7786

131. Giannoudis, A, Malki, M.I, Rudraraju, B, Mohhamed, H, Menon, S, Liloglou, T, Ali, S, **Carroll, J.S** and Palmieri, C. Activating transcription factor-2 (ATF2) is a key determinant of resistance to endocrine treatment in an in vitro model of breast cancer. **Breast Cancer Res**. 2020 Nov 16;22(1):126. doi: 10.1186/s13058-020-01359-7

132. Hickey, T.E, Selth, L.A, Chia, K.M, Laven-Law, G, Milioli, H.H, Roden, D, Jindal, S, Hui, M, Finlay-Schultz, J, Ebrahimie, E, Birrell, S.N, Stelloo, S, Iggo, R, Alexandrou, S, Caldon, C.E, Abdel-Fatah, T.M, Ellis, I.O, Zwart, W, Palmieri, C, Sartorius, C.A, Swarbrick, A, Lim, E, **Carroll, J.S** and Tilley, W.D. The androgen receptor is a tumor suppressor in estrogen receptor-positive breast cancer. **Nat Med**. 2021 27(2):310-320

133. Jakobczyk, H, Debaize, L, Soubise, B, Avner, S, Rouger-Gaudichon, J, Commet, S, Jiang, Y, Sérandour, A.A, Rio, A.G, **Carroll, J.S**, Wichmann, C, Lie-A-Ling, M, Lacaud, G, Corcos, L, Salbert, G, Galibert, M.D, Gandemer, V, Troadec, M.B. Reduction of RUNX1 transcription factor activity by a CBFA2T3-mimicking peptide: application to B cell precursor acute lymphoblastic leukemia. **J Hematol Oncol**. 2021;14(1):47. doi: 10.1186/s13045-021-01051-z

134. Bargh, J.D , Walsh, S.J , Ashman, N , Isidro-Llobet, A , **Carroll, J.S** and Spring, D.R. A dual-enzyme cleavable linker for antibody-drug conjugates. **Chem Commun (Camb)**. 2021 Apr 11;57(28):3457-3460.

135. Broome, R, Chernukhin, I, Jamieson, S, Kishore, K, Papachristou, E.K, Mao, S.Q, Tejado, C.G, Mahtey, A, Theodorou, V, Groen, A.J, D'Santos, C, Balasubramanian, S, Farcas, A.M, Siersbæk, R and **Carroll, J.S.** TET2 is a component of the estrogen receptor complex and controls 5mC to 5hmC conversion at estrogen receptor cis-regulatory regions. **Cell Rep**. 2021; 34(8):108776. doi: 10.1016/j.celrep.2021.108776

136. Holliday, H, Roden, D, Junankar, S, Wu, S.Z, Baker, L.A, Krisp, C, Chan, C.L, McFarland, A, Skhinas, J.N, Cox, T.R, Pal, B, Huntington, N.D, Ormandy, C.J, **Carroll, J.S**, Visvader, J, Molloy, M.P and Swarbrick, A. Inhibitor of Differentiation 4 (ID4) represses mammary myoepithelial differentiation via inhibition of HEB. *iScience*. 2021;24(2):102072. doi: 10.1016/j.isci.2021.102072
137. Farcas, A.M, Nagarajan, S, Cosulich, S and **Carroll, J.S**. Genome-Wide Estrogen Receptor Activity in Breast Cancer. *Endocrinology*. 2021;162(2):bqaa224
138. Walsh, S.J , Bargh, J.D , Dannheim, F.M , Hanby, A.R , Seki, H , Counsell, A.J , Ou, X, Fowler, E , Ashman, N , Takada, Y , Isidro-Llobet, A , Parker, J.S , **Carroll, J.S** and Spring, D.R. Site-selective modification strategies in antibody-drug conjugates. *Chem Soc Rev*. 2021;50(2):1305-1353
139. Varešlija, D, Ward, E, Purcell, S.P, Cosgrove, N.S, Cocchiglia, S, O'Halloran, P.J, Charmsaz, S, Bane, F.T, Brett, F.M, Farrell, M, Cryan, J, Beausang, A, Hudson, L, Turnbull, A.K, Dixon, J.M, Hill, A.D.K, Priedigkeit, N, Oesterreich, S, Lee, A.V, Sims, A.H, Redmond, A.M, **Carroll, J.S** and Young, L.S. Comparative analysis of the AIB1 interactome in breast cancer reveals MTA2 as a repressive partner which silences E-Cadherin to promote EMT and associates with a pro-metastatic phenotype. *Oncogene*. 2021;40(7):1318-1331. doi: 10.1038/s41388-020-01606-3
140. Jakobczyk, H, Debaize, L, Soubise, B, Avner, S, Rouger-Gaudichon, J, Commet, S, Jiang, Y, Sérandour, A.A, Rio, A.G, **Carroll, J.S**, Wichmann, C, Lie-A-Ling, M, Lacaud, G, Corcos, L, Salbert, G, Galibert, M.D, Gandemer, V and Troadec, M. B. Reduction of RUNX1 transcription factor activity by a CBFA2T3-mimicking peptide: application to B cell precursor acute lymphoblastic leukemia. *J Hematol Oncol*. 2021. 14(1):47. doi: 10.1186/s13045-021-01051-z
141. Jakobczyk, H, Jiang, Y, Debaize, L, Soubise, B, Avner, S, Sérandour, A.A, Rouger-Gaudichon, J, Rio, A.G, **Carroll, J.S**, Raslova, H, Gilot, D, Liu, Z, Demengeot, J, Salbert, G, Douet-Guilbert, N, Corcos, L, Galibert, M.D, Gandemer, V and Troadec, M.B. ETV6-RUNX1 and RUNX1 directly regulate RAG1 expression: one more step in the understanding of childhood B-cell acute lymphoblastic leukemia leukemogenesis. *Leukemia*. 2021. doi: 10.1038/s41375-021-01409-9
142. Simeoni, F, Romero-Camarero, I, Camera, F, Amaral, F.M.R, Sinclair, O.J, Papachristou, E.K, Spencer, G.J, Lie-A-Ling, M, Lacaud, G, Wiseman, D.H, **Carroll, J.S** and Somervaille, T.C.P. Enhancer recruitment of transcription repressors RUNX1 and TLE3 by mis-expressed FOXC1 blocks differentiation in acute myeloid leukemia. *Cell Rep*. 2021. 36(12):109725. doi: 10.1016/j.celrep.2021.109725
143. Che, M, Chaturvedi, A, Munro, S.A, Pitzen, S.P, Ling, A, Zhang, W, Mentzer, J, Ku, S.Y, Puca, L, Zhu, Y, Bergman, A.M, Severson, T.M, Forster, C, Liu, Y, Hildebrand, J, Daniel, M, Wang, T.Y, Selth, L.A, Hickey, T, Zoubeidi, A, Gleave, M, Bareja, R, Sboner, A, Tilley, W, **Carroll, J.S**, Tan, W, Kohli, M, Yang, R, Hsieh, AC, Murugan, P, Zwart, W, Beltran, H, Huang, R.S and Dehm, S.M. Opposing transcriptional programs of KLF5 and AR emerge during therapy for advanced prostate cancer. *Nat Commun*. 2021. 12(1):6377. doi: 10.1038/s41467-021-26612-1

144. Minshall, N, Chernukhin, I, **Carroll, J.S** and Git, A. ncRNAseq: simple modifications to RNA-seq library preparation allow recovery and analysis of mid-sized non-coding RNAs. *Biotechniques*. 2021. doi: 10.2144/btn-2021-0035
145. Walsh, S.J, Omarjee, S, Dannheim, F.M, Couturier, D.L, Bexheti, D, Mendil, L, Cronshaw, G, Fewster, T, Gregg, C, Brodie, C, Miller, J.L, Houghton, R, **Carroll, J.S** and Spring, D.R. Divinylpyrimidine reagents generate antibody-drug conjugates with excellent in vivo efficacy and tolerability. *Chem Commun (Camb)*. 2022 Jan 19. doi: 10.1039/d1cc06766d
146. Li, Z, Wu, Y, Yates, M.E, Tasdemir, N, Bahreini, A, Chen, J, Levine, K.M, Priedigkeit, N.M, Nasrazadani, A, Ali, S, Buluwela, L, Arnesen, S, Gertz, J, Richer, J.K, Troness, B, El-Ashry, D, Zhang, Q, Gerratana, L, Zhang, Y, Cristofanilli, M, Montanez, M.A, Sundd, P, Wallace, C.T, Watkins, S.C, Fumagalli, C, Guerini-Rocco, E, Zhu, L, Tseng, G.C, Wagle, N, *Carroll, J.S*, Jank, P, Denkert, C, Karsten, M.M, Blohmer, J.U, Park, B.H, Lucas, P.C, Atkinson, J.M, Lee, A.V and Oesterreich S. Hotspot ESR1 mutations are multimodal and contextual modulators of breast cancer metastasis. *Cancer Res*. 2022. doi: 10.1158/0008-5472.CAN-21-2576.
147. Dylgjeri, E, Kothari, V, Shafi, A.A, Semenova, G, Gallagher, P.T, Guan, Y.F, Pang, A, Goodwin, J.F, Irani, S, McCann, J.J, Mandigo, A.C, Chand, S, McNair, C.M, Vasilevska, I, Schiewer, M.J, Lallas, C.D, McCue, P.A, Gomella, L.G, Seifert, E.L, **Carroll, J.S**, Butler, L.M, Holst, J, Kelly, W.K and Knudsen, K.E. A Novel Role for DNA-PK in Metabolism by Regulating Glycolysis in Castration Resistant Prostate Cancer. *Clin Cancer Res*. 2022. doi: 10.1158/1078-0432.CCR-21-1846
148. Aspros, K.G.M, Carter, J.M, Hoskin, T.L, Suman, V.J, Subramaniam, M, Emch, M.J, Ye, Z, Sun, Z, Sinnwell, J.P, Thompson, K.J, Tang, X, Rodman, E.P.B, Wang, X, Nelson, A.W, Chernukhin, I, Hamdan, F.H, Bruinsma, E.S, **Carroll, J.S**, Fernandez-Zapico, M.E, Johnsen, S.A, Kalari, K.R, Huang, H, Leon-Ferre, RA, Couch, F.J, Ingle, J.N, Goetz, M.P and Hawse, J.R. Estrogen receptor beta repurposes EZH2 to suppress oncogenic NFκB/p65 signaling in triple negative breast cancer. *NPJ Breast Cancer*. 2022; 8(1):20. doi: 10.1038/s41523-022-00387-0.
149. Woods, L.M, Ali, F.R, Gomez, R, Chernukhin, I, Marcos, D, Parkinson, L.M, Tayoun, A.N.A, **Carroll, J.S** and Philpott, A. Elevated ASCL1 activity creates de novo regulatory elements associated with neuronal differentiation. *BMC Genomics*. 2022; 23(1):255. doi: 10.1186/s12864-022-08495-8.
150. Patel, S, Hirosue, S, Rodrigues, P, Vojtasova, E, Richardson, E, Jianfeng, G, Syafruddin, S, Speed, A, Papachristou, E, Barker, D, Clarke, D, Purvis, S, Wesolowski, L, Dyas, A, Castillon, L, Caraffini, V, Bihary, D, Yong, C, Harrison, D, Stewart, G, Purdue, M, Chanock, S.J, Warren, A, Samarajiwa, S, Machiela, M, Carroll, J.S and Vanharanta, S. Renal lineage factor PAX8 controls oncogenic signalling in kidney cancer. *Nature*, 2022, 606 (7916): 999-1006
151. Hanby, A.R, Walsh, S.J, Counsell, A.J, Ashman, N, Mortensen, K.T, **Carroll, J.S** and Spring, D.R. Antibody dual-functionalisation enabled through a modular divinylpyrimidine disulfide rebridging strategy. *Chem Commun (Camb)*. 2022 Aug 18;58(67):9401-9404

152. Dannheim, F.M, Walsh, S.J, Orozco, C.T, Hansen, A.H, Bargh, J.,D, Jackson S.E, Bond, N.J, Parker, J.S, **Carroll, J.S** and Spring, D.R. All-in-one disulfide bridging enables the generation of antibody conjugates with modular cargo loading. *Chem Sci*. 2022 Jul 20;13(30):8781-8790

153. Bahl, S, **Carroll, J.S** and Lupien, M. Chromatin Variants Reveal the Genetic Determinants of Oncogenesis in Breast Cancer. *Cold Spring Harb Perspect Med*. 2022 Oct 3;12(10):a041322

154. Parkinson, L.M, Gillen, S.L, Woods, L.M, Chaytor, L, Marcos, D, Ali, F.R, **Carroll, J.S** and Philpott, A. The proneural transcription factor ASCL1 regulates cell proliferation and primes for differentiation in neuroblastoma. *Front Cell Dev Biol*. 2022 Oct 3;10:942579

Additional publications

Guest Editor: Special issue on 'Steroids and breast cancer', *Molecular and Cellular Endocrinology*, 2013

Book Chapters

1. Watts, C.K.W., O.W.J. Prall, **J.S. Carroll**, N.R.C. Wilcken, E.M. Rogan, E.A. Musgrove and R. L. Sutherland. 1998. Antiestrogens and the cell cycle. In: Jordan, V.C. and Furr, B.J., ed(s). p 17-45. Antiestrogens and antiandrogens. Humana Press, Totowa, New Jersey

2. **Carroll, J.S.**, O.W.J. Prall, C.M. Sergio, E.M. Rogan, C.K.W. Watts, E.A. Musgrove and R.L. Sutherland. 2001. Estrogen/estrogen antagonist regulation of the cell cycle in breast cancer cells. In: Burnstein, K.L ed. P 57-71. Steroid hormones and cell cycle regulation. Kluwer Academic Publishers, Boston, Massachusetts

Invited Seminars

1. International Conference on Endocrinology (ICE), Sydney, Australia, 2000
2. Endocrine Society of Australia, Gold Coast, Australia, 2001
3. Harvard/DFCI Annual Breast Cancer Symposium, Boston, USA, 2005
4. Novartis Institute of Biomedical Research, Cambridge, USA, 2005
5. Biomedicum Institute, University of Helsinki, Finland, 2005
6. Affymetrix Users Meeting, Singapore, 2006
7. CCA Symposium in Oncogenomics and Proteomics, Amsterdam, Netherlands, 2006
8. Affymetrix Users meeting, Dublin, Ireland, 2007
9. Society for Endocrinology, BES, Birmingham, UK, 2007
10. Imperial College London (Hammersmith), London, UK, 2007
11. Affymetrix Meeting, University College Dublin, Ireland, 2007
12. Victorian Breast Cancer Research Consortium, Australia, 2007
13. Affymetrix ChIP-chip symposium, Boston, USA, 2007
14. NCRI, ChIP-chip meeting, Birmingham, UK, 2007
15. Garvan Institute of Medical Research, Sydney, Australia, 2007

16. CSC/IC, Microarray Centre, Hammersmith, London, UK, 2007
17. Genome Institute of Singapore, Singapore, 2007
18. Breakthrough Institute, London, UK, 2008
19. University of Dundee, Dundee, UK, 2008
20. CRESCENDO meeting, Munich, Germany, 2008
21. Marie-Curie GARD meeting, Madrid, Spain, 2008
22. The Novum lecture, Karolinska Institute, Stockholm, Sweden, 2008
23. ResisTH network, Tolouse, France, 2008
24. Newcastle University, Newcastle, UK, 2009
25. EACR Meeting, Cambridge, UK, 2009
26. Nuclear Receptor meeting, Spetses Island, Greece, 2009
27. NCRI Annual Cancer meeting, Birmingham, UK, 2009
28. Keystone meeting, Killarney, Ireland, UK, 2009
29. University of Edinburgh, UK, 2009
30. NCI/NIH meeting, Bethesda, USA, 2009
31. Imperial College, London, UK, 2009
32. University of Turin, Italy, 2010
33. Paterson Institute, Manchester, UK, 2010
34. University of Leeds, UK, 2010
35. Gordon Mammary Gland conference, Tuscany, Italy, 2010
36. VUMC, Amsterdam, The Netherlands, 2010
37. Keystone meeting, Keystone, Colorado, USA, 2010
38. University of Nottingham, UK, 2010
39. University of Manchester, UK, 2010
40. Peter MacCallum cancer Institute, Melbourne, Australia, 2010
41. Walter Eliza Hall Institute (WEHI), Melbourne, Australia, 2010
42. Genome Institute of Singapore, Singapore, 2010
43. Plenary talk, British breast cancer conference, Nottingham, UK, 2010
44. Plenary talk, Young prostate researchers symposium, UK, 2010
45. International Aromatase meeting, Edinburgh, UK, 2010
46. Biomedicum Institute, Helsinki, Finland, 2010
47. Karolinska Institute, Stockholm, Sweden, 2010
48. NKI, Amsterdam, The Netherlands, 2011
49. Breast SSG meeting, Cambridge, 2011
50. Irish Association for cancer research meeting, Cork, Ireland, 2011
51. Gordon Hormone action conference, Rhode Island, USA, 2011
52. FMI, Basel, Switzerland, 2011
53. EMBO meeting, Barcelona, Spain, 2011
54. EMBO YIP meeting, Heidelberg, Germany, 2011
55. Bone Biology forum, Mt Fuji, Japan, 2011
56. University of Tokyo, Japan, 2011
57. Teijin, Japan 2011
58. Nuclear Receptor research network, Amsterdam, Netherlands, 2011
59. Newcastle University, UK, 2011
60. University of Oxford, UK, 2011
61. EMBO chromatin YIP, Heidelberg, Germany, 2011
62. Centre for molecular medicine, Oslo, Norway, 2012
63. Josephine Nefkens Institute, Rotterdam, The Netherlands, 2012
64. Society for Endocrinology, BES, Harrogate, UK, 2012
65. University of Toronto, Canada, 2012
66. Sanger Institute, Cambridge, UK, 2012

67. Queen's University, Belfast, N. Ireland, 2012
68. IGBMC, Strasbourg, France, 2012
69. Université Libre de Bruxelles, Belgium, 2012
70. Karolinska Institute, Stockholm, Sweden, 2012
71. Metabolism and Endocrinology meeting, Odense, Denmark, 2012
72. Utrecht Medical Center, Utrecht, The Netherlands, 2012
73. NCRI, Liverpool, UK, 2012
74. Genes and Cancer, Warwick, UK, 2012
75. Plenary lecture, San Antonio breast cancer meeting, TX, USA, 2012
76. Next generation sequencing meeting, Imperial College, London, 2012
77. Breakthrough breast cancer institute, London, UK, 2013
78. Genentech, San Francisco, CA, USA, 2013
79. Nanyang Technical University, Singapore, 2013
80. University College London, UK, 2013
81. Precision Medicine in breast cancer meeting, London, UK, 2013
82. Birmingham Cancer Epigenetics conference, Birmingham, UK, 2013
83. University of Copenhagen, Denmark, 2013
84. Gordon Meeting, Hormone-dependent cancers, Rhode Island, US, 2013
85. Nuclear Receptors summer school, Spetses Island, Greece, 2013
86. AACR Breast cancer meeting, San Diego, US, 2013
87. Oslo breast cancer meeting, Oslo, Norway, 2013
88. Future of the Statistical Sciences Workshop, London, UK, 2013
89. University of Birmingham, UK, 2013
90. EMBO Nuclear Receptor meeting, Sorrento, Italy, 2013
91. San Antonio Breast cancer meeting, TX, USA, 2013
92. Keystone meeting, Taos, New Mexico, USA, 2014
93. NIMR, London, UK, 2014
94. Lorne Cancer Conference, Melbourne, Australia, 2014
95. Radboud Institute for Molecular Life Sciences, Nijmegen, Netherlands, 2014
96. International symposium on translational oncology, Barcelona, Spain, 2014
97. The Beatson Institute, Glasgow, Scotland, UK, 2014
98. The Patterson Institute, Manchester, UK, 2014
99. Breast cancer meeting, Oxford University, UK, 2014
100. Imperial College London, UK, 2015
101. Breast Cancer meeting, Institute for Radiology, London, UK, 2015
102. Lund University Cancer Centre, Lund, Sweden, 2015
103. Annual Hungarian biochemical conference, Eger, Hungary, 2015
104. EMBO Stem cell and cancer conference, Heidelberg, Germany, 2015
105. 39th Lineberger cancer conference, UNC, Chapel Hill, USA, 2015
106. AACR, Philadelphia, USA, 2015
107. Department of Pathology, University of Cambridge, UK, 2015
108. FEBS Nuclear Receptor course: Spetses Island, Greece, 2015
109. WIMM, University of Oxford, UK, 2015
110. EMBO Nuclear receptors conference, Corsica, France, 2015
111. BACR Annual Breast Cancer Conference, Newcastle, UK, 2015
112. The 13th Breast Cancer Frontier meeting, Tokyo, Japan, 2015
113. Dana-Farber special symposium, Boston, USA, 2015
114. Novartis Institute of Biomedical Research, Cambridge, USA, 2015
115. Imperial College London, UK, 2016
116. University of Geneva, Switzerland, 2016
117. Claude Bernard University Lyon 1, France, 2016

118. University of Bristol, UK, 2016
119. European Congress of Endocrinology, Munich, Germany, 2016
120. Dana-Farber Cancer Institute, Harvard Medical School, Boston, USA, 2016
121. Mass General Hospital, Boston, USA, 2016
122. Society for Endocrinology, BES conference, Brighton, UK, 2016
123. University of Southern Denmark, Odense, Denmark, 2017
124. British Breast Group Meeting, York, UK, 2017
125. Lorne Cancer Conference, Melbourne, Australia, 2017
126. Garvan Institute of Medical Research, Sydney, Australia, 2017
127. ENBDC meeting, Weggis, Switzerland, 2017
128. AACR conference, Washington DC, USA, 2017
129. IGMM, Edinburgh, UK, 2017
130. AstraZeneca Away day, Cambridge, UK, 2017
131. 25th annual meeting of the Japanese Breast cancer society, Fukuoka, Japan, 2017
132. Cambridge breast cancer away day conference, Cambridge, UK, 2017
133. EMBO members meeting, Heidelberg, Germany, 2017
134. NCRI cancer conference, Liverpool, UK, 2017
135. Breast cancer think tank 28, Curacao, Dutch Antilles, 2018
136. University of Manchester, UK, 2018
137. 3rd Australian breast and prostate cancer meeting, Sydney, Australia, 2018
138. AACR, Chicago, USA, 2018
139. Breakthrough breast cancer institute, London, UK, 2018
140. University of Sheffield, UK, 2018
141. Memorial Sloan Kettering Cancer Center, New York, USA, 2018
142. 8th meeting on Nuclear Receptors, Lyon, France, 2018
143. University of Sussex, UK, 2018
144. Society for Basic Urology Research, Palm Springs, USA, 2018
145. ICHSHC, Stellenbosh, South Africa, 2018
146. Huntsman Cancer Institute, Salt Lake City, UT, USA, 2019
147. AHMS, Adelaide Cancer meeting, Adelaide, Australia, 2019
148. PacRim, Barossa Valley, Australia, 2019
149. The Connie Johnson Memorial lectureship, Sydney, Australia, 2019
150. The Garvan Cancer meeting, Sydney, Australia, 2019
151. Genes and Cancer conference, Cambridge, UK, 2019
152. FEBS nuclear receptor workshop, Spetses Island, Greece, 2019
153. University of Nottingham, UK, 2019
154. Birmingham Breast cancer conference, UK, 2020
155. Dartmouth University (COVID on-line seminar), 2020
156. Ciudad Autónoma de Buenos Aires (COVID on-line seminar), 2020
157. Dana-Farber Cancer seminar series (COVID on-line seminar), 2020
158. Arizona Cancer Center (COVID on-line seminar), 2021
159. McGill University (COVID on-line seminar), 2021
160. UT SouthWestern (COVID on-line seminar), 2021
161. VHIO, Spain (COVID on-line seminar), 2022
162. The 32nd Breast Cancer Think tank, Key Largo, Florida, USA, 2022
163. Cambridge Epigenetics Society, (on-line seminar), 2022
164. 3rd Fusion Nuclear Receptors conference, Cancun, Mexico, 2022
165. Dublin Steroid conference, RCSI, Dublin, Ireland, 2022
166. TMS Seminar series (on-line), 2022
167. EACR conference, Berlin, Germany, 2022