Tema: "Epigenetika Karcinoma: kako obuzdati imperatora svih bolesti"

Zdenko Herceg

Section and Group Head

Epigenetics Group

Specialty:

Epigenetics, mechanisms of carcinogenesis, molecular biology

Academic Degrees

Year	Degree	Major	Institution	Town	Country
1995	PhD	Molecular and Cell Biology, Cancer Research	University of St. Andrews	St. Andrews	UK

Current Research Projects

- Epigenetic mechanisms (histone modifications, DNA methylation and noncoding RNAs) in gene transcription, DNA repair and cancer
  Z. Herceg, H. Hernandez-Vargas, C. Cuenin, M. Tommasino, B. Sylla, L. Tora (Strasbourg), S. Khochbin (Grenoble), C. Vourc'h (Grenoble), Z.-Q. Wang (Jena), B. Ren (San Diego)

- Early epigenetic changes ("drivers") in cancer development and in cancer stem cells
  Z. Herceg, H. Hernandez-Vargas, M. Martin, C. Cuenin, C. Matar (Ottawa), N. Sinčić (Zagreb), A. Puisieux (Lyon)

- Role of early-life exposures on epigenome and cancer susceptibility in childhood and adulthood
  H. Hernandez-Vargas, Z. Herceg, H.S. Lee, A. Ghantous, C. Cuenin, T. Dwyer (Melbourne)

- Epigenetic profiling of specific cancers (liver, head&neck, oesophagus, breast) and surrogate tissues to identify signature of environmental exposures and cancer risk
  Z. Herceg, H. Hernandez-Vargas, V. Krutovskikh, M.P. Lambert, A. da Costa, H.S. Lee, C. Cuenin, M.P. Cros, F. Le Calvez-Kelm, P. Brennan (IARC), I. Chemin (Lyon), J.Y. Scoazec (Paris), P. Vineis (London), F. Pinto (Rio de Janeiro), E. van Obberghen-Schilling (Nice), C. Plass (Heidelberg)

- Identification of epigenetic biomarkers for risk assessment and therapy choices in breast cancer
  Z. Herceg, C. Cuenin, I. Romieu, J. Chen (New York), M. Esteller (Barcelona)

Selected Publications

Herceg, Z., Hulla W., Gell D., Cuenin C., Lleonart M., Jackson S. and Wang Z.Q. (2001) Disruption of Trrap causes early embryonic lethality and defects in cell cycle progression. Nature Genetics, 29: 206-211

Gospodinov A, Vaissiere T, Krastev D, Legube G, Anachkova B and Herceg Z. (2011) Mammalian Ino80 Mediates Double Strand Break Repair through Its Role in DNA End Strand Resection Molecular and Cellular Biology, 31(23):4735-45

Hernandez-Vargas H, Lambert MP, Le Calvez-Kelm F, Gouysse G, McKay-Chopin S, Tavtigian S, Soazec JY, Herceg Z. (2010) Hepatocellular carcinoma displays distinct DNA promoter methylation profiles with potential as clinical predictors PLoS One, 5(3):e9749

Paliwal, A, Vaissière, T, Krais, A, Cuenin,C, Cros, M-P, Zaridze, D, Moukeria, A, Boffetta, P, Hainaut, P, Brennan, P, Herceg, Z. (2010) Aberrant DNA methylation links cancer susceptibility locus 15q25.1 to apoptotic regulation and lung cancer Cancer Research, 70(7):2779-88

Murr R., Loizou L., Yang Y.-G., Cuenin C., Li H., Wang Z.Q. and Herceg, Z. (2006) Histone acetylation by Trrap/Tip60 modulates loading of repair proteins and repair of DNA double strand breaks Nature Cell Biology, 8: 91-99

Scientific Societies Membership

European Association for the Study of the Liver (EASL)
American Association for Cancer Research (AACR)

Prizes, Honours

The Swiss Bridge Award 2006
The IARC Special Training Award, 1997

The British Council Fellowship for Young Scientists, 1992
The IAEA Fellowship, 1990
The University Silver Merits for undergraduate studies, 1984, 1985, 1986, 1987