Stanford

# Olivier Gevaert

Assistant Professor of Medicine (Biomedical Informatics) and of Biomedical Data Science

Medicine - Biomedical Informatics Research

NIH Biosketch available Online  Curriculum Vitae available Online

## Bio

### ACADEMIC APPOINTMENTS

- Assistant Professor, Medicine - Biomedical Informatics Research
- Assistant Professor, Biomedical Data Science
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

### HONORS AND AWARDS

- Faculty Fellow at the Stanford Center at Peking University, SCPKU (September-October 2016)
- Henri Benedictus Fellow, King Baudouin Foundation (June 2009)
- Honorary Fellow, Belgian American Educational Foundation (BAEF) (June 2009)

### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, International Society for Computational Biology (ISCB) (2006 - present)
- Member, American Association for Cancer Research (AACR) (2010 - present)

### PROFESSIONAL EDUCATION

- Certificate, Stanford Business School , Stanford Ignite (2012)
- Ph.D, University of Leuven, Belgium , BIoinformatics (2008)
- M.S., University of Leuven, Belgium , Artificial Intelligence (2004)
- M.S., University College, Ghent, Belgium , Electrical Engineering/Computer Science (2003)

### LINKS

- Homepage: http://med.stanford.edu/gevaertlab.html

## Research & Scholarship

### CURRENT RESEARCH AND SCHOLARLY INTERESTS

My lab focuses on biomedical data fusion: the development of machine learning methods for biomedical decision support using multi-scale biomedical data. Previously we pioneered data fusion work using Bayesian and kernel methods studying breast and ovarian cancer. Additionally, we developed computational algorithms for the

identification of driver genes using multi-omics data. Furthermore, we are working on multi-scale biomedical data fusion methods, bridging the molecular using omics data, cellular using pathology data and tissue using medical imaging data.

# Teaching

## COURSES

**2017-18**

- Translational Bioinformatics Lectures: BIOMEDIN 218 (Win)

**2016-17**

- Translational Bioinformatics: BIOE 217, BIOMEDIN 217, CS 275 (Win)
- Translational Bioinformatics: GENE 217 (Win)
- Translational Bioinformatics Lectures: BIOMEDIN 218 (Win)

**2015-16**

- Translational Bioinformatics: BIOMEDIN 217, CS 275 (Win)
- Translational Bioinformatics: GENE 217 (Win)
- Translational Bioinformatics Lectures: BIOMEDIN 218 (Win)

## STANFORD ADVISEES

**Postdoctoral Faculty Sponsor**

Pritam Mukherjee, Jayendra Shinde, Hong Zheng

**Postdoctoral Research Mentor**

Pritam Mukherjee, Jayendra Shinde, Hong Zheng

## GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biomedical Informatics (Phd Program)

# Publications

## PUBLICATIONS

- **The impact of DNA methylation on the cancer proteome.** *PLoS computational biology*
  Magzoub, M. M., Prunello, M., Brennan, K., Gevaert, O.
  2019; 15 (7): e1007245
- **Deep learning with multimodal representation for pancancer prognosis prediction**
  Cheerla, A., Gevaert, O.
  OXFORD UNIV PRESS.2019: I446–I454
- **Development and validation of radiomic signatures of head and neck squamous cell carcinoma molecular features and subtypes.** *EBioMedicine*
  Huang, C., Cintra, M., Brennan, K., Zhou, M., Colevas, A. D., Fischbein, N., Zhu, S., Gevaert, O.
  2019
- **MethylMix 2.0: an R package for identifying DNA methylation genes.** *Bioinformatics (Oxford, England)*
  Cedoz, P., Prunello, M., Brennan, K., Gevaert, O.
  2018
- **Machine Learning Identifies Stemness Features Associated with Oncogenic Dedifferentiation** *CELL*
  Malta, T. M., Sokolov, A., Gentles, A. J., Burzykowski, T., Poisson, L., Weinstein, J. N., Kaminska, B., Huelsken, J., Omberg, L., Gevaert, O., Colaprico, A., Czerwinska, P., Mazurek, et al

2018; 173 (2): 338-+

- **Genomic, Pathway Network, and Immunologic Features Distinguishing Squamous Carcinomas** *CELL REPORTS*
  Campbell, J. D., Yau, C., Bowlby, R., Liu, Y., Brennan, K., Fan, H., Taylor, A. M., Wang, C., Walter, V., Akbani, R., Byers, L., Creighton, C. J., Coarfa, et al
  2018; 23 (1): 194-+

- **Module Analysis Captures Pancancer Genetically and Epigenetically Deregulated Cancer Driver Genes for Smoking and Antiviral Response.** *EBioMedicine*
  Champion, M., Brennan, K., Croonenborghs, T., Gentles, A. J., Pochet, N., Gevaert, O.
  2018; 27: 156–66

- **Identification of an atypical etiological head and neck squamous carcinoma subtype featuring the CpG island methylator phenotype.** *EBioMedicine*
  Brennan, K., Koenig, J. L., Gentles, A. J., Sunwoo, J. B., Gevaert, O.
  2017; 17: 223-236

- **Intestinal Enteroendocrine Lineage Cells Possess Homeostatic and Injury-Inducible Stem Cell Activity.** *Cell stem cell*
  Yan, K. S., Gevaert, O., Zheng, G. X., Anchang, B., Probert, C. S., Larkin, K. A., Davies, P. S., Cheng, Z. F., Kaddis, J. S., Han, A., Roelf, K., Calderon, R. I., Cynn, et al
  2017; 21 (1): 78–90.e6

- **Noninvasive radiomics signature based on quantitative analysis of computed tomography images as a surrogate for microvascular invasion in hepatocellular carcinoma: a pilot study.** *Journal of medical imaging (Bellingham, Wash.)*
  Bakr, S., Echegaray, S., Shah, R., Kamaya, A., Louie, J., Napel, S., Kothary, N., Gevaert, O.
  2017; 4 (4): 041303

- **Magnetic resonance image features identify glioblastoma phenotypic subtypes with distinct molecular pathway activities.** *Science translational medicine*
  Itakura, H., Achrol, A. S., Mitchell, L. A., Loya, J. J., Liu, T., Westbroek, E. M., Feroze, A. H., Rodriguez, S., Echegaray, S., Azad, T. D., Yeom, K. W., Napel, S., Rubin, et al
  2015; 7 (303): 303ra138-?

- **MethylMix: an R package for identifying DNA methylation-driven genes** *BIOINFORMATICS*
  Gevaert, O.
  2015; 31 (11): 1839-1841

- **Pancancer analysis of DNA methylation-driven genes using MethylMix** *GENOME BIOLOGY*
  Gevaert, O., Tibshirani, R., Plevritis, S. K.
  2015; 16

- **CaMoDi: a new method for cancer module discovery** *BMC GENOMICS*
  Manolakos, A., Ochoa, I., Venkat, K., Goldsmith, A. J., Gevaert, O.
  2014; 15

- **Glioblastoma Multiforme: Exploratory Radiogenomic Analysis by Using Quantitative Image Features** *RADIOLOGY*
  Gevaert, O., Mitchell, L. A., Achrol, A. S., Xu, J., Echegaray, S., Steinberg, G. K., Cheshier, S. H., Napel, S., Zaharchuk, G., Plevritis, S. K.
  2014; 273 (1): 168-174

- **Oncogenic transformation of diverse gastrointestinal tissues in primary organoid culture** *NATURE MEDICINE*
  Li, X., Nadauld, L., Ootani, A., Corney, D. C., Pai, R. K., Gevaert, O., Cantrell, M. A., Rack, P. G., Neal, J. T., Chan, C. W., Yeung, T., Gong, X., Yuan, et al
  2014; 20 (7): 769-777

- **Identification of ovarian cancer driver genes by using module network integration of multi-omics data** *INTERFACE FOCUS*
  Gevaert, O., Villalobos, V., Sikic, B. I., Plevritis, S. K.
  2013; 3 (4)

- **Identifying master regulators of cancer and their downstream targets by integrating genomic and epigenomic features.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*
  Gevaert, O., Plevritis, S.
  2013: 123-134

- **Prognostic PET F-18-FDG Uptake Imaging Features Are Associated with Major Oncogenomic Alterations in Patients with Resected Non-Small Cell Lung Cancer** *CANCER RESEARCH*

Nair, V. S., Gevaert, O., Davidzon, G., Napel, S., Graves, E. E., Hoang, C. D., Shrager, J. B., Quon, A., Rubin, D. L., Plevritis, S. K.
2012; 72 (15): 3725-3734

- **Non-Small Cell Lung Cancer: Identifying Prognostic Imaging Biomarkers by Leveraging Public Gene Expression Microarray Data-Methods and Preliminary Results** *RADIOLOGY*
  Gevaert, O., Xu, J., Hoang, C. D., Leung, A. N., Xu, Y., Quon, A., Rubin, D. L., Napel, S., Plevritis, S. K.
  2012; 264 (2): 387-396

- **A Seven-Gene Set Associated with Chronic Hypoxia of Prognostic Importance in Hepatocellular Carcinoma** *CLINICAL CANCER RESEARCH*
  Van Malenstein, H., Gevaert, O., Libbrecht, L., Daemen, A., Allemeersch, J., Nevens, F., Van Cutsem, E., Cassiman, D., De Moor, B., Verslype, C., van Pelt, J.
  2010; 16 (16): 4278-4288

- **Intrinsic Gene Expression Profiles of Gliomas Are a Better Predictor of Survival than Histology** *CANCER RESEARCH*
  Gravendeel, L. A., Kouwenhoven, M. C., Gevaert, O., de Rooi, J. J., Stubbs, A. P., Duijm, J. E., Daemen, A., Bleeker, F. E., Bralten, L. B., Kloosterhof, N. K., De Moor, B., Eilers, P. H., van der Spek, et al
  2009; 69 (23): 9065-9072

- **Recurrent Copy Number Alterations in BRCA1-Mutated Ovarian Tumors Alter Biological Pathways** *HUMAN MUTATION*
  Leunen, K., Gevaert, O., Daemen, A., Vanspauwen, V., Michils, G., De Moor, B., Moerman, P., Vergote, I., Legius, E.
  2009; 30 (12): 1693-1702

- **Combined Analysis of Metabolomes, Proteomes, and Transcriptomes of Hepatitis C Virus-Infected Cells and Liver to Identify Pathways Associated With Disease Development** *GASTROENTEROLOGY*
  Lupberger, J., Croonenborghs, T., Suarez, A., Van Renne, N., Juhling, F., Oudot, M. A., Virzi, A., Bandiera, S., Jamey, C., Meszaros, G., Brumaru, D., Mukherji, A., Durand, et al
  2019; 157 (2): 537-+

- **Comparison of single and module-based methods for modeling gene regulatory networks.** *Bioinformatics (Oxford, England)*
  Hernaez, M., Blatti, C., Gevaert, O.
  2019

- **Combined Analysis of Metabolomes, Proteomes, and Transcriptomes of HCV-infected Cells and Liver to Identify Pathways Associated With Disease Development.** *Gastroenterology*
  Lupberger, J., Croonenborghs, T., Roca Suarez, A. A., Van Renne, N., Juhling, F., Oudot, M. A., Virzi, A., Bandiera, S., Jamey, C., Meszaros, G., Brumaru, D., Mukherji, A., Durand, et al
  2019

- **Predicting EGFR mutation status in lung adenocarcinoma on computed tomography image using deep learning** *EUROPEAN RESPIRATORY JOURNAL*
  Wang, S., Shi, J., Ye, Z., Dong, D., Yu, D., Zhou, M., Liu, Y., Gevaert, O., Wang, K., Zhu, Y., Zhou, H., Liu, Z., Tian, et al
  2019; 53 (3)

- **Artificial intelligence and dermatology: opportunities, challenges, and future directions.** *Seminars in cutaneous medicine and surgery*
  Schlessinger, D. I., Chhor, G., Gevaert, O., Swetter, S. M., Ko, J., Novoa, R. A.
  2019; 38 (1): E31–37

- **Predicting EGFR Mutation Status in Lung Adenocarcinoma on CT Image Using Deep Learning.** *The European respiratory journal*
  Wang, S., Shi, J., Ye, Z., Dong, D., Yu, D., Zhou, M., Liu, Y., Gevaert, O., Wang, K., Zhu, Y., Zhou, H., Liu, Z., Tian, et al
  2019

- **Non-invasive genotype prediction of chromosome 1p/19q co-deletion by development and validation of an MRI-based radiomics signature in lower-grade gliomas** *JOURNAL OF NEURO-ONCOLOGY*
  Han, Y., Xie, Z., Zang, Y., Zhang, S., Gu, D., Zhou, M., Gevaert, O., Wei, J., Li, C., Chen, H., Du, J., Liu, Z., Dong, et al
  2018; 140 (2): 297–306

- **A radiogenomic dataset of non-small cell lung cancer.** *Scientific data*
  Bakr, S., Gevaert, O., Echegaray, S., Ayers, K., Zhou, M., Shafiq, M., Zheng, H., Benson, J. A., Zhang, W., Leung, A. N., Kadoch, M., D Hoang, C., Shrager, et al
  2018; 5: 180202

- **A radiogenomic dataset of non-small cell lung cancer** *SCIENTIFIC DATA*
  Bakr, S., Gevaert, O., Echegaray, S., Ayers, K., Zhou, M., Shafiq, M., Zheng, H., Benson, J., Zhang, W., Leung, A. C., Kadoch, M., Hoang, C. D., Shrager, et al
  2018; 5

- **NSD1 inactivation defines an immune cold, DNA hypomethylated subtype in squamous cell carcinoma**
  Brennan, K., Gevaert, O., Sunwoo, J. B., Shin, J.
  AMER ASSOC CANCER RESEARCH.2018

- **Benchmark of lncRNA quantification in RNA-Seq of cancer samples**
  Zheng, H., Hernaez, M., Brennan, K., Gevaert, O.
  AMER ASSOC CANCER RESEARCH.2018

- **Comprehensive analysis of cancer stemness**
  Malta, T. M., Sokolov, A., Gentles, A. J., Burzykowski, T., Poisson, L., Weinstein, J., Kaminska, B., Huelsken, J., Omberg, L., Gevaert, O., Colaprico, A., Czerwinska, P., Mazurek, et al
  AMER ASSOC CANCER RESEARCH.2018

- **Deep learning to predict survival prognosis for patients with non-small cell lung cancer using images and clinical data**
  Lee, E. H., Zhou, M., Gamboa, N., Brennan, K., Itakura, H., Nair, V., Napel, S., Wong, S., Gevaert, O.
  AMER ASSOC CANCER RESEARCH.2018

- **Non-Small Cell Lung Cancer Radiogenomics Map Identifies Relationships between Molecular and Imaging Phenotypes with Prognostic Implications.** *Radiology*
  Zhou, M., Leung, A., Echegaray, S., Gentles, A., Shrager, J. B., Jensen, K. C., Berry, G. J., Plevritis, S. K., Rubin, D. L., Napel, S., Gevaert, O.
  2018; 286 (1): 307–15

- **The ENGAGE study: Integrating neuroimaging, virtual reality and smartphone sensing to understand self-regulation for managing depression and obesity in a precision medicine model.** *Behaviour research and therapy*
  Williams, L. M., Pines, A., Goldstein-Piekarski, A. N., Rosas, L. G., Kullar, M., Sacchet, M. D., Gevaert, O., Bailenson, J., Lavori, P. W., Dagum, P., Wandell, B., Correa, C., Greenleaf, et al
  2018; 101: 58–70

- **Development and validation of an MRI-based model to predict response to chemoradiotherapy for rectal cancer.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
  Bulens, P., Couwenberg, A., Haustermans, K., Debucquoy, A., Vandecaveye, V., Philippens, M., Zhou, M., Gevaert, O., Intven, M.
  2018; 126 (3): 437–42

- **Prediction of EGFR and KRAS mutation in non-small cell lung cancer using quantitative 18F FDG-PET/CT metrics.** *Oncotarget*
  Minamimoto, R., Jamali, M., Gevaert, O., Echegaray, S., Khuong, A., Hoang, C. D., Shrager, J. B., Plevritis, S. K., Rubin, D. L., Leung, A. N., Napel, S., Quon, A.
  2017

- **Predictive radiogenomics modeling of EGFR mutation status in lung cancer** *SCIENTIFIC REPORTS*
  Gevaert, O., Echegaray, S., Khuong, A., Hoang, C. D., Shrager, J. B., Jensen, K. C., Berry, G. J., Guo, H. H., Lau, C., Plevritis, S. K., Rubin, D. L., Napel, S., Leung, et al
  2017; 7

- **MicroRNA based Pan-Cancer Diagnosis and Treatment Recommendation** *BMC BIOINFORMATICS*
  Cheerla, N., Gevaert, O.
  2017; 18

- **A multi-view deep convolutional neural networks for lung nodule segmentation.** *Conference proceedings : ... Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual Conference*
  Gevaert, O.
  2017; 2017: 1752–55

- **Central focused convolutional neural networks: Developing a data-driven model for lung nodule segmentation.** *Medical image analysis*
  Wang, S., Zhou, M., Liu, Z., Liu, Z., Gu, D., Zang, Y., Dong, D., Gevaert, O., Tian, J.
  2017; 40: 172–83

- **Prediction of EGFR and KRAS mutation in non-small cell lung cancer using quantitative 18F FDG-PET/CT metrics.** *Oncotarget*
  Minamimoto, R., Jamali, M., Gevaert, O., Echegaray, S., Khuong, A., Hoang, C. D., Shrager, J. B., Plevritis, S. K., Rubin, D. L., Leung, A. N., Napel, S., Quon, A.
  2017; 8 (32): 52792–801

- **Intestinal Enteroendocrine Lineage Cells Possess Homeostatic and Injury-Inducible Stem Cell Activity** *Cell Stem Cell*
  Yan, K., Gevaert, O., Zheng, G., Anchang, B., Probert, C., et al

2017; 21 (1): 78 - 90.e6

- **Fast and Accurate Metadata Authoring Using Ontology-Based Recommendations.** *AMIA ... Annual Symposium proceedings. AMIA Symposium*
  Martinez-Romero, M., O'Connor, M. J., Shankar, R. D., Panahiazar, M., Willrett, D., Egyedi, A. L., Gevaert, O., Graybeal, J., Musen, M. A.
  2017; 2017: 1272–81

- **Predicting biomedical metadata in CEDAR: A study of Gene Expression Omnibus (GEO).** *Journal of biomedical informatics*
  Panahiazar, M., Dumontier, M., Gevaert, O.
  2017; 72: 132–39

- **Radiomics in Brain Tumor: Image Assessment, Quantitative Feature Descriptors, and Machine-Learning Approaches.** *AJNR. American journal of neuroradiology*
  Zhou, M., Scott, J., Chaudhury, B., Hall, L., Goldgof, D., Yeom, K. W., Iv, M., Ou, Y., Kalpathy-Cramer, J., Napel, S., Gillies, R., Gevaert, O., Gatenby, et al
  2017

- **Quantitative imaging outperforms molecular markers when predicting response to chemoradiotherapy for rectal cancer.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
  Joye, I., Debucquoy, A., Deroose, C. M., Vandecaveye, V., Cutsem, E. V., Wolthuis, A., D'Hoore, A., Sagaert, X., Zhou, M., Gevaert, O., Haustermans, K.
  2017; 124 (1): 104–9

- **NSD1 inactivation defines an immune cold, DNA hypomethylated subtype in squamous cell carcinoma.** *Scientific reports*
  Brennan, K., Shin, J. H., Tay, J. K., Prunello, M., Gentles, A. J., Sunwoo, J. B., Gevaert, O.
  2017; 7 (1): 17064

- **Magnetic resonance perfusion image features uncover an angiogenic subgroup of glioblastoma patients with poor survival and better response to antiangiogenic treatment.** *Neuro-oncology*
  Liu, T. T., Achrol, A. S., Mitchell, L. A., Rodriguez, S. A., Feroze, A., Kim, C., Chaudhary, N., Gevaert, O., Stuart, J. M., Harsh, G. R., Chang, S. D., Rubin, D. L.
  2016

- **Chromatin-Remodeling Complex SWI/SNF Controls Multidrug Resistance by Transcriptionally Regulating the Drug Efflux Pump ABCB1** *CANCER RESEARCH*
  Dubey, R., Lebensohn, A. M., Bahrami-Nejad, Z., Marceau, C., Champion, M., Gevaert, O., Sikic, B. I., Carette, J. E., Rohatgi, R.
  2016; 76 (19): 5810-5821

- **Transforming Big Data into Cancer-Relevant Insight: An Initial, Multi-Tier Approach to Assess Reproducibility and Relevance The Cancer Target Discovery and Development Network** *MOLECULAR CANCER RESEARCH*
  Clemons, P. A., Shamji, A., Hon, C., Wagner, B. K., Schreiber, S. L., Krasnitz, A., Sordella, R., Sander, C., Lowe, S. W., Powers, S., Smith, K., Aburi, M., Lavarone, et al
  2016; 14 (8): 675-682

- **Predicting structured metadata from unstructured metadata** *DATABASE-THE JOURNAL OF BIOLOGICAL DATABASES AND CURATION*
  Posch, L., Panahiazar, M., Dumontier, M., Gevaert, O.
  2016

- **CoINcIDE: A framework for discovery of patient subtypes across multiple datasets** *GENOME MEDICINE*
  Planey, C. R., Gevaert, O.
  2016; 8

- **Single Gene Prognostic Biomarkers in Ovarian Cancer: A Meta-Analysis** *PLOS ONE*
  Willis, S., Villalobos, V. M., Gevaert, O., Abramovitz, M., Williams, C., Sikic, B. I., Leyland-Jones, B.
  2016; 11 (2)

- **Development of prognostic signatures for intermediate-risk papillary thyroid cancer.** *BMC cancer*
  Brennan, K., Holsinger, C., Dosiou, C., Sunwoo, J. B., Akatsu, H., Haile, R., Gevaert, O.
  2016; 16 (1): 736-?

- **Predicting structured metadata from unstructured metadata.** *Database : the journal of biological databases and curation*
  Posch, L., Panahiazar, M., Dumontier, M., Gevaert, O.
  2016; 2016

- **A Rapid Segmentation-Insensitive 'Digital Biopsy' Method for Radiomic Feature Extraction; Method and Pilot Study Using CT Images of Non-Small Cell Lung Cancer** *Tomography*

Echegaray, S., Nair, V., Kadoch, M., Leung, A., Rubin, D., Gevaert, O., Napel Sandy , et al
2016; 2 (4): 283–94

- **Magnetic resonance perfusion image features uncover an angiogenic subgroup of glioblastoma patients with poor survival and better response to antiangiogenic treatment.** *Neuro-Oncology*
  Liu, T. T., Achrol, A. S., Mitchell, L. A., Rodriguez, S. A., Feroze, A., Iv, M., Kim, C., Chaudhary, N., Gevaert, O., Stuart, J. M., Harsh, G. R., Chang, S. D., Rubin, et al
  2016
- **A Rapid Segmentation-Insensitive "Digital Biopsy" Method for Radiomic Feature Extraction: Method and Pilot Study Using CT Images of Non-Small Cell Lung Cancer.** *Tomography : a journal for imaging research*
  Echegaray, S., Nair, V., Kadoch, M., Leung, A., Rubin, D., Gevaert, O., Napel, S.
  2016; 2 (4): 283–94
- **COmbined Mapping of Multiple clUsteriNg ALgorithms (COMMUNAL): A Robust Method for Selection of Cluster Number, K** *SCIENTIFIC REPORTS*
  Sweeney, T. E., Chen, A. C., Gevaert, O.
  2015; 5
- **The center for expanded data annotation and retrieval.** *Journal of the American Medical Informatics Association*
  Musen, M. A., Bean, C. A., Cheung, K., Dumontier, M., Durante, K. A., Gevaert, O., Gonzalez-Beltran, A., Khatri, P., Kleinstein, S. H., O'Connor, M. J., Pouliot, Y., Rocca-Serra, P., Sansone, et al
  2015; 22 (6): 1148-1152
- **Core samples for radiomics features that are insensitive to tumor segmentation: method and pilot study using CT images of hepatocellular carcinoma.** *Journal of medical imaging (Bellingham, Wash.)*
  Echegaray, S., Gevaert, O., Shah, R., Kamaya, A., Louie, J., Kothary, N., Napel, S.
  2015; 2 (4): 041011-?
- **Addition of MR imaging features and genetic biomarkers strengthens glioblastoma survival prediction in TCGA patients.** *Journal of neuroradiology. Journal de neuroradiologie*
  Nicolasjilwan, M., Hu, Y., Yan, C., Meerzaman, D., Holder, C. A., Gutman, D., Jain, R., Colen, R., Rubin, D. L., Zinn, P. O., Hwang, S. N., Raghavan, P., Hammoud, et al
  2015; 42 (4): 212-221
- **DNA Methylation-Guided Prediction of Clinical Failure in High-Risk Prostate Cancer** *PLOS ONE*
  Litovkin, K., Van Eynde, A., Joniau, S., Lerut, E., Laenen, A., Gevaert, T., Gevaert, O., Spahn, M., Kneitz, B., Gramme, P., Helleputte, T., Isebaert, S., Haustermans, et al
  2015; 10 (6)
- **Combining bevacizumab and chemoradiation in rectal cancer. Translational results of the AXEBeam trial.** *British journal of cancer*
  Verstraete, M., Debucquoy, A., Dekervel, J., van Pelt, J., Verslype, C., Devos, E., Chiritescu, G., Dumon, K., D'Hoore, A., Gevaert, O., Sagaert, X., Van Cutsem, E., Haustermans, et al
  2015; 112 (8): 1314-1325
- **Methylation of PITX2, HOXD3, RASSF1 and TDRD1 predicts biochemical recurrence in high-risk prostate cancer** *JOURNAL OF CANCER RESEARCH AND CLINICAL ONCOLOGY*
  Litovkin, K., Joniau, S., Lerut, E., Laenen, A., Gevaert, O., Spahn, M., Kneitz, B., Isebaert, S., Haustermans, K., Beullens, M., Van Eynde, A., Bollen, M.
  2014; 140 (11): 1849-1861
- **Glioblastoma multiforme: exploratory radiogenomic analysis by using quantitative image features.** *Radiology*
  Gevaert, O., Mitchell, L. A., Achrol, A. S., Xu, J., Echegaray, S., Steinberg, G. K., Cheshier, S. H., Napel, S., Zaharchuk, G., Plevritis, S. K.
  2014; 273 (1): 168-174
- **NF-?B protein expression associates with (18)F-FDG PET tumor uptake in non-small cell lung cancer: A radiogenomics validation study to understand tumor metabolism.** *Lung cancer*
  Nair, V. S., Gevaert, O., Davidzon, G., Plevritis, S. K., West, R.
  2014; 83 (2): 189-196
- **Oncogenic transformation of diverse gastrointestinal tissues in primary organoid culture.** *Nature medicine*
  Li, X., Nadauld, L., Ootani, A., Corney, D. C., Pai, R. K., Gevaert, O., Cantrell, M. A., Rack, P. G., Neal, J. T., Chan, C. W., Yeung, T., Gong, X., Yuan, et al
  2014

- **Stromal architecture and periductal decorin are potential prognostic markers for ipsilateral locoregional recurrence in ductal carcinoma in situ of the breast** *HISTOPATHOLOGY*
  Van Bockstal, M., Lambein, K., Gevaert, O., de Wever, O., Praet, M., Cocquyt, V., Van den Broecke, R., Braems, G., Denys, H., Libbrecht, L.
  2013; 63 (4): 520-533

- **Identification of ovarian cancer driver genes by using module network integration of multi-omics data.** *Interface focus*
  Gevaert, O., Villalobos, V., Sikic, B. I., Plevritis, S. K.
  2013; 3 (4): 20130013-?

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