

Stanford



Jan Carette

Associate Professor of Microbiology and Immunology
Microbiology & Immunology

Bio

ACADEMIC APPOINTMENTS

- Associate Professor, Microbiology & Immunology
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Faculty Fellow, Stanford ChEM-H

HONORS AND AWARDS

- Investigator in the Pathogenesis of Infectious Disease, Burroughs Wellcome Fund (2018)
- Scholar Award, American Asthma Foundation (2014)
- Ann Palmenberg Junior Investigator Award, American Society of Virology (2013)
- Fellow, David & Lucile Packard Foundation (2012)
- NIH Director's New Innovator Award, NIH (2012)
- Baxter Faculty Scholar Award, Baxter Foundation (2011)

LINKS

- Carette Lab: <http://med.stanford.edu/carettelab.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our research focuses on the identification of host genes that play critical roles in the pathogenesis of infectious agents including viruses. We use haploid genetic screens in human cells as an efficient approach to perform loss-of-function studies. Besides obtaining fundamental insights on how viruses hijack cellular processes and on host defense mechanisms, it might also facilitate the development of new therapeutic strategies.

Teaching

COURSES

2017-18

- Biology and Applications of CRISPR/Cas9: Genome Editing and Epigenome Modifications: BIOS 268 (Spr)

2016-17

- Advanced Pathogenesis of Bacteria, Viruses, and Eukaryotic Parasites: MI 210 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Makeda Robinson

Postdoctoral Faculty Sponsor

Allison Dupzyk, Yaw Shin Ooi, Wenjie Qiao, Christopher Richards, James Zengel

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Microbiology and Immunology (Phd Program)

Publications

PUBLICATIONS

- **MLKL Requires the Inositol Phosphate Code to Execute Necroptosis.** *Molecular cell*
Dovey, C. M., Diep, J., Clarke, B. P., Hale, A. T., McNamara, D. E., Guo, H., Brown, N. W., Cao, J. Y., Grace, C. R., Gough, P. J., Bertin, J., Dixon, S. J., Fiedler, et al
2018; 70 (5): 936–48.e7
- **A CRISPR toolbox to study virus-host interactions** *NATURE REVIEWS MICROBIOLOGY*
Puschnik, A. S., Majzoub, K., Ooi, Y. S., Carette, J. E.
2017; 15 (6): 351-364
- **A Small-Molecule Oligosaccharyltransferase Inhibitor with Pan-flaviviral Activity.** *Cell reports*
Puschnik, A. S., Marceau, C. D., Ooi, Y. S., Majzoub, K., Rinis, N., Contessa, J. N., Carette, J. E.
2017; 21 (11): 3032–39
- **Genetic dissection of Flaviviridae host factors through genome-scale CRISPR screens** *NATURE*
Marceau, C. D., Puschnik, A. S., Majzoub, K., Ooi, Y. S., Brewer, S. M., Fuchs, G., Swaminathan, K., Mata, M. A., Elias, J. E., Sarnow, P., Carette, J. E.
2016; 535 (7610): 159-?
- **An essential receptor for adeno-associated virus infection.** *Nature*
Pillay, S., Meyer, N. L., Puschnik, A. S., Davulcu, O., Diep, J., Ishikawa, Y., Jae, L. T., Wosen, J. E., Nagamine, C. M., Chapman, M. S., Carette, J. E.
2016; 530 (7588): 108-112
- **Ebola virus entry requires the cholesterol transporter Niemann-Pick C1** *NATURE*
Carette, J. E., Raaben, M., Wong, A. C., Herbert, A. S., Obernosterer, G., Mulherkar, N., Kuehne, A. I., Kranzusch, P. J., Griffin, A. M., Ruthel, G., Dal Cin, P., Dye, J. M., Whelan, et al
2011; 477 (7364): 340-U115
- **Impact of a patient-derived hepatitis C viral RNA genome with a mutated microRNA binding site** *PLOS PATHOGENS*
Mata, M., Neben, S., Majzoub, K., Carette, J., Ramanathan, M., Khavari, P. A., Sarnow, P.
2019; 15 (5)
- **A Genome-wide Haploid Genetic Screen Identifies Regulators of Glutathione Abundance and Ferroptosis Sensitivity.** *Cell reports*
Cao, J. Y., Poddar, A., Magtanong, L., Lumb, J. H., Mileur, T. R., Reid, M. A., Dovey, C. M., Wang, J., Locasale, J. W., Stone, E., Cole, S. P., Carette, J. E., Dixon, et al
2019; 26 (6): 1544
- **Differential and convergent utilization of autophagy components by positive-strand RNA viruses.** *PLoS biology*
Abernathy, E., Mateo, R., Majzoub, K., van Buuren, N., Bird, S. W., Carette, J. E., Kirkegaard, K.
2019; 17 (1): e2006926
- **Discovery of gene regulatory elements through a new bioinformatics analysis of haploid genetic screens.** *PLoS one*
Patel, B. B., Lebensohn, A. M., Pusapati, G. V., Carette, J. E., Salzman, J., Rohatgi, R.
2019; 14 (1): e0198463

- **Direct Activation of Human MLKL by a Select Repertoire of Inositol Phosphate Metabolites.** *Cell chemical biology*
McNamara, D. E., Dovey, C. M., Hale, A. T., Quarato, G., Grace, C. R., Guibao, C. D., Diep, J., Nourse, A., Cai, C. R., Wu, H., Kalathur, R. C., Green, D. R., York, et al
2019
- **Honey bee Royalactin unlocks conserved pluripotency pathway in mammals.** *Nature communications*
Wan, D. C., Morgan, S. L., Spencley, A. L., Mariano, N., Chang, E. Y., Shankar, G., Luo, Y., Li, T. H., Huh, D., Huynh, S. K., Garcia, J. M., Dovey, C. M., Lumb, et al
2018; 9 (1): 5078
- **A Dock-and-Lock Mechanism Clusters ADAM10 at Cell-Cell Junctions to Promote alpha-Toxin Cytotoxicity.** *Cell reports*
Shah, J., Rouaud, F., Guerrero, D., Vasileva, E., Popov, L. M., Kelley, W. L., Rubinstein, E., Carette, J. E., Amieva, M. R., Citi, S.
2018; 25 (8): 2132
- **Editing N-Glycan Site Occupancy with Small-Molecule Oligosaccharyltransferase Inhibitors** *CELL CHEMICAL BIOLOGY*
Rinis, N., Golden, J. E., Marceau, C. D., Carette, J. E., Van Zandt, M. C., Gilmore, R., Contessa, J. N.
2018; 25 (10): 1231-+
- **Species-independent contribution of ZBP1/DAI/DLM-1-triggered necroptosis in host defense against HSV1** *CELL DEATH & DISEASE*
Guo, H., Gilley, R. P., Fisher, A., Lane, R., Landsteiner, V. J., Ragan, K. B., Dovey, C. M., Carette, J. E., Upton, J. W., Mocarski, E. S., Kaiser, W. J.
2018; 9: 816
- **KREMEN1 Is a Host Entry Receptor for a Major Group of Enteroviruses** *CELL HOST & MICROBE*
Staring, J., van den Hengel, L. G., Raaben, M., Blomen, V. A., Carette, J. E., Brummelkamp, T. R.
2018; 23 (5): 636-+
- **STAG2 deficiency induces interferon responses via cGAS-STING pathway and restricts virus infection.** *Nature communications*
Ding, S., Diep, J., Feng, N., Ren, L., Li, B., Ooi, Y. S., Wang, X., Brulois, K. F., Yasukawa, L. L., Li, X., Kuo, C. J., Solomon, D. A., Carette, et al
2018; 9 (1): 1485
- **An alternate route for adeno-associated virus entry independent of AAVR.** *Journal of virology*
Dudek, A. M., Pillay, S., Puschnik, A. S., Nagamine, C. M., Cheng, F., Qiu, J., Carette, J. E., Vandenberghe, L. H.
2018
- **SETD3 is an actin histidine methyltransferase that prevents primary dystocia.** *Nature*
Wilkinson, A. W., Diep, J., Dai, S., Liu, S., Ooi, Y. S., Song, D., Li, T. M., Horton, J. R., Zhang, X., Liu, C., Trivedi, D. V., Ruppel, K. M., Vilches-Moure, et al
2018
- **RNA-protein interaction detection in living cells.** *Nature methods*
Ramanathan, M., Majzoub, K., Rao, D. S., Neela, P. H., Zarnegar, B. J., Mondal, S., Roth, J. G., Gai, H., Kovalski, J. R., Sipsashvili, Z., Palmer, T. D., Carette, J. E., Khavari, et al
2018
- **Monkeypox Virus Host Factor Screen Using Haploid Cells Identifies Essential Role of GARP Complex in Extracellular Virus Formation.** *Journal of virology*
Realegeno, S., Puschnik, A. S., Kumar, A., Goldsmith, C., Burgado, J., Sambhara, S., Olson, V. A., Carroll, D., Damon, I., Hirata, T., Kinoshita, T., Carette, J. E., Satheshkumar, et al
2017; 91 (11)
- **Antigen presentation profiling reveals recognition of lymphoma immunoglobulin neoantigens** *NATURE*
Khodadoust, M. S., Olsson, N., Wagar, L. E., Haabeth, O. A., Chen, B., Swaminathan, K., Rawson, K., Liu, C. L., Steiner, D., Lund, P., Rao, S., Zhang, L., Marceau, et al
2017; 543 (7647): 723-?
- **PLA2G16 represents a switch between entry and clearance of Picornaviridae.** *Nature*
Staring, J., von Castelmuur, E., Blomen, V. A., van den Hengel, L. G., Brockmann, M., Baggen, J., Thibaut, H. J., Nieuwenhuis, J., Janssen, H., Van Kuppeveld, F. J., Perrakis, A., Carette, J. E., Brummelkamp, et al
2017; 541 (7637): 412-416
- **Host determinants of adeno-associated viral vector entry.** *Current opinion in virology*
Pillay, S., Carette, J. E.

2017; 24: 124–31

- **DDX6 Represses Aberrant Activation of Interferon-Stimulated Genes.** *Cell reports*
Lumb, J. H., Li, Q., Popov, L. M., Ding, S., Keith, M. T., Merrill, B. D., Greenberg, H. B., Li, J. B., Carette, J. E.
2017; 20 (4): 819–31
- **AAV serotypes have distinctive interactions with domains of the cellular receptor AAVR.** *Journal of virology*
Pillay, S., Zou, W., Cheng, F., Puschnik, A. S., Meyer, N. L., Ganaie, S. S., Deng, X., Wosen, J. E., Davulcu, O., Yan, Z., Engelhardt, J. F., Brown, K. E., Chapman, et al
2017
- **Comparative genetic screens in human cells reveal new regulatory mechanisms in WNT signaling** *ELIFE*
Lebensohn, A. M., Dubey, R., Neitzel, L. R., Tacchelly-Benites, O., Yang, E., Marceau, C. D., Davis, E. M., Patel, B. B., Bahrami-Nejad, Z., Travaglini, K. J., Ahmed, Y., Lee, E., Carette, et al
2016; 5
- **Complement pathway amplifies caspase-11-dependent cell death and endotoxin-induced sepsis severity.** *journal of experimental medicine*
Napier, B. A., Brubaker, S. W., Sweeney, T. E., Monette, P., Rothmeier, G. H., Gertszolf, N. A., Puschnik, A., Carette, J. E., Khatri, P., Monack, D. M.
2016; 213 (11): 2365-2382
- **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
- **Parallel shRNA and CRISPR-Cas9 screens enable antiviral drug target identification** *NATURE CHEMICAL BIOLOGY*
Deans, R. M., Morgens, D. W., Okesli, A., Pillay, S., Horlbeck, M. A., Kampmann, M., Gilbert, L. A., Li, A., Mateo, R., Smith, M., Glenn, J. S., Carette, J. E., Khosla, et al
2016; 12 (5): 361-?
- **A Single Residue in Ebola Virus Receptor NPC1 Influences Cellular Host Range in Reptiles.** *mSphere*
Ndungo, E., Herbert, A. S., Raaben, M., Obermosterer, G., Biswas, R., Miller, E. H., Wirchnianski, A. S., Carette, J. E., Brummelkamp, T. R., Whelan, S. P., Dye, J. M., Chandran, K.
2016; 1 (2)
- **Gene essentiality and synthetic lethality in haploid human cells.** *Science*
Blomen, V. A., Májek, P., Jae, L. T., Bigenzahn, J. W., Nieuwenhuis, J., Staring, J., Sacco, R., van Diemen, F. R., Olk, N., Stukalov, A., Marceau, C., Janssen, H., Carette, et al
2015; 350 (6264): 1092-1096
- **The adherens junctions control susceptibility to Staphylococcus aureus a-toxin.** *Proceedings of the National Academy of Sciences of the United States of America*
Popov, L. M., Marceau, C. D., Starkl, P. M., Lumb, J. H., Shah, J., Guerrero, D., Cooper, R. L., Merakou, C., Bouley, D. M., Meng, W., Kiyonari, H., Takeichi, M., Galli, et al
2015; 112 (46): 14337-14342
- **A forward genetic screen reveals novel independent regulators of ULBP1, an activating ligand for natural killer cells** *ELIFE*
Gowen, B. G., Chim, B., Marceau, C. D., Greene, T. T., Burr, P., Gonzalez, J. R., Hesser, C. R., Dietzen, P. A., Russell, T., Iannello, A., Coscoy, L., Sentman, C. L., Carette, et al
2015; 4
- **Kinetic pathway of 40S ribosomal subunit recruitment to hepatitis C virus internal ribosome entry site.** *Proceedings of the National Academy of Sciences of the United States of America*
Fuchs, G., Petrov, A. N., Marceau, C. D., Popov, L. M., Chen, J., O'Leary, S. E., Wang, R., Carette, J. E., Sarnow, P., Puglisi, J. D.
2015; 112 (2): 319-325
- **Compromising the 19S proteasome complex protects cells from reduced flux through the proteasome.** *eLife*
Tsvetkov, P., Mendillo, M. L., Zhao, J., Carette, J. E., Merrill, P. H., Cikes, D., Varadarajan, M., van Diemen, F. R., Penninger, J. M., Goldberg, A. L., Brummelkamp, T. R., Santagata, S., Lindquist, et al
2015; 4

- **Hunting Viral Receptors Using Haploid Cells** *ANNUAL REVIEW OF VIROLOGY, VOL 2*
Pillay, S., Carette, J. E.
2015; 2: 219-239
- **A forward genetic screen reveals novel independent regulators of ULBP1, an activating ligand for natural killer cells.** *eLife*
Gowen, B. G., Chim, B., Marceau, C. D., Greene, T. T., Burr, P., Gonzalez, J. R., Hesser, C. R., Dietzen, P. A., Russell, T., Iannello, A., Coscoy, L., Sentman, C. L., Carette, et al
2015; 4
- **Identifying multi-locus chromatin contacts in human cells using tethered multiple 3C.** *BMC genomics*
Ay, F., Vu, T. H., Zeitz, M. J., Varoquaux, N., Carette, J. E., Vert, J., Hoffman, A. R., Noble, W. S.
2015; 16: 121-?
- **RIP3 induces apoptosis independent of proinflammatory kinase activity.** *Molecular cell*
Mandal, P., Berger, S. B., Pillay, S., Moriwaki, K., Huang, C., Guo, H., Lich, J. D., Finger, J., Kasparcova, V., Votta, B., Ouellette, M., King, B. W., Wisnoski, et al
2014; 56 (4): 481-495
- **GPR107, a G-protein-coupled Receptor Essential for Intoxication by Pseudomonas aeruginosa Exotoxin A, Localizes to the Golgi and Is Cleaved by Furin.** *journal of biological chemistry*
Tafesse, F. G., Guimaraes, C. P., Maruyama, T., Carette, J. E., Lory, S., Brummelkamp, T. R., Ploegh, H. L.
2014; 289 (35): 24005-24018
- **Human induced pluripotent stem cell-derived cardiomyocytes as an in vitro model for coxsackievirus b3-induced myocarditis and antiviral drug screening platform.** *Circulation research*
Sharma, A., Marceau, C., Hamaguchi, R., Burridge, P. W., Rajarajan, K., Churko, J. M., Wu, H., Sallam, K. I., Matsa, E., Sturzu, A. C., Che, Y., Ebert, A., Diecke, et al
2014; 115 (6): 556-566
- **Inhibition of ATP1F1 Ameliorates Severe Mitochondrial Respiratory Chain Dysfunction in Mammalian Cells.** *Cell reports*
Chen, W. W., Birsoy, K., Mihaylova, M. M., Snitkin, H., Stasinski, I., Yucel, B., Bayraktar, E. C., Carette, J. E., Clish, C. B., Brummelkamp, T. R., Sabatini, D. D., Sabatini, D. M.
2014; 7 (1): 27-34
- **A CREB3-ARF4 signalling pathway mediates the response to Golgi stress and susceptibility to pathogens** *NATURE CELL BIOLOGY*
Reiling, J. H., Olive, A. J., Sanyal, S., Carette, J. E., Brummelkamp, T. R., Ploegh, H. L., Starnbach, M. N., Sabatini, D. M.
2013; 15 (12): 1473-?
- **Late endosomal transport and tethering are coupled processes controlled by RILP and the cholesterol sensor ORP1L** *JOURNAL OF CELL SCIENCE*
van der Kant, R., Fish, A., Janssen, L., Janssen, H., Krom, S., Ho, N., Brummelkamp, T., Carette, J., Rocha, N., Neefjes, J.
2013; 126 (15): 3462-3474
- **A Reporter Screen in a Human Haploid Cell Line Identifies CYLD as a Constitutive Inhibitor of NF-kappa B** *PLOS ONE*
Lee, C. C., Carette, J. E., Brummelkamp, T. R., Ploegh, H. L.
2013; 8 (7)
- **Deciphering the Glycosylome of Dystroglycanopathies Using Haploid Screens for Lassa Virus Entry** *SCIENCE*
Jae, L. T., Raaben, M., Riemersma, M., van Beusekom, E., Blomen, V. A., Velds, A., Kerkhoven, R. M., Carette, J. E., Topaloglu, H., Meinecke, P., Wessels, M. W., Lefeber, D. J., Whelan, et al
2013; 340 (6131): 479-483
- **MCT1-mediated transport of a toxic molecule is an effective strategy for targeting glycolytic tumors.** *Nature genetics*
Birsoy, K., Wang, T., Possemato, R., Yilmaz, O. H., Koch, C. E., Chen, W. W., Hutchins, A. W., Gultekin, Y., Peterson, T. R., Carette, J. E., Brummelkamp, T. R., Clish, C. B., Sabatini, et al
2013; 45 (1): 104-108
- **MCT1-mediated transport of a toxic molecule is an effective strategy for targeting glycolytic tumors** *NATURE GENETICS*
Birsoy, K., Wang, T., Possemato, R., Yilmaz, O. H., Koch, C. E., Chen, W. W., Hutchins, A. W., Gultekin, Y., Peterson, T. R., Carette, J. E., Brummelkamp, T. R., Clish, C. B., Sabatini, et al
2013; 45 (1): 104-U149

- **Attachment of Chlamydia trachomatis L2 to host cells requires sulfation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Rosmarin, D. M., Carette, J. E., Olive, A. J., Starnbach, M. N., Brummelkamp, T. R., Ploegh, H. L.
2012; 109 (25): 10059-10064
- **Ebola virus entry requires the host-programmed recognition of an intracellular receptor** *EMBO JOURNAL*
Miller, E. H., Obernosterer, G., Raaben, M., Herbert, A. S., Deffieu, M. S., Krishnan, A., Ndungo, E., Sandesara, R. G., Carette, J. E., Kuehne, A. I., Ruthel, G., Pfeffer, S. R., Dye, et al
2012; 31 (8): 1947-1960
- **Identification of host cell factors required for intoxication through use of modified cholera toxin** *JOURNAL OF CELL BIOLOGY*
Guimaraes, C. P., Carette, J. E., Varadarajan, M., Antos, J., Popp, M. W., Spooner, E., Brummelkamp, T. R., Ploegh, H. L.
2011; 195 (5): 751-764
- **Lipolysis-stimulated lipoprotein receptor (LSR) is the host receptor for the binary toxin Clostridium difficile transferase (CDT)** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Papatheodorou, P., Carette, J. E., Bell, G. W., Schwan, C., Guttenberg, G., Brummelkamp, T. R., Aktories, K.
2011; 108 (39): 16422-16427
- **A haploid genetic screen identifies the major facilitator domain containing 2A (MFSD2A) transporter as a key mediator in the response to tunicamycin** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Reiling, J. H., Clish, C. B., Carette, J. E., Varadarajan, M., Brummelkamp, T. R., Sabatini, D. M.
2011; 108 (29): 11756-11765
- **Global gene disruption in human cells to assign genes to phenotypes by deep sequencing** *NATURE BIOTECHNOLOGY*
Carette, J. E., Guimaraes, C. P., Wuethrich, I., Blomen, V. A., Varadarajan, M., Sun, C., Bell, G., Yuan, B., Muellner, M. K., Nijman, S. M., Ploegh, H. L., Brummelkamp, T. R.
2011; 29 (6): 542-U108
- **Objective determination of the oncolytic potency of conditionally-replicating adenoviruses using mathematical modeling** *JOURNAL OF GENE MEDICINE*
Idema, S., Dirven, C. M., van Beusechem, V. W., Carette, J. E., Planque, R., Noskel, D. P., Lamfers, M. L., Vandertop, W. P.
2010; 12 (7): 564-571
- **Generation of iPSCs from cultured human malignant cells** *BLOOD*
Carette, J. E., Pruszk, J., Varadarajan, M., Blomen, V. A., Gokhale, S., Camargo, F. D., Wernig, M., Jaenisch, R., Brummelkamp, T. R.
2010; 115 (20): 4039-4042
- **Haploid Genetic Screens in Human Cells Identify Host Factors Used by Pathogens** *SCIENCE*
Carette, J. E., Guimaraes, C. P., Varadarajan, M., Park, A. S., Wuethrich, I., Godarova, A., Kotecki, M., Cochran, B. H., Spooner, E., Ploegh, H. L., Brummelkamp, T. R.
2009; 326 (5957): 1231-1235
- **Replacement of native adenovirus receptor-binding sites with a new attachment moiety diminishes hepatic tropism and enhances bioavailability in mice** *HUMAN GENE THERAPY*
Schagen, F. H., Graat, H. C., Carette, J. E., Vellinga, J., van Geer, M. A., Hoeben, R. C., Dermody, T. S., van Beusechem, V. W.
2008; 19 (8): 783-794
- **Enhanced tumor cell kill by combined treatment with a small-molecule antagonist of mouse double minute 2 and adenoviruses encoding p53** *MOLECULAR CANCER THERAPEUTICS*
Graat, H. C., Carette, J. E., Schagen, F. H., Vassilev, L. T., Gerritsen, W. R., Kaspers, G. J., Wuisman, P. I., van Beusechem, V. W.
2007; 6 (5): 1552-1561
- **A conditionally replicating adenovirus with strict selectivity in killing cells expressing epidermal growth factor receptor** *VIROLOGY*
Carette, J. E., Graat, H. C., Schagen, F. H., Mastenbroek, D. C., Rots, M. G., Haisma, H. J., Groothuis, G. M., Schaap, G. R., Bras, J., Kaspers, G. J., Wuisman, P. I., Gerritsen, W. R., van Beusechem, et al
2007; 361 (1): 56-67
- **Cyclophosphamide increases transgene expression mediated by an oncolytic adenovirus in glioma-bearing mice monitored by bioluminescence imaging** *MOLECULAR THERAPY*
Lamfers, M. L., Fulci, G., Gianni, D., Tang, Y., Kurozumi, K., Kaur, B., Moeniralm, S., Saeki, Y., Carette, J. E., Weissleder, R., Vandertop, W. P., van Beusechem, V. W., Dirven, et al

2006; 14 (6): 779-788

- **Genetic targeting of adenovirus vectors using a reovirus sigma 1-based attachment protein** *MOLECULAR THERAPY*
Schagen, F. H., Wensveen, F. M., Carette, J. E., Dermody, T. S., Gerritsen, W. R., van Beusechem, V. W.
2006; 13 (5): 997-1005
- **Tissue inhibitor of metalloproteinase-3 expression from an oncolytic adenovirus inhibits matrix metalloproteinase activity In vivo without affecting antitumor efficacy in malignant glioma** *CANCER RESEARCH*
Lamfers, M. L., Gianni, D., Tung, C. H., Idema, S., Schagen, F. H., Carette, J. E., QUAX, P. H., van Beusechem, V. W., Vandertop, W. P., Dirven, C. M., Chiocca, E. A., Gerritsen, W. R.
2005; 65 (20): 9398-9405
- **Replication-dependent transgene expression from a conditionally replicating adenovirus via alternative splicing to a heterologous splice-acceptor site** *JOURNAL OF GENE MEDICINE*
Carette, J. E., Graat, H. C., Schagen, F. H., El Hassan, M. A., Gerritsen, W. R., van Beusechem, V. W.
2005; 7 (8): 1053-1062
- **Gene-directed enzyme prodrug therapy with carboxylesterase enhances the anticancer efficacy of the conditionally replicating adenovirus Ad Delta 24** *GENE THERAPY*
Oosterhoff, D., Pinedo, H. M., Witlox, M. A., Carette, J. E., Gerritsen, W. R., van Beusechem, V. W.
2005; 12 (12): 1011-1018
- **Coxsackievirus and adenovirus receptor expression on primary osteosarcoma specimens and implications for gene therapy with recombinant adenoviruses** *CLINICAL CANCER RESEARCH*
Graat, H. C., Wuisman, P. I., van Beusechem, V. W., Carette, J. E., Gerritsen, W. R., Bras, J., Schaap, G. R., Kaspers, G. J.
2005; 11 (6): 2445-2447
- **Conditionally replicating adenoviruses expressing short hairpin RNAs silence the expression of a target gene in cancer cells** *CANCER RESEARCH*
Carette, J. E., Overmeer, R. M., Schagen, F. H., Alemany, R., Barski, O. A., Gerritsen, W. R., van Beusechem, V. W.
2004; 64 (8): 2663-2667
- **Cowpea mosaic virus: effects on host cell processes** *MOLECULAR PLANT PATHOLOGY*
Pouwels, J., Carette, J. E., Van Lent, J., Wellink, J.
2002; 3 (6): 411-418
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