Stanford

Derek Richard Clements

Postdoctoral Research Fellow, Microbiology and Immunology

Bio

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Dalhousie University (2018)
- Bachelor of Science, Dalhousie University (2012)

STANFORD ADVISORS

- Juliana Idoyaga, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Trial Watch: oncolytic viro-immunotherapy of hematologic and solid tumors** *Oncolmmunology*
  Pol, J. G., Levesque, S., Workenhe, S. T., Gujar, S., Le Boeuf, F., Clements, D. R., Fahrner, J., Fend, L., Bell, J. C., Mossman, K. L., Fucikova, J., Spisek, R., Zitvogel, et al
  2018

- **Quantitative Temporal in Vivo Proteomics Deciphers the Transition of Virus-Driven Myeloid Cells into M2 Macrophages.** *Journal of proteome research*
  Clements, D. R., Murphy, J. P., Sterea, A., Kennedy, B. E., Kim, Y., Helson, E., Almasi, S., Holay, N., Konda, P., Paulo, J. A., Sharif, T., Lee, P. W., Weekes, et al
  2017; 16 (9): 3391–3406

- **All that glitters is not gold: the need to consider desirable and undesirable immune aspects of oncolytic virus therapy** *ONCOIMMUNOLOGY*
  Clements, D. R., Kim, Y., Gujar, S. A., Lee, P. W.
  2016; 5 (1)

- **Dendritic Cells in Oncolytic Virus-Based Anti-Cancer Therapy** *VIRUSES-BASEL*
  Kim, Y., Clements, D. R., Sterea, A. M., Jang, H. W., Gujar, S. A., Lee, P. W.
  2015; 7 (12): 6506-6525

- **Newly Recruited CD11b(+), GR-1(+), Ly6C(high) Myeloid Cells Augment Tumor-Associated Immunosuppression Immediately following the Therapeutic Administration of Oncolytic Reovirus** *JOURNAL OF IMMUNOLOGY*
  Clements, D. R., Sterea, A. M., Kim, Y., Helson, E., Dean, C. A., Nunokawa, A., Coyle, K. M., Sharif, T., Marcato, P., Gujar, S. A., Lee, P. W.
  2015; 194 (9): 4397-4412

- **Gemcitabine enhances the efficacy of reovirus-based oncotherapy through anti-tumour immunological mechanisms** *BRITISH JOURNAL OF CANCER*
  Gujar, S. A., CLEMENTS, D., Dielschneider, R., Helson, E., Marcato, P., Lee, P. W.
  2014; 110 (1): 83-93

- **Two is better than one Complementing oncolytic virotherapy with gemcitabine to potentiate antitumor immune responses** *ONCOIMMUNOLOGY*
  Gujar, S. A., Clements, D., Lee, P. W.
  2014; 3 (1)

- **Reovirus in cancer therapy: an evidence-based review.** *Oncolytic virotherapy*
  Clements, D., Helson, E., Gujar, S. A., Lee, P. W.
  2014; 3: 69-82

- **TRPM2 ion channel promotes gastric cancer migration, invasion and tumor growth through the AKT signaling pathway.** *Scientific reports*
  Almasi, S., Sterea, A. M., Fernando, W., Clements, D. R., Marcato, P., Hoskin, D. W., Gujar, S., El Hiani, Y.
  2019; 9 (1): 4182

- **RTN4 Knockdown Dysregulates the AKT Pathway, Destabilizes the Cytoskeleton, and Enhances Paclitaxel-Induced Cytotoxicity in Cancers** *MOLECULAR THERAPY*
  Pathak, G. P., Shah, R., Kennedy, B. E., Murphy, J., Clements, D., Konda, P., Giacomantonio, M., Xu, Z., Schlaepfer, I. R., Gujar, S.
  2018; 26 (8): 2019–33

- **Epigenetic Silencing of TAP1 in Aldefluor+ Breast Cancer Stem Cells Contributes to Their Enhanced Immune Evasion.** *Stem cells (Dayton, Ohio)*
  Sultan, M., Vidovic, D., Paine, A. S., Huynh, T. T., Coyle, K. M., Thomas, M. L., Cruickshank, B. M., Dean, C. A., Clements, D. R., Kim, Y., Lee, K., Gujar, S. A., Weaver, et al
  2018; 36 (5): 641–54

- **The NAD+ Salvage Pathway Supports PHGDH-Driven Serine Biosynthesis** *Cell Reports*
  Murphy, J. P., Giacomantonio, M., Paulo, J. A., Everley, R. A., Kennedy, B. E., Pathak, G. P., Clements, D. R., Kim, Y., Dai, C., Sharif, T., Gygi, S. P., Gujar, S.
  2018

- **Surfen, a proteoglycan binding agent, reduces inflammation but inhibits remyelination in murine models of Multiple Sclerosis.** *Acta neuropathologica communications*
  Warford, J. R., Lamport, A. C., Clements, D. R., Malone, A., Kennedy, B. E., Kim, Y., Gujar, S. A., Hoskin, D. W., Easton, A. S.
  2018; 6 (1): 4

- **MHC-I Ligand Discovery Using Targeted Database Searches of Mass Spectrometry Data: Implications for T-Cell Immunotherapies** *JOURNAL OF PROTEOME RESEARCH*
  Murphy, J. P., Konda, P., Kowalewski, D. J., Schuster, H., Clements, D., Kim, Y., Cohen, A. M., Sharif, T., Nielsen, M., Stevanovic, S., Lee, P. W., Gujar, S.
  2017; 16 (4): 1806-1816

- **Autophagic homeostasis is required for the pluripotency of cancer stem cells** *AUTOPHAGY*
  Sharif, T., Martell, E., Dai, C., Kennedy, B. E., Murphy, P., Clements, D. R., Kim, Y., Lee, P. W., Gujar, S. A.
  2017; 13 (2): 264-284

- **Breast cancer subtype dictates DNA methylation and ALDH1A3-mediated expression of tumor suppressor RARRES1** *ONCOTARGET*
  Coyle, K. M., Murphy, J. P., Vidovic, D., Vaghar-Kashani, A., Dean, C. A., Sultan, M., Clements, D., Wallace, M., Thomas, M. L., Hundert, A., Giacomantonio, C. A., Helyer, L., Gujar, et al
  2016; 7 (28): 44096-44112

- **The NAD(+) salvage pathway modulates cancer cell viability via p73** *CELL DEATH AND DIFFERENTIATION*
  Sharif, T., Ahn, D., Liu, R., Pringle, E., Martell, E., Dai, C., NUNOKAWA, A., Kwak, M., CLEMENTS, D., Murphy, J. P., Dean, C., Marcato, P., McCormick, et al
  2016; 23 (4): 669-680

- **Aldehyde dehydrogenase 1A3 influences breast cancer progression via differential retinoic acid signaling.** *Molecular oncology*
  Marcato, P., Dean, C. A., Liu, R., Coyle, K. M., Bydoun, M., Wallace, M., Clements, D., Turner, C., Mathenge, E. G., Gujar, S. A., Giacomantonio, C. A., Mackey, J. R., Godbout, et al
  2015; 9 (1): 17-31

- **Core Needle Biopsy of Breast Cancer Tumors Increases Distant Metastases in a Mouse Model** *NEOPLASIA*
  Mathenge, E. G., Dean, C. A., Clements, D., Vaghar-Kashani, A., Photopoulos, S., Coyle, K. M., Giacomantonio, M., Malueth, B., Nunokawa, A., Jordan, J., Lewis, J. D., Gujar, S. A., Marcato, et al
  2014; 16 (11): 950-960

- **The NAD(+) synthesizing enzyme nicotinamide mononucleotide adenylyltransferase 2 (NMNAT-2) is a p53 downstream target** *CELL CYCLE*
  Pan, L., Ahn, D., Sharif, T., Clements, D., Gujar, S. A., Lee, P. W.
  2014; 13 (6): 1041-1048

- **Gemcitabine-mediated tumour regression and p53-dependent gene expression: implications for colon and pancreatic cancer therapy** *CELL DEATH & DISEASE*
  Hill, R., Rabb, M., Madureira, P. A., CLEMENTS, D., Gujar, S. A., Waisman, D. M., Giacomantonio, C. A., Lee, P. W.
  2013; 4

- **Multifaceted Therapeutic Targeting of Ovarian Peritoneal Carcinomatosis Through Virus-induced Immunomodulation** *MOLECULAR THERAPY*
  Gujar, S., Dielschneider, R., Clements, D., Helson, E., Shmulevitz, M., Marcato, P., Pan, D., Pan, L., Ahn, D., Alawadhi, A., Lee, P. W.
  2013; 21 (2): 338-347