Stanford

Anais Amaya

Postdoctoral Scholar, Stem Cell Transplantation

Bio

INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- Travel Award, European Society of Gene and Cell Therapy (ESGCT) (2019)
- Travel Award, European Society of Gene and Cell Therapy (ESGCT) (2018)
- Travel Award, American Society of Gene and Cell Therapy (ASGCT) (2018)
- Panos Ioannou Young Investigator Award, Australasian Gene and Cell Therapy Society (AGCTS) (2017)
- CMRI PhD Scholarship, Children's Medical Research Institute (2015)
- USyd International Scholarship, The University of Sydney (2015)
- SI Scholarship for Future Global Leaders, Swedish Institute (2014)
- Summa Cum Laude, Universidad Simon Bolivar (2014)

PROFESSIONAL EDUCATION

- PhD, University of Sydney , Medicine (2020)

STANFORD ADVISORS

- Matthew Porteus, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Assessment of Pre-Clinical Liver Models Based on Their Ability to Predict the Liver-Tropism of Adeno-Associated Virus Vectors.** *Human gene therapy*
  Westhaus, A., Cabanes-Creus, M., Dilworth, K. L., Zhu, E., Salas Gomez, D., Navarro, R. G., Amaya, A. K., Scott, S., Kwiatek, M., McCorkindale, A. L., Hayman, T. E., Frahm, S., Perocheau, et al
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- **Novel human liver-tropic AAV variants define transferable domains that markedly enhance the human tropism of AAV7 and AAV8.** *Molecular therapy. Methods & clinical development*
  Cabanes-Creus, M., Navarro, R. G., Zhu, E., Baltazar, G., Liao, S. H., Drouyer, M., Amaya, A. K., Scott, S., Nguyen, L. H., Westhaus, A., Hebben, M., Wilson, L. O., Thrasher, et al
  2022; 24: 88-101

- **Attenuation of Heparan Sulfate Proteoglycan Binding Enhances In Vivo Transduction of Human Primary Hepatocytes with AAV2** *MOLECULAR THERAPY-METHODS & CLINICAL DEVELOPMENT*

Cabanes-Creus, M., Westhaus, A., Navarro, R., Baltazar, G., Zhu, E., Amaya, A. K., Liao, S. Y., Scott, S., Sallard, E., Dilworth, K. L., Rybicki, A., Drouyer, M., Hallwirth, et al

2020; 17: 1139-1154

- **Efficient in vivo editing of OTC-deficient patient-derived primary human hepatocytes** *JHEP REPORTS*

  Ginn, S. L., Amaya, A. K., Liao, S. Y., Zhu, E., Cunningham, S. C., Lee, M., Hallwirth, C., Logan, G. J., Tay, S. S., Cesare, A. J., Pickett, H. A., Grompe, M., Dilworth, et al

  2020; 2 (1): 100065

- **Inhibition of proliferation in primary human hepatocytes following in vivo AAV-mediated genome editing**

  Amaya, A. K., Ginn, S. L., Liao, S. Y., Zhu, C., Smyth, C. M., Logan, G. J., Lisowski, L., Alexander, I. E.

  MARY ANN LIEBERT, INC.2019: A18

- **Efficient in vivo editing of patient-derived primary human hepatocytes**

  Ginn, S. L., Amaya, A. K., Liao, S. Y., Zhu, E., Cunningham, S. C., Hallwirth, C. V., Tay, S. S., Lee, M., Pickett, H. A., Grompe, M., Dilworth, K., Lisowski, L., Alexander, et al

  MARY ANN LIEBERT, INC.2019: A2-A3

- **Codon-Optimization of Wild-Type Adeno-Associated Virus Capsid Sequences Enhances DNA Family Shuffling while Conserving Functionality** *MOLECULAR THERAPY-METHODS & CLINICAL DEVELOPMENT*

  Cabanes-Creus, M., Ginn, S. L., Amaya, A. K., Liao, S. Y., Westhaus, A., Hallwirth, C. V., Wilmott, P., Ward, J., Dilworth, K. L., Santilli, G., Rybicki, A., Nakai, H., Thrasher, et al

  2019; 12: 71-84

- **Successful in vivo editing of patient-derived primary human hepatocytes**

  Amaya, A. K., Ginn, S. L., Liao, S. Y., Zhu, C., Lee, M., Pickett, H. A., Hallwirth, C. V., Cunningham, S. C., Lisowski, L., Alexander, I. E.

  MARY ANN LIEBERT, INC.2018: A26-A27

- **Gene therapy clinical trials worldwide to 2017: An update** *JOURNAL OF GENE MEDICINE*

  Ginn, S. L., Amaya, A. K., Alexander, I. E., Edelstein, M., Abedi, M. R.

  2018; 20 (5): e3015

- **Evaluation of Recombinant Adeno-Associated Virus-Based Genome Editing Reagents for Homology-Directed Repair to Target a Human Liver Locus In Vivo**

  Ginn, S. L., Amaya, A. K., Liao, S. Y., Zhu, C., Hallwirth, C. V., Tay, S. S., Cunningham, S. C., Logan, G. J., Dilworth, K., Lisowski, L., Alexander, I.

  CELL PRESS.2018: 113

- **Successful In Vivo Editing of the OTC Locus in Primary Human Hepatocytes Xenografted into the FRG Mouse Liver**

  Amaya, A. K., Ginn, S. L., Liao, S. Y., Zhu, C., Lee, M., Pickett, H. A., Hallwirth, C. V., Cunningham, S. C., Logan, G. J., Dilworth, K., Lisowski, L., Alexander, I. E.

  CELL PRESS.2018: 448-449

- **TREATMENT OF GENETIC LIVER DISEASE BY AAV-MEDIATED GENOME EDITING AND SELECTIVE EXPANSION OF REPAIRED HEPATOCYTES**

  Amaya, A. K., Zhu, C., Ginn, S. L., Hallwirth, C. V., Tay, S. S., Cunningham, S. C., Logan, G. J., Alexander, I. E.

  WILEY.2018

- **DISCOVERY OF A LIVER-SPECIFIC ENHANCER-PROMOTER ELEMENT IN THE 3 ' UTR OF THE WILD-TYPE AAV2 GENOME PROVIDES NOVEL INSIGHTS INTO AAV VECTOR SAFETY IN THE HUMAN LIVER**

  Logan, G. J., Dane, A. P., Hallwirth, C. V., Smyth, C. M., Wilkie, E. E., Amaya, A. K., Zhu, E., Khandekar, N., Ginn, S. L., Liao, S., Cunningham, S. C., Sasaki, N., Tam, et al

  WILEY.2018

- **Identification of liver-specific enhancer-promoter activity in the 3 ' untranslated region of the wild-type AAV2 genome** *NATURE GENETICS*

  Logan, G. J., Dane, A. P., Hallwirth, C. V., Smyth, C. M., Wilkie, E. E., Amaya, A. K., Zhu, E., Khandekar, N., Ginn, S. L., Liao, S. Y., Cunningham, S. C., Sasaki, N., Cabanes-Creus, et al

  2017; 49 (8): 1267-+