



Connor Galen O'Brien

Postdoctoral Medical Fellow, Cardiovascular Medicine

Bio

BIO

Dr. O'Brien is a native of Menlo Park, CA. He attended medical school at Columbia University College of Physicians and Surgeons. At Columbia he was elected to both Alpha Omega Alpha and Gold Humanism Honors Societies. He completed an Internal Medicine residency as well as fellowship in Cardiovascular Medicine at Stanford University. In his third year of fellowship, he was selected Chief Cardiology Fellow.

He is currently a post-doctoral fellow performing regenerative medicine research, specifically studying the role of exosomes in treating cardiomyopathy. In addition to his basic science research, he is also involved in human clinical trials investigating the role of stem cells in treating various forms of cardiomyopathy.

HONORS AND AWARDS

- Timothy E Beckett Award, Stanford University Department of Internal Medicine (2020)
- Chief Fellow, Stanford University Division of Cardiovascular Medicine (2018)
- Gerald Reaven Basic Science Research Award, Stanford University Division of Cardiovascular Medicine (2018)
- Outstanding Clinical Fellow Award, Stanford University Division of Cardiovascular Medicine (2017)
- Ruth L Kirschstein National Research Service Award, National Institutes Of Health (2017)
- Timothy E Beckett Award, Stanford University Department of Internal Medicine (2016)
- Johnson and Johnson Global Health Scholar, Stanford University Department of Internal Medicine (2014)
- Alpha Omega Alpha Honors Society, Columbia University College of Physicians and Surgeons (2012)
- Gold Humanism Honor Society, Columbia University College of Physicians and Surgeons (2012)
- Benjamin H Kean Travel Fellowship in Tropical Medicine, American Society of Tropical Medicine and Hygiene (2011)
- Howard Hughes Medical Research Fellow, Howard Hughes Medical Institute (2010)
- Cum Laude, University of Pennsylvania (2005)
- Elliot Stellar Chance Research Award, University of Pennsylvania Department of Biological Basis of Behavior (2005)

PROFESSIONAL EDUCATION

- Doctor of Medicine, Columbia University (2012)
- Bachelor of Arts, University of Pennsylvania (2005)
- Fellowship, Stanford Hospital and Clinics , Critical Care Medicine (2020)
- Fellowship, Stanford Hospital and Clinics , Cardiovascular Medicine (2018)
- Residency, Stanford Hospital and Clinics , Internal Medicine (2015)

- Internship, Stanford Hospital and Clinics , Internal Medicine (2013)

Publications

PUBLICATIONS

- **N-Terminal Pro-B-Type Natriuretic Peptide as a Biomarker for the Severity and Outcomes With COVID-19 in a Nationwide Hospitalized Cohort.** *Journal of the American Heart Association*
O'Donnell, C., Ashland, M. D., Vasti, E. C., Lu, Y., Chang, A. Y., Wang, P., Daniels, L. B., de Lemos, J. A., Morrow, D. A., Rodriguez, F., O'Brien, C. G.
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- **Mitochondria-Rich Extracellular Vesicles From Autologous Stem Cell-Derived Cardiomyocytes Restore Energetics of Ischemic Myocardium.** *Journal of the American College of Cardiology*
Ikeda, G. n., Santoso, M. R., Tada, Y. n., Li, A. M., Vaskova, E. n., Jung, J. H., O'Brien, C. n., Egan, E. n., Ye, J. n., Yang, P. C.
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- **Mitochondria-Rich Extracellular Vesicles Rescue Patient-Specific Cardiomyocytes From Doxorubicin Injury: Insights Into the SENECA Trial.** *JACC. CardioOncology*
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- **Cardiogenic Shock: Reflections at the Crossroad Between Perfusion, Tissue Hypoxia, and Mitochondrial Function.** *The Canadian journal of cardiology*
O'Brien, C., Beaubien-Souligny, W., Amsallem, M., Denault, A., Haddad, F.
2020; 36 (2): 184–96
- **Electrical Storm in COVID-19.** *JACC. Case reports*
O'Brien, C. n., Ning, N. n., McAvoy, J. n., Mitchell, J. E., Kalwani, N. n., Wang, P. n., Nguyen, D. n., Reejhsinghani, R. n., Rogers, A. n., Lorenzo, J. n.
2020; 2 (9): 1256–60
- **Disruptive Modifications to Cardiac Critical Care Delivery During the Covid-19 Pandemic: An International Perspective.** *Journal of the American College of Cardiology*
Katz, J. N., Sinha, S. S., Alviar, C. L., Dudzinski, D. M., Gage, A. n., Brusca, S. B., Flanagan, M. C., Welch, T. n., Geller, B. J., Miller, P. E., Leonardi, S. n., Bohula, E. A., Price, et al
2020
- **EXOSOMES FROM HUMAN INDUCED PLURIPOTENT STEM CELL-DERIVED CARDIOMYOCYTES (ICMS) AND MESENCHYMAL STEM CELLS (MSCS) RECOVER HEART FUNCTION IN PORCINE ACUTE MYOCARDIAL INFARCTION (MI) MODEL**
Bayardo, N., O'Brien, C., Vaskova, E., Lyons, J., Tada, Y., Yang, P.
ELSEVIER SCIENCE INC.2021: 19
- **The Use of Factor Eight Inhibitor Bypass Activity (FEIBA) for the Treatment of Perioperative Hemorrhage in Left Ventricular Assist Device Implantation.** *Journal of cardiothoracic and vascular anesthesia*
O'Donnell, C., Rodriguez, A. J., Madhok, J., Sharifi, H., Wang, H., O'Brien, C. G., Boyd, J., Hiesinger, W., Hsu, J., Hill, C. C.
2021
- **A Phase II Study of Autologous Mesenchymal Stromal Cells and c-kit Positive Cardiac Cells, Alone or in Combination, in Patients with Ischemic Heart Failure: The CCTRN CONCERT-HF Trial.** *European journal of heart failure*
Bolti, R., Mitrani, R. D., Hare, J. M., Pepine, C. J., Perin, E. C., Willerson, J. T., Traverse, J. H., Henry, T. D., Yang, P. C., Murphy, M. P., March, K. L., Schulman, I. H., Ikram, et al
2021
- **Worldwide Survey of COVID-19 Associated Arrhythmias.** *Circulation. Arrhythmia and electrophysiology*
Coromilas, E. J., Kochav, S. n., Goldenthal, I. n., Biviano, A. n., Garan, H. n., Goldburg, S. n., Kim, J. H., Yeo, I. n., Tracy, C. n., Ayanian, S. n., Akar, J. n., Singh, A. n., Jain, et al
2021
- **miR-106a-363 cluster in extracellular vesicles promotes endogenous myocardial repair via Notch3 pathway in ischemic heart injury.** *Basic research in cardiology*

- Jung, J. H., Ikeda, G. n., Tada, Y. n., von Bornstädt, D. n., Santoso, M. R., Wahlquist, C. n., Rhee, S. n., Jeon, Y. J., Yu, A. C., O'brien, C. G., Red-Horse, K. n., Appel, E. A., Mercola, et al
2021; 116 (1): 19
- **Allogeneic Mesenchymal Cell Therapy in Anthracycline-Induced Cardiomyopathy Heart Failure Patients: The CCTRN SENECA Trial.** *JACC CardioOncology*
Bolli, R., Perin, E. C., Willerson, J. T., Yang, P. C., Traverse, J. H., Henry, T. D., Pepine, C. J., Mitrani, R. D., Hare, J. M., Murphy, M. P., March, K. L., Ikram, S., Lee, et al
2020; 2 (4): 581–95
 - **MITOCHONDRIA CONTAINING EXTRACELLULAR VESICLES FROM AUTOLOGOUS INDUCED PLURIPOTENT STEM CELL DERIVED CARDIOMYOCYTES RESTORE BIOENERGETICS IN ISCHEMIC MYOCARDIUM**
Ikeda, G., Santoso, M., Tada, Y., Vaskova, E., O'Brien, C. G., Jung, J., Yang, P. C.
ELSEVIER SCIENCE INC.2020: 3659
 - **Meta-analysis of short- and long-term efficacy of mononuclear cell transplantation in patients with myocardial infarction.** *American heart journal*
Yang, D., O'Brien, C. G., Ikeda, G., Traverse, J. H., Taylor, D. A., Henry, T. D., Bolli, R., Yang, P. C.
2019; 220: 155–75
 - **MICROVESICLES LARGER THAN 200NM RESCUE CARDIOMYOCYTES FROM DOXORUBICIN INJURY IN A PATIENT-SPECIFIC MODEL OF ANTHRACYCLINE INDUCED CARDIOMYOPATHY**
O'Brien, C., Shi, L., Ozgun, M., Vaskova, E., Santoso, M., Jung, J., Ikeda, G., Demirci, U., Yang, P.
ELSEVIER SCIENCE INC.2019: 688
 - **Large-Scale Assessment of a Smartwatch to Identify Atrial Fibrillation.** *The New England journal of medicine*
Perez, M. V., Mahaffey, K. W., Hedlin, H., Rumsfeld, J. S., Garcia, A., Ferris, T., Balasubramanian, V., Russo, A. M., Rajmane, A., Cheung, L., Hung, G., Lee, J., Kowey, et al
2019; 381 (20): 1909–17
 - **Routine Indwelling Urethral Catheterization in Acute Heart Failure Patients Is Associated With Increased Urinary Tract Complications Without Improved Heart Failure Outcomes** *CIRCULATION JOURNAL*
Jang, A., O'Brien, C., Chung, W., Oh, P., Yu, J., Lee, K., Kang, W., Moon, J.
2018; 82 (6): 1632-+
 - **Alternative Therapies for Chronic Hepatitis B Patients With Partial Virological Response to Standard Entecavir Monotherapy.** *Journal of clinical gastroenterology*
Chaug, K. T., O'Brien, C., Ha, N. B., Nguyen, N. H., Trinh, H. N., Nguyen, M. H.
2016; 50 (4): 338-344
 - **Hurdles to clinical translation of human induced pluripotent stem cells** *JOURNAL OF CLINICAL INVESTIGATION*
Neofytou, E., O'Brien, C. G., Couture, L. A., Wu, J. C.
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 - **Current treatment guidelines for chronic hepatitis B and their applications.** *Journal of clinical gastroenterology*
Uribe, L. A., O'Brien, C. G., Wong, R. J., Gish, R. R., Tsai, N., Nguyen, M. H.
2014; 48 (9): 773-783
 - **Evidence for Pyronaridine as a Highly Effective Partner Drug for Treatment of Artemisinin-Resistant Malaria in a Rodent Model** *ANTIMICROBIAL AGENTS AND CHEMOTHERAPY*
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2014; 58 (1): 183-195
 - **Risk Factors and Characterization of Plasmodium Vivax-Associated Admissions to Pediatric Intensive Care Units in the Brazilian Amazon** *PLOS ONE*
Caetano Lanca, E. F., Lopes Magalhaes, B. M., Vitor-Silva, S., Siqueira, A. M., Benzecry, S. G., Araujo Alexandre, M. A., O'Brien, C., Bassat, Q., Guimaraes Lacerda, M. V.
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 - **Pfpat6 molecular profile of Plasmodium falciparum isolates in the western Brazilian Amazon** *MALARIA JOURNAL*
Brasil, L. W., Areas, A. L., Melo, G. C., Oliveira, C. M., Alecrim, M. G., Lacerda, M. V., O'Brien, C., Oelemann, W. M., Zalis, M. G.

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- **In vitro and in vivo activity of frenolicin B against Plasmodium falciparum and P berghei** *JOURNAL OF ANTIBIOTICS*
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- **In Vivo and In Vitro Antimalarial Properties of Azithromycin-Chloroquine Combinations That Include the Resistance Reversal Agent Amlodipine** *ANTIMICROBIAL AGENTS AND CHEMOTHERAPY*
Pereira, M. R., Henrich, P. P., Sidhu, A. B., Johnson, D., Hardink, J., Van Deusen, J., Lin, J., Gore, K., O'Brien, C., Wele, M., Djimde, A., Chandra, R., Fidock, et al
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