

\*Name of Individual: Anderson, R.R.

### **Positions/Scientific Appointments**

2021– Present Associate Professor, Department of Medicine, University of California, San Francisco  
2020 – Present Visiting Scholar, McGill University Department of Medicine, Montreal, Quebec, Canada  
2013 – Present Lecturer, Department of Medicine, Middlebury College, Middlebury, VT

### **Project/Proposal**

#### **PREVIOUS**

Title: Allogeneic Human Mesenchymal Stem Cells for the Treatment of Acute Lung Injury

Major Goals: To test the safety and efficacy of human mesenchymal stem cells for the treatment of severe acute lung injury.

Specific Aims: The specific aim is to test the therapeutic value of intravenous human bone marrow derived mesenchymal stem cells for the treatment of 60 patients with moderate to severe ARDS for safety and limited efficacy endpoints, using a 2:1 randomization with a double blind design. There is also an aim to study the biologic markers of injury that may be altered in the plasma and bronchoalveolar lavage in the placebo versus treated patients.

Project Number: 5 R01 HL 00000-07

Name of PD/PI: Baker, J.B.

Source of Support: NHLBI

Source of Support Address:

NIH/NHLBI Information center  
P.O Box 30105  
Bethesda, MD 20824-0105

Contracting/Grants Officer: Kimberly Stanton

Project/Proposal Start and End Date: (MM/YYYY) (if available): 04/2017 – 03/2022

Total Award Amount (including Indirect Costs): \$1,687,044

Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
1. 2018	3.6 calendar
2. 2019	3.6 calendar
3. 2020	3.6 calendar
4. 2021	3.6 calendar
5. 2022	3.6 calendar

Overlap: None

Title: Resolution of Clinical Lung Injury

Major Goals: To study the pathogenesis of acute lung injury and ARDS, with an emphasis on alveolar epithelial fluid clearance, through the use of clinical studies.

Specific Aims: The specific aims are to study the the pathogenetic and prognostic value of biomarkers in patients with ARDS, to test the effect of human edema fluid from ARDS patients in both an in vitro model of cultured human alveolar epithelial type 2 cells and new therapeutics for acute lung injury in an isolated perfused human lung preparation.

Project Number: 2 R01 HL 00000 - 13

Name of PD/PI: Anderson, R.R.

Source of Support: NHLBI

Source of Support Address:

NIH/NHLBI Information center  
P.O Box 30105  
Bethesda, MD 20824-0105

Contracting/Grants Officer: Charmaine Prasad

Project/Proposal Start and End Date: (MM/YYYY) (if available): 05/2013 – 04/2018

Total Award Amount (including Indirect Costs): \$1,492,232

Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
1. 2015	3.6 calendar
2. 2015	3.6 calendar
3. 2016	3.6 calendar
4. 2017	3.6 calendar
5. 2018	3.6 calendar

Overlap: None

## **CURRENT**

Title: Prevention and Early Treatment of Acute Lung Injury

Major Goals: The major goals of this project are to define the biochemistry of chloride and sodium transport in airway epithelial cells and clone the gene(s) involved in transport.

Specific Aims: The specific aim is to test new therapeutic approaches to testing the preventative or early treatment value of novel treatments in patients admitted to the Emergency Department at risk for ARDS or new treatments for ARDS in patients in the intensive care unit in primarily phase 3 designs.

Project Number: R01 HL 00000

Name of PD/PI: Anderson, R.R.

Source of Support: NHLBI

Source of Support Address:  
NIH/NHLBI Information center  
P.O Box 30105  
Bethesda, MD 20824-0105

Contracting/Grants Officer: Gayle Jones

Project/Proposal Start and End Date: (MM/YYYY) (if available): 03/2021 – 02/2026

Total Award Amount (including Indirect Costs): \$1,492,232

Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
1. 2022	5.2 calendar
2. 2023	5.2 calendar
3. 2024	5.2 calendar
4. 2025	5.2 calendar
5. 2026	5.2 calendar

Overlap: None

Title: Identification of Patients at High Risk for the Development of ALI with Clinical and Biological Predictors

Major Goals: To identify clinical and biological predictors of ALI in a cohort of patients with sepsis

Specific Aims: The aim is to determine the biological predictors of ARDS in the plasma of sepsis patients in the Emergency department at risk for developing ARDS.

Name of PD/PI: Baker, J.B.

Source of Support: U Penn Subcontract/Glaxo Smith Kline, Galaxy ALI (subcontract)

Source of Support Address:

Glaxo Smith Kline  
709 Swedeland Road  
King of Prussia, PA 19406

Contracting/Grants Officer: Susan Russell

Project/Proposal Start and End Date: (MM/YYYY) (if available): 06/2020 – 05/2025

Total Award Amount (including Indirect Costs): \$981,736

Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
1. 2021	3.2 calendar
2. 2022	3.2 calendar
3. 2023	3.2 calendar
4. 2024	3.2 calendar

5. 2025	3.2 calendar
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Overlap: None

**PENDING**

Title: Mesenchymal Stem Cell (MSC) or MSC Derived Factors for the Prolonged Field Care of Wounded Military Personnel with Traumatic Brain Injury and Hemorrhagic Shock

Major Goals: To conduct preclinical animal studies to test the efficacy of MSC derived factors, specifically lyophilized conditioned media from MSC, for treatment of traumatic brain injury in rats and pigs for application in prolonged field care as is currently done with lyophilized fresh frozen plasma in combat victims who are injured.

Specific Aims: Aim 1. To test lyophilized conditioned media of MSC for efficacy in cultured endothelial cells. Aim 2. To test the lyophilized conditioned media of MSC in a rat model of traumatic brain injury and Aim 3. To test the lyophilized conditioned media of MSC in a pig model of traumatic brain injury.

Name of PD/PI: Baker, J.B.

Source of Support: NIH

Source of Support Address: Pending

Contracting/Grants Officer: Pending

Project/Proposal Start and End Date: (MM/YYYY) (if available): 06/2023 – 05/2028

Total Award Amount (including Indirect Costs): \$981,736

Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
1. 2024	4.2 calendar
2. 2025	4.2 calendar
3. 2026	4.2 calendar
4. 2027	4.2 calendar
5. 2028	4.2 calendar

OVERLAP: There is commitment overlap for Dr. Anderson between R01 HL 00000 this pending support. If funded, Dr. Anderson will request approval to reduce his effort on R01 HL 00000 to 4 calendar months. If other pending applications are funded, Dr. XYZ will reduce his effort appropriately.

## IN-KIND

\*Summary of In-Kind Contribution: Post-doctoral fellow, Dr. John Smith, who conducts research activities in the Anderson lab. Salary supported by Oxford University.

\*Source Support: Oxford University

Project/Proposal Start and End Date (MM/YYYY) (if available):

\*Estimated Dollar Value of In-Kind Information: \$80,000

\*Person Months (Calendar/Academic/Summer) per budget period: N/A

\*Summary of In-Kind Contribution: Cell line XYZ provided by Dr. Jennifer Smith at Cornell University.

\*Source of Support: Cornell University

Project/Proposal Start and End Date (MM/YYYY) (if available):

\*Estimated Dollar Value of In-Kind Information: \$1,000

\*Person Months (Calendar/Academic/Summer) per budget period: N/A

\*Summary of In-Kind Contribution: C57BL/6-*ABC1*<sup>tm1jbp</sup> mice provided by Dr. Joseph Jones at the University of Texas at Austin.

\*Source of Support: University of Texas at Austin

Project/Proposal Start and End Date (MM/YYYY) (if available):

\*Estimated Dollar Value of In-Kind Information: \$4,000

\*Person Months (Calendar/Academic/Summer) per budget period: N/A

I, PD/PI or other senior/key personnel, certify that the statements herein are true, complete and accurate to the best of my knowledge, agree to update such disclosure at the request of the agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award and accept the obligation to comply with Section 223(a) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.

\*Signature:

Date: