UNIVERSITY OF ALABAMA AT BIRMINGHAM SCHOOL OF MEDICINE CURRICULUM VITAE

PERSONAL INFORMATION

Name: Nathaniel Bernard Erdmann, M.D., Ph. D.

Citizenship: USA

Home Address: 612 Lake Crest Drive

Birmingham, Alabama 35226

Phone: 205-617-7514

RANK/TITLE: Associate Professor of Medicine

Department: Medicine

Division: Infectious Diseases

Business Address: Heersink School of Medicine

Department of Medicine

Division of Infectious Diseases BBRB 512, 1720 2nd Ave S Birmingham, AL 35294-2170

Phone: 205-975-1690

Pager: 205-934-3411 #7835

Fax: 205-996-7200

Email: nerdmann@uab.edu

HOSPITAL AND OTHER (NON ACADEMIC) APPOINTMENTS:

08/2015- Attending Physician, Infectious Diseases, UAB Medicine (Inpatient

present General and Immunocompromised ID Consult services)

08/2015- Attending Physician, UAB Medicine Specialty Outpatient Clinics (1917/HIV

present Clinic, ID Immunocompromised Outpatient Clinic, and HIV Pre-Transplant

Clinic [assessing solid organ transplantation patients in collaboration with

UAB Transplant Surgery])

08/2012-2020 Hospitalist at UAB Medicine, Birmingham, AL

EDUCATION:

Year	Degree	Institution
06/2002- 05/2010	Doctor of Medicine Doctor of Philosophy in Experimental Neuroscience	University of Nebraska Medical Center (UNMC), Omaha, NE
08/1998- 05/2001	Bachelor of Science, Magna Cum Laude	University of Nebraska in Lincoln (UNL), Honors Program, Lincoln, NE

LICENSURE:

2012 State of Alabama Registration No. 31563

BOARD CERTIFICATION

2010	Diplomate, National Board of Medical Examiners
2013	Diplomate, American Board of Internal Medicine (ABIM)
2015	Board Certified, Infectious Diseases, ABIM

POSTDOCTORAL TRAINING:

Year	Degree	Institution
07/2010- 06/2016	UAB Medicine Scholars Program, ABIM Research Pathway	University of Alabama at Birmingham School of Medicine, Birmingham, AL
07/2014- 06/2015	Infectious Diseases Chief Fellow	University of Alabama at Birmingham School of Medicine, Birmingham, AL
07/2012- 06/2015	Infectious Diseases Fellowship	University of Alabama at Birmingham School of Medicine, Birmingham, AL
07/2011- 06/2012	Internal Medicine Residency	University of Alabama at Birmingham School of Medicine, Birmingham, AL
06/2010- 06/2011	Internal Medicine Internship	University of Alabama at Birmingham School of Medicine, Birmingham, AL

ACADEMIC APPOINTMENTS:

Year	Rank/Title	Institution
2015	Instructor, Division of Infectious Diseases, Department of Medicine	University of Alabama at Birmingham, School of Medicine
2017	Assistant Professor, Division of Infectious Diseases, Department of Medicine	University of Alabama at Birmingham, School of Medicine

2022	Clinical Associate Director of Physician Scientist Development Office	Nathaniel Erdmann, MD, PhD – July 1 st , 2023 University of Alabama at Birmingham, School of Medicine
2022	Associate Professor	University of Alabama at Birmingham, School of Medicine
2023	Medical Director, UAB 1917 Clinic at Dewberry	University of Alabama at Birmingham, School of Medicine

AWARDS/HONORS

2023	Featured Discovery Recipient, AMC 21 Research Steering Committee
2023	UAB Department of Medicine Leadership Academy
2022	Top-Performing Providers, UAB Ambulatory
2022	Dean's Excellence Award in Service
2022	Pittman Scholar, UAB School of Medicine
2021	Featured Discovery Recipient, AMC 21 Research Steering Committee
2021	Top-Performing Providers, UAB Ambulatory
2021	Healthcare Leadership Academy, UAB School of Medicine
2020	Graduate Biomedical Sciences Symposium Keynote Address
2016	Walter B. Frommeyer, Jr. Fellowship in Investigative Medicine, Department of Medicine, UAB School of Medicine
2015	Conference of Retrovirus and Opportunistic Infections Young Investigator Travel Award, "HLA class-II associated polymorphisms predict escape from CD4 T cell responses"; poster #364
2015	J. Claude Bennett Award for Excellence in Research by Associate Fellow, Oral Research Presentation, "HLA class-II associated polymorphisms predict escape from CD4 T cell responses"
2014	J. Claude Bennett Award for Excellence in Research by Associate Fellow, Oral Research Presentation, "The use of HLA class-II associated Polymorphisms in predicting novel CD4 responses and viral escape"
2008	International Student Research Forum, Conference Coordinator
2007	Conference of Retrovirus and Opportunistic Infections Young Investigator Travel Award, "Excitotoxic glutamate production in HIV-1-infected human macrophage by glutaminase C"; poster #352
2007	Community Pride in Neuroscience Award
2007	Midwest Student Biomedical Research Forum Oral Presentation, 2 nd Place
2007	International Student Forum, Tokyo Young Investigator Travel Award 2006 International Union of Basic and Clinical Pharmacology, Young Investigator Award

2006 International Student Research Forum, Beijing Student Travel Award

PROFESSIONAL SOCIETIES

2013 - present Infectious Diseases Society of America2014 - present American Society of Transplantation

COUNCILS AND COMMITTEES:

2014 – present	Fellowship Performance Evaluation Committee, Division of Infectious Diseases, UAB Department of Medicine
2017 – present	UAB CCTS Panels Done Quickly
2019 – 2020	Medical School Admissions Committee, UAB School of Medicine
2020 – present	COVID Therapeutic Committee Co-Chair, Department of Medicine, UAB School of Medicine
2020 – present	Antimicrobial Stewardship Committee, UAB School of Medicine
2022 - present	NIH Exercise Intolerance Study Design Committee
2022 – present	RECOVER I&H Pathobiology Task Force
2022 - present	RECOVER Publications and Presentations Oversight Committee
2022 - present	IDCRC Respiratory Expert Working Group
2022 - present	Perspectum Scientific Advisory Board

UNIVERSITY ACTIVITIES:

2014 - present	Academic Pathways Co-Director, Department of Medicine
2014 - present	American Physician Scientist Association (APSA) Mentor
2015 - present	Immunocompromised Consult Service Attending, UAB Medicine
2018 – present	Director of Undergraduate Physician Experience Program
2018 – present	Associate Scientist, UAB Center for AIDS Research (CFAR), UAB School of Medicine
2018 – present	HIV Vaccine Trials Network Investigator, NIH/National Institute of Allergy and Infectious Diseases (NIAID)
2019 – present	Associate Scientist, Center for Clinical and Translational Science (CCTS), General Clinical Research, UAB School of Medicine

Nathaniel Erdmann, MD, PhD – July 1st, 2023

2022 - present Clinical Associate Director of the Physician Scientist Development Office,

UAB School of Medicine

2023 - present Medical Director, UAB 1917 Clinic at Dewberry

EDITORIAL BOARD MEMBERSHIPS:

Invited PLOS One

Reviewer Clinical Microbiology and Infection

Journal of Infectious Diseases

American Journal of Respiratory Cell and Molecular Biology

Open Forum Infectious Diseases

PLOSPathogens

Annals of Internal Medicine Clinical Cases

Frontiers in Immunology

STUDY SECTION MEMBERSHIPS:

2020 Ad Hoc Study Section Member, COVID RFA Study Section: Review

of Funding Opportunity Announcement (FOA- RFA-CA-20-039); National Cancer Institute of the National Institutes of Health (NIH) "to develop, validate, improve, and implement serological testing and associated

technologies".

NIAID, Population-based Research in Infectious Disease Study Section

(PRID) study section

MAJOR RESEARCH INTERESTS:

Throughout my M.D., Ph.D. basic, translational, and clinical investigative training, I have focused on questions exploring the interplay between pathogen virulence factors and host immune responses. My mentored Physician Scientist Training Award project focused on understanding optimal CD4 T cell responses in HIV infection and vaccination platforms. I have expertise investigating immunologic biomarkers and clinical therapeutics for viral infections (e.g., HIV, CMV, BK and VZV) as well as predictive immunologic biomarkers of carcinogenesis in HIV-infected individuals. More recently, my laboratory focus explores the role of T cell responses in the development of severe presentations of COVID-19 infection, the sequelae of acute viral infections with particular interest in modified immune backgrounds including Solid Organ Transplants and HIV infection.

TEACHING EXPERIENCE:

2023 – present Primary Mentor, MD/PhD Candidate Kyle Landers 2022 - 2023 Primary Mentor, TL1 Scholar, Skye Opsteen

	Nathaniel Erdmann, MD, PhD – July 1 st , 2023
2021 – 2022	Primary Mentor, UAB Masters in Medical Research Candidate, Skye Opsteen
2021 – present	Inter-UAB departmental and inter-institutional "Immunocompromised Host Conference", led by UAB Division of Infectious Diseases with multiple UAB and other universities.
2021 - present	UAB Medical Student Fundamentals of Medicine Block 5: "Retroviruses"
2021 - present	UAB Medical Student Fundamentals of Medicine Block 5: "Opportunistic Infections"
2019 – 2022	Thesis Committee Member: Krystle Ong, UAB Microbiology PhD Committee
2018	Fundamentals of Medicine Block 5: "Immunology in Practice"
2018 – present	Physician Scientist Development Office (PSDO) 230 Undergraduate Program - Physician Experience 230; Physician Experience 240 Trainee Shadowing
2017 – 2020	UAB Department of Medicine Annual Internal Medicine Trainee Clinical Research Symposium Faculty Judge (internal medicine residents, ID fellows, and graduate students)
2016 – present	UAB Medical Students Fundamentals of Medicine Block 5: "Arboviral Infections" and "Case Studies in Infectious Diseases".
2016	IM Noon Conference: "CNS Infections"
2015 – present	Center for Community Outreach Development summer program, CORD UAB Summer Science Institute Mentor
2014 – present	Infectious Diseases (ID) Teaching Conferences (lecturer, discussant, and participant): ID Journal Club, ID Board Review, ID Case Conference, 1917/HIV Conference. Lecturer for internal medicine residents and medical students rotating on the inpatient infectious diseases consult block month for the Department of Medicine, UAB School of Medicine.
2014 – present	Microbiology laboratory hands-on teaching course by Division of Infectious Diseases for 2 nd year University of Alabama at Birmingham School of Medicine Students.
2012 – present	Mentoring dozens of undergraduate UAB students, UAB medical students, UAB internal medicine physicians, and UAB PhD students in both the laboratory and clinical arenas.

MAJOR LECTURES AND VISITING PROFESSORSHIPS:

10/28/2020	COVID-19 Research Symposium, UAB School of Medicine, "COVID Clinical Trials at UAB, Response to a Global Pandemic."
11/03/2020	Bristol-Meyers Squibb COVID-19 Scientific Refresh Symposium, New York City, NY, November 2020, COVID-19 Therapeutics
05/05/2021	Medical Grand Rounds, Department of Medicine, UAB School of Medicine "COVID-19: A Crash Course in Translational Medicine"
09/09/2021	Infectious Diseases Grand Rounds, UAB Department of Medicine "Immune Dysregulation in Acute and Long COVID"

Nathaniel Erdmann, MD, PhD – July 1st, 2023

09/15/2021 Medical Grand Rounds, Department of Medicine, UAB School of Medicine

"COVID: From Outpatient to Inpatient to the Future"

04/02/2022 Symposium on Clincal and Translational Perspectives in Post-infectious

SARS-CoV-2 (PASC), Experimental Biology in Philadelphia 2022 "Persistent immune signatures in post-acute seguelae of COVID-19

(PASC)

08/06/2022 Alabama Society of Allergy and Immunology, San Destin Florida,

"Background, Diagnosis and Pathophysiology of SARS-CoV-2"

GRANT SUPPORT: (PAST AND CURRENT):

Ongoing Research Awards

Title: Cooperative Centers on Human Immunology: Tissue and organ specific human B cell immunity:

Supplement – Risk Factors and Inflammation in PASC Development

Major Goals: CoV-2 (PASC). The goal of this proposal is assess whether specific health factors, including obesity, cardiometabolic syndrome or diabetes, alter the immune system response to SARS-CoV-2 and increase the risk of developing PASC.

Status of Support: Active

Project Number: U19 Al142737

Name of PD/PI: Lund, FE Source of Support: NIAID

Primary Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 08/2022 – 03/2023

Total Award Amount (including Indirect Costs): \$1,033,284

Role: Co-PI

Title: UAB Center for AIDS Research - Basic Sciences Core

Major Goals: The primary purpose of this center is to support interdisciplinary AIDS research efforts. This Center is responsible for the planning, evaluating, managing and documenting a broad array of research activities within the two institutions. The purpose of this project is linking clinical and basic science studies through the use of shared facilities and to translate as quickly as possible fundamental knowledge about AIDS and its related disorders into clinical treatment and prevention programs. This effort will fund the leadership of the highly successful CFAR Developmental Grant Program which provides faculty development resources to HIV/AIDS investigators.

Status of Support: Active / THIS AWARD

Project Number: P30Al027767 Name of PD/PI: Heffron, R Source of Support: NIAID

Primary Place of Performance: University of Alabama at Birmingham `

Project/Proposal Start and End Date: (MM/YYYY) (if available): 06/2019 - 05/2024

Total Award Amount (including Indirect Costs): \$11,619,702

Role: Co-I

Title: Deep South SARS-CoV-2 Recovery (DSR) Cohort

Major Goals: The DSR Cohort will contribute to the SARS-CoV-2 Recovery Cohort Investigator Consortium to investigate Post-Acute Sequelae of SARS-CoV-2 infection (PASC) with the goal of optimizing our understanding of PASC.

Status of Support: Active

Project Number: OT2HL161847 / ADU-04-21

Name of PD/PI: Katz, S

Source of Support: NHLBI / NYU

Primary Place of Performance: University of Alabama at Birmingham `

Project/Proposal Start and End Date: (MM/YYYY) (if available): 10/2021 - 05/2025

Total Award Amount (including Indirect Costs): \$17,548,479

Role: cPI

Title: Phase I/IIA Study of Descartes-30 in Acute Respiratory Distress Syndrome

Major Goals: Goal of study is to determine the safety and efficacy of a stem cell delivered therapy

targeting NETs

in COVID-induced ARDS. Status of Support: Active Project Number: DC30-1A Name of PD/PI: Erdmann, N

Source of Support: Cartesian Therapeutics

Primary Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 01/2020 - 12/2025

Total Award Amount (including Indirect Costs): \$80,350

Role: Site PI

Title: A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate The Safety and Efficacy of EB05+SOC vs. Placebo+SOC in Adult Hospitalized Patients with COVID-19

Major Goals: This study will evaluate the safety and efficacy of the therapeutic targeting of toll

like receptors for

treatment of moderate to severe COVID-19.

Status of Support: Active

Project Number: EB05-04-2020 Name of PD/PI: Erdmann, N

Source of Support: Edesa Biotech Inc

Primary Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 07/2021 - 07/2026

Total Award Amount (including Indirect Costs): \$160,306

Role: Site PI

Title: Alabama to Zambia-Clinical Trials Unit

Major Goals: The Alabama to Zambia CTU is designed to provide an administrative infrastructure that brings Network investigators at UAB and at CIDRZ in Lusaka Zambia together to facilitate the conduct of high capacity, quality-assured, safety-driven clinical trials through provision of administrative support, financial support, communications, staff training, oversight, regulatory support, pharmacy services, synchronization of scientific effort, community relations, and CAB support, and coordination of study personnel in order to achieve maximal efficiency of available staff effort.

Status of Support: Active

Project Number: UM1AI069452 Name of PD/PI: Goepfert, P Source of Support: NIAID

Primary Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 12/2020 – 11/2027

Total Award Amount (including Indirect Costs): \$10,496,801

Role: Co-I

Title: A Randomized, Open-Label, Multi-Center, Comparative Trial, to Assess the Efficacy and Safety of Pritelivir versus Foscarnet for the Treatment of Acyclovir-Resistant Mucocutaneous HSV Infections in mmunocompromised Subjects (PRIOH-1)

Major Goals: The purpose of this research study is to look at the safety and effectiveness of pritelivir given orally (by mouth) at a dose of 400mg on day 1 followed by 100mg per day for a maximum of 42 days in patients with an impaired immune system who have recurrent lesions caused by the form of HSV that does respond to treatment with acyclovir.

Status of Support: Active / NEW Project Number: AlC316-03-II-01 Name of PD/PI: Erdmann, NE

Name of Individual: Erdmann, Nathaniel

Commons ID: NATERD

Source of Support: AiCuris Anti-infective Cures AG (Medpace Inc)
Primary Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 11/2022 - 10/2028

Total Award Amount (including Indirect Costs): \$265,500

Role: Site PI

PENDING

Title: OTA-21-015E: Origins of Post-Acute Sequelae SARS-CoV-2 Infection (PASC) Lung Fibrosis

Phase I was awarded for six (6) weeks, from August 30th, 2022 – October 11th, 2022, and will support certain relevant staff as they meet to discuss the Pathobiology Study's synergies and efficiencies across RECOVER. NYU plans to send a second agreement for Phase II of the research activities for the Pathobiology Study.

Major Goals: To better understand the biology of PASC, pulmonary fibrosis, and identifying predictive factors for its development.

Status of Support: Phase I Active; Phase II Pending

Project Number: OTA-21-015E

Name of PD/PI: Gaggar A cPI, Erdmann NB, Patel R, Wells JM mPIs

Source of Support: NIH

Primary Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 08/2022 - 10/2022

Total Award Amount (including Indirect Costs): \$22,198

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

Role: MPI

Title: Remote Pulmonary Rehabilitation for Improvement of Functional Status in Long COVID, A Phase IIb Randomized Controlled Trial

Major Goals: This study proposes the use of a targeted Pulmonary Rehabilitation (PR) program delivered via a remote platform. We hypothesize that compared to usual care, a video telehealth

PR intervention will improve respiratory symptoms, quality of life, functional status, and reduce hospital admissions in those with persistent respiratory symptoms following COVID-19 infection.

Status of Support: Pending Project Number: OTA-21-015H

Name of PD/PI: Erdmann, Bhatt, Dransfield Name of Individual: Erdmann, Nathaniel

Commons ID: NATERD

Source of Support: NIH/NHLBI/NYU

Primary Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 08/2022 - 07/2024

Total Award Amount (including Indirect Costs): \$3,343,468

Role: PI

Title: Infection and Systemic Homeostatic Dysfunction of ARDS, Pneumonia and Sepsis (APS) Endotypes

Major Goals: Infection is often the initial event in APS, yet large gaps in knowledge exist about how specific pathogen classes coupled with patient comorbidities may yield different patient trajectories; this APS Center will focus on infection, antibiotic class and antibiotic duration as drivers of unique endotypic trajectories analyzed along with periodic physical function measures. Using a Precision Medicine approach may optimize future stratification of APS survivors permitting new studies whose interventions are designed for just one specific trajectory; thus, the current APS study population heterogeneity could be reduced in future studies (enrolling only one endotype at a time) and eventually the numbers of patients required as well as study costs could be reduced. These studies could provide a paradigm change for both hospital and post-hospital clinical care for APS patients.

Status of Support: Pending Project Number: Grant13661798

Name of PD/PI: Morris, P Source of Support: NIH

Primary Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 04/2023 – 03/2029

Total Award Amount (including Indirect Costs): \$2,464,311

Role: Co-l

Title: Strategies and Treatments for Respiratory Infections and Viral Emergencies (STRIVE)

Major Goals: Treatments are needed to improve outcomes among patients hospitalized for COVID-19, including direct-acting antiviral (DAA) agents to mitigate the pathology driven by ongoing viral replication. This trial will evaluate S-217622, an anti-SARS-CoV2 3C-like protease inhibitor.

Status of Support: Pending

Project Number: Federal Contract 75N91019D00024 and NIH 1OT2HL156812-01

Name of PD/PI: Neaton J, Self W

Source of Support: NIH/ Leidos Biomedical Research Inc./ University of Minnesota/ Vanderbilt

University

Medical Center Primary

Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 05/2022 – 03/2025

Total Award Amount (including Indirect Costs): \$77,500

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

Role: Site Pl

Title: Antiviral treatment of BK polyomavirus reactivation

Major Goals: The goal of this project is to apply our understanding of host pathways that are required by BKPyV for viral production in human primary kidney cells to determine if these can be exploited as antiviral targets.

Status of Support: Pending
Project Number: R21Al178734
Name of PD/Pl: Thompson, S

Name of PD/PI: Thompson, S Source of Support: NIH/NIAID

Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 07/2023 - 06/2025

Total Award Amount (including Indirect Costs): \$408,375

Role: Co-I

Title: Linking multidrug resistant Acinetobacter infections to extended subclinical carriage

Major Goals: Identifying the role of community carriage of Acinetobacter in driving mortality

Status of Support: Pending

Project Number: Grant 13790068

Name of PD/PI: Calix, J Source of Support: NIH

Place of Performance: University of Alabama at Birmingham

Project/Proposal Start and End Date: (MM/YYYY) (if available): 12/2023 - 11/2028

Total Award Amount (including Indirect Costs): \$2,952,275

Co-I

Completed Research Awards

MAU868-201 (Erdmann) Amplyx Pharmaceuticals Inc 11/16/2020 – 11/15/2022 \$278.202

A Randomized, Double-blind, Placebo-controlled Study to Assess the Safety, Pharmacokinetics and Efficacy of MAU868 for the Treatment of BK Viremia in Kidney Transplant Recipients

This study will assess the efficacy of a therapeutic antibody in treating BK viremia.

Role: Site PI

21CTA-DM0039 (Erdmann) NIH/Leidos Biomedical Research Inc 08/11/2021 – 08/11/2022 \$77,500

A Multicenter Platform Trial of Putative Therapeutics for the Treatment of COVID-19 in Hospitalized Adults (Big Effect Trial or "BET")

The COVID-19 Big Effect Trial is an adaptive inpatient clinical trial protocol designed to rapidly identify impactful new therapeutics for the treatment of moderate to severe COVID-10

Role: Site PI

K08 Al4129705 (Erdmann) NIH/NIAID 07/14/2017 – 06/30/2022 \$976,320

Viral adaptation to CD4 T cell responses and the impact on HIV immunity

In this proposal, we lay out experiments to assess the effects of HIV adaptation to CD4 T cell responses and the mechanisms underlying how adaptation influences immunogenicity and HIV disease progression. These studies will lead to a greater understanding of HIV immunity with direct implications for rational vaccine design. *NIH approval received to reduce K08 effort during year 4

Role: PI

Medpace Inc (Erdmann) Hookipa Biotech AG 06/05/2019 – 06/04/2022 \$383,937

A Randomized Placebo-Controlled Phase 2 Study of HB-101 a Bivalent Cytomegalovirus (CMV) Vaccine in CMV-Seronegative Recipient (R-) Patients Awaiting Kidney Transplantation from Living CMV-Seropositive Donors (D+)

The primary objectives of this project are 1) to assess the safety and reactogenicity of HB-101 and 2) to assess the immunogenicity of HB-101.

Role: Site PI

P30 Al027767 (Saag) NIH/NIAID/CFAR Supplement (Erdmann) 06/01/2021 – 05/31/2022 \$37,125

UAB Center for AIDS Research

Immunologic Signatures of Acute COVID-19 in Persons Living with HIV

This project will inform the degree to which HIV compounds the hyper-inflammatory state of acute COVID-19, and whether heightened inflammation persists in PLWH.

Role: SWG Leader DC30-1A (Erdmann) Cartesian Therapeutics 01/22/2020 – 01/21/2022 \$80,350

Phase I/IIA Study of Descartes-30 in Acute Respiratory Distress Syndrome

Goal of study is determine the safety and efficacy of a stem cell delivered therapy targeting NETs in COVID-induced ARDS.

Role: Site Pl

Um1 Al068614 (Corey) NIH/NIAID/FHCRC 07/01/2020 - 11/30/2021 \$44,500

CoVPN 5001 (Acute Immune Responses to SARS-CoV-2 Infection Protocol Funding (PF)

To generate standardized datasets characterizing the quality, magnitude, and kinetics of humoral immune responses to SARS-CoV-2 infection in asymptomatic participants and symptomatic participants (both hospitalized and non-hospitalized) experiencing a range of

clinical outcomes in order to prepare for similar assessments during trials of immune-based preventive strategies

Role: Site PI

Exploratory Research (Erdmann) 09/18/2017 – present 4% annual effort

UAB/DOM/Pathways in Academic Medicine Program

These funds have been provided by UAB Department of Medicine to Dr. Erdmann for his leadership role in delivering courses to introduce trainees to the wide array of academic career pathways and give guidance and resources to jump-start their careers.

UM1 AI148684 (Stephens) NIH/NIAID/Emory University 03/13/2020 – 11/30/2021* \$1,376,343

A Multicenter, Adaptive, Randomized Blinded Controlled Trial of the Safety and Efficacy of Investigational Therapeutics for the Treatment of COVID-19 in Hospitalized Adults

The overall objective of the study is to evaluate the clinical efficacy of different investigational therapeutics relative to the control arm in adults hospitalized with COVID-19.

Role: Site Pl

*All ACTT phases have been completed

OT2 HL161934 (Katz) NIH/NHLBI/NYU Grossman SOM 06/09/2021 – 07/08/2021 \$19.862

Post Acute Sequelae of SARS-COV-2 Infection Initiative

Phase 1 activities in collaboration with the PASC Consortium Clinical Science Core to support achievement of the Phase 1 scientific goals of the consortium (creation of a master protocol for each cohort type).

Role: MPI

MK-2882-002 (Erdmann) Merck & Co 04/27/2020 – 07/02/2021 \$182,894

A Phase III, Randomized, Double-Blind, Active Comparator-Controlled Study to Evaluate the Efficacy and Safety of MK-8228 (letermovir) Versus Valganciclovir for the Prevention of Human Cytomegalovirus (CMV) Disease in Adult Kidney Transplant Recipients

This study will evaluate a new CMV-active medication for the prevention of CMV infection and disease in renal transplant recipients.

Role: Site PI

SHP620-302 (Erdmann) Shire Human Genetic Therapies 06/24/2020 – 06/23/2021 \$182,894

A Phase 3, Multicenter, Randomized, Double-Blind, Double Dummy, Active-Controlled Study to Assess the Efficacy and Safety of Maribavir Compared to Valganciclovir for the

Treatment of Cytomegalovirus (CMV) Infection in Hematopoietic Stem Cell Transplant Recipients

This randomized clinical trial will compare the safety and efficacy of marabivir versus valganciclovir in the treatment of CMV infection in stem cell transplant recipients.

Role: Site PI

UM1 Al069452 (Overton) NIH/NIAID 12/01/2013 – 11/30/2020 \$13,306,025

Alabama Clinical Trials Unit

The Alabama HIV/AIDS CTU is designed to provide an administrative infrastructure that brings Network investigators at UAB together to facilitate the conduct of high capacity, quality-assured, safety-driven clinical trials through provision of administrative support, financial support, communications, staff training, oversight, regulatory support, pharmacy services, synchronization of scientific effort, community relations, and CAB support, and coordination of study personnel in order to achieve maximal efficiency of available staff effort.

Role: Co-Investigator

UM1 Al069452 (Overton) NIH/NIAID 06/12/2020 - 11/30/2020 \$300.000

Alabama Clinical Trials Unit – Administrative Supplement: SARS-CoV-2 Testing

These funds are for additional testing resources to flatten the curve and mitigate COVID-19 disease in Alabama.

Role: Co-Investigator

R61 AI133679 (Kutsch) NIH/NIAID 08/01/2017 - 07/31/2020 \$1,965,027

Identification of drugs that induce terminal transcriptional silencing of latent HIV-1 infection

Latent HIV-1 infection represents the principal obstacle to a curative AIDS therapy. The overall goal(s) of the project is to identify treatment strategies that would not trigger HIV-1 reactivation, but would permanently transcriptionally silence latent HIV-1 infection to permanently disable the ability of the virus to reactivate.

Role: Co-Investigator

R21 Al134282 (Tang) NIH/NIAID 06/29/2018 - 07/01/2020 \$408,375

Immunologic Health in Aging PLWH

Measuring VSV-specific T-cell responses and the biological age in individuals with incident shingles

Role: Co-Investigator

UM1 Al068614 (Kublin) 12/01/2018 – 11/30/2019

NIH/NIAID/Fred Hutchinson Cancer Research Center

Leadership Group for a Global HIV Vaccine Clinical Trials Network - Subaward

UAB HIV Vaccine Trials Network Protocol Funding, HVTN 108

The purpose of this funding to the Vaccine Clinical Trials Research Site of the NIH/NIAID Alabama Clinical Trials Unit (CTU) is to provide protocol funds to conduct clinical research evaluating candidate HIV vaccines for the prevention of HIV infection in adult populations.

Role: Co-Investigator

Frommeyer Fellowship (Erdmann)
Walter B. Frommeyer Fellowship in Investigative Medicine 07/01/2016 – 06/30/2017
\$107.969

Viral adaptation to CD4 T cell responses and the impact on HIV immunity

Mentored award to study CD4 T cell responses to HIV and potential strategies for HIV vaccine development

Role: PI

MANUSCRIPTS:

Published Manuscripts

- 1. Huang Y, <u>Erdmann N</u>, Peng H, Zhao Y, Zheng J. The role of TNF related apoptosis-inducing ligand in neurodegenerative diseases. *Cell Mol Immunol*. 2005 Apr;2(2):113-22. Review. PubMed PMID: 16191417.
- 2. Huang Y, <u>Erdmann N</u>, Zhao J, Zheng J. The signaling and apoptotic effects of TNF-related apoptosis-inducing ligand in HIV-1 associated dementia. *Neurotox Res.* 2005 Oct;8(1-2):135-48. doi: 10.1007/bf03033825. Review. PubMed PMID: <u>16260391</u>.
- 3. Peng H, Huang Y, Duan Z, <u>Erdmann N</u>, Xu D, Herek S, Zheng J. Cellular IAP1 regulates TRAIL-induced apoptosis in human fetal cortical neural progenitor cells. *J Neurosci Res*. 2005 Nov 1;82(3):295-305. doi: 10.1002/jnr.20629. PubMed PMID: 16180223.
- 4. Huang Y, <u>Erdmann N</u>, Peng H, Herek S, Davis JS, Luo X, Ikezu T, Zheng J. TRAIL-mediated apoptosis in HIV-1-infected macrophages is dependent on the inhibition of Akt-1 phosphorylation. *J Immunol*. 2006 Aug 15;177(4):2304-13. doi: 10.4049/jimmunol.177.4.2304. PMCID: PMC1892167.
- 5. Peng H, <u>Erdmann N</u>, Whitney N, Dou H, Gorantla S, Gendelman HE, Ghorpade A, Zheng J. HIV-1-infected and/or immune activated macrophages regulate astrocyte SDF-1 production through IL-1beta. *Glia*. 2006 Nov 1;54(6):619-29. doi: 10.1002/glia.20409. PMCID: <u>PMC1919406</u>.
- 6. <u>Erdmann NB</u>, Whitney NP, Zheng J. Potentiation of Excitotoxicity in HIV-1 Associated Dementia and the Significance of Glutaminase. *Clin Neurosci Res.* 2006 Dec;6(5):315-328. doi: 10.1016/j.cnr.2006.09.009. PMCID: <u>PMC1832112</u>.

- 7. <u>Erdmann N</u>, Zhao J, Lopez AL, Herek S, Curthoys N, Hexum TD, Tsukamoto T, Ferraris D, Zheng J. Glutamate production by HIV-1 infected human macrophage is blocked by the inhibition of glutaminase. *J Neurochem*. 2007 Jul;102(2):539-49. doi: 10.1111/j.1471-4159.2007.04594.x. PMCID: PMC1976281.
- 8. Tian C, <u>Erdmann N</u>, Zhao J, Cao Z, Peng H, Zheng J. HIV-infected macrophages mediate neuronal apoptosis through mitochondrial glutaminase. *J Neurochem*. 2008 May;105(3):994-1005. doi: 10.1111/j.1471-4159.2007.05197.x. Epub 2007 Dec 18. PMCID: <u>PMC2614440</u>.
- 9. Whitney NP, Peng H, <u>Erdmann NB</u>, Tian C, Monaghan DT, Zheng JC. Calcium-permeable AMPA receptors containing Q/R-unedited GluR2 direct human neural progenitor cell differentiation to neurons. *FASEB J*. 2008 Aug;22(8):2888-900. doi: 10.1096/fj.07-104661. Epub 2008 Apr 10. PMCID: <u>PMC2493446</u>.
- 10. <u>Erdmann N</u>, Tian C, Huang Y, Zhao J, Herek S, Curthoys N, Zheng J. In vitro glutaminase regulation and mechanisms of glutamate generation in HIV-1-infected macrophage. <u>J Neurochem.</u> 2009 Apr;109(2):551-61. doi: 10.1111/j.1471-4159.2009.05989.x. Epub 2009 Feb 13. PMCID: <u>PMC2668921</u>.
- 11. <u>Erdmann N</u>, Du VY, Carlson J, Schaefer M, Jureka A, Sterrett S, Yue L, Dilernia D, Lakhi S, Tang J, Sidney J, Gilmour J, Allen S, Hunter E, Heath S, Bansal A, Goepfert PA. HLA Class-II Associated HIV Polymorphisms Predict Escape from CD4+ T Cell Responses. *PLoS Pathog*. 2015 Aug;11(8):e1005111. doi: 10.1371/journal.ppat.1005111. eCollection 2015 Aug. PMCID: <u>PMC4547780</u>.
- Erdmann N, Hewitt BA, Atkinson TP, Van Wagoner N. Disseminated Primary Herpes Simplex Virus Type 2 Infection in a 22-Year-Old male. *Open Forum Infect Dis*. 2015 Sep;2(3):ofv092. doi: 10.1093/ofid/ofv092. eCollection 2015 Sep. PMCID: PMC4499671.
- 13. Bansal A, Sterrett S, <u>Erdmann N</u>, Westfall AO, Dionne-Odom J, Overton ET, Goepfert PA. Normal T-cell activation in elite controllers with preserved CD4+ T-cell counts. *AIDS*. 2015 Nov;29(17):2245-54. doi: 10.1097/QAD.0000000000000860. PMCID: PMC4773905.
- 14. <u>Erdmann NB</u>, Prentice HA, Bansal A, Wiener HW, Burkholder G, Shrestha S, Tang J. Herpes Zoster in Persons Living with HIV-1 Infection: Viremia and Immunological Defects Are Strong Risk Factors in the Era of Combination Antiretroviral Therapy. Front Public Health. 2018;6:70. doi: 10.3389/fpubh.2018.00070. eCollection 2018. PMCID: PMC5857573.
- 15. Kraemer RR, Wakelee JF, Hites L, Frank SJ, Saag K, Rogers DA, Nellore A, <u>Erdmann N</u>, Nichols AC, Merlin JS. Moving Career Development Upstream: Evaluation of a Course for Internal Medicine Trainees Contemplating Career Pathways in Academic Medicine. *South Med J.* 2018 Aug;111(8):471-475. doi: 10.14423/SMJ.0000000000000844. PMCID: <u>PMC6080215</u>.
- 16. Perez MD, Seu L, Lowman KE, Moylan DC, Tidwell C, Samuel S, Duverger A, Wagner FH, Carlin E, Sharma V, Pope B, Raman C, <u>Erdmann N</u>, Locke J, Hu H, Sabbaj S, Kutsch O. The tetraspanin CD151 marks a unique population of activated human T cells. *Sci Rep.* 2020 Sep 25;10(1):15748. doi: 10.1038/s41598-020-72719-8. PMCID: <u>PMC7519159</u>.

- 17. Beigel JH, Tomashek KM, Dodd LE, Mehta AK, Zingman BS, Kalil AC, Hohmann E, Chu HY, Luetkemeyer A, Kline S, Lopez de Castilla D, Finberg RW, Dierberg K, Tapson V, Hsieh L, Patterson TF, Paredes R, Sweeney DA, Short WR, Touloumi G, Lye DC, Ohmagari N, Oh MD, Ruiz-Palacios GM, Benfield T, Fätkenheuer G, Kortepeter MG, Atmar RL, Creech CB, Lundgren J, Babiker AG, Pett S, Neaton JD, Burgess TH, Bonnett T, Green M, Makowski M, Osinusi A, Nayak S, Lane HC. Remdesivir for the Treatment of Covid-19 Final Report. N Engl J Med. 2020 Nov 5;383(19):1813-1826. doi: 10.1056/NEJMoa2007764. Epub 2020 Oct 8. PMCID: PMC7262788. (Contributing Author in Addendum)
- 18. Ye Y, Shrestha S, Burkholder G, Bansal A, <u>Erdmann N</u>, Wiener H, Tang J. Rates and Correlates of Incident Type 2 Diabetes Mellitus Among Persons Living With HIV-1 Infection. *Front Endocrinol (Lausanne)*. 2020;11:555401. doi: 10.3389/fendo.2020.555401. eCollection 2020. PMCID: PMC7719801.
- 19. Files JK, Boppana S, Perez MD, Sarkar S, Lowman KE, Qin K, Sterrett S, Carlin E, Bansal A, Sabbaj S, Long DM, Kutsch O, Kobie J, Goepfert PA, <u>Erdmann N</u>. Sustained cellular immune dysregulation in individuals recovering from SARS-CoV-2 infection. *J Clin Invest*. 2021 Jan 4;131(1). doi: 10.1172/JCI140491. PMCID: PMC7773371.
- 20. Kalil AC, Patterson TF, Mehta AK, Tomashek KM, Wolfe CR, Ghazaryan V, Marconi VC, Ruiz-Palacios GM, Hsieh L, Kline S, Tapson V, Iovine NM, Jain MK, Sweeney DA, El Sahly HM, Branche AR, Regalado Pineda J, Lye DC, Sandkovsky U, Luetkemeyer AF, Cohen SH, Finberg RW, Jackson PEH, Taiwo B, Paules Cl, Arguinchona H, Erdmann N, Ahuja N, Frank M, Oh MD, Kim ES, Tan SY, Mularski RA, Nielsen H, Ponce PO, Taylor BS, Larson L, Rouphael NG, Saklawi Y, Cantos VD, Ko ER, Engemann JJ, Amin AN, Watanabe M, Billings J, Elie MC, Davey RT, Burgess TH, Ferreira J, Green M, Makowski M, Cardoso A, de Bono S, Bonnett T, Proschan M, Deye GA, Dempsey W, Nayak SU, Dodd LE, Beigel JH. Baricitinib plus Remdesivir for Hospitalized Adults with Covid-19. *N Engl J Med*. 2021 Mar 4;384(9):795-807. doi: 10.1056/NEJMoa2031994. Epub 2020 Dec 11. PMCID: PMC7745180.
- 21. Boppana S, Qin K, Files JK, Russell RM, Stoltz R, Bibollet-Ruche F, Bansal A, <u>Erdmann N</u>, Hahn BH, Goepfert PA. SARS-CoV-2-specific circulating T follicular helper cells correlate with neutralizing antibodies and increase during early convalescence. *PLoS Pathog.* 2021 Jul;17(7):e1009761. doi: 10.1371/journal.ppat.1009761. eCollection 2021 Jul. PMCID: PMC8318272.
- 22. Files JK, Sarkar S, Fram TR, Boppana S, Sterrett S, Qin K, Bansal A, Long DM, Sabbaj S, Kobie JJ, Goepfert PA, <u>Erdmann N</u>. Duration of post-COVID-19 symptoms is associated with sustained SARS-CoV-2-specific immune responses. *JCI Insight*. 2021 Aug 9;6(15). doi: 10.1172/jci.insight.151544. PubMed PMID: <u>34143754</u>.
- 23. Liu W, Russell RM, Bibollet-Ruche F, Skelly AN, Sherrill-Mix S, Freeman DA, Stoltz R, Lindemuth E, Lee FH, Sterrett S, Bar KJ, <u>Erdmann N</u>, Gouma S, Hensley SE, Ketas T, Cupo A, Cruz Portillo VM, Moore JP, Bieniasz PD, Hatziioannou T, Massey G, Minyard MB, Saag MS, Davis RS, Shaw GM, Britt WJ, Leal SM Jr, Goepfert P, Hahn BH. Predictors of Nonseroconversion after SARS-CoV-2 Infection. *Emerg Infect Dis*. 2021 Sep;27(9):2454-2458. doi: 10.3201/eid2709.211042. Epub 2021 Jun 30. PMCID: <u>PMC8386781</u>.
- 24. Piepenbrink MS, Park JG, Oladunni FS, Deshpande A, Basu M, Sarkar S, Loos A, Woo J, Lovalenti P, Sloan D, Ye C, Chiem K, Bates CW, Burch RE, <u>Erdmann NB</u>, Goepfert PA, Truong VL, Walter MR, Martinez-Sobrido L, Kobie JJ. Therapuetic activity of an

- inhaled potent SARS-CoV-2 neutralizing human monoclonal antibody in hamsters. Cell Rep Med. 2021 Mar 16;2(3):100218. doi: 10.1016/j.xcrm.2021.100218. Epub 2021 Feb 25. Cell Rep Med. 2021. PMID: 33649747
- 25. Cheung MD, Erman EN, Liu S, <u>Erdmann NB</u>, Ghajar-Rahimi G, Moore KH, Edberg JC, George JF, Agarwal A. Single-Cell RNA Sequencing of Urinary Cells Reveals Distinct Cellular Diversity in COVID-19-Associated AKI. Kidney360. 2021 Nov 5;3(1):28-36. doi: 10.34067/KID.0005522021. PMID: 35368565; PMCID: PMC8967619.
- 26. Raines NH, Cheung MD, Wilson LS, Edberg JC, Erdmann NB, Schmaier AA, Berryhill TF, Manickas-Hill Z, Li JZ, Yu XG, Agarwal A, Barnes S, Parikh SM. Nicotinamide Adenine Dinucleotide Biosynthetic Impairment and Urinary Metabolomic Alterations Observed in Hospitalized Adults With COVID-19-Related Acute Kidney Injury. Kidney Int Rep. 2021 Dec;6(12):3002-3013. doi: 10.1016/j.ekir.2021.09.001. Epub 2021 Sep 14. PMID: 34541422; PMCID: PMC8439094.
- 27. Wolfe CR, Tomashek KM, Patterson TF, Gomez CA, Marconi VC, Jain MK, Yang OO, Paules CI, Palacios GMR, Grossberg R, Harkins MS, Mularski RA, Erdmann N, Sandkovsky U, Almasri E, Pineda JR, Dretler AW, de Castilla DL, Branche AR, Park PK, Mehta AK, Short WR, McLellan SLF, Kline S, Iovine NM, El Sahly HM, Doernberg SB, Oh MD, Huprikar N, Hohmann E, Kelley CF, Holodniy M, Kim ES, Sweeney DA, Finberg RW, Grimes KA, Maves RC, Ko ER, Engemann JJ, Taylor BS, Ponce PO, Larson L, Melendez DP, Seibert AM, Rouphael NG, Strebe J, Clark JL, Julian KG, de Leon AP, Cardoso A, de Bono S, Atmar RL, Ganesan A, Ferreira JL, Green M, Makowski M, Bonnett T, Beresnev T, Ghazaryan V, Dempsey W, Nayak SU, Dodd LE, Beigel JH, Kalil AC. Baricitinib versus dexamethasone for adults hospitalised with COVID-19 (ACTT-4): a randomised, double-blind, double placebo-controlled trial. Lancet Respir Med. 2022 May 23;. doi: 10.1016/S2213-2600(22)00088-1. [Epub ahead of print] PubMed PMID: 35617986.
- 28. Banday AR, Stanifer ML, Florez-Vargas O, Onabajo OO, Papenberg BW, Zahoor MA, Mirabello L, Ring TJ, Lee CH, Albert PS, Andreakos E, Arons E, Barsh G, Biesecker LG, Boyle DL, Brahier MS, Burnett-Hartman A, Carrington M, Chang E, Choe PG, Chisholm RL, Colli LM, Dalgard CL, Dude CM, Edberg J, Erdmann N, Feigelson HS, Fonseca BA, Firestein GS, Gehring AJ, Guo C, Ho M, Holland S, Hutchinson AA, Im H, Irby L, Ison MG, Joseph NT, Kim HB, Kreitman RJ, Korf BR, Lipkin SM, Mahgoub SM, Mohammed I, Paschoalini GL, Pacheco JA, Peluso MJ, Rader DJ, Redden DT, Ritchie MD, Rosenblum B, Ross ME, Anna HPS, Savage SA, Sharma S, Siouti E, Smith AK, Triantafyllia V, Vargas JM, Vargas JD, Verma A, Vij V, Wesemann DR, Yeager M, Yu X, Zhang Y, Boulant S, Chanock SJ, Feld JJ, Prokunina-Olsson L. Genetic regulation of OAS1 nonsense-mediated decay underlies association with COVID-19 hospitalization in patients of European and African ancestries. Nat Genet. 2022 Jul 14;. doi: 10.1038/s41588-022-01113-z. [Epub ahead of print] PubMed PMID: 35835913.
- 29. Patton MJ, Orihuela CJ, Harrod KS, Bhuiyan MAN, Dominic P, Kevil CG, Fort D, Liu VX, Farhat M, Koff JL, Lal CV, Gaggar A, Richter RP, <u>Erdmann N</u>*, Might M, Gaggar A. COVID-19 bacteremic co-infection is a major risk factor for mortality, ICU admission, and mechanical ventilation. Crit Care. 2023 Jan 23;27(1):34. doi: 10.1186/s13054-023-04312-0. PMID: 36691080; PMCID: PMC9868503. * Co-senior author

- 30. Fortmann SD, Patton M, Frey BF, Tipper JL, Reddy SB, Vieira CP, Hanumanthu VS, Sterrett S, Floyd JL, Prasad R, Zucker JD, Crouse AB, Huls F, Chkheidze R, Li P, Erdmann N, Harrod KS, Gaggar A, Goepfert PA, Grant MB, Might M. <u>Circulating SARS-CoV-2+ Megakaryocytes Associate with Severe Viral Infection in COVID-19.</u> Blood Adv. 2023 Mar 15;. doi: 10.1182/bloodadvances.2022009022. [Epub ahead of print] PubMed PMID: 36920790; PubMed Central PMCID: PMC10022176.
- 31. Karuna S, Gallardo-Cartagena JA, Theodore D, Hunidzarira P, Montenegro-Idrogo J, Hu J, Jones M, Kim V, De La Grecca R, Trahey M, Karg C, Takalani A, Polakowski L, Hutter J, Miner MD, Erdmann N, Goepfert P, Maboa R, Corey L, Gill K, Li SS. Post-COVID symptom profiles and duration in a global convalescent COVID-19 observational cohort: Correlations with demographics, medical history, acute COVID-19 severity and global region. J Glob Health. 2023 Jun 23;13:06020. doi: 10.7189/jogh.13.06020. PubMed PMID: 37352144; PubMed Central PMCID: PMC10289480.
- 32. Opsteen S, Files JK, Fram T, <u>Erdmann N</u>. <u>The role of immune activation and antigen persistence in acute and long COVID.</u> J Investig Med. 2023 Jun;71(5):545-562. doi: 10.1177/10815589231158041. Epub 2023 Mar 6. Review. PubMed PMID: 36879504; PubMed Central PMCID: PMC9996119.
- 33. Sweeney DA, Tuyishimire B, Ahuja N, Beigel JH, Beresnev T, Cantos VD, Castro JG, Cohen SH, Cross K, Dodd LE, <u>Erdmann N</u>, Fung M, Ghazaryan V, George SL, Grimes KA, Hynes NA, Julian KG, Kandiah S, Kim HJ, Levine CB, Lindholm DA, Lye DC, Maves RC, Oh MD, Paules C, Rapaka RR, Short WR, Tomashek KM, Wolfe CR, Kalil AC. <u>Baricitinib Treatment of Coronavirus Disease 2019 Is Associated With a Reduction in Secondary Infections.</u> Open Forum Infect Dis. 2023 May;10(5):ofad205. doi: 10.1093/ofid/ofad205. eCollection 2023 May. PubMed PMID: 37206623; PubMed Central PMCID: PMC10191442.
- 34. Margaroli C, Fram T, Sharma NS, Patel SB, Tipper J, Robison SW, Russell DW, Fortmann SD, Banday MM, Soto-Vazquez Y, Abdalla T, Saitornuang S, Madison MC, Leal SM Jr, Harrod KS, Erdmann NB*, Gaggar A. Interferon-dependent signaling is critical for viral clearance in airway neutrophils. JCI Insight. 2023 May 22;8(10). doi: 10.1172/jci.insight.167042. PubMed PMID: 37071484. *Co-Senior Author
- 35. Thaweethai T, Jolley SE, Karlson EW, Levitan EB, Levy B, McComsey GA, McCorkell L, Nadkarni GN, Parthasarathy S, Singh U, Walker TA, Selvaggi CA, Shinnick DJ, Schulte CCM, Atchley-Challenner R, Alba GA, Alicic R, Altman N, Anglin K, Argueta U, Ashktorab H, Baslet G, Bassett IV, Bateman L, Bedi B, Bhattacharyya S, Bind MA, Blomkalns AL, Bonilla H, Bush PA, Castro M, Chan J, Charney AW, Chen P, Chibnik LB, Chu HY, Clifton RG, Costantine MM, Cribbs SK, Davila Nieves SI, Deeks SG, Duven A, Emery IF, Erdmann N, Erlandson KM, Ernst KC, Farah-Abraham R, Farner CE, Feuerriegel EM, Fleurimont J, Fonseca V, Franko N, Gainer V, Gander JC, Gardner EM, Geng LN, Gibson KS, Go M, Goldman JD, Grebe H, Greenway FL, Habli M, Hafner J, Han JE, Hanson KA, Heath J, Hernandez C, Hess R, Hodder SL, Hoffman MK, Hoover SE, Huang B, Hughes BL, Jagannathan P, John J, Jordan MR, Katz SD, Kaufman ES, Kelly JD, Kelly SW, Kemp MM, Kirwan JP, Klein JD, Knox KS, Krishnan

JA, Kumar A, Laivemo AO, Lambert AA, Lanca M, Lee-lannotti JK, Logarbo BP, Longo MT, Luciano CA, Lutrick K, Maley JH, Marathe JG, Marconi V, Marshall GD, Martin CF, Matusov Y, Mehari A, Mendez-Figueroa H, Mermelstein R, Metz TD, Morse R, Mosier J, Mouchati C, Mullington J, Murphy SN, Neuman RB, Nikolich JZ, Ofotokun I, Oiemakinde E. Palatnik A. Palomares K. Parimon T. Parry S. Patterson JE. Patterson TF, Patzer RE, Peluso MJ, Pemu P, Pettker CM, Plunkett BA, Pogreba-Brown K, Poppas A, Quigley JG, Reddy U, Reece R, Reeder H, Reeves WB, Reiman EM, Rischard F, Rosand J, Rouse DJ, Ruff A, Saade G, Sandoval GJ, Schlater SM, Shepherd F. Sherif ZA, Simhan H, Singer NG, Skupski DW, Sowles A, Sparks JA, Sukhera FI, Taylor BS, Teunis L, Thomas RJ, Thorp JM, Thuluvath P, Ticotsky A, Tita AT, Tuttle KR, Urdaneta AE, Valdivieso D, VanWagoner TM, Vasey A, Verduzco-Gutierrez M, Wallace ZS, Ward HD, Warren DE, Weiner SJ, Welch S, Whiteheart SW, Wiley Z, Wisnivesky JP, Yee LM, Zisis S, Horwitz LI, Foulkes AS. Development of a Definition of Postacute Sequelae of SARS-CoV-2 Infection. JAMA. 2023 Jun 13;329(22):1934-1946. doi: 10.1001/jama.2023.8823. PubMed PMID: 37278994; PubMed Central PMCID: PMC10214179.

Manuscripts in Press: NA

Manuscripts Under Revision:

- 1. Opsteen S, Files J, Fram T, Erdmann N*. The Acute Immune Response to SARS-CoV-2 and Influences of Chronic HIV Infection.
- 2. Patton MK, Benson D, Robison SW, Dhaval R, Locy ML, Patel K, Grumley S, Levitan EB, Morris P, Might M, Gaggar A, Erdmann N. Characteristics and Determinants of Pulmonary Long COVID.

Other Publications (Book Chapters, Letters to the Author, Etc.):

- 1. <u>Erdmann N</u>, Heath S. Cytokine Storm Syndrome as a manifestation of Primary HIV Infection. (Chapter) *Cytokine Storm Syndromes* (Editors: Randy Cron and Edward Behrens). 2019 Springer 299-306.
- Y. Huang, N. Erdmann, T. D. Hexum and J. Zheng. Cytokines and Chemokines (Chapter 15.). Neuroimmune Pharmacology (Editors: Tsuneya Ikezu and Howard E. Gendelman). 2008 Springer Science+Business Media, LLC, 233 Spring Street, New York, NY-10013, USA
- 3. <u>Erdmann N</u>, Huang Y and Zheng, J. (2006). The relevance of Chemokines and Cytokines to the pathogenesis of HIV-1 Associated Dementia. In the *NEURO-AIDS*, eds by Paul Shapshak and Alireza Minagar, Nova Science Publisher, Inc., Hauppauge, NY.

PRESENTATIONS:

Oral presentations

- 1. <u>Erdmann N</u>, Tian C, Zhao J, Zheng J. Midwest Student Biomedical Research Forum. Excitotoxic glutamate production in HIV-1-infected human macrophage by glutaminase C. (February 2007).
- 2. <u>Erdmann N</u>, Jureka A, Du V, Sterrett S, Carlson J, Hunter E, Bansal A, Goepfert, P. J. Claude Bennett Award for Excellence in Research by Associate Fellow. "The use of HLA class-II associated HIV polymorphisms in predicting novel CD4 T-cell escape". (April 2014).
- 3. <u>Erdmann N</u>. Therapeutic Discovery in the Midst of a Global Pandemic. McWane SciCafe (August 2020, Birmingham, Alabama).
- 4. <u>Erdmann N</u>. COVID Clinical Trials, Re-Purposing for a New Threat. CFAR World AIDS Day (UAB, December 2020).
- 5. <u>Erdmann N.</u> Research in an Evolving Pandemic. Graduate Biomedical Sciences Plenary Lecture (Birmingham AL, December 2020).
- 6. <u>Erdmann N.</u> Response to a Global Pandemic. Darwin Day (UAB School of Medicine, December 2020).
- 7. <u>Erdmann N</u>. Looking Forward on COVID-19: Current Immunology, Therapeutics and Vaccine Strategies. Alabama Dental Society Plenary (Alabama, February 2021).
- 8. <u>Erdmann N</u>. Looking Forward on COVID-19. Department of Family Medicine Grand Rounds (UAB, March 2021).
- 9. <u>Erdmann N.</u> Development of COVID Management Strategies. School of Public Health Grand Rounds (March 2021).
- 10. <u>Erdmann N</u>. Development of COVID Management Strategies. School of Public Health Grand Rounds (March 2021).
- 11. <u>Erdmann N</u>. COVID-19: A Crash Course in Translational Medicine. UAB Department of Medicine Grand Rounds (May 5, 2021).
- 12. Erdmann N. Immune Dysregulation in Acute and Long COVID. Infectious Diseases Grand Rounds, UAB Department of Medicine (September 9, 2021).
- 13. <u>Erdmann N</u>. COVID: From Outpatient to Inpatient to the Future. UAB Department of Medicine Grand Rounds (September 15, 2021).
- 14. <u>Erdmann N</u>, Lee R, Kaslow R, Godwins B, Muntner P. COVID-19 Roundtable. School of Public Health. (November 8th, 2021).
- 15. <u>Erdmann N.</u> Looking Back, What did we get Wrong and Right in the COVID-19 Pandemic. ADPH Nursing CEU Day (May 3rd, 2023).

Poster Exhibits

- 1. <u>Erdmann N</u>, Du V, Carlson J, Hunter E, Bansal A, Goepfert P. CD4 T-cell targeting among a cohort of chronically HIV-infected patients with varying levels of viral control. UAB Department of Medicine Trainees Research Symposium Birmingham, AL (March 2013).
- 2. <u>Erdmann N</u>, Du V, Carlson J, Hunter E, Mann T, Sterrett S, Bet A, E Bansal A, Goepfert P. The use of HLA class-II associated HIV polymorphisms in predicting novel CD4 T-cell

- responses and viral escape. UAB Spring Immunology Symposium. Birmingham, AL (June 2013).
- 3. <u>Erdmann N</u>, Du V, Carlson J, Hunter E, Bansal A, Goepfert, P. The use of HLA class-II associated HIV polymorphisms in predicting novel CD4 T-cell escape. AIDS Vaccine. Barcelona, Spain. P12.18 (October 2013).
- 4. <u>Erdmann N</u>, Jureka A, Du V, Sterrett S, Carlson J, Hunter E, Bansal A, Goepfert, P. The use of HLA class-II associated HIV polymorphisms in predicting novel CD4 T-cell escape. UAB Department of Medicine Trainees Research Symposium Birmingham, Alabama (March 2014).
- Erdmann N, Du V, Carlson, J, Schaefer M, Jureka A, Sterrett S, Yue L, Dilernia D, Lakhi S, Tang J, Sidney J, Gilmour J, Allen S, Hunter E, Heath S, Bansal A, Goepfert, P. The use of HLA class-II associated HIV polymorphisms in predicting novel CD4 T-cell escape. Conference on Retroviruses and Opportunistic Infections (CROI), Seattle, Washington (February 2015).
- Erdmann N, Du V, Carlson, J, Schaefer M, Jureka A, Sterrett S, Yue L, Dilernia D, Lakhi S, Tang J, Sidney J, Gilmour J, Allen S, Hunter E, Heath S, Bansal A, Goepfert, P. The use of HLA class-II associated HIV polymorphisms in predicting novel CD4 T-cell escape. UAB Department of Medicine Trainees Research Symposium Birmingham, Alabama (March 2015).
- 7. <u>Erdmann N</u>, Du V, Mackel J, Qin K, Carlson J, Hunter E, Heath S, Bansal A, Goepfert, P. HLA class II associated HIV polymorphisms and cytotoxic effector functions of CD4 T cells. Keystone HIV Vaccine Symposium, Colorado (March 2016).
- 8. Bansal A, Willig J, <u>Erdmann N</u>. HIV Transplantation Awareness and Attitudes Following Implementation of the HOPE Act. ID Week, San Francisco, California (October 2018).

MISCELLANEOUS

Clinical Research Trial Investigations

2023 – present	VITAL Site PI
2022 - present	STRIVE Site MPI
2021 – 2022	Site PI Cartesian ARDS Trial
2021 – 2022	Site PI ACTIV-5 BET Trial
2021 – 2022	Site PI Gilead Remdesivir in Renal Insufficiency Trial
2021 – 2022	Site PI EB05 COVID-19 Trial
2020 – present	COVID Clinical Trials Committee Chair
2020 – 2021	
2020 2021	ACTT Remdesivir Study Site PI
2020 – 2021	DSMB Anakinra (Chatham/Cron) Study
	•
2020 – 2021	DSMB Anakinra (Chatham/Cron) Study

2018 – 2019	Site PI Hologic CMV Diagnostic Study
2018 – 2021	Co-Chair, HVTN 133 (MPER) Protocol
2018 – present	UAB Clinical Trials Unit Investigator
2018 – present	HVTN Investigator

Regional and National Media Expertise

UAB Drug Remdesivir Is First to Block the COVID-19 Virus, May Become Standard of Care. Fauci "Optimistic." <u>Birmingham Watch</u> April 30, 2020

Here's the latest on what one UAB infectious disease doctor knows about coronavirus. AL.com July 8 2020

Alabama doctors in the fight of their lives: 'Never seen anything like COVID-19'. <u>Al.com</u> Jul. 24, 2020

Fauci: Drug discovered, tested at UAB 'will be the standard of care' for coronavirus patients. AL.com April 30, 2020.

Fast-tracked drug tied to Alabama is ready to battle COVID, but questions remain. <u>Al.com</u>. Nov. 01, 2020

Scientists work toward an elusive dream: a simple pill to treat Covid-19. <u>STAT News</u>. April 9, 2021

Do you need to get vaccinated if you already had COVID? AL.com July 23, 2021