



The Lupus Research Alliance is the largest private funder of lupus research, united to free the world of lupus by harnessing the power of science to make a difference for people living with this autoimmune disease. Merging the resources of the former Alliance for Lupus Research, Lupus Research Institute and the S.L.E. Lupus Foundation, the new organization has collectively committed over \$173 million for the most innovative lupus research around the globe.

OUR RESEARCH FUNDING MECHANISMS:

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| Dr. William E. Paul Distinguished Innovator Award (DIA) in Lupus and Autoimmunity | The Dr. William E. Paul Distinguished Innovator Award in Lupus and Autoimmunity was created to address the current lack of treatments in development that could arrest or reverse the disease. The only privately funded awards of this scale in lupus, the \$1 million award challenges exceptional scientists to pursue innovative, hypothesis- or discovery-driven worldwide projects in human and/or animal model based lupus research that aims to uncover the fundamental root causes of lupus and present a compelling vision of how the discovery would begin the drive to a cure and open the door to prevention. |
| Target Identification in Lupus Grant (TIL) Program | Under our Target Identification in Lupus (TIL) grant program, investigators leverage a two-year, up-to-\$400,000 award, to remove the barriers to new treatments and a possible cure. All research funded under the TIL program is based on realizable goals for translation into therapeutic discovery programs — that is, research that can move quickly from the laboratory to the patient's bedside. Researchers also have the opportunity to apply for a third year of funding through a non-competitive progress report. All lupus research funded under the TIL program is based on realizable goals for translation into therapeutic discovery programs — that is, research discoveries become useful therapies in the near future. |
| Novel Research Grants (Novel) | The Novel Research Grant program provides early-stage support with three-year \$300,000 grants for high-risk, high-reward, idea-driven, novel research projects relevant to basic, translational or clinical investigation in lupus. Exceptionally creative and innovative, projects advance novel scientific hypotheses in lupus, aim to stimulate investigation of underexplored pathways, and initiate transformative discoveries that can drive the development of safer and more effective treatments. Open to the global research community, the Novel Research Grants foster investigations into the fundamental mechanisms of lupus and its complications, explorations of novel targets and pathways, and novel technologies. Applications from investigators in diverse disciplines, including those who may not have worked in lupus are encouraged. |
| Lupus Investigators Network Grants (LuCin) | The Lupus Investigators Network (LuCIN) was formed to accelerate the identification and development of new therapies to treat lupus. The goals of LuCIN are to: conduct safe and reliable clinical studies to test drugs already approved for other diseases or new compounds for their potential use as treatments for lupus; facilitate sharing of clinical and biological data to better understand lupus; and enlist patient input and participation in clinical studies. To achieve these goals, LuCIN provides grants of up to \$80,000 annually to cover institutional infrastructure costs for LuCIN clinical study activities. Submissions are evaluated on the institutions' resources and capabilities to conduct lupus clinical trials. |

If you have questions about any of the Lupus Research Alliance grant mechanisms, please contact Diomaris Gonzalez, Director of Grant Programs at dgonzalez@lupusresearch.org or 212-218-2840.

| Distinguished Innovator Award (DIA) | | | |
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| <i><u>Investigator</u></i> | <i><u>Institution</u></i> | <i><u>State/ Country</u></i> | <i><u>Project Title</u></i> |
| <u>2016</u> | | | |
| Reizis, Boris, PhD | New York University School of Medicine | NY | Origin, regulation and therapeutic targeting of extracellular DNA |
| Fu, Shu Man, MD, PhD | University of Virginia | VA | Local factors contributing to pathogenesis of proliferative lupus nephritis |
| <u>2015</u> | | | |
| Mayadas, Tanya, PhD | Brigham and Women's Hospital and Harvard Medical School | MA | IgG glycans, FcγRs and renal elements dictate antibody pathogenicity in SLE |
| Morand, Eric, PhD | Monash University | Australia | GILZ: glucocorticoid mediator, B cell regulator, and lupus target |
| <u>2014</u> | | | |
| Chen, Zhijian, PhD | University of Texas Southwestern Medical Center | TX | Roles of the cGAS pathway in lupus |
| Green, Douglas, PhD | St. Jude Children's Research Hospital | TN | Non-canonical autophagy, phagocytosis, and SLE |
| Noelle, Randy, PhD | Dartmouth College | NH | Targetting the VISTA pathway prevents fatal systemic lupus |
| <u>2013</u> | | | |
| Smith, Kenneth, MD, PhD | The University of Cambridge | UK | A Transcriptional focus on new cells and pathways in SLE |
| Tarlinton, David, PhD | Monash University and Walter and Eliza Hall Institute of Medical Research | Australia | Attacking the source: targeting plasma cell survival in lupus |
| <u>2012</u> | | | |
| Barton, Gregory, PhD | University of California, Berkeley | CA | Defining factors that control the initial break in tolerance in lupus |
| Marshak-Rothstein, Ann, PhD | University of Massachusetts Medical School | MA | DNA- and RNA-associated autoantigens in the activation of human B cells |

| Target Identification in Lupus (TIL) | | | |
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| <i><u>Investigator</u></i> | <i><u>Institution</u></i> | <i><u>State/ Country</u></i> | <i><u>Project Title</u></i> |
| <u>2016</u> | | | |
| Davidson , Anne, MBBS | The Feinstein Institute for Medical Research | NY | The role of TLR8 in lupus nephritis |
| Fan , Rong, PhD | Yale University | CT | Dissecting the effector function of pathogenic Tfh cells in human lupus |
| Greenberg, Roger, MD, PhD | University of Pennsylvania | PA | BRISC DUB Activity as a Novel Target for Lupus |
| Liu , Ming-Lin, PhD | University of Pennsylvania Health System | PA | A novel target for neutrophil NETosis in lupus skin inflammation |
| Mamula , Mark J., PhD | Yale University | CT | Therapeutic inhibitors of antigen presentation pathways in SLE |
| Morel , Laurence, PhD | University of Florida | FL | Targeting follicular helper CD4 T cells in SLE |
| Nundel , Kerstin, PhD | University of Massachusetts Medical School | FL | TLR9 regulates Axl dependent migration of autoreactive B cells |
| <u>2015</u> | | | |
| Carroll, Michael, PhD | Children's Hospital Boston | MA | Investigating the mechanisms of lupus-associated CNS dysfunction |
| Craft, Joseph, MD | Yale University | CT | Characterization and function of CD4 T cell subsets in lupus |
| Criswell, Lindsey, MD, MPH | University of California, San Francisco | CA | The contribution of epigenetics to SLE phenotype and outcome |
| Elkon, Keith, MD | University of Washington | WA | The cyclic GAMP pathway in SLE |
| Fathman, Charles, MD | Stanford University | CA | Understanding the MoA of low dose IL-2 as a potential therapy for SLE |
| Fu, Shu Man, MD, PhD | University of Virginia | VA | IL-2 and IL-33 as therapeutic agents for lupus nephritis |
| Jarjour, Wael, MD | The Ohio State University | OH | Regulation of T follicular helper cells in SLE by E3 ubiquitin ligase Cbl-b |
| Jefferies, Caroline, PhD | Cedars-Sinai Medical Center | CA | Estrogen-dependent microRNAs as potential targets for the treatment of SLE |
| Kontaridis, Maria, PhD | Beth Israel Deaconess Medical Center | MA | Role for SHP2 as a therapeutic target for systemic lupus erythematosus |
| Kosiewicz, Michele, PhD | University of Louisville Research Foundation, Inc. | KY | Sex and microbiota influence on immunoregulation and disease in BWF1 mice |
| Rothlin, Carla, PhD | Yale University | CT | Protein S: at the crossroads of thrombosis and inflammation in SLE |
| Stohl, William, MD, PhD | University of Southern California | CA | Therapeutic targeting of FcγRIIb on B cells in SLE |
| Tsao, Betty, PhD | Medical University of South Carolina | SC | Targeting IL-10 producing B cells in SLE |
| Xiao, Sheng, PhD | Brigham and Women's Hospital, Inc. | MA | Role of Tim-1 in kidneys during lupus |
| Yan, Nan, PhD | UT Southwestern Medical Center | TX | Glycans and glycosylation defects as novel targets in lupus |
| <u>2014</u> | | | |
| Alarcon-Riquelme, Marta E., MD, PhD | Fundacion Publica Andaluza Progreso Y Salud - Spain | Spain | Influence of BANK1 in the in vivo development of lupus |
| Casali, Paolo, MD | University of Texas Health Science Center | TX | B cell histone modifications and non-coding RNA as targets in lupus therapy |
| Cohen, Philip, MD | Temple University | PA | Aggregated MAVS as a disease mechanism in SLE |
| Erickson, Loren D., PhD | University of Virginia | VA | Role of the BAFF receptor BCMA to control B cell homeostasis and tolerance |
| Jacob, Chaim Oscar, MD, PhD | University of Southern California | CA | Towards understanding the role of NCF2 in SLE |
| Lu, Theresa T., MD, PhD | The Hospital for Special Surgery | NY | Targeting a dendritic cell-stromal axis in lupus |
| Mohan, Chandra, MD, PhD | University of Houston | TX | Bradykinins in Lupus |
| Morel, Laurence, PhD | University of Florida | FL | High through-put screening to repurpose drugs for lupus therapeutics |
| Roopenian, Derry, PhD | The Jackson Laboratory | ME | |
| Peterson, Erik Jon, MD | University of Minnesota - Twin Cities | MN | Targeting interferogenic signals regulated by SLE risk gene PTPN22 |
| Rathmell, Jeffrey C., PhD | Vanderbilt University Medical Center | TN | Metabolism of effector T cells as a target in SLE |
| Sullivan, Kathleen, MD, PhD | The Children's Hospital of Philadelphia | PA | IRF1 decoy treatment |
| Wakeland, Edward K., PhD | UT Southwestern Medical Center | TX | Identifying functional variants that underlie SLE susceptibility |

| Novel Research Grants (Novel) | | | |
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| <u>2016</u> | | | |
| Acharya, Mridu, PhD | Benaroya Research Institute at Virginia Mason | WA | Autophagy components and B cell activation during SLE |
| Giltiay, Natalia, PhD | University of Washington | WA | Anti-BDCA2-targeted therapy for SLE |
| Jackson, Shaun, MD, PhD | Seattle Children's Hospital | WA | B cell-intrinsic cytokine reg of spontaneous germinal ctr formation in SLE |
| Knight, Andrea, MD | The Children's Hospital of Philadelphia | PA | Multi-level biomarkers for psychiatric disorders in pediatric lupus |
| Kumar, Vipin, PhD | University of California, San Diego | CA | Targeting type II NKT cells for a novel therapeutic in lupus |
| Lood, Christian, PhD | University of Washington | WA | Impaired mitochondrial clearance in systemic lupus erythematosus |
| Rongvaux, Anthony, PhD | Fred Hutchinson Cancer Research Center | WA | Mitochondria, caspases and Type I interferons in autoimmunity |
| Shi, Guo-Ping, DSc | Brigham and Women's Hospital | MA | Cathepsin S inhibitor-modified Treg cells mitigate murine SLE |
| Zhang, John, DVM, PhD | Medical University of South Carolina | SC | A novel approach for treating lupus by inhibiting Fli1 transcription factor |
| Zhang, Zhiqiang, PhD | The Methodist Hospital Research Institute | TX | Oxidized mitochondrial DNA employs APEX1 in neutrophils to control lupus |
| <u>2015</u> | | | |
| Abrahams, Vikki, PhD | Yale University | CT | Role of infection in obstetric antiphospholipid syndrome |
| Camarero, Julio, PhD | University of Southern California | CA | Therapeutic selective targeting of BAFF receptors |
| Criswell, Lindsey, MD, MPH | University of California, San Francisco | CA | Pesticides and chemical exposures, DNA methylation, and SLE phenotypes |
| Gallucci, Stefania, MD | Temple University | PA | Bacterial amyloids from biofilms break tolerance in lupus |
| Garrett-Sinha, Lee Ann, MD | The Research Foundation for The SUNY on behalf of University at Buffalo | NY | Understanding the pathway regulated by the lupus susceptibility gene Ets1 |
| Hsu, Hui-Chen, PhD | The University of Alabama at Birmingham | AL | Repopulation of tolerogenic B cells post B cell depletion therapy in lupus |
| Mandik-Nayak, Laura, PhD | Lankenau Institute for Medical Research | PA | IDO2, a novel therapeutic target for the treatment of lupus |
| Niewold, Timothy, MD | Mayo Clinic | MN | Tolerogenic dendritic cells in human lupus |
| Scofield, Hal, MD | University of Oklahoma, Health Sciences Center | OK | Sex disparity in lupus is driven by putative X-linked genes |
| Vilen, Barbara, PhD | The University of North Carolina at Chapel Hill | NC | Cross sectional and longitudinal studies of immune complexes in SLE |
| Weirauch, Matthew, PhD | Cincinnati Children's Hospital Medical Center Research Foundation | OH | A free website for discovering non-coding lupus-associated variant function |
| Wu, Tianfu, PhD | University of Houston | TX | PLK1, a potential novel therapeutic target for lupus |
| <u>2014</u> | | | |
| Anthony, Robert, PhD | Massachusetts General Hospital, Harvard Medical School | MA | Therapeutic potential of sialylated IgG Fc In SLE |
| Boesen, Erika, PhD | Nebraska Medical Center | NE | Iron and ER stress in lupus nephritis |
| Chepelev, Iouri, PhD | Cincinnati Children's Hospital Medical Center | OH | Identification of lupus causal variants at 8p23.1 by mapping 3D genome |
| Davidson, Anne, MD | Feinstein Medical Research Institute | NY | Altered renal circadian rhythm in SLE nephritis |
| Fitzgerald, Kate, PhD | University of Massachusetts Medical School | MA | The role of the long non-coding RNA lincRNA-Eps in Lupus |
| Janssen, Edith, PhD | Cincinnati Children's Hospital Medical Center - Research Foundation | OH | CD244 targeting therapeutics in SLE |
| Kriegel, Martin, MD, PhD | Yale University | CT | A Role for diet-sensitive gut commensals in systemic autoimmunity |
| Radic, Marko, PhD | University of Tennessee, Memphis | TN | CD19-targeted cytotoxic T cells for lupus therapy |
| Stein, Michael, MB, ChB | Vanderbilt University Medical Center | TN | Tissue sodium in autoimmune disease |
| Ueno, Hideki, MD, PhD | Mount Sinai School of Medicine | NY | A new disease mechanism in lupus |
| Walter, Mark, PhD | University of Alabama at Birmingham | AL | Single Cell Detection of IFN Signaling in Lupus Patients |

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| <i><u>Investigator</u></i> | <i><u>Institution</u></i> | <i><u>State/ Country</u></i> | <i><u>Project Title</u></i> |
| <u>2016</u> | | | |
| Pisetsky, David, MD, PhD Rovin, Brad, MD Pendergraft, Will, MD, PhD | Duke University The Ohio University Wexner Medical Center UNC Kidney Center | NC OH NC | A pilot study of the utility of Dynamic Contrast Enhanced (DCE) MRI in the evaluation of lupus nephritis |
| Germano, David F., PhD | University of Virginia Contemplative Sciences Center | VA | An innovative contemplation-based intervention to suppress disease and promote health and well-being tailored for people living with systemic lupus erythematosus |