**IgA Nephropathy Research Team at UAB:**

**Progress Report for IGA Nephropathy Foundation of America**

**(*period: January 1 - October 17, 2018*)**

Studies published, presented, submitted, or in revision that acknowledge support from *IGA Nephropathy Foundation of America*:

**Published Manuscripts**

Placzek, W.J., Yanagawa, H., Makita, Y., Renfrow, M.B., Julian, B.A., Rizk, D.V., Suzuki, Y., Novak, J., Suzuki, H. Serum galactose-deficient-IgA1 and IgG autoantibodies correlate in patients with IgA nephropathy. PLoS ONE. 13(1): e0190967, 2018.

Weblink: <https://www.ncbi.nlm.nih.gov/pubmed/29324897>

Novak, J., Barratt, J., Julian, B.A., Renfrow, M.B. Aberrant glycosylation of the IgA1 molecule in IgA nephropathy. Invited review. Semin. Nephrol. 38(5), 461-476, 2018. PMID: 30177018. DOI: https://doi.org/10.1016/j.semnephrol.2018.05.016

Weblink: <https://www.ncbi.nlm.nih.gov/pubmed/30177018>

Reily, C., Rizk, D.V., Julian, B.A., Novak, J. Assay for galactose-deficient IgA1 enables mechanistic studies with primary cells from IgA nephropathy patients. BioTechniques. 65(2), 71-77, 2018. PMID: 30091383. doi: 10.2144/btn-2018-0042

Weblink: <https://www.ncbi.nlm.nih.gov/pubmed/30091383>

**Manuscripts submitted or in revision**

Stewart, T.S., Takahashi, K., Whitaker, R.H., Raska, M., Placzek, W.J., Novak, J.,\* Renfrow, M.B.,\* (\*co-corresponding co-senior authors) Connecting the mechanisms of IgA1 clustered O-glycan synthesis by GalNAc-T2 to the fidelity of IgA1 *O*-glycosylation patterns. Glycobiology. In Revision. 2018.

Moldoveanu, Z., Suzuki, H., Reily, C., Satake, K., Novak, L., Xu, N., Huang, Z.Q., Lewis, T., Khan, A., Hall, S., Brown, R., Winstead, C.J., O’Quinn, D.B., Weinmann, A., Kiryluk, K., Julian, B.A., Weaver, C.T., Suzuki, Y., Novak, J. A passive murine model that displays pathology typical of IgA nephropathy. JCI Insight. In Revision. 2018.

Reily, C.,# Stewart, T.,# Matthew B. Renfrow, M.B.,\*, Novak, J.\* Glycosylation in health and disease. (# co-first authors, \* co-senior, co-corresponding authors) Invited review. Nat. Rev. Nephrol. In Revision. 2018.

**Manuscripts in preparation for submission**

Rizk, D.V., Saha, M.K., Hall, S., Novak, L., Brown, R., Huang, Z.Q., Julian, B.A., Novak, J. Glomerular immunodeposits of patients with IgA nephropathy are enriched for IgG autoantibodies specific for galactose-deficient IgA1. J. Am. Soc. Nephrol. In Preparation. 2018.

Rizk, D.V., Maillard, N., Julian, B.A., Knoppova, B., Green, T.J., Novak, J., Wyatt, R.J. The emerging role of complement as a target for therapy of IgA nephropathy. Front. Immunol. Invited review. In Preparation. 2018.

**Abstracts Selected for Oral Presentation at International Conferences**

Reily, C. Novel method to detect galactose-deficient IgA1 revealed enhanced autoantigen production by PBMCs from IgA nephropathy patients in response to cytokines. 15th International Symposium on IgA Nephropathy, Buenos Aires, Argentina, September 27-29, 2018.

Rizk, D.V. Glomerular immunodeposits of patients with IgA nephropathy contain IgG autoantibodies specific for galactose-deficient IgA1.15th International Symposium on IgA Nephropathy, Buenos Aires, Argentina, September 27-29, 2018.

***\* Dr. Rizk received a prize from the International IgAN Network for outstanding presentation.***

**Invited Presentations at National and International Conferences**

Novak, J. Invited speaker, “From genetics to pathophysiology” in the session on “IgA nephropathy: from genes to therapeutic controversies”. 55th Congress of European Renal Association–European Dialysis and Transplantation Association (ERA–EDTA). Copenhagen, Denmark. May 24-27, 2018.

Novak, J. Invited speaker, “Defining pathogenesis of an autoimmune disease: From glycomics to genomics and back”. 7th Annual Southeastern Immunology Symposium. Immunologic Diseases and Basic Immunology. Sheraton Birmingham Hotel, Medical Forum Conference Center, Birmingham, AL. June 16-17, 2018.

Renfrow, M.B. Invited speaker, “Proteomics & glycomics”, 15th International Symposium on IgA Nephropathy, Buenos Aires, Argentina, September 27-29, 2018.

Novak, J. Invited speaker, “Can we use IgA1 immune complexes to select therapeutic targets in IgAN?” 15th International Symposium on IgA Nephropathy, Buenos Aires, Argentina, September 27-29, 2018.