

**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. 15<sup>th</sup> 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. 15<sup>th</sup> 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”. 55<sup>th</sup> 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”. 7<sup>th</sup> 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”, 15<sup>th</sup> 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?” 15<sup>th</sup> International Symposium on IgA Nephropathy, Buenos Aires, Argentina, September 27-29, 2018.