

Stanford



Tammy Lisa Sirich

Assistant Professor of Medicine (Nephrology)

Medicine - Nephrology

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor - University Medical Line, Medicine - Nephrology

ADMINISTRATIVE APPOINTMENTS

- Associate Program Director, Stanford Nephrology, (2021- present)
- Dialysis Director, VA Palo Alto, (2019- present)

PROFESSIONAL EDUCATION

- Fellowship, Stanford University , Nephrology (2011)
- Residency, Santa Clara Valley Medical Center , Internal Medicine (2009)
- MD, UC San Diego (2006)
- BS, UC Berkeley , Chemistry (2002)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

I conduct translational research focused on uremia and dialysis. I use mass spectrometry to conduct studies testing ways to reduce levels of solutes and examining the contribution of uremic solutes to illness.

CLINICAL TRIALS

- Efficacy of Diuretics in Kidney Disease, Recruiting
- Efficacy of Twice Weekly Hemodialysis in Patients With Residual Kidney Function, Recruiting

PROJECTS

- Dialysis stdKt/V Calculator App Description

Publications

PUBLICATIONS

- **The Hemodialysis Prescription: Past, Present, and Future.** *Kidney360*
Murea, M., Sirich, T. L.
2023
- **Increasing the Clearance of Protein Bound Solutes by Recirculating Dialysate through Activated Carbon.** *Kidney360*

- Meyer, T. W., Lee, S., Whitmer, L. C., Blanco, I. J., Suba, J. K., Sirich, T. L.
2023
- **Critical Appraisal of Limitations in the Current Definition/Classification of Uremic Toxins.** *Blood purification*
Husain-Syed, F., Vanholder, R., Rosner, M. H., Kawanishi, H., Sirich, T. L., Ronco, C.
2022: 1-12
 - **Effect of Furosemide on Proximal Tubular Secretion of Organic Solutes in Patients Receiving Hemodialysis.** *Clinical journal of the American Society of Nephrology : CJASN*
Sirich, T., Hostetter, T., Flythe, J.
2022
 - **Removal of Uremic Solutes from Dialysate by Activated Carbon.** *Clinical journal of the American Society of Nephrology : CJASN*
Lee, S., Sirich, T. L., Blanco, I. J., Plummer, N. S., Meyer, T. W.
2022
 - **Improving Solute Clearances by Hemodialysis.** *Blood purification*
Lee, S., Sirich, T. L., Meyer, T. W.
2022: 1-12
 - **Barriers to Reducing Hemodialysis Time and Frequency in Patients with Residual Kidney Function.** *Journal of the American Society of Nephrology : JASN*
Meyer, T. W., Blanco, I. J., Grimm, J. C., Leypoldt, J. K., Sirich, T. L.
2021; 32 (9): 2112-2116
 - **Impaired Tubular Secretion of Organic Solutes in Advanced CKD.** *Journal of the American Society of Nephrology : JASN*
Mair, R., Lee, S., Plummer, N., Sirich, T., Meyer, T.
2021
 - **Association of Plasma Uremic Solute Levels with Residual Kidney Function in Children on Peritoneal Dialysis.** *Clinical journal of the American Society of Nephrology : CJASN*
Ganesan, L., O'Brien, F., Sirich, T., Plummer, N., Sheth, R., Fajardo, C., Brakeman, P., Sutherland, S., Meyer, T.
2021
 - **Improving Clearance for Renal Replacement Therapy.** *Kidney360*
Lee, S., Sirich, T. L., Meyer, T. W.
2021; 2 (7): 1188-1195
 - **Metabolomic analysis of uremic pruritus in patients on hemodialysis.** *PLoS one*
Bolanos, C. G., Pham, N. M., Mair, R. D., Meyer, T. W., Sirich, T. L.
2021; 16 (2): e0246765
 - **Classification of Uremic Toxins and Their Role in Kidney Failure.** *Clinical journal of the American Society of Nephrology : CJASN*
Rosner, M., Reis, T., Husain-Syed, F., Vanholder, R., Hutchison, C., Stenvinkel, P., Blankestijn, P., Cozzolino, M., Juillard, L., Kashani, K., Kaushik, M., Kawanishi, H., Massy, et al
2021
 - **Impaired Tubular Secretion of Organic Solutes in Acute Kidney Injury.** *Kidney360*
O'Brien, F. J., Mair, R. D., Plummer, N. S., Meyer, T. W., Sutherland, S. M., Sirich, T. L.
2020; 1 (8): 724-730
 - **Contribution of 'clinically negligible' residual kidney function to clearance of uremic solutes** *NEPHROLOGY DIALYSIS TRANSPLANTATION*
Toth-Manikowski, S. M., Sirich, T. L., Meyer, T. W., Hostetter, T. H., Hwang, S., Plummer, N. S., Hai, X., Coresh, J., Powe, N. R., Shafi, T.
2020; 35 (5): 846-53
 - **Asymmetric dimethylarginine, erythropoietin resistance, and anemia in CKD.** *Annals of translational medicine*
Sirich, T. L., Chertow, G. M.
2019; 7 (Suppl 3): S86
 - **Accumulation of Uremic Solutes in the Cerebrospinal Fluid in Experimental Acute Renal Failure.** *American journal of physiology. Renal physiology*
Mair, R. D., Nguyen, H., Huang, T., Plummer, N. S., Sirich, T. L., Meyer, T. W.
2019

- **Blood Microbiome in CKD: Should We Care?** *CLINICAL JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY*
Mair, R. D., Sirich, T. L.
2019; 14 (5): 648–49
- **Timing of blood pressure medications and intradialytic hypotension.** *Seminars in dialysis*
Wang, K. M., Sirich, T. L., Chang, T. I.
2019
- **Plasma pseudouridine levels reflect body size in children on hemodialysis.** *Pediatric nephrology (Berlin, Germany)*
O'Brien, F. J., Sirich, T. L., Taussig, A. n., Fung, E. n., Ganesan, L. L., Plummer, N. S., Brakeman, P. n., Sutherland, S. M., Meyer, T. W.
2019
- **Characteristics of Colon-Derived Uremic Solutes.** *Clinical journal of the American Society of Nephrology : CJASN*
Mair, R. D., Sirich, T. L., Plummer, N. S., Meyer, T. W.
2018
- **Uremic Toxin Clearance and Cardiovascular Toxicities.** *Toxins*
Mair, R. D., Sirich, T. L., Meyer, T. W.
2018; 10 (6)
- **Intensive Hemodialysis Fails to Reduce Plasma Levels of Uremic Solutes** *CLINICAL JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY*
Sirich, T. L., Meyer, T. W.
2018; 13 (3): 361–62
- **Residual Function Effectively Controls Plasma Concentrations of Secreted Solutes in Patients on Twice Weekly Hemodialysis.** *Journal of the American Society of Nephrology : JASN*
Leong, S. C., Sao, J. N., Taussig, A. n., Plummer, N. S., Meyer, T. W., Sirich, T. L.
2018
- **Untargeted mass spectrometry discloses plasma solute levels poorly controlled by hemodialysis** *PLOS ONE*
Sirich, T. L., Aronov, P. A., Fullman, J., Khanh Nguyen, Plummer, N. S., Meyer, T. W.
2017; 12 (11): e0188315
- **Obstacles to reducing plasma levels of uremic solutes by hemodialysis.** *Seminars in dialysis*
Sirich, T. L.
2017; 30 (5): 403-408
- **Manipulating the microbiome** *KIDNEY INTERNATIONAL*
Sirich, T. L., Meyer, T. W.
2017; 91 (2): 274–76
- **Limited reduction in uremic solute concentrations with increased dialysis frequency and time in the Frequent Hemodialysis Network Daily Trial.** *Kidney international*
Sirich, T. L., Fong, K., Larive, B., Beck, G. J., Chertow, G. M., Levin, N. W., Klinger, A. S., Plummer, N. S., Meyer, T. W.
2017
- **Indoxyl Sulfate-Review of Toxicity and Therapeutic Strategies** *TOXINS*
Leong, S. C., Sirich, T. L.
2016; 8 (12)
- **Metabolic Profiling of Impaired Cognitive Function in Patients Receiving Dialysis** *JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY*
Tamura, M. K., Chertow, G. M., Depner, T. A., Nissenson, A. R., Schiller, B., Mehta, R. L., Liu, S., Sirich, T. L.
2016; 27 (12): 3780-3787
- **Kt/Vurea and Nonurea Small Solute Levels in the Hemodialysis Study.** *Journal of the American Society of Nephrology*
Meyer, T. W., Sirich, T. L., Fong, K. D., Plummer, N. S., Shafi, T., Hwang, S., Banerjee, T., Zhu, Y., Powe, N. R., Hai, X., Hostetter, T. H.
2016; 27 (11): 3469-3478
- **More Dialysis Has Not Proven Much Better.** *Seminars in dialysis*
O'Brien, F. J., Fong, K. D., Sirich, T. L., Meyer, T. W.

2016; 29 (6): 481-490

- **Effect of a sustained difference in hemodialytic clearance on the plasma levels of p-cresol sulfate and indoxyl sulfate** *NEPHROLOGY DIALYSIS TRANSPLANTATION*
Camacho, O., Rosales, M. C., Shafi, T., Fullman, J., Plummer, N. S., Meyer, T. W., Sirich, T. L.
2016; 31 (8): 1335-1341
- **Tubular Secretion in CKD** *JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY*
Suchy-Dacey, A. M., Laha, T., Hoofnagle, A., Newitt, R., Sirich, T. L., Meyer, T. W., Thummel, K. E., Yanez, N. D., Himmelfarb, J., Weiss, N. S., Kestenbaum, B. R.
2016; 27 (7): 2148-2155
- **An Enlarged Profile of Uremic Solutes** *PLOS ONE*
Tanaka, H., Sirich, T. L., Plummer, N. S., Weaver, D. S., Meyer, T. W.
2015; 10 (8)
- **Uremic Solutes Produced by Colon Microbes** *BLOOD PURIFICATION*
Tanaka, H., Sirich, T. L., Meyer, T. W.
2015; 40 (4): 306-311
- **Dietary Protein and Fiber in End Stage Renal Disease** *SEMINARS IN DIALYSIS*
Sirich, T. L.
2015; 28 (1): 75-80
- **Effect of Increasing Dietary Fiber on Plasma Levels of Colon-Derived Solutes in Hemodialysis Patients** *CLINICAL JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY*
Sirich, T. L., Plummer, N. S., Gardner, C. D., Hostetter, T. H., Meyer, T. W.
2014; 9 (9): 1603-1610
- **Uremic solutes and risk of end-stage renal disease in type 2 diabetes: metabolomic study** *KIDNEY INTERNATIONAL*
Niewczas, M. A., Sirich, T. L., Mathew, A. V., Skupien, J., Mohney, R. P., Warram, J. H., Smiles, A., Huang, X., Walker, W., Byun, J., Karoly, E. D., Kensicki, E. M., Berry, et al
2014; 85 (5): 1214-1224
- **Prominent Accumulation in Hemodialysis Patients of Solutes Normally Cleared by Tubular Secretion** *JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY*
Sirich, T. L., Funk, B. A., Plummer, N. S., Hostetter, T. H., Meyer, T. W.
2014; 25 (3): 615-622
- **Protein-Bound Molecules: A Large Family With a Bad Character** *SEMINARS IN NEPHROLOGY*
Sirich, T. L., Meyer, T. W., Gondouin, B., Brunet, P., Niwa, T.
2014; 34 (2): 106-117
- **Numerous protein-bound solutes are cleared by the kidney with high efficiency** *KIDNEY INTERNATIONAL*
Sirich, T. L., Aronov, P. A., Plummer, N. S., Hostetter, T. H., Meyer, T. W.
2013; 84 (3): 585-590
- **Selectively increasing the clearance of protein-bound uremic solutes** *NEPHROLOGY DIALYSIS TRANSPLANTATION*
Sirich, T. L., Luo, F. J., Plummer, N. S., Hostetter, T. H., Meyer, T. W.
2012; 27 (4): 1574-1579