

CURRICULUM VITAE

Jeffrey A. Wesson MD, PhD

**Professor
Department of Medicine
Division of Nephrology**

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EDUCATION:

09/1972 - 05/1976 B.S., Major: Chemistry (Physical), University of Illinois, Urbana
08/1976 - 08/1978 M.S., Major: Physical Chemistry (Macromolecular) Minor: Physics, University of Wisconsin, Madison
08/1980 - 09/1983 Ph.D., Major: Physical Chemistry (Macromolecular) University of Wisconsin, Madison, WI
08/1990 - 05/1994 M.D., Medical College of Wisconsin, Milwaukee, WI

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

07/1994 - 06/1997 Resident, Internal Medicine, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, WI
07/1997 - 06/1999 Fellowship, Nephrology, Medical College of Wisconsin, Milwaukee, WI

FACULTY APPOINTMENTS:

09/1985 - 12/1987 Adjunct Professor, Department of Chemistry, University of Rochester, Rochester, NY
01/1999 - 06/2005 Assistant Professor, Department of Medicine, Division of Nephrology, Medical College of Wisconsin, Milwaukee, WI
07/2005 - 06/2014 Associate Professor, Department of Medicine, Division of Nephrology, Medical College of Wisconsin, Milwaukee, WI
07/2014 - Present Professor, Medicine, Nephrology, Medical College of Wisconsin, Milwaukee, WI 53226

ADMINISTRATIVE APPOINTMENTS:

1999 - Present Director, Kidney Stone Clinic, Froedtert Memorial Lutheran Hospital, Milwaukee, WI
07/2013 - Present Dialysis Director, Medicine, Nephrology, Clement J. Zablocki Veterans Affairs Medical Center, Milwaukee, WI 53295

HOSPITAL AND CLINICAL ADMINISTRATIVE APPOINTMENTS:

01/1999 - Present Staff Physician, Internal Medicine, Medicine, Nephrology, Department of Veterans Affairs Medical Center, Milwaukee, WI 53295
07/1999 - Present Attending Staff, Department of Medicine, Nephrology, Froedtert Memorial Lutheran Hospital, Milwaukee, WI
07/1999 - 10/2001 Attending Staff, Renal Care Group Dialysis Center, Curative Rehabilitation Center, Milwaukee, WI
07/1999 - Present Staff Physician, Nephrology Section, Medicine, Nephrology, Department of Veterans Affairs Medicine Center, Milwaukee, WI 53295
07/1999 - 07/2001 Attending Staff, Fresenius Medical Care Dialysis Center, Stella Jones Dialysis Unit,

Columbia Hospital, Milwaukee, WI
 07/2001 - Present Attending Staff, Fresenius Medical Care Dialysis Center, Shorewood Dialysis Unit, Shorewood, WI
 10/2001 - Present Attending Staff, Fresenius Medical Care Dialysis Center, CentrePoint Unit, Milwaukee, WI
 07/2005 - Present Attending Staff, DaVita Wisconsin Avenue Dialysis, Milwaukee, WI
 01/2008 - Present Attending Staff, Fresenius Medical Care Dialysis Center, Pleasant Street Unit, Milwaukee, WI
 01/2012 - Present Physician, Community Memorial Hospital, Menomonee Falls, WI

HOSPITAL STAFF PRIVILEGES:

01/1999 - Present Clement J. Zablocki VA Medical Center, 5000 W. National Avenue, Milwaukee, WI
 07/1999 - Present Froedtert Memorial Lutheran Hospital, 9200 W. Wisconsin Ave., Milwaukee, WI

SPECIALTY BOARDS AND CERTIFICATION:

<u>Licensure</u>	<u>Number</u>	<u>Issue Date</u>	<u>Expiration</u>
Wisconsin License	37081	09/08/1995	10/31/2013

AWARDS AND HONORS:

06/3 - 06/4 Best Teaching Service for academic year 2003/2004, Medical College of Wisconsin
 1977 - Present American Chemical Society
 1983 - Present American Physical Society Divisions of Polymer Physics and Biological Physics
 12/1988 - Present Nominated for C.E.K. Mees Award for technical writing, Eastman Kodak Company
 1993 - Present American Society of Internal Medicine/American College of Physicians
 06/1995 - Present Best Resident Paper, Medical College of Wisconsin Affiliate Hospital Research Symposium
 09/1995 - Present Advanced to state level in Clinical Vignette Competition, American College of Physicians
 1997 - Present American Society of Nephrology, 1997-Present
 1999 - 2010 American Federation for Medical Research
 2000 - 2015 American Heart Association/Kidney Council
 2000 - Present American Association for the Advancement of Science
 2003 - Present ROCK Society
 01/2007 - Present Best Basic Science Research Poster at Internal Medicine Research Day Conference, Medical College of Wisconsin by William Zachowicz (mentor)
 04/2011 - Present Invited paper at National Kidney Foundation 6th Annual Young Investigator National Forum, Las Vegas, NV presented by Kevin Tucker, MD, Nephrology Fellow (mentor)
 05/2011 - Present MCWAH Housestaff Research Award for Kevin Tucker, MD, Nephrology Fellow (mentor)
 06/2011 - Present Department of Medicine Excellence in Research award
 07/2011 - Present Froedtert Hospital received high national ranking in five specialties, including nephrology in U.S. News & World Report's 2011-12 "Best Hospitals" list

LOCAL/REGIONAL APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2008 - Present Ad Hoc Reviewer, NIDDK/UKGD Study Section July and September meetings
 2009 - Present Ad Hoc Reviewer, NIDDK/UKGD Study Section June and September meeting
 2010 - Present Seated panel member NIDDK/UKGD Study Section July1, 2010 to June 30, 2014
 NIH

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

Local
 1. J.A. Wesson, "Crystal Surface Interactions and Kidney Stones" Laboratory for Surface Science, University of Wisconsin-Milwaukee, Milwaukee, WI, May 16, 2006
 3. J.A. Wesson, "Evaluation and Treatment of Kidney Stones" Grand Rounds, Froedtert Memorial Lutheran Hospital, Medical College of Wisconsin, Department of Medicine, Milwaukee, WI,
 4. May 18, 2001
 5. J.A. Wesson, "Assessment of macromolecular inhibitor function in kidney stone formers" Internal Medicine Fall Research Day, Froedtert Memorial Lutheran Hospital, Milwaukee, WI, October 26,

2001

6. J.A. Wesson, "The influence of protein microstructure on calcium oxalate monohydrate crystallization" Internal Medicine Fall Research Day, Helfaer Conference Center, Froedtert Memorial Lutheran Hospital, Medical College of Wisconsin, Milwaukee, WI, October 4, 2002
7. J.A. Wesson, "Newer treatments of renal stones" Invited Speaker, Grand Rounds, St. Joseph Regional Medical Center, Milwaukee, WI, February 26, 2003
8. J.A. Wesson, "Evaluation and Treatment of Kidney Stones" Community Memorial Hospital, Menomonee Falls, WI, October 10, 2003
9. J.A. Wesson, "Update on Kidney Stones" St. Michael's Hospital, Milwaukee, WI, January 15, 2004
10. J.A. Wesson, "Polycystic Kidney Disease" Educational Seminar Sponsored by the Wisconsin Chapter for the Polycystic Kidney Disease Foundation, Froedtert Memorial Lutheran Hospital, Milwaukee, WI, April 3, 2004
2. J.A. Wesson, Internal Medicine Fall Research Day, Helfaer Conference Center, Froedtert Memorial Lutheran Hospital, Medical College of Wisconsin, Milwaukee, WI, October 20, 2000

Regional

1. J.A. Wesson, "The effect of protein microstructure on calcium oxalate crystallization" Department of Chemistry, University of Wisconsin - Madison, Madison, WI, September 23, 2002
2. J.A. Wesson, "Crystal Aggregation in Kidney Stones; A Polymer Aggregation Problem" Macromolecules Seminar, Department of Chemistry, University of Wisconsin, Madison, WI, April 16, 2007

National

1. J.A. Wesson, "Protein Microstructure and Calcium Oxalate Monohydrate Crystallization" ROCK Society Annual Meeting, San Antonio, TX, February 7-10, 2002
2. J.A. Wesson, "Calcium Oxalate Kidney Stones: From the Clinics to the Laboratories" University of Rochester Medical School, Rochester, NY, July 11, 2002
3. J.A. Wesson, "Crystal Aggregation and Stone Formation" ROCK Society Annual Meeting, Wrightsville Beach, NC, March 1, 2003
4. J.A. Wesson, "Regulation of Kidney Stone Formation by Macromolecules" Pathology Department, University of Florida, Gainesville, FL, March 17, 2005
5. J.A. Wesson, "Regulation of Kidney Stone Formation by Macromolecules" ROCK Society Annual Meeting, Chicago, IL, April 29, 2005
6. J.A. Wesson, "Regulation of Kidney Stone Formation by Macromolecules" American Conference on Crystal Growth and Epitaxy, Big Sky, MT, July 10-15, 2005
7. J.A. Wesson, "Intratubular Control of Crystal Formation and Aggregation" NIDDK Urolithiasis Symposium, Baltimore, MD, March 9-10, 2006
8. J.A. Wesson, "Crystal Aggregation in Kidney Stones; A Protein Aggregation Problem" ROCK Society Annual Meeting, Dallas, TX, March 16, 2007
9. J.A. Wesson, "Crystal Aggregation in Kidney Stones; A Protein Aggregation Problem" Polymer Science and Engineering Department, University of Massachusetts, Amherst, MS, November 13, 2007
10. J.A. Wesson, "The Link between Post-Translational Modifications of Tamm-Horsfall Protein and Calcium Oxalate Aggregation" ROCK Society Annual Meeting, Durham, NC, June 6, 2008
11. J.A. Wesson, "Crystal Aggregation in Kidney Stones: A Polymer Aggregation Process." Department of Chemistry, University of Florida, Gainesville, FL, March 3, 2009
12. J.A. Wesson, "Kidney Stone Prevention: First Treat Urine Supersaturation, Then What?" Urology Grand Rounds, Department of Urology, University of Florida, Gainesville, FL, March 4, 2009
13. J.A. Wesson, "Crystal Aggregation in Kidney Stones: A Protein Aggregation Problem?" Department of Pharmacology, Toxicology, and Neurosciences, Louisiana State University Medical School - Shreveport, LA, May 4, 2009
14. J.A. Wesson, "Calcium Oxalate Monohydrate Crystal Aggregation: A Protein Aggregation Problem?" The 17th American Conference on Crystal Growth and Epitaxy (ACCGE), Lake Geneva, WI, August 9-14, 2009
15. J.A. Wesson, "Protein Induced Calcium Oxalate Aggregation: A Conceptual Model" ROCK Society Annual Meeting, Chaska, MN, October 2-3, 2009.
16. J.A. Wesson, "Net Charge Assay: A Promising New Test for Kidney Stone Risk?" ROCK Society Annual Meeting, Boston, MA, November 5-6, 2010.
17. J.A. Wesson, "Organic-inorganic composites: exploring polymer-calcium oxalate crystal interactions in

kidney stones" Kodak Research Laboratories, Eastman Kodak Company, Rochester, NY, May 21, 2001

International

1. J.A. Wesson, "Crystal Aggregation in Kidney Stones; A Protein Aggregation Problem" ESPCI, Paris, FRANCE, September 11, 2008

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. WESSON, J.A., Takezoe, H., Yu, H., and Chen, S.P.: Dye diffusion in swollen gels by forced Rayleigh scattering. *J. Appl. Phys.* 53 (10): 6513-6519, 1983.
2. WESSON, J.A., Noh, I., Kitano, T., and Yu, H.: Self-diffusion of polystyrenes by forced Rayleigh scattering. *Macromolecules* 17(4): 782-792, 1984.
3. Nemoto, N., Landry, M.R., Noh, I., Kitano, T., WESSON, J.A., and Yu, H.: Concentration dependence of self-diffusion co-efficient by forced Rayleigh scattering. *Macromolecules* 18(2): 308-310, 1984.
4. Patton, E. V., WESSON, J. A., Rubinstein, M., Wilson, J. C., and Oppenheimer, L. E.: Scaling properties of branched polyesters. *Macromolecules* 22(4): 1946-1959, 1989.
5. DeMejo, L., Massa, D., WESSON, J., and Wilson, J.: The influence of rheology and molecular architecture on the fusing behavior of toners. *Proc. SPIE Int. Soc. Opt Eng.*, vol. 1253, *Hard Copy and Printing Materials, Media and Processes*, pp. 85-95, 1990.
6. Long, T. E., Kelts, L. W., Turner, S. R., WESSON, J. A., and Mourey, T. H.: Synthesis and characterization of well-defined star polymers via a controlled sol-gel process. *Macromolecules* 24 (6): 1431-1434, 1991.
7. Mourey, T. H., Miller, S. M., WESSON, J. A., Long, T. E., and Kelts, L. W.: Hydrolysis and condensation-coupling of phenyltrimethoxysilyl-terminated polystyrene macromonomers. *Macromolecules* 25 (1): 45-52, 1992.
8. Landry, C. J. T., Coltrain, B. K., WESSON, J. A., Zumbulyadis, N., and Lippert, J. L.: In-situ polymerization of tetraethoxysilane in polymers. 2. Chemical nature of interactions. *Polymer* 33 (7): 1496-1506, 1992.
9. WESSON, J.A. and Worcester, E.M.: Formation of hydrated calcium oxalates in the presence of poly-L-aspartic acid. *Scanning Microscopy* 10:415-424, 1996
10. WESSON, J. A., Worcester, E. M., Wiessner, J. H., Mandel, N.S., and Kleinman, J. G.: Control of calcium oxalate crystal structure and cell adherence by urinary macromolecules. *Kidney Int.* 53: 952-957, 1998.
11. WESSON, J.A., Worcester, E.M., and Kleinman, J.G.: Role of anionic proteins in kidney stone formation: Interaction between model anionic polypeptides and calcium oxalate crystals. *J. Urol.* 163:1343-1348, 2000.
12. Beshensky, A.M., WESSON, J.A., Worcester, E.M., Sorokina, E.J., Synder, C.J., and Kleinman, J.G.: The effect of urinary macromolecules on hydroxyapatite crystal formation. *J. Am. Soc. Nephrol.*, 12:2108-2116, 2001.
13. Mazzali, M., Kipari, T., Ophascharoensuk, V., WESSON, J.A., Johnson, R., and Hughes, J.: Osteopontin - a molecule for all seasons. *Queens J. Med.*, 95:3-13, 2002.
14. Guo, S., Ward, M.D., and WESSON, J.A.: Direct visualization of calcium oxalate monohydrate (COM) crystallization and dissolution with atomic force microscopy (AFM) and the role of polymeric additives. *Langmuir*, 18:4284-4291, 2002.
15. WESSON, J. A., Johnson, R. J., Mazzali, M., Beshensky, A. M., Stietz, S., Giachelli, C., Liaw, L., Alpers, C., Couser, W. G., Kleinman, J. G., and Hughes, J.: Osteopontin is a critical inhibitor of calcium oxalate crystal formation and retention in renal tubules. *J. Am. Soc. Nephrol.* 14:139-147, 2003.
16. Sheng, X., Ward, M.D., and WESSON, J.A.: Adhesion between molecules and calcium oxalate crystals: critical interactions in kidney stone formation. *J. Am. Chem. Soc.* 125:2854-2855, 2003.
17. Sorokina, E.A., WESSON, J.A., and Kleinman, J.G.: An acidic peptide sequence of nucleolin-related protein can mediate the attachment of calcium oxalate to renal tubule cells. *J. Am. Soc. Nephrol.* 15: 2057-2065, 2004.
18. Jung, T., Sheng, X., Choi, C.K., Kim, W.S., WESSON, J.A., and Ward, M.D.: Probing calcium oxalate monohydrate crystal growth and the role of macromolecular additives with in situ atomic force microscopy. *Langmuir* 20:8587-8596, 2004.
19. Sheng, X., Jung, T., WESSON, J.A., and Ward, M.D.: Adhesion at calcium oxalate crystal surfaces and the effect of urinary constituents. *Proc. Nat. Acad. Sci.* 102:267-272, 2004.

20. WESSON, J.A., Ganne, V., Beshensky, A.M., and Kleinman, J.G.: Regulation by macromolecules of calcium oxalate crystal aggregation in stone formers. *Urological Research*, 33:206-212, 2005.
21. Sheng, X., Ward, M. D., WESSON, J. A.: Crystal surface adhesion explains the pathological activity of calcium oxalate hydrates in kidney stone formation. *J. Am. Soc. Nephrol.*, 16:1904-1908, 2005.
22. WESSON, J. A., Ward, M. D.: Role of crystal surface adhesion in kidney stone disease. *Current Opinion in Nephrology and Hypertension*. 15:386-393, 2006.
23. WESSON, J.A., Ward, M.D.: Unraveling pathological biomineralization. *Elements*, December, 3:415-421, 2007.
24. Kleinman, J. G., Alatalo, L., Beshensky, A., WESSON, J.A.: Prevention of calcium oxalate crystal deposition by the acidic polyanion poly (acrylic acid). *Kidney Int.* 74:919-924, 2008.
25. Kleinman, J.G, Sorokina, E., WESSON, J.A.: Induction of apoptosis with cisplatin enhances calcium oxalate crystal adherence to inner medullary collecting duct cells. *Urol. Res.* 38:97-104, 2010.
26. Rimer, J.D., An, Z., Zhu, Z., Lee, M.H., Goldfarb, D.S., Wesson, J.A., Ward, M.D.: Crystal growth inhibitors for the prevention of L-cystine kidney stones through molecular design. *Science*. 330:337-341, 2010.
27. An, Z., Lee, S., Oppenheimer, H., WESSON, J.A., Ward, M.D.: Attachment of calcium oxalate monohydrate crystals on patterned surfaces of proteins and lipid bilayers. *J. Am. Chem. Soc.* 132:13188-90, 2010.
28. Pragasam, V., Beshensky, A., Rimer, J., Ward, M.D., Kleinman, J.G., WESSON, J.A.: Calcium oxalate monohydrate aggregation is induced by desialylated Tamm-Horsfall protein aggregation. *Urol. Res*, 39:269-282, 2011.
29. Kolbach, A.M., Afzal, O., Halligan, B., Sorokina, E., Kleinman, J.G., WESSON, J.A.: Relative deficiency of acidic isoforms of osteopontin from stone former urine. Submitted to *Urol. Res*, June, 2011.
30. Invited Papers/Symposia Contributions
31. WESSON, J. A., Kleinman, J. G., Wiessner, J. H., Mandel, N. S., and Worcester, E. M.: Inhibitor proteins in urine favor formation of calcium oxalate dihydrate crystals, which have a smaller affinity for renal tubule cells than monohydrate. In: *Urolithiasis 1996. Proceedings of the Eighth International Symposium on Urolithiasis*. Pak, C.Y.C., Resnick, M.A., and Preminger, G.M., Editors, Millet the Printer, Dallas, pp. 351-352, 1996. Presented at the Proceedings of the VIII International Symposium on Urolithiasis, Dallas, TX, September 29-October 2, 1996
32. WESSON, J.A., Weissner, J.H, Mandel, N.S., and Kleinman, J.G.: Polymer chemical structures that control calcium oxalate polymorphism. In: *Urolithiasis 2000. Proceedings of the Ninth International Symposium on Urolithiasis*. Rodgers, A.L., Hibbert, B.E., Hess, B., Khan, S.R., and Preminger, G.M., Editors, University of Cape Town, Rondebosch, Cape Town, pp. 109-112, 2000.
33. Beshensky, A.M., WESSON, J.A., Worcester, E.M., Snyder C., and Kleinman, J.G.: Urinary protein effects on heterogeneous nucleation of calcium oxalate on hydroxyapatite. In: *Urolithiasis 2000. Proceedings of the Ninth International Symposium on Urolithiasis*. Rodgers, A.L., Hibbert, B.E., Hess, B., Khan, S.R., and Preminger, G.M., Editors, University of Cape Town, Rondebosch, Cape Town, pp. 116-118, 2000.
34. Beshensky, A.M., WESSON, J.A., Worcester, E.M., Snyder, C., and Kleinman, J.G.: Growth and secondary nucleation of hydroxyapatite crystals. In: *Urolithiasis 2000. Proceedings of the Ninth International Symposium on Urolithiasis*. Rodgers, A.L., Hibbert, B.E., Hess, B., Khan, S.R., and Preminger, G.M., Editors, University of Cape Town, Rondebosch, Cape Town, pp. 189-191.
35. WESSON, J.A., Sheng, X., Jung, T., and Ward, M.D.: Characterization of calcium oxalate crystal surfaces at near molecular levels. In: *Kidney Stones: Inside and Out. Proceedings of the 10th International Symposium on Urolithiasis*. M.D.I. Gohel and D Wtau, Editors, The Hong Kong Polytechnic University, Hong Kong, 2004, pp. 23-25.
36. WESSON, J.A., Beshensky, A.M., and Kleinman, J.G.: Aggregation promotion in calcium stone formation. In: *Kidney Stones: Inside and Out. Proceedings of the 10th International Symposium on Urolithiasis*. M.D.I. Gohel and D Wtau, Editors, The Hong Kong Polytechnic University, Hong Kong, 2004, pp.78-79.
37. WESSON, J.A., Beshensky, A., Afzal, O., Ganne, V., and Kleinman, J.: Assessment of macromolecular inhibitor function in kidney stone formers. In: *Kidney Stones: Inside and Out. Proceedings of the 10th International Symposium on Urolithiasis*. M.D.I. Gohel and D Wtau, Editors, The Hong Kong Polytechnic University, Hong Kong, 2004, pp. 54-56.
38. Kleinman, J.G., WESSON, J.A., and Hughes, J.: Osteopontin and calcium stone formation. *Nephron Physiol.* 98:43-47, 2004.
39. Kleinman, J.G., WESSON, J.A., and Sudakoff, G.S.: Types of kidney stones and their pathogenesis. *Clin. Rev. Bone Miner. Metab.* 2:187-207, 2004.

Books, Chapters, and Reviews

1. Yu, H., Kitano, T., Kim, C. Y., Amis, E. J., Chang, T., Landry, M. R., WESSON, J. A., Han, C. C., Lodge, T. P., and Glinka, C. J.: Study of the uniaxial deformation of rubber network chains by small angle neutron scattering. In: *Advances in Elastomers and Rubber Elasticity*. J. Lal, J. E. Marks, eds.; Plenum, pp. 407-420, 1987.
2. Long, T.E, Kelts, L.W., Mourey, T.H. and WESSON, J.A.: Star Polymers via a controlled Sol-Gel Process. In: *Star and Hyperbranched Polymers (Plastics Engineering Series/53)*. M.K. Mishra, S. Kobayashi, eds.: Marcel Dekker, Inc., New York, NY, pp. 179-199, 1999.
3. Effros, R.M. and WESSON, J.A. Acid-Base Balance. In: *Textbook of Respiratory Medicine*, 4th Edition. Murray J.F. and Nadel, J.A., Eds. W. B. Saunders Company, Philadelphia, June 2005
4. WESSON, J.A., Nephrolithiasis. In: *Kochar's Clinical Medicine for Students*, Fifth Edition. Torre, D.M., Lamb, G.C., Ruiswyk, J.V., and Schapira, R.M., Eds. Lippincott Williams & Wilkins, Philadelphia, pp. 535 - 539, 2007
5. WESSON, J.A., Dall A. Chapter 28: A Nephrology Consult. *Neurocritical Care* 1st edition. Ed. Torbey, MT. Cambridge, 2010.

Editorials, Letters to Editor, Other

1. Merrill, K., WESSON, J.A., Simon, K., Etherton, G., Helm, R., and Jacobson, S.J.: First year medical students' opinions and projected practice behaviors regarding abortion. *Academic Med.* 68 (2): 171, 1993.
2. Shrishrimal, K., WESSON, J.A.: Sulfamethoxazole crystalluria. *Am J Kidney Dis* 58(3):492-3, 2011.

Abstracts

1. WESSON, J. A., and Sharma, R.: Dye mobility in polyurethane using forced Rayleigh scattering. Presented at the American Physical Society, March 1990.
2. WESSON, J. A., Patten, E. V., Hewitt, J. M., and Wilson, J. C.: Polymer growth in branched polyesters: experimental determination of the extent of reaction. Presented at the American Physical Society, March 1990.
3. WESSON, J.A., Kleinman, J.G., Mandel, N.S., and Weissner, J.H.: The influence of polymers on calcium oxalate polymorphism. Presented at the American Physical Society Conference, Atlanta, Georgia, March 20-26, 1999.
4. WESSON, J.A., Weissner, J.H, Mandel, N.S., and Kleinman, J.G.: Polymer chemical structures that control calcium oxalate polymorphism. Presented at the American Federation of Clinical Research, Midwest Regional Meeting, Drake Hotel, Chicago, IL, September 16-18, 1999.
5. Beshensky, A.M., WESSON, J.A., Worcester, E.M., Snyder, C., and Kleinman, J.G.: Urinary protein effects of heterogeneous nucleation of calcium oxalate on hydroxyapatite Presented at the American Federation of Clinical Research, Midwest Regional Meeting, Drake Hotel, Chicago, IL, September 16-18, 1999.
6. Beshensky, A.M., WESSON, J.A., Worcester, E.M., Synder, C. and Kleinman, J.G.: Urinary protein effects on heterogeneous nucleation of calcium oxalate on hydroxyapatite. *J. Am. Soc. Nephrol.* 10:606A, 1999.
7. Beshensky, A.M., WESSON, J.A., Worcester, E.M., Synder, C., and Kleinman, J.G.: Growth and secondary nucleation of hydroxyapatite crystals. *J. Am. Soc. Nephrol.* 10:605A, 1999.
8. WESSON, J.A.: The influences of calcium oxalate crystal structure on kidney stone formation. Poster and brief oral presentation at Biomineralization Gordon Research Conference, Colby-Sawyer College, New London, NH, August 13-18, 2000.
9. Beshensky, A.M., WESSON, J.A., and Kleinman, J.G.: Growth and secondary nucleation of calcium oxalate crystals. Presented at the American Federation of Clinical Research, Midwest Regional Meeting, Drake Hotel, Chicago, IL, September 21-23, 2000.
10. Beshensky, A., WESSON, J.A., Kleinman, J., Liaw, L. Seietz, S., Ciachelli, C., Mazzali, M., Johnson, R., and Hughes, J.: Renoprotective modulation of calcium oxalate crystal structure by osteopontin in vivo. *J. Am. Soc. Nephrol.* 11:558A, 2000.
11. Beshensky, A.M. Snyder, C.J., Kleinman, J.G, and WESSON, J.A.: Assessment of macromolecular inhibitor function in kidney stone formers. Presented at the American Federal for Medical Research, Midwest Regional Meeting, September 5-8, 2001, Drake Hotel, Chicago, IL.
12. WESSON, J.A., Beshensky, A.M., Alatalo, L.J., and Kleinman, J.G.: Characterization of urinary proteins in stone formers and normals. Presented at the American Federal for Medical Research, Midwest

- Regional Meeting, September 5-8, 2001, Drake Hotel, Chicago, IL.
13. WESSON, J.A., McMahon, E., Perry, B.W., Pierce, B.M., and Breshahan, B.A.: Problems with serum creatinine determination. *J. Am. Soc. Nephrol.* 12:739A, 2001. Presented at the 34th Annual Meeting of the American Society of Nephrology, San Francisco, CA, October 14-17, 2001.
 14. Beshensky, A.M. Snyder, C.J., Kleinman, J.G. and WESSON, J.A.: Assessment of macromolecular inhibitor function in kidney stone formers. *J. Am. Soc. Nephrol.* 12:750A, 2001. Presented at the 34th Annual Meeting of the American Society of Nephrology, San Francisco, CA, October 14-17, 2001.
 15. WESSON, J.A., Beshensky, A.M., Alatalo, L.J., and Kleinman, J.G.: Characterization of urinary proteins in stone formers and normals. *J. Am. Soc. Nephrol.* 12:760A, 2001. Presented at the 34th Annual Meeting of the American Society of Nephrology, San Francisco, CA, October 14-17, 2001.
 16. Sorokina, E.A., WESSON, J.A., and Kleinman, J.G.: Attachment of calcium oxalate crystals (CaOx) to inner medullary collecting duct cells (IMCD) mediated by acidic fragment (AC) of nucleolin-related protein (NRP). *J. Am. Soc. Nephrol.* 12: 759A, 2001. Presented at the 34th Annual Meeting of the American Society of Nephrology, San Francisco, CA, October 14-17, 2001.
 17. WESSON, J.A., Beshensky, A.M., Alatalo, L.J., Snyder, C.J., and Kleinman, J.G.: Abnormalities of urinary inhibitors in kidney stone formers. Presented at the annual ROCK Society Meeting, February 7-10, 2002, Menger Hotel, San Antonio, TX.
 18. Kleinman, J.G., WESSON, J.A., Johnson, R.J., Mazzali, M., Beshensky, A.M., Stietz, S., Giachelli, C., Liaw, L., Alpers, C., Couser, W.G., Sorokina, E.A., and Hughes, J.: Osteopontin in nephrolithiasis: cell culture, animal, and human studies. Presented at the 3rd International Conference on Osteopontin, May 10-12, 2002, Menger Hotel, San Antonio, TX.
 19. WESSON, J.A., Guo, S., Ward, M.D.: Influence of protein microstructure on calcium oxalate monohydrate crystallization. Presented at the 34th Great Lakes regional Meeting, American Chemical Society, June 2-4, 2002, Minneapolis, MN.
 20. WESSON, J.A., Guo, S., Sheng, X., Beshensky, A.M., Kleinman, J.G., and Ward, M.D.: The influence of protein microstructure on calcium oxalate monohydrate crystallization. Poster presentation at the FASEB Annual Research Conference, Saxton's River, VT, August 4-9, 2002.
 21. WESSON, J.A., Guo, S., Ward, M.D.: Probing calcium oxalate monohydrate crystallization with AFM. Presented at Biomineralization Gordon Research Conference, Colby-Sawyer College, New London, NH, August 11-16, 2002.
 22. WESSON, J.A., Kleinman, J.G., Beshensky, A.M., Sorokina, E.A., and Hughes, J.: Osteopontin in nephrolithiasis. *J. Am. Soc. Nephrol.* 13: 574A, 2002. Presented at the 35th Annual Meeting of the American Society of Nephrology, October 30-November 4, 2002, Philadelphia, PA.
 23. WESSON, J.A., Ganne, V., Beshensky, A.M., Sheng, X., Guo, S., and Ward, M.D.: Crystal aggregation and stone formation. Presented at the annual ROCK Society Meeting, March 1, 2003, Wrightsville beach, NC.
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