


**CURRICULUM VITAE FOR ADAM IAN KAPLIN**  
The Johns Hopkins University School of Medicine

Signature   
Adam Ian Kaplin

Date 4/14/17

## DEMOGRAPHIC INFORMATION

### Current Appointments

**2004- Present Chief Neuropsychiatric Consultant, Multiple Sclerosis Center of Excellence**  
Department of Psychiatry and Neurology  
Johns Hopkins University School of Medicine

### Personal Data

**Business Address:** Johns Hopkins Hospital  
Department of Psychiatry and Behavioral Sciences  
600 North Wolfe Street/ Meyer 121  
Baltimore, MD 21287-7121

**Phone:** Office: (410)-614-3307  
Mobile: (410)

**E-mail:** akaplin@jhmi.edu

### Education and Training

- 1985-1988 B.S., Biology - *Magna cum laude*, Yale University, New Haven, CT**  
(Brandeis University 1984-85, transferred to Yale)
- 1989-1996 M.D., Johns Hopkins University School of Medicine, Baltimore, MD**  
Medical Scientist Training Program
- 1989-1996 Ph.D., Johns Hopkins University School of Medicine, Baltimore, MD**  
Department of Neuroscience, Advisor - Solomon H. Snyder, M.D.
- 1996-1997 Internship, Internal Medicine, Johns Hopkins Bayview Medical Center, Baltimore, MD**
- 1997-2000 Residency Training, Psychiatry, Johns Hopkins Hospital, Baltimore, MD**
- 1999-2000 Chief Resident, Department of Psychiatry, Johns Hopkins Hospital, Baltimore, MD**

## RESEARCH ACTIVITIES

### Research Training Experience

Summer 1986 Summer Student Fellowship Program, National Cancer Institute, FCRC, Frederick, MD

- Summer 1987 Undergraduate Research Program**, Cold Spring Harbor, NY  
Laboratory of David Spector, Ph.D.  
Investigation of functional significance of the *in situ* Sm Ag
- 1987-1988 Undergraduate Senior Research Thesis**, Yale University, New Haven, CT  
Department of Biology, Laboratory of Sidney Altman, Ph.D. (Nobel Laureate)  
Investigation of enzymatic activity of a continuous RNA construct in *E. coli*
- 1988-1989 Assistant Researcher**, Yale University School of Medicine, New Haven, CT  
Laboratory of George Palade, M.D. (Nobel Laureate)  
Investigation of vesicular transport and protein trafficking in mammalian cells
- 1991-1995 Ph.D. Research Thesis**, Johns Hopkins University School of Medicine, Baltimore, MD  
Laboratory of Solomon Snyder, M.D.  
**Thesis:** New mechanisms involved in intracellular calcium signaling: Novel means of activating inositol 1,4,5-trisphosphate receptors.

## Publications

### Peer Reviewed Original Research Articles

1. Sztul E, **Kaplin A**, Saucan L, Palade G. Protein traffic between distinct plasma membrane domains: isolation and characterization of vesicular carriers involved in transcytosis. *Cell*. 1991; 64(1): 81-9.
2. **Kaplin AI**, Ferris CD, Voglmaier SM, Snyder SH. Purified reconstituted inositol 1, 4, 5-trisphosphate receptors: Thiol reagents act directly on receptor protein. *J. Biol. Chem.* 1994; 269: 28972-28978.
3. Cameron AM, Steiner JP, Sabatini DM, **Kaplin AI**, Walensky LD, Snyder SH. Immunophilin FK506 Binding Protein Associated with Inositol 1,4,5-Trisphosphate Receptor Modulates Calcium Flux. *Proc. Natl. Acad. Sci. USA*. 1995; 92: 1784-1788.
4. **Kaplin AI**, Snyder SH, Linden DJ. Reduced nicotinamide adenine dinucleotide-selective stimulation of inositol 1,4,5-trisphosphate receptors mediates hypoxic mobilization of calcium. *J. of Neuroscience*. 1996; 16(6): 2002-2011.
5. Voglmaier SM, Bembenek ME, **Kaplin AI**, Dorman G, Olszewski JD, Prestwich GD, Snyder SH. Purified inositol hexakisphosphate kinase is an ATP synthase -diphosphoinositol pentakisphosphate as a high-energy phosphate donor. *Proc. Natl. Acad. Sci. USA*. 1996; 93(9): 4305-4310.
6. Pieper AA, Brat DJ, O'Hearn E, Krug DK, **Kaplin AI**, Takahashi K, Greenberg JH, Ginty D, Molliver ME, Snyder SH. Differential neuronal localizations and dynamics of phosphorylated and unphosphorylated type 1 inositol 1,4,5-trisphosphate receptors. *Neuroscience*. 2001; 102(2): 433-44.
7. Treisman GJ, **Kaplin AI**. Neurologic and psychiatric complications of antiretroviral agents. *AIDS*. 2002; 16(9): 1201-15.
8. Kerr DA, Barnes G, Benjamin S, Bowen JD, Cutter N, de Lateur BJ, Dietrich WD, Dowling MM, Griffin JW, Hummers L, Irani, D, Jorens PG, **Kaplin AI**, Katz JD, Krishnan C, Levy CE, Lucchinetti C. Proposed diagnostic criteria and nosology of acute transverse myelitis

9. Krishnan C, **Kaplin AI**, Deshpande DM, Pardo CA, Kerr DA. Transverse Myelitis: pathogenesis, diagnosis and treatment. *Frontiers in Bioscience*. 2004; 9: 1483-1499.
10. Watkins CC, Boehning D, **Kaplin AI**, Rao M, Ferris CD, Snyder SH. Carbon monoxide mediates vasoactive intestinal polypeptide-associated nonadrenergic/noncholinergic neurotransmission. *Proc Natl Acad Sci U S A*. 2004; 101(8): 2631-2635.
11. **Kaplin AI**, Krishnan C, Deshpande DM, Pardo CA, Kerr DA. Diagnosis and Management of Acute Myelopathies. *The Neurologist*. 2004; 11(1): 2-18.
12. Patterson RL, van Rossum DB, **Kaplin AI**, Barrow RK, Snyder SH. Inositol 1,4,5-triphosphate receptor / GAPDH complex augments Ca<sup>2+</sup> release via locally derived NADH. *Proceedings of the National Academy of Sciences (PNAS)*. 2005; 102(5): 1357-1359.
13. Krishnan C, **Kaplin AI**, Graber JS, Darman JS, Kerr DA. Recurrent transverse myelitis following neurobrucellosis: Immunologic features and beneficial response to immunosuppression. *Journal of Neurovirology*. 2005; 11(2): 225-231.
14. Berger JR, Cambi F, Di Rocco A, Farace J, **Kaplin AI**, Kerr DA, Keswani SC, Krishnan C, Olson SE, Zivin JA. Spinal Cord Disorders. *AAN Continuum Life Long Learning in Neurology*, 2005; 11(3).
15. **Kaplin AI**, Deshpande DM, Scott E, Krishnan C, Darman JS, Shats I, Martinez T, Drummond J, Dike S, Pletnikov M, Keswani SC, Moran TH, Pardo CA, Calabresi PA, Kerr DA. Interleukin-6 induces regionally selective spinal cord injury in patients with the neuroinflammatory disorder transverse myelitis. *Journal of Clinical Investigation*. 2005; 115(10): 2731-2741.
16. **Kaplin A**, Bartner S. Reciprocal Communication between the Nervous and Immune Systems: crosstalk, back-talk and motivational speeches. *International Review of Psychiatry*. 2005; 17(6): 439-441
17. Pucak ML, **Kaplin AI**. Unkind cytokines: Current evidence for the potential role of cytokines in immune-mediated depression. *International Review of Psychiatry*, 2005; 17(6): 477-483.
18. Krishnan C, **Kaplin AI**, Pardo C, Kerr DA, Keswani SC. Demyelinating disorders: update on transverse myelitis. *Current Neurology and Neuroscience Reports*. 2006; 6(3): 236-243.
19. Greenberg BM, Thomas KP, Krishnan C, **Kaplin AI**, Calabresi PA, Kerr DA. Idiopathic transverse myelitis: corticosteroids, plasma exchange, or cyclophosphamide. *Neurology*. 2007; 68(19):1614-1617
20. **Kaplin AI**, Williams M. How common are the “common” neurologic disorders? *Neurology*. 2007; 69(4): 410-411.
21. Hammond ER, **Kaplin AI**, Kerr DA. Thalidomide for acute treatment of neurosarcoidosis. *Spinal Cord*. 2007; 45(12): 802-803.
22. Pucak ML, Carroll KA, Kerr DA, **Kaplin AI**. Neuropsychiatric manifestations of depression in multiple sclerosis: neuroinflammatory, neuroendocrine, and neurotrophic mechanisms in the pathogenesis of immune-mediated depression. *Dialogues in Clinical Neuroscience*. 2007; 9(2): 125-139

23. Graber JJ, Allie SR, Mullen KM, Jones MV, Wang T, Krishnan C, **Kaplin AI**, Nath A, Kerr DA, Calabresi PA. Interleukin-17 in transverse myelitis and multiple sclerosis. *Journal of Neuroimmunology*, 2008;196(1-2):124-132.
24. Krishnan C, **Kaplin AI**, Brodsky RA, Drachman DB, Jones RJ, Pham DL, Richert ND, Pardo CA, Yousem DM, Hammond E, Quigg M, Trecker C, McArthur JC, Nath A, Greenberg BM, Kerr DA. Reduction of disease activity and disability with high-dose Cyclophosphamide in patients with aggressive multiple sclerosis. *Archives of Neurology*. 2008; 65(8): 1044-1051.
25. Taylor J, Watkins C, **Kaplin A**. Kleine-Levin syndrome: A disease in its own right? *Nature Clinical Practice Neurology*. 2008; 4(10): 534-535.
26. **Kaplin A**, Carroll KA, Cheng J, Allie R, Lyketsos CG, Calabresi P, Rosenberg PB. IL6 Release by LPS-stimulated peripheral blood mononuclear cells as a potential biomarker in Alzheimer's Disease. *International Psychogeriatrics*. 2009; 21(2): 413-4.
27. Trecker C, Kozubal D, Quigg M, Hammond E, Krishnan C, Sim P, **Kaplin AI**. Quality Care in Transverse Myelitis: A Responsive Protocol. *Journal of Child Neurology* 2009; 24(5): 577-83.
28. **Kaplin AI**, Sedlak TW. Novel Neurotransmitters. Kaplan and Sadock's Comprehensive Textbook of Psychiatry. 2009; 9th ed. 1: 102 -7
29. Jamison KR, Wyatt RJ, **Kaplin AI**. The Patient's Perspective. New Oxford Textbook of Psychiatry. 2009 2nd ed. 1: 3-4
30. Hammoud, D. A., Endres, C. J., Hammond, E., Uzuner, O., Brown, A., Nath, A., **Kaplin, A.**, Pomper, M. Imaging serotonergic transmission with [11C]DASB-PET in depressed and non-depressed patients infected with HIV. *NeuroImage*. 2010;49(3):2588-2595. PMID: 19853044
31. **Kaplin AI** and Stagg RE. Depression in Multiple Sclerosis. *Multiple Sclerosis Therapeutics*. 2011 3rd ed. 825-44.
32. Foreman AC, Hall C, Bone K, Cheng J, **Kaplin A**. Just Text Me: Using SMS Technology for Collaborative Patient Mood Charting. *Journal of Participatory Medicine*. 2011 Sep 26; 3: e45
33. Kristen Rahn, Barbara Slusher, **Kaplin, Adam I**. Glutamate in CNS neurodegeneration and cognition and its regulation by GCPII inhibition. *Current Medicinal Chemistry*. 2012 Mar 1; 19(9): 1335-45.
35. Inhibition of Glutamate Carboxypeptidase II activity as a treatment for cognitive impairment in multiple sclerosis. Kristen A. Rahn, Crystal C. Watkins, Jesse Altb, Rana Rais, Marigo Stathis, Inna Grishkan, Ciprian M. Crainiceau, Martin G. Pomper, Camilo Rojas, Mikhail V. Pletnikov, Peter A. Calabresi, Jason Brandt, Peter B. Barker, Barbara S. Slusher, and **Adam I. Kaplin**. *Proceedings of the National Academy of Sciences U S A*. 2012 Dec 4; 109(49): 20101-6.
36. Wong H, Bakare A, Benoit C, Wang J, Smith T, McCready SC, Guo H, Yu Q, Speed T, **Kaplin AI**. Evidence-based Medicine – Short Message Service Texting Ascertains Student Mood Fluctuations over the Winter Holiday Season. *iHealth Connections*. 2012; 2(1): 65-9.
37. Kozubal DE, Samus QM, Bakare AA, Trecker CC, Wong HW, Guo H, Cheng J, Allen PX, Mayer LS, Jamison KR, **Kaplin AI**. Separate may not be equal: A preliminary Investigation of Clinical Correlates of Electronic Psychiatric Record Accessibility in Academic Medical centers. *International Journal Medical Informatics*. 2012 Dec 19; 82(4): 260-7
38. Kristen A. Rahn, Ying-Jun Cao, Craig W. Hendrix, Adam I. **Kaplin**. The Role of 5-HT1A Receptors in Mediating Acute Negative Effects of Antidepressants: Implications in Pediatric

39. Kristen A. Rahn, Barbara Slusher, Adam I. **Kaplin**. Cognitive Impairment in Multiple Sclerosis: A Forgotten Disability Remembered. *Cerebrum*. 2012; 14. Epub.
39. Adam I. **Kaplin**, Laura Anzaldi. New Movement in Neuroscience: A Purpose-Driven Life. *Cerebrum*. 2015; 7.
40. Kristen R. Hollinger, Jesse Alt, Alison Riehm, Barbara S. Slusher, Adam I. **Kaplin**. Dose-Dependent Inhibition of GCPII to Prevent and Treat Cognitive Impairment in the EAE Model of Multiple Sclerosis. *Brain Research*. 2016; 1635: 105-12
41. Kristen R. Hollinger, Caroline Franke, Ana Arenivasa, Steven R. Woods, Maureen A. Mealy, Michael Levy, Adam I. **Kaplin**. Cognition, Mood, and Purpose in Life in Neuromyelitis Optica Spectrum Disorder. *Journal of the Neurological Sciences*. 2016; 362: 85-90.

### Patents/Applications

- 9/14/07 **Kaplin AI**, Kerr DA. “Method of Identifying Patients Suitable for High-Dose Cyclophosphamide Treatment” Pending provisional patent application PCT/US07/78518 filed 14-Sep-2007 JHU Ref. C05071
- 10/1/07 **Kaplin AI**, Kerr DA. “Combined Treatment of CNS Autoimmune Diseases (e.g. Multiple Sclerosis) with Immunoablative Doses of Cyclophosphamide and Glatiramer Acetate to Immunize Against Autoimmune Disease Reactivation” Pending provisional patent application 60/997,074 filed 01-Oct-2007 JHU Ref. C10194
- 3/17/08 **Kaplin AI**, Calabresi PA. “An Assay to Assess Aldehyde Dehydrogenase Activity from Adult Human Immune Cells to Predict the Dosing, Safety and Efficacy and Dosing of High-Dose Cyclophosphamide in the Treatment of Autoimmune Diseases” Pending provisional patent application 61/037,059 filed 17-Mar-2008 JHU Ref. C10332
- 5/1/09 Brodsky R, Jones R, **Kaplin AI**. “Use of High-dose Oxazaphosphorine Drugs in Combination with Monoclonal Antibodies for Treating Immune Disorders” Pending provisional patent application 12/434,125 filed 01-May-2009 JHU Ref. C05098
- 7/11/09 **Kaplin AI**. “Combined Treatment of CNS Autoimmune Diseases (eg. Multiple Sclerosis) with Immunoablative Doses of Cyclophosphamide and Antithymocyte Antibody Treatment (eg. Antithymocyte Globulin) to Achieve a Maximum Efficacy with Minimum Relapse Rate” Submitted for application 11-July-2009 JHU Ref. C10437
- 7/21/09 **Kaplin AI**. “Methods for Treating or Preventing an Autoimmune Disease Comprising Administering Cyclophosphamide and ATG, Optionally in Combination with Glatiramer Acetate (Copaxone)” Submitted for application 21-July-2009 JHU Ref. C10814
- 7/21/09 **Kaplin AI**, Worthington M. “Methods for Treating or Preventing an Autoimmune Disease Comprising Administering Cyclophosphamide and an Additional Immunomodulatory Agent” Submitted for application 21-July-2009 JHU Ref. C10815
- 9/22/11 **Kaplin AI**. “Electronic System and Method for Patient Self-Assessment or Treatment Compliance” Submitted for application 22-September-2011
- 12/14/11 **Kaplin AI**, Rahn K, Slusher B. Treatment of Cognitive Impairment in a Subject with a Neurological Autoimmune Disease, U.S. Patent Application No.: 13/994,514
- 12/6/12 **Kaplin AI**, Rahn K. Preventing Suicidality and Impulsivity in Children and Adolescents

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.