



## Jacob S. Ballon

Clinical Associate Professor, Psychiatry and Behavioral Sciences

### CLINICAL OFFICES

- **Psychiatry**

401 Quarry Rd Ste 2206

MC 5723

Stanford, CA 94305

**Tel** (650) 723-8335

**Fax** (650) 724-7389

### ACADEMIC CONTACT INFORMATION

- **Research Contact**

Daniel Virtheim - Research Coordinator

**Email** [dmvirt@stanford.edu](mailto:dmvirt@stanford.edu)

**Tel** (650) 353-7030

### Bio

---

#### BIO

Jacob S. Ballon, M.D., M.P.H. specializes in the treatment of people with psychotic disorders including schizophrenia. He is the Co-Director of the INSPIRE Clinic at Stanford which provides interdisciplinary care for people experiencing psychosis. He is also the medical director of H2 acute inpatient unit and the co-director of the specialty psychiatry clinics section in the Department of Psychiatry. Dr. Ballon completed his residency at Stanford in 2009 and a Schizophrenia Research Fellowship at Columbia University in 2011.

INSPIRE is an innovative interdisciplinary client-centered resource providing respectful evidence-based care to support people to achieve meaningful recovery from psychosis through collaborative partnership with individuals and their families while advancing knowledge and training for a new generation of providers. With a recovery-oriented philosophy, the clinic provides an array of services including psychopharmacology, psychotherapy, and psychosocial evaluations. As a research clinic, they are focused on collaborating with multiple disciplines throughout the university to conduct clinical and basic science research including functional imaging, clinical trials, basic pathophysiology, and genetics.

Dr. Ballon maintains an interest in understanding the connections between the brain and the rest of the body as relates to the manifestation and treatment of people who experience psychosis. He co-chairs a diverse working group that brings together researchers from throughout the university and technology community to investigate these connections and look at innovative ways to combine large-scale data to elucidate new strategies for developing pathways to prevention or treatment of psychosis. He has active projects investigating the metabolic implications of schizophrenia and of psychiatric medication including the association of antipsychotic medication with weight gain and insulin resistance.

In understanding the whole-body impact of psychiatric illness, Dr. Ballon also has an active interest in the role that exercise can play in psychiatric treatment. He co-chairs Brain-Ex, a multidisciplinary research partnership of clinical research, neuroscience, exercise physiology, and prevention medicine to build the capacity to study the impact of physical exercise on brain response, reward pathways, neuroprotection, and prevention of psychiatric disorders. This program aims to study the neurobiology of elite athletic performance, sustained exercise behavior, and the subjective experience of exercise, as well as the potential for exercise to prevent and

reverse neurodegenerative psychiatric disorders. He is the site-principal investigator of an NIMH-funded clinical trial looking at the use of aerobic exercise to improve cognition in people with schizophrenia.

## CLINICAL FOCUS

- Psychiatry
- psychosis
- schizophrenia
- early psychosis

## ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Psychiatry and Behavioral Sciences

## ADMINISTRATIVE APPOINTMENTS

- Medical Director, H2 - Inpatient Psychiatry Unit, Stanford Hospital, (2018- present)
- Co-Section Chief, Specialty Clinics Section, Stanford University, Department of Psychiatry and Behavioral Sciences, (2017- present)
- Co-Director, INSPIRE Clinic, Stanford University Department of Psychiatry and Behavioral Sciences, (2014- present)
- Chief Resident, Stanford University Department of Psychiatry and Behavioral Sciences, (2008-2009)

## HONORS AND AWARDS

- Chairman's Award for Clinical Innovation, Stanford University, Department of Psychiatry and Behavioral Science (2016)
- Fellow, American Psychiatric Association (2014)
- Resident Travel Award, Clinical Trials Workshop, American Society of Clinical Psychopharmacology (2010)
- Janssen Research Scholar, American Psychiatric Institute for Research and Education (APIRE) (2008)
- Resident Travel Award, Clinical Trials Workshop, American Society of Clinical Psychopharmacology (2008)
- PRITE Fellow, American College of Psychiatrists (2006-2008)
- Resident Travel Award, Univ. of Pittsburgh, Schizophrenia Conference (2006)
- Mark B. Fefferman, MD Memorial Award, University of California, San Diego School of Medicine (2005)

## PROFESSIONAL EDUCATION

- M.D., University of California, San Diego (2005)
- Residency, Stanford University , Department of Psychiatry and Behavioral Sciences (2009)
- Schizophrenia Research Fellow, Columbia University (2011)
- M.P.H., Columbia University , Health Policy and Management (2013)

## LINKS

- INSPIRE Clinic Homepage: [http://med.stanford.edu/psychiatry/patient\\_care/inspire.html](http://med.stanford.edu/psychiatry/patient_care/inspire.html)

## Research & Scholarship

---

### CLINICAL TRIALS

- A Study to Assess the Effects of RO6889450 in Participants With Schizophrenia or Schizoaffective Disorder and Negative Symptoms, Recruiting
- Improving Cognition Via Exercise in Schizophrenia, Recruiting
- Study to Evaluate the Efficacy of ALKS 3831 on Body Weight in Young Adults Who Have Been Recently Diagnosed With Schizophrenia, Schizophreniform, or Bipolar I Disorder, Recruiting

- A Study to Compare Disease Progression and Modification Following Treatment With Paliperidone Palmitate Long-Acting Injection or Oral Antipsychotics in Participant's With Recent-onset Schizophrenia or Schizophreniform, Not Recruiting
- Bromocriptine for Patients With Schizophrenia and Impaired Glucose Tolerance, Not Recruiting

## Publications

---

### PUBLICATIONS

- **How genome-wide association studies (GWAS) made traditional candidate gene studies obsolete** *NEUROPSYCHOPHARMACOLOGY*  
Duncan, L. E., Ostacher, M., Ballon, J.  
2019; 44 (9): 1518–23
- **How genome-wide association studies (GWAS) made traditional candidate gene studies obsolete.** *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*  
Duncan, L. E., Ostacher, M., Ballon, J.  
2019
- **VALIDATION OF THE NDSE, A NEW SELF REPORT SCALE FOR PEOPLE WITH PSYCHOSIS**  
Noordsy, D., Spelber, D., Ballon, J.  
OXFORD UNIV PRESS.2019: S348
- **Clozapine Titration for People in Early Psychosis A Chart Review and Treatment Guideline** *JOURNAL OF CLINICAL PSYCHOPHARMACOLOGY*  
Ballon, J. S., Ashfaq, H., Noordsy, D. L.  
2018; 38 (3): 234–38
- **Pathophysiology of drug induced weight and metabolic effects: findings from an RCT in healthy volunteers treated with olanzapine, iloperidone, or placebo** *JOURNAL OF PSYCHOPHARMACOLOGY*  
Ballon, J. S., Pajvani, U. B., Mayer, L. S., Freyberg, Z., Freyberg, R., Contreras, I., Rosenbaum, M., Leibel, R. L., Lieberman, J. A.  
2018; 32 (5): 533–40
- **Therapeutic Potential of Physical Exercise in Early Psychosis.** *The American journal of psychiatry*  
Noordsy, D. L., Burgess, J. D., Hardy, K. V., Yudofsky, L. M., Ballon, J. S.  
2018; 175 (3): 209–14
- **The Impact of Hypomania on Aerobic Capacity and Cardiopulmonary Functioning-A Case Report.** *Frontiers in psychiatry*  
Shoval, A., Armstrong, H. F., Vakhrusheva, J., Ballon, J. S., Bartels, M. N., Kimhy, D.  
2018; 9: 729
- **Impact of age of onset of psychosis and engagement in higher education on duration of untreated psychosis** *JOURNAL OF MENTAL HEALTH*  
Hardy, K. V., Noordsy, D. L., Ballon, J. S., McGovern, M. P., Salomon, C., Stirman, S.  
2018; 27 (3): 257–62
- **Intrinsic and Antipsychotic Drug-Induced Metabolic Dysfunction in Schizophrenia** *FRONTIERS IN NEUROSCIENCE*  
Freyberg, Z., Aslanoglou, D., Shah, R., Ballon, J. S.  
2017; 11: 432
- **Aerobic Exercise Training in People with Schizophrenia: Neural, Cognitive, and Functional Benefits**  
Kimhy, D., Vakhrusheva, J., Bartels, M. N., Ballon, J. S., Castren, E., Sloan, R. P.  
ELSEVIER SCIENCE INC.2017: S162–S163
- **GENETIC CORRELATION ANALYSIS OF SCHIZOPHRENIA MIRRORS KNOWN EPIDEMIOLOGICAL RELATIONSHIPS AND SUGGESTS NOVEL ASSOCIATIONS**  
Duncan, L., Shen, H., Ballon, J. S., Hardy, K., Noordsy, D.  
OXFORD UNIV PRESS.2017: S73
- **Genetic Correlation Profile of Schizophrenia Mirrors Epidemiological Results and Suggests Link Between Polygenic and Rare Variant (22q11.2) Cases of Schizophrenia.** *Schizophrenia bulletin*  
Duncan, L. E., Shen, H., Ballon, J. S., Hardy, K. V., Noordsy, D. L., Levinson, D. F.  
2017

- **Verbigeration: An overlooked symptom of a "forgotten syndrome"?** *Bipolar disorders*  
Mason, D. P., Tan, M., Lee, J., Wolstencroft, P., Sanborn, K., Ballon, J. S.  
2017; 19 (8): 710–12
- **Ultra-low dose clozapine treatment for people with early psychosis: Development of tailored treatment guidelines**  
Noordsy, D., Ashfaq, H., Ballon, J.  
WILEY-BLACKWELL.2016: 177–78
- **The impact of aerobic exercise training on cardiopulmonary functioning in individuals with schizophrenia** *SCHIZOPHRENIA RESEARCH*  
Armstrong, H. F., Bartels, M. N., Paslavski, O., Cain, D., Shoval, H. A., Ballon, J. S., Khan, S., Sloan, R. P., Kimhy, D.  
2016; 173 (1-2): 116–17
- **Aerobic exercise for cognitive deficits in schizophrenia - The impact of frequency, duration, and fidelity with target training intensity** *SCHIZOPHRENIA RESEARCH*  
Kimhy, D., Lauriola, V., Bartels, M. N., Armstrong, H. F., Vakhrusheva, J., Ballon, J. S., Sloan, R. P.  
2016; 172 (1-3): 213–15
- **Use of Active-Play Video Games to Enhance Aerobic Fitness in Schizophrenia: Feasibility, Safety, and Adherence** *PSYCHIATRIC SERVICES*  
Kimhy, D., Khan, S., Ayanrouh, L., Chang, R. W., Hansen, M. C., Lister, A., Ballon, J. S., Vakhrusheva, J., Armstrong, H. F., Bartels, M. N., Sloan, R. P.  
2016; 67 (2): 240-243
- **The Impact of Aerobic Exercise on Brain-Derived Neurotrophic Factor and Neurocognition in Individuals With Schizophrenia: A Single-Blind, Randomized Clinical Trial** *SCHIZOPHRENIA BULLETIN*  
Kimhy, D., Vakhrusheva, J., Bartels, M. N., Armstrong, H. F., Ballon, J. S., Khan, S., Chang, R. W., Hansen, M. C., Ayanruoh, L., Lister, A., Castren, E., Smith, E. E., Sloan, et al  
2015; 41 (4): 859-868
- **A SINGLE-BLIND RANDOMIZED CLINICAL TRIAL OF AEROBIC EXERCISE IN INDIVIDUALS WITH SCHIZOPHRENIA: IMPACT ON BRAIN-DERIVED NEUROTROPHIC FACTOR AND NEUROCOGNITION**  
Kimhy, D., Vakhrusheva, J., Bartels, M. N., Armstrong, H. F., Ballon, J. S., Khan, S., Chang, R. W., Hansen, M. C., Ayanruoh, L., Lister, A. M., Rotundo, L., Castren, E., Smith, et al  
OXFORD UNIV PRESS.2015: S83
- **Aerobic fitness and body mass index in individuals with schizophrenia: Implications for neurocognition and daily functioning** *PSYCHIATRY RESEARCH*  
Kimhy, D., Vakhrusheva, J., Bartels, M. N., Armstrong, H. E., Ballon, J. S., Khan, S., Chang, R. W., Hansen, M. C., Ayanruoh, L., Smith, E. E., Sloan, R. P.  
2014; 220 (3): 784-791
- **Molecular pathophysiology of metabolic effects of antipsychotic medications** *TRENDS IN ENDOCRINOLOGY AND METABOLISM*  
Ballon, J. S., Pajvani, U., Freyberg, Z., Leibel, R. L., Lieberman, J. A.  
2014; 25 (11): 593-600
- **Emotional granularity and social functioning in individuals with schizophrenia: An experience sampling study** *JOURNAL OF PSYCHIATRIC RESEARCH*  
Kimhy, D., Vakhrusheva, J., Khan, S., Chang, R. W., Hansen, M. C., Ballon, J. S., Malaspina, D., Gross, J. J.  
2014; 53: 141-148
- **Polypharmacy for schizophrenia** *CURRENT OPINION IN PSYCHIATRY*  
Ballon, J., Stroup, T. S.  
2013; 26 (2): 208-213
- **METFORMIN AND IMPAIRED GLUCOSE TOLERANCE IN OVERWEIGHT PERSONS WITH SCHIZOPHRENIA**  
Ballon, J. S., Hamer, R. M., Catellier, D. J., Stewart, D., Lavange, L., Golden, L., Lieberman, J., Stroup, T., Jarskog, L.  
OXFORD UNIV PRESS.2011: 24
- **Signaling pathways in schizophrenia: emerging targets and therapeutic strategies** *TRENDS IN PHARMACOLOGICAL SCIENCES*  
Karam, C. S., Ballon, J. S., Bivens, N. M., Freyberg, Z., GirgiS, R. R., Lizardi-Ortiz, J. E., Markx, S., Lieberman, J. A., Javitch, J. A.  
2010; 31 (8): 381-390
- **Teaching Pearls from the Lost Art of Psychopharmacology** *JOURNAL OF PSYCHIATRIC PRACTICE*  
Glick, I. D., Balon, R. J., Ballon, J., Rovine, D.  
2009; 15 (5): 423-426

- **HEALTH SERVICES OUTCOMES IN VETERANS WITH SCHIZOPHRENIA AND TRAUMATIC BRAIN INJURY**  
Ballon, J. S., Brooks, J. O., King, R., Hoblyn, J.  
OXFORD UNIV PRESS.2009: 323
- **Olanzapine** *AMERICAN PSYCHIATRIC PUBLISHING TEXTBOOK OF PSYCHOPHARMACOLOGY, 4TH EDITION*  
Ballon, J. S., Wirshing, D. A., Schulz, S., Schatzberg, A. F., Nemeroff, C. B.  
2009: 573–98
- **Social functioning in young people at risk for schizophrenia** *60th Annual Convention of the Society-of-Biological-Psychiatry*  
Ballon, J. S., Kaur, T., Marks, I. I., Cadenhead, K. S.  
ELSEVIER IRELAND LTD.2007: 29–35
- **A systematic review of modafinil: Potential clinical uses and mechanisms of action** *JOURNAL OF CLINICAL PSYCHIATRY*  
Ballon, J. S., Feifel, D.  
2006; 67 (4): 554-566
- **The effects of novel antipsychotics on glucose and lipid levels** *JOURNAL OF CLINICAL PSYCHIATRY*  
Wirshing, D. A., Boyd, J. A., Meng, L. R., Ballon, J. S., Marder, S. R., Wirshing, W. C.  
2002; 63 (10): 856-865