Jonathan Cachat, PhD

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Profile

Higher education veteran looking for local job in more traditional role after 5+ years in start-up cannabis space. Neuroscience/Data Science (PhD) with CRM experience in Higher Ed (hub-spot) and business (SalesForce), able to quickly learn Slate and OU specific processes & procedures. In IT Support role since 2000, starting local IT support company, working as support specialist with IT department at Denison University & IT lead at Tulane University, before data management post-graduate positions at University of California, San Diego (CalIT2) and UC Davis (CLIR Postdoc). Organized, detail-oriented & able to integrate, learn from constructive criticism. Dedicated to helping organizations reach achievable goals by developing workflows and formalizing processes with input from multiple stakeholders.

Able to connect with potential students in an admissions perspective and discuss value of higher education for career/life goals - roles as academic advisor and student mentor at Tulane University and Hocking College. Professional and business style is research-focused, data-drive and educational. Very skilled at translating between academic disciplines & departments.

Experience

Executive Director, CCV Research, LLC – Jan 2015 to Present

CCV Research is a cannabis company providing consulting and business development from cultivation technology to product development, analytical testing, legislative policy advocacy and public education. Board of Directors of Cleveland School of Cannabis, also developed healthcare curriculum modules. Consultant work

Dir of Laboratory Sciences, Scientific Director Hocking College – Sept 2017 - Apr 2019

created curriculum and learning goals for the nation's first Associates's Degree in Laboratory Sciences for Cannabis Lab Technician. managed the entire approval process from planning and submission to the Ohio Department of Higher Education to approval by the accreditation body and federal student loan bodies. Spoke with interested students and families about program, outcomes and networking opportunities, logging each interaction in Hocking College's HubSpot CRM system. Scheduled follow-ups, wrote admission email templates, worked with admissions department on workflow. Earned media and press about new lab sciences program, which is now one of Hocking College’s most popular programs.

conceptualized and developed a Third-Party Testing Laboratory application for Ohio's Medical Marijuana Control Program, which was the only public application awarded a certificate of operation. Built lab from the ground up including floor plan design, instrument

and equipment selection, security system functionality, SOPs and processes, and regulatory compliance. Personally managed the lab's business model, client acquisition, staff selection, pricing and purchasing, marketing and political advocacy for the lab.

Postdoc Research Fellow - Data Curation, Data Scientist, UC Davis - July 2013 - July 2015
Working with the University Library, developed strategies and programs for the collection, description, organization, normalization, storage, preservation, integration, visualization and mining of data across the spectrum of neuroscience programs on campus.

Data Scientist - Neuroscience Information Framework, UC San Diego - Jan 2011 - Oct 2013
The NIF project (www.neuinfo.org) is a resource description framework and semantic deep search strategy for locating, accessing, and utilizing data, resources and tools available for neuroscience research. My responsibilities for NIF include: database curation, SQL statement queries into quick searches, use case documentation, screencast recording, UI/UX development, outreach and social media management.

Sr Psychopharmacology Researcher - Tulane University - Jan 2009 - Dec 2012
Developed novel research methodologies to explore the relationship between drugs, the brain and behavior. A worldwide expert on the use of adult zebrafish in neurobehavioral and psychopharmacological research. Licensed by the DEA for research with Controlled Substances in schedules 1-4.

Education

Ph.D., Neuroscience - Tulane University New Orleans, LA (2012)

M.S., Neuroscience - Tulane University New Orleans, LA (2011)

B.S., Social Neuroscience (IDM) - Denison University Granville, OH (2008)

Skills

Microsoft Office, G-Suite, Adobe Creative Cloud Expert
Familiar with R, Python (SciPi), MatLab, WolframAlpha, proficient with RapidMiner
HTML, RDF, CSS, Webmaster Tools, Social Media Management
Mac power user, Windows user
Ability to Troubleshoot, productively google & ask a friend, to resolve issues without data loss.

Volunteer/ Associations

Students for Sensible Drug Policy - UC Davis Faculty Advisor

Research Interests

Behavioral Neuroscience, Social Neuroscience, Psychopharmacology, Public Policy. Complex, Multi-faceted Problems, Heterogenous Data Integration, Visual Analytics, UX/UI Development, Design, Multimedia Production; Executing, Testing, Measuring, Reiterating

Avid Tech and Comedy Podcast Listener - Regularly with [illegible] Laporte since the cabin days.

Honors & Awards

Oct 2012	**UC Davis 1st Place - Poster Presentation**
Oct 2012	**UC Davis 1st Place - Talk**
Oct 2012	**Dynamic Poster Session - Society for Neuroscience 2012**
Nov 2010	**Graduate Student Travel Award - Society for Neuroscience 2010** Greater New Orleans Society for Neuroscience Chapter (GNOSN)
April 2010	**NSF Graduate Research Fellowship Program (GRFP) - Honorable Mention**
June 2008	**Dialectical Model of Human Nature - U.S. Copyright**
May 2008	**Dialectical Model of Human Nature - Philosophy Art Award of Distinction** Denison University

References

Available Upon Request

Articles

1. Stewart A, Cachat J, *et. al.* Constructing the habituome for phenotype-driven zebrafish research. Behav Brain Res, 2013; 236: 110–117. PMID: 22944516
2. Roth A, Kyzar E, Cachat J, *et. al.* Potential translational targets revealed by linking mouse grooming behavioral phenotypes to gene expression using public databases. Progress Neuropsychopharmacol Biol Psychiatry, 2013; 40: 312–325. PMID: 23123364
3. Kyzar E, Pham M, Roth A, Cachat J, *et. al.* Alterations in grooming activity and syntax in heterozygous SERT and BDNF knockout mice: The utility of behavior-recognition tools to characterize mutant mouse phenotypes. Brain Res Bull, 2012; 89: 168–176. PMID: 22951260
4. Green J, Collins C, Kyzar E, Pham M, Roth A, Gaikwad S, Cachat J, *et. al.* Automated high-throughput neurophenotyping of zebrafish social behavior. J of Neuro Methods, 2012; 210: 266–271. PMID: 22884772
5. Cachat J, *et. al.* Unique and potent effects of acute ibogaine on zebrafish: The developing utility of novel aquatic models for hallucinogenic drug research. Behav Brain Res, 2012; 236C: 258–269. PMID: 22974549
6. Cachat J, *et. al.* A survey of the neuroscience resource landscape: perspectives from the neuroscience information framework. Int Rev Neurobiol, 2012; 103: 39–68. PMID: 231951201
7. Kalueff A, Stewart A, Kyzar E, Cachat J, *et. al.* Time to recognize zebrafish 'affective' behavior. Behaviour, 2012; 149: 1019–1036.
8. Bandrowski A, Cachat J, *et. al.* A hybrid human and machine resource curation pipeline for the Neuroscience Information Framework. Database, 2012; bas005. PMID: 22434839
9. Williams L, Wong K, Stewart A, Suciu C, Gaikwad S, Wu N, DiLeo J, Grossman L, Cachat J, *et. al.* Behavioral and physiological effects of RDX on adult zebrafish. Comp Biochem Phys 2012; 155: 33-38. PMID: 21382508
10. Gaikwad S, Stewart A, Hart P, Wong K, Piet V, Cachat J, Kalueff AV. Acute stress disrupts performance of zebrafish in the cued and spatial memory tests: the utility of fish models to study stress-memory interplay. Behav Processes, 2011; 87: 224–230. PMID: 21545830
11. Stewart A, Riehl R, Wong K, Green J, Cosgrove J, Vollmer K, Kyzar E, Hart P, Allain A, Cachat J, *et. al.* Behavioral effects of MDMA ("Ecstasy") on adult zebrafish. Behav Pharmacol 2011; 22: 275–280. PMID: 21522057
12. Stewart A, Wu N, Cachat J, *et. al.* Pharmacological modulation of anxiety-like phenotypes in adult zebrafish behavioral models. Progress Neuropsychopharmacol Biol Psychiatry 2011; 35: 1421-1431. PMID: 21122812
13. Cachat J, *et. al.* Three-dimensional neurophenotyping of adult zebrafish behavior. PLoS One 2011: 6: e17597. PMID: 21408171
14. Stewart A, Wong K, Cachat J, *et. al.* Zebrafish models to study drug abuse-related phenotypes. Rev in Neuro 2011; 22(1): 95-105. PMID: 21615264
15. Cachat J, *et. al.* Measuring behavioral and endocrine responses to novelty stress in adult zebrafish. Nature Protocols 2010; 5(11): 1786-1799. PMID: 21030954
16. Stewart A, Cachat J, *et. al.* Homebase behavior of zebrafish in novelty-based paradigms. Behav Processes 2010; 85: 198-203. PMID: 21030954
17. Wong K, *et. al.* Modeling seizure-related behavioral and endocrine phenotypes in adult zebrafish. Brain Res 2010; 1348: 209-215. PMID: 20035794
18. Grossman L, *et. al.* Characterization of behavioral and endocrine effects of LSD on zebrafish. Behav Brain Res 2010; 214(2): 277-284. PMID: 20561961
19. Stewart A, Wong K, Cachat J, *et. al.* Neurosteroid vitamin D system as a non-traditional drug target in neuropsychopharmacology. Behav Pharmacol 2010; 21: 420-426. PMID: 20571365
20. Stewart A, Kadri F, DiLeo J, Chung K, Cachat J, *et. al.* The developing utility of zebrafish in modeling neurobehavioral disorders. Int J Compar Psychol 2010; 23: 104-121.

Articles (Con't)

21. Denmark A, Tien D, Wong K, Chung A, Cachat J, *et. al.* The effects of chronic social defeat stress on mouse self-grooming behavior and its patterning. Behav Brain Res 2010; 208(2): 553-559. PMID: 20060021

22. Wong K, *et. al.* Analyzing habituation responses to novelty in zebrafish (*Danio rerio*). Behav Brain Res 2010; 208: 450-457. PMID: 20035794

23. Cachat J, *et. al.* Modeling withdrawal syndrome in zebrafish. Behav Brain Res 2010; 208 (2): 371-376. PMID: 20006651

24. LaPorte J, Egan R, Hart P, Bergner C, Cachat J, Canavello P, Kalueff AV. Qui non proficit, deficit: Experimental models for 'integrative' research of affective disorders. J Affect Disorders 2010; 121: 1-9. PMID: 19428115

25. Tuohimaa P, Keisala T, Cachat J, Kalueff A. Vitamin D, nervous system and aging. Psychoneuroendocrinology 2009; 34S: S278-S286. PMID: 19660871

26. Egan R, Bergner C, Hart R, Cachat J, *et. al.* Understanding behavioral and physiological phenotypes of stress and anxiety in zebrafish. Behav Brain Res 2009; 205: 38-44. PMID: 19540270

Books

1. *Zebrafish Models in Neurobehavioral Research*. A.V. Kalueff and J. Cachat (editors), Humana Press, NY 2010.

2. *Zebrafish Neurobehavioral Protocols*. A.V. Kalueff and J. Cachat (editors), Humana Press, NY 2010.

Chapters

1. Canavello P, Cachat J, *et. al.* Behavioral phenotyping of mouse grooming and barbering. In: *Behavioral Genetics of the Mouse*. Ed: W. Crusio, F. Sluyter, R. Gerlai, S. Pietropaolo, Cambridge University Press. 2013, in press.

2. Maximino C, Lima M, Aruajo J, Oliveira K, Herculano A, Stewart A, Kyzar E, Cachat J, Kalueff A. The Serotonergic System of Zebrafish: Genomics, Neuroanatomy and Neuropharmacology. In: *Serotonin: Biosynthesis, Regulation and Health Implications*, Ed: S. Hall, Nova Science, NY. 2013, in press.

3. Dow E, Piet V, Stewart A, Gaikwad S, Cachat J, *et. al.* Modeling mouse anxiety and sensorimotor integration: phenotypes in the Suok Test. In: *Mood and Anxiety Related Phenotypes in Mice: Characterization Using Behavioral Tests*, Ed: T. Gould, Humana Press, NY. 2011; 2: 61-81.
4. Cachat J, *et. al.* Modeling Stress and Anxiety in Zebrafish. In: *Zebrafish Models in Neurobehavioral Research.* Ed: A.V. Kalueff, and J. Cachat, Humana Press, NY. 2010; 72-88.

5. Cachat J, *et. al.* Video-aided analysis of zebrafish locomotion and anxiety-related behavioral responses. In: *Zebrafish Neurobehavioral Protocols*. Ed: A.V. Kalueff, and J. Cachat, Humana Press, NY. 2010; 1-14.

6. Cachat J, *et. al.* Deconstructing Adult Zebrafish Behavior with Swim Trace Visualizations. In: *Zebrafish Neurobehavioral Protocols*. Ed: A.V. Kalueff, and J. Cachat, Humana Press, NY. 2010; 191- 201.

7. Canavello P, Cachat J, *et. al.* Measuring endocrine (cortisol) responses of zebrafish to stress. In: *Zebrafish Neurobehavioral Protocols*. Ed: A.V. Kalueff, and J. Cachat, Humana Press, NY. 2010; 135-142.

8. Stewart A, Cachat J, *et. al.* Phenotyping of Zebrafish Homebase Behaviors in Novelty-Based Tests. In: *Zebrafish Neurobehavioral Protocols*. Ed: A.V. Kalueff, and J. Cachat, Humana Press, NY. 2010; 143-156.

9. Stewart A, Maximino C, Marques de Brio T, Herculano A, Gouveia A, Morato S, Cachat J, *et. al.* Neurophenotyping of Adult Zebrafish Using the Light/Dark Box Paradigm. In: *Zebrafish Neurobehavioral Protocols*. Ed: A.V. Kalueff, and J. Cachat, Humana Press, NY. 2010; 157-168.

10. Stewart A, Cachat J, *et. al.* Intraperitoneal Injection as a Method of Psychotropic Drug Delivery. In: *Zebrafish Neurobehavioral Protocols*. Ed: A.V. Kalueff, and J. Cachat, Humana Press, NY. 2010; 169-180.

Chapters

11. Linker A, Stewart A, Gaikwad S, Cachat J, *et. al.* Assessing the Maximum Predictive Validity for Neuropharmacological Anxiety Screening Assays Using Zebrafish. In: *Zebrafish Neurobehavioral Protocols*. Ed: A.V. Kalueff, and J. Cachat, Humana Press, NY. 2010; 181-190.

12. Bergner C, Egan R, Hart P, Cachat J, *et. al.* Mutant and Transgenic Zebrafish in Modeling Neurobehavioral Disorders. In: *Transgenic and Mutant Models of Brain Disorders*. Ed: A.V. Kalueff and C. Bergner, Humana Press, NY, 2009; 3-12.

13. Canavello P, Egan R, Bergner C, Hart P, Cachat J, Kalueff A. Genetic Animal Models of Depression. In: *Transgenic and Mutant Models of Brain Disorders*. Ed: A.V. Kalueff and C. Bergner, Humana Press, NY, 2009; 191-200.

Conferences & Abstracts

Selected Abstracts (7 of 30)

1. Cachat J, *et. al.* Three-dimensional neurophenotyping of adult zebrafish behavior: updates, achievements and future directions. Society for Neuroscience (SfN) 2012; (New Orleans, LA).

2. Cachat J, *et. al.* The Zebrafish Neurophenome Project (ZNP) database: Developing Use Cases and Terminology Standardization. Society for Neuroscience (SfN) 2012; (New Orleans, LA).

3. Cachat J, *et. al.* Effects of the hallucinogenic drug psilocybin on zebrafish behavior and physiology. Behavioral, Biology, and Chemistry (BBC): Translational Research In Addiction 2012; (Austin, TX).

4. Cachat J, *et. al.* Visualizing Adult Zebrafish 3D Behavior and its Utility for Neuroscience Research. National Academies Keck Futures Initiative Conf (NAKFI): Imaging Conf. 2010; (San Diego, CA)

5. Cachat J, *et. al.* Understanding Behavioral Phenotypes of LSD and MDMA in Adult Zebrafish. Society for Neuroscience (SfN) 2010; (San Diego, CA).

6. Cachat J, *et. al.* Developing Adult Zebrafish-based Models of Neuropsychiatric and Neurological Disorders: Anxiety, Epilepsy, Withdrawal and Drug Abuse. Aquatic System Models of Human Diseases Conf. 2010; (Corvallis, OR).

7. Cachat J, *et. al.* Three-Dimensional Reconstructions of Zebrafish Emotional Behavior. ISBS Stress and Behavior Conf. 2010; (St. Petersburg, Russia).

Industry & Associations

The Society for Neuroscience (SfN)

The American Society for Pharmacology and Experimental Therapeutics (ASPET)

Noldus Information Technologies - Zebrafish Behavior & EthoVision XT collaborator

References

References Available Upon Request

Articles

1. Stewart A, Cachat J, *et. al.* Constructing the habituome for phenotype-driven zebrafish research. Behav Brain Res, 2013; 236: 110–117. PMID: 22944516
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3. Kyzar E, Pham M, Roth A, Cachat J, *et. al.* Alterations in grooming activity and syntax in heterozygous SERT and BDNF knockout mice: The utility of behavior-recognition tools to characterize mutant mouse phenotypes. Brain Res Bull, 2012; 89: 168–176. PMID: 22951260
4. Green J, Collins C, Kyzar E, Pham M, Roth A, Gaikwad S, Cachat J, *et. al.* Automated high-throughput neurophenotyping of zebrafish social behavior. J of Neuro Methods, 2012; 210: 266–271. PMID: 22884772
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6. Cachat J, *et. al.* A survey of the neuroscience resource landscape: perspectives from the neuroscience information framework. Int Rev Neurobiol, 2012; 103: 39–68. PMID: 231951201
7. Kalueff A, Stewart A, Kyzar E, Cachat J, *et. al.* Time to recognize zebrafish 'affective' behavior. Behaviour, 2012; 149: 1019–1036.
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10. Gaikwad S, Stewart A, Hart P, Wong K, Piet V, Cachat J, Kalueff AV. Acute stress disrupts performance of zebrafish in the cued and spatial memory tests: the utility of fish models to study stress-memory interplay. Behav Processes, 2011; 87: 224–230. PMID: 21545830
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13. Cachat J, *et. al.* Three-dimensional neurophenotyping of adult zebrafish behavior. PLoS One 2011: 6: e17597. PMID: 21408171
14. Stewart A, Wong K, Cachat J, *et. al.* Zebrafish models to study drug abuse-related phenotypes. Rev in Neuro 2011; 22(1): 95-105. PMID: 21615264
15. Cachat J, *et. al.* Measuring behavioral and endocrine responses to novelty stress in adult zebrafish. Nature Protocols 2010; 5(11): 1786-1799. PMID: 21030954
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18. Grossman L, *et. al.* Characterization of behavioral and endocrine effects of LSD on zebrafish. Behav Brain Res 2010; 214(2): 277-284. PMID: 20561961
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20. Stewart A, Kadri F, DiLeo J, Chung K, Cachat J, *et. al.* The developing utility of zebrafish in modeling neurobehavioral disorders. Int J Compar Psychol 2010; 23: 104-121.