

# Daniel J. Kats

---

## EDUCATION

### **Case Western Reserve University**, Cleveland, OH

Doctor of Medicine

Expected May 2020

- Longitudinal Patient Navigator Elective
  - Help a newly arrived family of refugees navigate through their healthcare
  - Assigned to a family physician preceptor at an FQHC in Cleveland, OH
- Special Needs Medicine Interest Group
- Cancer Care Elective
  - Three half-days of shadowing Dr. Rod Rezaee (otolaryngology)
  - Attended tumor board
  - Attended medical oncology rounds
- Cancer Survivorship Elective
  - Traveled weekly to a community-based cancer support center to meet cancer survivors, their caretakers, and the support center's staff to learn about various aspects of cancer survivorship
- **Applied Medical Spanish – Intermediate**

### **Brandeis University**, Waltham, MA

Bachelor of Science in Biochemistry

May 2016

- Summa cum laude, GPA 3.85
- Thesis – high honors: “**Inosine 5'-monophosphate dehydrogenase: A collection of mysterious binding sites and regulation**”

## TRAINING

### **Family Planning Conference**

Medical Students for Choice, Philadelphia, PA

December 2 – 3, 2017

### **2017 Inclusion Summit**

Ruderman Family Foundation, Cleveland, OH

November 19 – 20, 2017

### **2017 Annual Meeting**

Family Medicine Education Consortium, Cleveland, OH

November 10 – 12, 2017

### **UltraSound Fest**

The Ohio State University, Columbus, OH

October 8, 2017

### **State-of-the-Art Reviews in Neonatal-Perinatal Medicine**

The MetroHealth System, Cleveland, OH

October 7, 2017

### **The Telluride Experience:**

#### **Transforming Mindsets II – Patient Safety Summer School**

The Academy of Emerging Leaders in Patient Safety, Telluride, CO

June 11 – 15, 2017

### **Summer Institute for Medical Students**

Hazelden Betty Ford, Rancho Mirage, CA

June 5 – 9, 2017

**Abortion Training Institute**

Medical Students for Choice, Philadelphia, PA

February 24 – 26, 2017

**Global Health Workshop 2017**

Cleveland Clinic, Cleveland, OH

February 11, 2017

**Implementation Science Conference**

Case Western Reserve University, Cleveland, OH

December 2, 2016

**The North Coast Conference on Precision Medicine**

The Institute for Computational Biology

Case Western Reserve University, Cleveland, OH

September 29, 2016

**HONORS AND AWARDS**

- Lepow Day oral presentation (see RESEARCH EXPERIENCE) September 28, 2017
  - One of 11 students chosen to give a 10 minute oral presentation (the highest level of achievement), out of over 190 submitted abstracts
- Phi Beta Kappa honor society May 2016
- NIH Computational Neuroscience Training Fellowship (R90DA033463) May 2014 – May 2016
- Attendance scholarships (see TRAINING)
  - Family Planning Conference December 2 – 3, 2017
  - 2017 Annual Meeting November 10 – 12, 2017
  - Transforming Mindsets II – Patient Safety Summer School June 11 – 15, 2017
  - Summer Institute for Medical Students June 5 – 9, 2017
  - Abortion Training Institute February 24 – 26, 2017
  - The North Coast Conference on Precision Medicine September 29, 2016

**WORK EXPERIENCE**

**S.M.Art School**, Newton Centre, MA

Math and Chess Teacher

November 2009 – June 2016

- Developed personalized curricula for each class, based on students' needs
- Required students to teach each other to demonstrate complete understanding, while practicing public speaking
- Built student self-confidence by teaching material several years ahead of grade level

## RESEARCH EXPERIENCE

### Clinical Informatics, The MetroHealth System, Cleveland, OH

Researcher

May 2017 – Present

- Project: Is overmedication of alcohol withdrawal patients in the intensive care unit causing benzodiazepine-induced psychosis?
- Project: The effects of smoking history variability in electronic health records on the ordering of lung cancer screening tests
  - Does the inaccuracy of smoking history documentation lead to underscreening of patients?
  - Are some specialties/types of providers more likely than others to inappropriately alter smoking exposure documentation?

### Hedstrom Laboratory, Brandeis University, Waltham, MA

Undergraduate Researcher

September 2013 – May 2016

Computational Neuroscience Fellow

May 2014 – May 2016

- Project: *Escherichia coli* inosine 5'-monophosphate dehydrogenase lysine acetylation
- Designed and implemented method of *in situ* chromosomal mutations without using biomarkers or scars (in collaboration with [Lovett Laboratory](#))
- Designed and wrote Python scripts to analyze IC<sub>50</sub> data of hundreds of inhibitors used with inosine 5'-monophosphate dehydrogenase (IMPDH) from different organisms
  - Goal: Find quick, easy, and cheap way to functionally categorize previously unused strains of IMPDH by using a small set of inhibitors
  - Developed method to reduce entire set of inhibitors to a small representative subset
  - Found drug outliers
  - Visualized data to find patterns, drugs/enzymes of interest

## BIBLIOGRAPHY

### Oral Presentations

**Kats DJ**, Tarabichi Y, Kaelber DC, Thornton JD. “The Impact of Smoking History EHR Fluctuations on Lung Cancer Screening Practices.” Lepow Day; Cleveland, OH (2017).

### Poster Presentations

**Kats DJ**, Gollapalli D, Dang Y, Hedstrom L. “[Moonlighting Interactions of IMPDH Affect \*Escherichia coli\* Growth](#).” SciFest V; Waltham, MA (2015). (Poster #2015.421 presented by **Kats, DJ**.)

**Kats DJ**, Gollapalli D, Dang Y, Hedstrom L. “[Moonlighting Interactions of \*Escherichia coli\* IMPDH](#).” SciFest IV; Waltham, MA (2014). (Poster #2014.311 presented by **Kats, DJ**.)

### Non-Peer Reviewed

**Kats, DJ**. [Inosine 5'-monophosphate dehydrogenase: A collection of mysterious binding sites and regulation](#) [honors thesis]. Waltham, MA: Brandeis University (2016).

## INSTITUTIONAL SERVICE

**Student Committee on Admissions**, Case Western Reserve University School of Medicine  
Co-Chair January 2017 – January 2018

- Coordinated admissions interviews, tours, and lunches
- Attended Admissions Committee Meetings as a non-voting participant

**Peer Handoff**, Case Western Reserve University School of Medicine  
Volunteer July 2017

- Led small and large group sessions during new student orientation

**Diversity Planning Committee**, Case Western Reserve University School of Medicine  
Member June – July 2017

- Helped plan diversity training for new student orientation
- Focused on making all aspects of training engaging for all students, regardless of background

## COMMUNITY SERVICE

**Sexual Education**, American Medical Women's Association  
Volunteer November 2016 – Present

- Taught a three-day sexual education curriculum to underserved Cleveland middle school students
- Topics covered: reproductive anatomy, sexually transmitted infections, contraception, and consent
- Helped incorporate education on consent into the curriculum

**Student Run Health Clinic**, Case Western Reserve University School of Medicine  
Volunteer June 2017 – Present

- Junior Clinician: worked with a fourth year medical student to perform the initial history and physical on patients, followed by presenting to the attending
- Case Manager: worked with a social work student to assess patients' social needs prior to handing off to the Junior and Senior Clinicians
- Front Desk: registered patients for appointments

**Anatomy Camp**, Case Western Reserve University School of Medicine  
Volunteer October – November 2017

- Taught Cleveland middle and high school students general principles of biology related to the healthcare field

**Sexual Education**, Cuyahoga County Juvenile Detention Center  
Volunteer October 2017

- Taught a three-day sexual education curriculum to children in a juvenile detention center
- Topics covered: reproductive anatomy, hygiene, sexually transmitted infections, contraception, consent, and healthy relationships

**Doc Opera (Fundraiser)**, Case Western Reserve University School of Medicine

Dancer (3 performances)

August – December 2016

Dancer (1 performance)

August – December 2017

- Doc Opera is a fundraiser for the Student Run Health Clinic, which consists of dances and skits entirely performed by medical students
- Danced in three performances during 2016: cha-cha, Bollywood fusion, and hip-hop
- Danced in one performance during 2017: fusion dance consisting of Bhangra, Bharatanatyam, and Kathak

**SPECTRUM, Waltham Group**, Brandeis University, Waltham, MA

Coordinator

November 2014 – May 2016

Volunteer

September 2012 – November 2014

- Ran weekly tutoring, mentoring, and playgroup (with parent social group) programs
- Received [Waltham Special Education Parent Advisory Council's](#) Rising Star (2015) and Kelly Beaumont-Mazzarini Inclusion (2016) awards
- Received [Greater Waltham Arc's](#) “Rags” LaCava Community Service Award (2015)
- Planned and hosted annual educational events about developmental disabilities
- Managed nonprofit budget (over \$6,000)
- Grew volunteer base from thirty to sixty members

**Newton-Wellesley Hospital**, Newton, MA

Volunteer

April 2010 – August 2015

- Worked in Day Surgery, Emergency Radiology, Medical/Surgical Units, and Emergency Department
- Assisted nurses with paperwork
- Arranged transportation for discharged patients
- Provided blankets, snacks, and water to patients

## SKILLS

- Languages
  - Russian: fluent
  - Spanish: intermediate conversational and medical
- Programming in Python, Java, MATLAB, and R
- Basic web development: HTML, CSS, and JavaScript (self-taught)
- Document typesetting:  $\text{\LaTeX}$  (self-taught)

## INTERESTS

Bollywood films and dance, ballroom dancing, computer programming, baseball, and skiing