Curriculum Vitae

Date Prepared: July 18, 2023

Name: Daniel "Dan" J. Kats

Cell Phone: (617) 584-2485

Work Email: daniel.kats@childrens.harvard.edu

Place of Birth: Boston, MA

EDUCATION:

| Month/Year | Degree (Honors) | Field(s) of Study | Institution |
|---------------|---------------------------|--------------------------|------------------------|
| 6/2016 | BS, summa cum laude | Biochemistry | Brandeis University |
| 0/2010 | with high honors | (PI: Hedstrom) | Drandels University |
| 6/2020 | MD, honors and | Medicine | Case Western Reserve |
| 0/2020 | distinction in research | (PIs: Tarabichi, Skotko) | University |
| Expected 2025 | Master of Biomedical Info | rmatics | Harvard Medical School |

POSTDOCTORAL TRAINING:

| Month/Year(s) | \mathbf{Title} | Specialty/Department | Institution |
|-----------------|------------------|--|---|
| 6/2020-6/2023 | Resident | Pediatrics (PIs: Skotko, Smith) | Massachusetts General Hospital for Children |
| 7/2023 - 7/2025 | Fellow | Clinical Informatics | Boston Children's Hospital |
| 7/2023-6/2024 | Fellow | Biomedical Informatics and Data Science Research Training Program (National Library of Medicine) | Harvard Medical School |

COMMITTEE SERVICE:

Local

| Year(s) | Name of Committee | Institution/Organization Title of Role(s) |
|-----------|--|--|
| 2017 | Diversity Planning Committee | Case Western Reserve University School of Medicine Member |
| 2017-2018 | Student Committee on Admissions | Case Western Reserve University School of Medicine Co-chair |
| 2020-2023 | Advocacy Committee | Massachusetts General Hospital for Children Member |
| 2021 | Wards Redesign Process Improvement | Massachusetts General Hospital for Children PGY-1 Representative |
| 2021-2022 | Housestaff Quality & Patient Safety Committee | Massachusetts General Hospital for Children Pediatrics Representative |
| 2021-2022 | Pediatric Rapid Response Team Quality Improvement Project | Massachusetts General Hospital for Children Resident Representative |

EDITORIAL ACTIVITIES:

Ad Hoc Reviewer

■ The New England Journal of Medicine

HONORS AND PRIZES:

| Year | Name of Honor/Prize | Awarding Organization | Achievement for Which Awarded |
|-----------|--|--|--|
| 2014–2016 | Undergraduate and Graduate Training in Computational Neuroscience (R90) | Brandeis University | Training in Computational Neuroscience |
| 2016 | Honor society | Phi Beta Kappa | Undergraduate academics |
| 2019 | Abstract scholarship | American Thoracic Society | Four abstracts (Mini Symposium, Poster 1, Poster 2, Poster 3) |
| 2021 | PGY-1 teaching award | Massachusetts General Hospital for Children | Teaching medical students |
| 2022 | PGY-2 teaching award | Newton-Wellesley Hospital | Teaching medical and physician assistant students |
| 2023 | Patient Safety Star | Massachusetts General Hospital | Safety reporting |
| 2023 | Biomedical Informatics and Data Science Fellowship (T15) | Harvard Medical School | Master of Biomedical Informatics |
| 2023 | Inpatient Care Improvement Award | Massachusetts General Hospital | Residency |

REPORT OF FUNDED AND UNFUNDED PROJECTS:

Unfunded Current Projects

| | Title of Project |
|--------------|---|
| Year(s) | Role |
| | Brief Description |
| | Down Syndrome Human Rights |
| 2018-present | Co-investigator (PIs: Brian Skotko, MD, MPP; Karen Donelan, ScD, EdM) |
| | Creating a global quality of life map for people with Down syndrome |
| | Amoxicillin-clavulanate Dosing Calculator |
| 2021-present | Co-investigator (Co-PI: Iman Moawad, PharmD, BCPPS) |
| | Creating a clinical decision support tool for prescribing amoxicillin-clavulanate |
| | Sickle Cell Organized Outpatient Transition |
| 2021-2023 | Investigator (PI: Sharl Azar, MD) |
| | Creating a holistic pediatric to adult transition program for patients with sickle cell disease |
| | Cellular Therapies |
| | Chapter Co-author (Mentor: Gopi Mohan, MD, PhD) |
| 2022 | Wrote a chapter about the existing cellular therapies and associated toxicities for <i>Palliative</i> |
| | Care for Hematologic Malignancies and Serious Blood Disorders: A Clinical Guide (Springer |
| | Publishing) |

REPORT OF LOCAL TEACHING AND TRAINING

Teaching of Students in Courses

| Year(s) | Course Title Type of student/audience | Location Level of effort |
|---------|--|--|
| 2020 | Pediatric Clerkship Third year medical students | Case Western Reserve University School of Medicine Designed virtual curriculum and then taught the material over 4 weeks |

Formal Teaching of Residents, Clinical Fellows, and Research Fellows

| Year(s) | Title | Location |
|---------|---|---|
| . , | Type of trainee/audience | Level of effort |
| | Chief of Service: 14 year old with growth | Massachusetts General Hospital for Children |
| 2021 | restriction and pituitary mass | Case presentation |
| | Residents, medical students, and hospitalists | Case presentation |
| 2021 | Hospitalist Journal Club | Massachusetts General Hospital for Children |
| 2021 | Residents, medical students, and hospitalists | One hour lecture |
| 2021 | Hospitalist Journal Club | Newton-Wellesley Hospital |
| 2021 | Residents, medical students, and hospitalists | One hour lecture |
| 0001 | Hospitalist Journal Club | Massachusetts General Hospital for Children |
| 2021 | Residents, medical students, and hospitalists | One hour lecture |
| 2021 | Hospitalist Journal Club | Newton-Wellesley Hospital |
| 2021 | Residents, medical students, and hospitalists | One hour lecture |
| 0000 | Sex Education in Massachusetts | Massachusetts General Hospital for Children |
| 2022 | PGY-2 residents | 30 minute lecture |
| 0000 | Sex Education in Massachusetts | Massachusetts General Hospital for Children |
| 2022 | Residents, medical students, and hospitalists | One hour lecture |
| 0000 | A Case of Dizziness | Massachusetts General Hospital for Children |
| 2023 | Residents and medical students | 45 minute lecture |
| 2023 | A Case of Weight Loss | Massachusetts General Hospital for Children |
| | Residents and medical students | 45 minute lecture |
| 2022 | Hospitalist Journal Club | Massachusetts General Hospital for Children |
| 2023 | Residents, medical students, and hospitalists | One hour lecture |

Local Invited Presentations

No presentations below were sponsored by 3rd parties/outside entities

| Year(s) | Title of presentation / Type of presentation |
|---------|---|
| rear(s) | Department and Institution where presented (sponsor, if any) |
| | The Impact of Smoking History EHR Fluctuations on Lung Cancer Screening Practices / |
| 2017 | Selected oral abstract |
| | Case Western Reserve University School of Medicine Lepow Research Day |

Report of Regional, National, and International Invited Teaching and Presentations

No presentations below were sponsored by 3rd parties/outside entities

Regional

| Year(s) | Title of presentation or name of course / Type of presentation/role(s) |
|---------|--|
| rear(s) | Location (sponsor, if any) |
| | A Case of Hemoptysis, Hematuria, and Anemia / Grand Rounds, Department of Pediatrics |
| 2022 | Massachusetts General Hospital for Children |
| | Boston, MA |

National

| Year(s) | Title of presentation or name of course / Type of presentation/role(s) |
|---------|--|
| | Location (sponsor, if any) |
| | Patient Navigation: Pre-clinical Medical Students Experiencing Longitudinal Patient |
| | Relationships / invited workshop |
| 2018 | Accelerating Change in Medical Education Consortium Student-Led Conference on Health |
| | Systems Science |
| | Hershey, PA |

International

| Year(s) | Title of presentation or name of course / Type of presentation/role(s) Location (sponsor, if any) | |
|---------|--|--|
| 2019 | Providers at an Academic Safety-Net Hospital System Tend to Refer Patients for Lung Cancer Screening Based on Patient Risk, but Demographic Disparities Persist / Selected oral abstract American Thoracic Society International Conference Dallas, TX | |

REPORT OF CLINICAL ACTIVITIES AND INNOVATIONS

Current Licensure and Certification

| Year(s) | Type of License or Certification |
|---------|--|
| 2020 | American Academy of Addiction Psychiatry MAT Waiver Course (8 hours) |
| 2021 | ALTA Language Services, Inc. Qualified Bilingual Staff (Russian) |
| 2021 | Middlesex Children's Advocacy Center's Mandated Reporter Training |
| 2022 | Massachusetts Chapter 260 Training |
| 2022 | Massachusetts Registered Physician |
| 2022 | Epic Physician Power User |
| 2022 | Epic Notecraft for Physician Builders |
| 2023 | Cross Cultural Communication Systems, Inc. Russian Bilingual Clinician/Staff |

Practice Activities

| Month/Year(s) | Type of Activity | Name and Location of Practice | Level of Activity |
|----------------|-------------------------------------|---|-------------------|
| 6/2023-present | Pediatric Hospitalist $(per\ diem)$ | Massachusetts General Hospital <i>for</i> Children | 1 weekend/month |

| Month/Year(s) | Type of Activity | Name and Location of Practice | Level of Activity |
|----------------|-------------------------------------|-------------------------------|-------------------|
| 7/2023-present | Primary Care Physician (per diem) | Andover Pediatrics | 1 weekend/month |
| 7/2023-present | Pediatric Hospitalist $(per\ diem)$ | Newton-Wellesley Hospital | Sporadic |

Clinical Innovations

| Name/location (dates if applicable) | Description |
|---|--|
| Interpreter phone application, Massachusetts General Hospital (2020–2022) | I started an improvement project to make interpreters more accessible in the hospital. When we rolled out a phone application, I was the lead clinician involved with the trial. |
| $\begin{array}{c} {\rm www.AmoxClav.com} \\ {\rm (2021-present)} \end{array}$ | Together with a pharmacist, I created an online clinical decision support tool to recommend appropriate formulations/ratios of amoxicillin-clavulanate to prescribe based on age, weight, and indication. I created and programmed the website; the pharmacist verified the methodology and quality. |
| www.InfusionCalc.com (2022) | Together with a pharmacist, I created an online clinical decision support tool to verify the administration rates for uptitration of IV immunoglobulin and rituximab infusions. |

REPORT OF TEACHING AND EDUCATION INNOVATIONS

| Teaching/education innovation (date if applicable) | Description |
|--|--|
| Virtual pediatric clerkship (2020) | Led the development of a "Mock Wards Day" to simulate rounding and clinical decision making for pediatric clerkship students who were learning remotely in the setting of the COVID-19 pandemic. |

REPORT OF EDUCATION OF PATIENTS AND SERVICE TO THE COMMUNITY

No presentations below were sponsored by 3rd parties/outside entities $\,$

Activities

| Year(s) | Organization or institution / Role (Sponsor, if any) Description |
|-----------|---|
| 2016-2017 | Cleveland Metropolitan School District Taught three-day sex education classes, helped incorporate consent into the curriculum |
| 2017 | Case Western Reserve University School of Medicine Taught Cleveland middle and high school students general principles of biology related to the healthcare field |
| 2017–2018 | Cuyahoga County Juvenile Detention Center Taught three-day sex education classes |
| 2021 | Boston International Newcomers Academy Gave 1 hour lectures $\times 3$ on medical topics to high school students |

Educational Material for Patients and the Lay Community:

Patient Educational Material

| Year | Title | Type of contribution (sponsor, if any) | Citation, if any |
|--------------|--|--|------------------|
| 2019 | www.DanceKats.com (patient exercise education) | Creator | |
| 2020-present | www.KatsMD.com (general patient education) | Creator | |

REPORT OF SCHOLARSHIP

ORCID: 0000-0001-7591-6222
Google Scholar

Peer-reviewed Scholarship in Print or Other Media

Research Investigations

- Tarabichi, Y., Kats, D.J., Kaelber, D.C., Thornton, J.D. The Impact of Fluctuations in Pack-Year Smoking History in the Electronic Health Record on Lung Cancer Screening Practices. CHEST. 2018, 153(2): 575–578.
- Adie, Y., Kats, D.J., Tlimat, A., Perzynski, A., Dalton, J., Gunzler, D., Tarabichi, Y. Neighborhood Disadvantage and Lung Cancer Incidence in Ever-Smokers at a Safety-Net Healthcare System: A Retrospective Study. CHEST. 2020, 157(4): 1021–1029.
- 3. **Kats, D.J.**, Patsiogiannis, V., Skotko, B.G. Epileptic Spasms in Patients with Down Syndrome: Experiences from Caregivers. *J Child Neurol.* 2020, 35(12): 813–819.
- Kats, D.J., Adie, Y., Tlimat, A., Greco, P.J., Kaelber, D.C., Tarabichi, Y. Assessing Different Approaches
 to Leveraging Historical Smoking Exposure Data to Better Select Lung Cancer Screening Candidates: A
 Retrospective Validation Study. Nicotine Tob Res. 2020, 23(8): 1334–1340.
- 5. **Kats, D.J.**, Skotko, B.G., de Graaf, G., Skladzien, E., Hooper, B.T., Mordi, R., Mykhailenko, T., Buckley, F., Patsiogiannis, V., Krell, K., Haugen, K., Donelan, K. Designing an international survey for organisations serving people with Down syndrome. *J Appl Res Intellect Disabil.* 2023, 36(3): 497–506.
- 6. **Kats, D.J.**, Martin, S.D., Smith, M.H. Don't "MIS-C" the cancer: a case report of balancing the timing of concurrent treatment for MIS-C and incidentally diagnosed pediatric Wilms tumor. *Pediatr Blood Cancer*. 2023, 70(5): e30216.

Other Peer-reviewed Scholarship

1. **Kats, D.J.**, Roche, K.J., Skotko, B.G. Epileptic Spasms in Individuals with Down Syndrome: A Review of the Current Literature. *Epilepsia Open.* 2020, 5: 344–353.

Books/Textbooks for the Medical or Scientific Community

1. Martin, S.D., Miozzo, M., **Kats, D.J.**, Mohan, G. Cellular Therapies: A description of the types of existing cellular therapies and associated toxicities. In: Ullrich, C.K. (ed), Roeland, E.J. (ed). *Palliative Care for Hematologic Malignancies and Serious Blood Disorders: A Clinical Guide*. New York: Springer; 2023.

Theses

- 1. **Kats**, **D.J.** Inosine 5'-monophosphate dehydrogenase: A collection of mysterious binding sites and regulation [BS honors thesis]. Waltham, MA: Brandeis University. 2016.
- 2. **Kats, D.J.** Lung cancer risk stratification, Down syndrome, and epileptic spasms: A journey through informatics, healthcare disparities, and quality improvement [MD thesis]. Cleveland, OH: Case Western Reserve University School of Medicine. 2020.

Abstracts, Poster Presentations, and Exhibits Presented at Professional Meetings Last Three Years

1. [International] Tlimat, A., O. Adeoye, **Kats, D.J.**, Tarabichi, Y. Could Patients at a Safety-Net Healthcare Systems Be Too Sick to Be Screened for Lung Cancer? American Thoracic Society International Conference; Philadelphia, PA. 2020.

2. [National] Kats, D.J., Martin, S.D., Smith, M.H. Don't "MIS-C" The Cancer: a Case Report of Incidentally Diagnosed Wilms Tumor During Acute MIS-C. The American Society of Pediatric Hematology/Oncology Conference; Pittsburgh, PA. 2022. (Poster #559)