# **Samuel Taylor**

## EDUCATION

(Sep. 2015 - Present) | Tri-Institutional MD-PhD Program, New York, NY

- M.D., Ph.D., Expected May 2022
- Atkins Research Fellowship, Dean's Diversity and Healthcare Disparity Research Award, AOA Carolyn L. Kuckein Student Research Fellowship
- USMLE Step 1: 266

### (Sep. 2010 - May 2014) | Yale University, New Haven, CT

- B.A. in Economics, May 2014, Cumulative GPA: 3.9/4.0
- Magna Cum Laude, Mellon Forum Undergraduate Research Grant
- MCAT: 38

### MEMBERSHIP AND HONORARY/PROFESSIONAL SOCIETIES

- Member, American Academy of Family Physicians
- Member, American Medical Association
- Member, American College of Surgeons

#### **CERTIFICATIONS/LICENSURE**

– BLS Certified, January 12, 2018 exp. January 2020

#### WORK EXPERIENCE

(May 2013 - Aug. 2013) | Global Market Research Intern - Alexion Pharmaceuticals, Cheshire, CT

- Calculated the market sizes for the company's flagship product as well as 2 pipeline drugs in investigational indications; identified \$500MM in potential additional revenue
- Wrote predictive data mining algorithms to identify and prioritize sales leads
- Average hours/week: 50

### **RESEARCH EXPERIENCE**

(Dec. 2017 - Present) | Graduate Student - Meyer Cancer Center, New York, NY

- PIs: Lewis Cantley, PhD & Marcus Goncalves, MD PhD
- Studying metabolism and autophagy in tumorigenesis and cancer cachexia
- Average hours/week: 50

(April 2016 – Dec. 2017) | Atkins Fellow – Memorial Sloan Kettering Cancer Center, New York, NY

- PI: Robert Downey, MD
- Developed a novel technique of CT and PET image analysis to measure changes in muscle volume and metabolism during chemotherapy in a large group of patients surgically treated for lung cancer at MSK
- Average hours/week: 10

(July 2014 – July 2015) | NCI Research Fellow – National Cancer Institute (Gress Branch), Bethesda, MD

- PI: Daniel Fowler, MD
- Demonstrated that PD-1 regulates a subset of innate lymphoid cells involved in the immune response to parasitic infection as well as in numerous autoimmune diseases
- Demonstrated that CD4+ Th1 cells expressing the transcription factor Tbet negatively modulate the expression of anti-inflammatory regulatory T cells, leading to more severe autoimmune graftversus-host disease

Average hours/week: 50

(June 2012 – Aug. 2012) | Research Fellow – Aurora St. Luke's Transplant Research Lab, Milwaukee, WI

- PI: Martin Oaks, MD
- Demonstrated sialylated antibody binding to the DC-SIGN receptor—suggesting that there exists a carbohydrate-mediated switch between inflammatory and immunosuppressive antibodies, possibly aiding tumor immune escape
- Average hours/week: 50

## LEADERSHIP/VOLUNTEER EXPERIENCE

(July. 2018 – Present) | Mentor – Meyer Cancer Center, New York, NY

- Supervising and teaching undergraduate and early graduate students in lab
- Average hours/week: 8

(Mar. 2018 – Apr. 2018) | Executive Director – WCMC Clothing Drive, New York, NY

- Planned, organized, and executed a clothing drive which collected 1200lbs of donations (estimated resale value: \$14000) to help support The Salvation Army's adult rehabilitation centers in NYC
- Average hours/week: 3

(Nov. 2017 – Apr. 2018) | Senior Instructor – ACEing Autism, New York, NY

- Planning drills and coaching children with autism at the National Tennis Center in Queens, NY
- Average hours/week: 3

(Sep. 2015 – Nov. 2017) | Clinician, Board Member – Weill Cornell Community Clinic, New York, NY

- Performed as a junior clinician, senior clinician, and ultimately board member for the community clinic
- As clinician: took patient histories, performed exams, instructed junior clinicians, ordered labs/medications, and documented visits in the chart
- As board member: organized referrals with participating specialists, actively sought out new specialists to augment the clinic's specialist network
- Average hours/week: 1.5

(Sep. 2015 - Dec. 2015) | Volunteer - Heart to Heart, New York, NY

- Provided free health screening services to underserved populations in Queens and Brooklyn, NY
- Transported and set up equipment, greeted and registered patients, collected blood samples, and performed exams
- Average hours/week: 5

(Sep. 2011 – May 2014) | Tutor – Yale Science and Quantitative Reasoning Center, New Haven, CT

- Tutored Yale students enrolled in economics, organic chemistry, and computer science courses
- Increased test scores by 12% on average
- Average hours/week: 5

### PUBLICATIONS

- 1. **Taylor S**, Ramsamooj J, Liang RJ, et al. Dietary Fructose Improves Intestinal Cell Survival and Nutrient Absorption. *Nature* (Accepted May 2021)
- Liang RJ, Taylor S, Nahiyaan N, et al. 2021. GLUT5 (SLC2A5) enables fructose-mediated proliferation independent of ketohexokinase. Cancer Metab. 9(1):12. PMID: 33762003; PMCID: PMC7992954

- Goncalves MD, Lu C, Tutnauer J, Hartman TE, Hwang SK, Murphy CJ, Pauli C, Morris R, Taylor S, Lekaye CL, Roper J, Kim Y, Chen Q, Gross SS, Rhee KY, Cantley LC, Yun J. 2019. Highfructose corn syrup enhances intestinal tumor growth in mice. *Science*, 363(6433):1345-1349. PMID: 30898933; PMCID: 30898933
- Goncalves MD, Taylor S, et al. 2018. Imaging skeletal muscle volume, density, and FDG uptake before and after induction therapy for non-small cell lung cancer. *Clin. Radiol.* 73:505.e1-505.e8. PMID: 29317048; PMCID: PMC6785997
- 5. **Taylor S**, Huang Y, Mallett G, et al. 2017. PD-1 regulates KLRG1+group 2 innate lymphoid cells. *J Exp Med*. 214(6):1663-1678. PMID: 28490441; PMCID: PMC5461001
- Amarnath S, Laurence A, Zhu N, Cunha R, Eckhaus MA, Taylor S, et al. 2017. Tbet is a critical modulator of FoxP3 expression in autoimmune graft-versus-host disease. *Haematologica*. 102(8):1446-1456. PMID: 28473623; PMCID: PMC5541878
- Oaks M, Taylor S, Shaffer J. 2013. Autoantibodies targeting tumor-associated antigens in metastatic cancer: Sialylated IgGs as candidate anti-inflammatory antibodies. *Oncoimmunology*. 2(6):e24841. PMID: 23894724; PMCID: PMC3716759

#### PRESENTATIONS

- 1. **Taylor S,** Halpenny DF, Jones L, Downey R, Goncalves M. (Dec. 2016) A Novel Method for Assessing Cachexia: Insights from the MSKCC Non-Small Cell Lung Cancer Cohort. Oral Presentation at the Joint Atkins Curriculum and Obesity Conference. New York, NY
- Taylor S, Halpenny DF, Jones L, Downey R, Goncalves M. (Oct. 2016) Body Composition Changes during Induction Chemotherapy in Patients with Non-Small Cell Lung Cancer. Poster Presentation at the Weill Cornell Medical College Medical Student Research Day. New York, NY
- Taylor S, Amarnath A, Laurence A, Kanno Y, Sciume G, Eckhaus MA, Fowler DH. (April 2015) Tbet Represses FoxP3 Through Cell Intrinsic and Extrinsic Pathways. Poster Presentation at the NIH Post-Baccalaureate Poster Day. Bethesda, MD
- Taylor S, Shaffer J, Oaks M. (July 2012) Anti-Inflammatory Antibodies and the DC-SIGN Receptor. Oral Presentation at the Aurora Summer Student Research Conference. Milwaukee, WI

#### SKILLS/INTERESTS

Tennis, alpine and Nordic skiing, sailing (former Yale varsity co-ed skipper), wakeboarding, "Escape the Room"

## LANGUAGES

English (native speaker), spanish (conversant)