

TALON CHANDLER

CURRICULUM VITÆ

Biographical Information

Born: June 24, 1993 in Calgary, Alberta
Citizenship: Canada
Address: 7 MBL Street
Woods Hole, MA
02543
Phone: (312) 978-1901
Email: talonchandler@uchicago.edu
Website: talonchandler.com

Education

- [2] **(In Progress) Ph.D. Medical Physics** 2015–2020
Thesis: “Measuring Molecular Orientations With Polarized Light Microscopy”
Advisor: Dr. Patrick La Rivière
University of Chicago
- [1] **B.A.Sc. Engineering Physics** 2010–2015
with Electrical Engineering Minor, with Distinction
GPA: 3.93/4.00
University of British Columbia
-

Publications

- [3] **(Submitted), Chandler, T.**, Mehta, S., Shroff, H., Oldenbourg, R., La Rivière, P. J., “Single-fluorophore orientation determination with multiview polarized illumination: Modeling and microscope design,” *Optics Express*,
- [2] Day, K. J., La Rivière, P. J., **Chandler, T.**, Bindokas, V. P., Ferrier, N. J., Glick, B. S., “Improved deconvolution of very weak confocal signals,” *F1000Research*, vol. 6, no. 787, 2017. DOI: 10.12688/f1000research.11773.1.
- [1] Shechter, S. M., **Chandler, T.**, Skandari, M., Zalunardo, N., “Cost-effectiveness analysis of vascular access referral policies in CKD,” *American Journal of Kidney Diseases*, 2017. DOI: 10.1053/j.ajkd.2017.04.020.
-

Presentations

- [2] “Evaluating Gambles Using Dynamics” 2017
Graduate Program on Medical Physics Journal Club
Carl J. Vyborny Award for Outstanding Journal Club Presentation
- [1] “Digital Holography For Radiation Dosimetry” 2016
Graduate Program on Medical Physics Journal Club

Research History

- | | | |
|-----|--|-----------------|
| [5] | La Rivière Lab , University of Chicago | 05/2016– |
| | Advisors: Dr. Patrick La Rivière & Dr. Rudolph Oldenbourg | |
| | Topics: Polarized light microscopy, 3D reconstruction | |
| [4] | Kao Lab , University of Chicago | 01/2016–04/2016 |
| | Advisor: Dr. Chien-Min Kao | |
| | Topics: PET detectors, statistical signal processing | |
| [3] | MRI Research Centre , University of British Columbia | 04/2014–09/2015 |
| | Advisors: Dr. Alex MacKay & Dr. Carl Michal | |
| | Topics: NMR, MRI, inhomogeneous magnetization transfer | |
| [2] | Haas Lab , University of British Columbia | 01/2014–04/2014 |
| | Advisor: Dr. Kelly Sakaki | |
| | Topics: Single cell electroporation, two-photon microscopy | |
| [1] | Centre For Operations Excellence , University of British Columbia | 04/2013–09/2015 |
| | Advisor: Dr. Steven Shechter | |
| | Topics: Health care optimization, Monte Carlo simulation | |

Employment History

- | | | |
|-----|---|-----------------|
| [2] | Kardium Inc. , Burnaby, BC | 09/2013–12/2013 |
| | Junior Engineer | |
| | Topics: Cardiac ablation, tissue conductivity, image analysis | |
| [1] | SRK Consulting Inc. , Vancouver, BC | 01/2012–04/2012 |
| | Junior Engineer | |
| | Topics: Waste water management, Monte Carlo simulation | |

Teaching

- | | | |
|-----|---|------|
| [2] | Medical Imaging 1 , University of Chicago | 2017 |
| | Teaching Assistant | |
| | Topics: X-ray imaging, MRI, image restoration | |
| | Rating: 5.0/5.0 from 5 students | |
| [1] | Mathematics For Medical Physics , University of Chicago | 2016 |
| | Teaching Assistant | |
| | Topics: Linear systems theory, stochastic processes, image reconstruction | |
| | Rating: 4.8/5.0 from 5 students | |

Awards

[8]	University of Chicago Biological Sciences Division Graduate Fellowship	\$30k	2016
[7]	Eastern Irrigation District Graduate Scholarship	\$2k	2014
[6]	NSERC Undergraduate Research Award	\$4k	2014
[5]	NSERC Industrial Undergraduate Research Award	\$4k	2013
[4]	Interpipeline Discovery Scholarship	\$2k	2011
[3]	UBC President's Entrance Scholarship	\$1.5k	2010
[2]	Alexander Rutherford Scholarship	\$2.5k	2010
[1]	Junior Citizen of the Year, City of Brooks	-	2010

Computing

Top Language:	Python
Competent Languages:	C, C++, Bash, MATLAB
Familiar Languages:	R, Mathematica, HTML/CSS
Tools:	GNU Emacs, L ^A T _E X, git, OpenGL, ImageJ

Other Activities

Ultramarathon running	12 races \geq 26.2 miles
SCUBA diving	15 open water dives, \sim 600 minutes underwater
Apiculture	