

Christian M. Denis
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Location: Montréal, Canada

I'm currently a physics (biophysics) PhD student at Université de Montréal. My main projects are oriented in immunology and developmental biology. I'm also involved in various artistic projects, mainly as a musician/composer.

EDUCATION	Université de Montréal, Montréal Physics (PhD) May 2028	CUM GPA: NA/4.30
	Université de Montréal, Montréal Physics (M. Sc.) – Dean's Honor List May 2025	CUM GPA: 4.30/4.30
	McGill University, Montréal Honours Physics (B. Sc.) December 2022	CUM GPA: 3.94/4.00
	John Abbott College, Ste-Anne de Bellevue Arts and Sciences (DEC) May 2019	R-Score: 33.939
SKILLS	Languages (spoken and written): French, English Computer Skills: Solid programming skills in Julia, Python and Mathematica. Knowledgeable with LaTeX, JavaScript, HTML, CSS and Matlab. Competent with programs such as the Office Suite from Microsoft, GIMP, Pages (Apple) and Overleaf. Solid audio-editing and producing skills using Ableton and Reason. Data Analysis: Usage of Python, Julia and other statistical tools to analyze data Driver's License: Class 5 Permit (Canada)	
EXPERIENCE	EMBL (Heidelberg, Germany): Trainee Internship in Alexander Aulehla's lab (Developmental biology).	Summer 2024
	EMBL (Heidelberg, Germany): Trainee Internship in Alexander Aulehla's lab (Developmental biology).	Summer 2023
	Université de Montréal: Research Assistant Research assistant in Paul François' lab (Biophysics).	Winter 2023
	McGill Physics: Undergraduate Summer Intern Research assistant in Paul François' lab (Biophysics).	Summer 2022
	McGill Physics: Undergraduate Summer Intern Research assistant in Paul François' lab (Biophysics).	Summer 2021
	Phytronix Technologies: Research Assistant Research assistant at Phytronix technologies in mass-spectrometry.	Summer 2020
	Math, Physics and Chemistry Tutor	2018 - Now
	Summer Jobs Kruger Packaging: student factory worker (2019), Norsk Hydro: student factory worker (2018), McDonald's: kitchen employee (2017), House maintenance work (2016)	2016 - 2019

PUBLICATIONS	Dynamical model and geometric insights in the discontinuity theory of immunity Denis CM , Mochulska V, Dagher M, Verbavatz V, Bourassa FXP, Altan-Bonnet G, François P. bioRxiv (preprint). 2025.	
	Unclocklike Oscillators with Frequency Memory for the Entrainment of Biological Clocks Denis CM , François P. PRX Life 2, 043008. 2024.	
	Arnold tongue entrainment reveals dynamical principles of the embryonic segmentation clock Layague Sanchez PG, Mochulska V, Denis CM , Mönke G, Tomita T, Tsuchida-Straeten N, Petersen Y, Sonnen KF, François P, Aulehla A. eLife 11:e79575. 2022.	
AWARDS AND GRANTS	Dean's Honor List (UdeM)	2025
	Dean's honor list for Master's degree at Université de Montréal	
	3rd CIB Symposium: Best Oral Presentation Award	2025
	500 \$ – Center for Innovative Biomedicine (CIB) Scientific Symposium, Université de Montréal	
	FRQNT Graduate Scholarship	2025
	100 000 \$ — Québec Provincial Graduate Scholarship — PhD program.	
	FRQNT Graduate Scholarship	2024
	20 000 \$ — Québec Provincial Graduate Scholarship — Master's program.	
	NSERC Graduate Scholarship	2024
	27 000 \$ — Canada Graduate Scholarship — Master's program.	
	BLUE Fellowship	2024
	3 000 \$ — McGill University, Building 21.	
	McGill McGameJam	2023
	2nd Position. I mainly worked on audio production for our video game during the event. Access the game here .	
	NSERC USRA Research Award	2022
	6 000 \$ grant for undergraduate summer research.	
	SURA - Dixie Park Science Undergraduate Research Award	2021
	4 000 \$ grant from donors, for undergraduate summer research.	
	Summer Internship Grant From BioTalent Canada	2020
	7 000 \$ grant for undergraduate summer research.	
	2nd Position at John Abbott College at CAP exams	2019
	Certificat du Mérite en histoire pour résultat scolaire exceptionnel	2017
	Prix Coup de cœur francophone (song lyrics)	2017
	Concours Soliste de Victoriaville (Provincial Music Contest)	2013-2015
	Silver - Clarinet (2013), Bronze - Clarinet (2015)	

ACADEMIC INVOLVEMENT	Organization of the 2024 BSC Meeting	2024
	I participated in the organization committee of the 2024 Biophysical Society of Canada (BSC) Meeting. I also co-chaired the “trainee symposium” part of the event.	
	Organization of “The Late-Night Blackboard” events	2023
	I organized a series of evenings with “chalkboard-talks” presentations explaining a topic in any field to a general audience. Held at <u>Building 21</u> (McGill).	
	VP Brewing – McGill Brewing Club	2022
	TVM Admin Position – Music Composer	2022
	Executive Member of TVM (Student Television at McGill)	2021 - 2022
	VP - John Abbott College Space Club	August 2018 - May 2019
	Hospital Volunteer (Jewish General Hospital, Montreal)	2025 – now
	Part-time volunteer at the ER.	
SOCIAL INVOLVEMENT AND VOLUN- TEERING	Organization of “@agora_jeanne_mance” events	2025 – now
	I organized weekly inclusive and accessible “agora” events in Jeanne-Mance Park, an effort to combat the loneliness epidemic. A mission statement can be found <u>here</u> .	
	Organization of Crater Sketching Workshops	2019
	Organization of musical performances for the Salvation Army	dec. 2014
DISCOGRAPHY	“Continental” (as Chris Mauden)	2025
	Music album, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	“Boxberg” (as Chris Mauden)	2024
	Music EP, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	“Should’ve Stayed Home Tonight” (as Chris Mauden)	2024
	Music EP, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	“Lab Day 23 (feat. Jona Rada & Ali Seleit)” (as Chris Mauden)	2023
	Music single, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	“LMP1” (as Chris Mauden)	2022
	Music single, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	“The Sunset Experiment” (as Chris Mauden)	2020
	Music EP, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	“T.H.E.C.O.R.O.N.A” (as Chris Mauden)	2020
	Music EP, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	“Differential” (as Chris Mauden)	2019
	Music Album, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	“Signals” (as Chris Mauden)	2018
	Music single, composed, recorded, produced, mixed, and mastered. Made using samples of the cosmic microwave background noise. <u>Link</u> .	

VIDEOGRAPHY	“Maman, j’étais pirate” (Short)	2025
	Original Music Composer. Link to video.	
	“Building 21: McGill’s Interdisciplinary Idea Lab” (Promo video)	2024
	Original Music Composer. Link to video.	
	“I Worry About My Teeth” (Short)	2024
	Original Music Composer, Sound Recordist	
	“Posing in Bondage” (Short)	2023
	Original Music Composer Awarded “Best Student Short” at the 2023 Cannes Short Film Festival.	
	“Reminiscence Of The Fading Memories” (Short)	2023
	Original Music Composer. Link to video.	
MULTIMEDIA	“Just A Kid” (Short Documentary)	2022
	Original Music Composer. Link to NFB page.	
	“Love Triangle” (TVM Short)	2022
	Original Music Composer	
	“A Quirky Indie” (TVM Short)	2021
	Original Music Composer, Cameraman, Actor	
	“Bloom” (Short)	2020
	Original Music Composer	
	“Philippe” (Short Documentary)	2018
	Original Music Composer. Link to video.	
ACTIVITIES AND INTERESTS	“ShadowChasers 2017: The Great American Total Solar Eclipse”	2018
	Original Music Composer	
	“Music from modelling the segmentation clock” (Projection)	2024
	Procedural projections reactive to music. Music samples from numerical simulations of a model for the segmentation clock . Made for a BLUE fellowship at B21 (McGill).	
	“Raccoon raider & the temple of thrash” (Video Game)	2023
	Original Music Composer and sound designer. Video game project done at the McGame-Jam 2023 (McGill University). Link to project.	
	“Scène de la mer” (VR)	2022
	Original Music Composer. VR project done at B21 (McGill University).	
	NAS management	2025 – now
	Media digitization and archiving/organization (HDD, VHS, DVD, Blurays, etc.)	
	River Surfing	2025 – now
	Home-fermentation (Beer, Kombucha, Wine, Yogurt, etc.)	2022 – now
	Coding projects	2021 – now
	Find some examples on this page of my personal website.	
	Music recording, composition and production	2015 – now
Travelling 50+ countries visited (list). A year-long trip around the world (2013-2014).		