

**Christian M. Denis**  
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**Location:** Montréal, Canada

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*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: 4.30/4.30

**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

**Licenses:** Driver's Licence – Class 5 Permit (Canada), Scuba Diving License – “Open Water Diver” (PADI), Ski Instructor License – CSIA Level 1 Certification (Canada)

**EXPERIENCE**

**EMBL (Heidelberg, Germany): Trainee** Summer 2024  
Internship in Alexander Aulehla's lab (Developmental biology).

**EMBL (Heidelberg, Germany): Trainee** Summer 2023  
Internship in Alexander Aulehla's lab (Developmental biology).

**Université de Montréal: Research Assistant** Winter 2023  
Research assistant in Paul François' lab (Biophysics).

**McGill Physics: Undergraduate Summer Intern** Summer 2022  
Research assistant in Paul François' lab (Biophysics).

**McGill Physics: Undergraduate Summer Intern** Summer 2021  
Research assistant in Paul François' lab (Biophysics).

**Phytronix Technologies: Research Assistant** Summer 2020  
Research assistant at Phytronix technologies in mass-spectrometry.

**Math, Physics and Chemistry Tutor** 2018 - Now

**Summer Jobs** 2016 - 2019  
Kruger Packaging: student factory worker (2019), Norsk Hydro: student factory worker (2018), McDonald's: kitchen employee (2017), House maintenance work (2016)

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

<b>ACADEMIC INVOLVEMENT</b>	<b>Organization of the 2024 BSC Meeting</b>	<b>2024</b>
	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.	
	<b>Organization of “The Late-Night Blackboard” events</b>	<b>2023</b>
	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).	
	<b>VP Brewing – McGill Brewing Club</b>	<b>2022</b>
	<b>TVM Admin Position – Music Composer</b>	<b>2022</b>
	<b>Executive Member of TVM (Student Television at McGill)</b>	<b>2021 - 2022</b>
	<b>VP - John Abbott College Space Club</b>	<b>August 2018 - May 2019</b>
<b>SOCIAL INVOLVEMENT AND VOLUNTEERING</b>	<b>Barista Volunteer (“La Planck”, Université de Montréal)</b>	<b>2025 – now</b>
	Part-time volunteer at the student-ran physics coffee shop “La Planck”.	
	<b>Hospital Volunteer (Jewish General Hospital, Montreal)</b>	<b>2025 – now</b>
	Part-time volunteer at the ER.	
	<b>Organization of “@agora_jeanne_mance” events</b>	<b>2025 – now</b>
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> .		
	<b>Organization of Crater Sketching Workshops</b>	<b>2019</b>
	<b>Organization of musical performances for the Salvation Army</b>	<b>dec. 2014</b>
<b>DISCOGRAPHY</b>	<b>“Continental” (as Chris Mauden)</b>	<b>2025</b>
	Music album, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	<b>“Boxberg” (as Chris Mauden)</b>	<b>2024</b>
	Music EP, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	<b>“Should’ve Stayed Home Tonight” (as Chris Mauden)</b>	<b>2024</b>
	Music EP, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	<b>“Lab Day 23 (feat. Jona Rada &amp; Ali Seleit)” (as Chris Mauden)</b>	<b>2023</b>
	Music single, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
	<b>“LMP1” (as Chris Mauden)</b>	<b>2022</b>
	Music single, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .	
<b>“The Sunset Experiment” (as Chris Mauden)</b>	<b>2020</b>	
Music EP, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .		
<b>“T.H.E.C.O.R.O.N.A” (as Chris Mauden)</b>	<b>2020</b>	
Music EP, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .		
<b>“Differential” (as Chris Mauden)</b>	<b>2019</b>	
Music Album, composed, recorded, produced, mixed, mastered and published. <u>Link</u> .		
<b>“Signals” (as Chris Mauden)</b>	<b>2018</b>	
Music single, composed, recorded, produced, mixed, and mastered. Made using samples of the cosmic microwave background noise. <u>Link</u> .		

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