

# Breathing Games

## Synthesis 2014 – 2018

[In a nutshell](#)

[2018](#)

[2017](#)

[2016](#)

[2015](#)

[2014](#)

[Games](#)

[Game controllers](#)

[Human rights principles](#)

[Financial report](#)

[Acknowledgements](#)

[info@breathinggames.net](mailto:info@breathinggames.net) | [www.breathinggames.net](http://www.breathinggames.net)

Information provided to our best knowledge. Updated August 12, 2018.

License: [Creative Commons Attribution-NoDerivatives 4.0 International](#).

DOI: [10.5281/zenodo.1344081](https://doi.org/10.5281/zenodo.1344081)



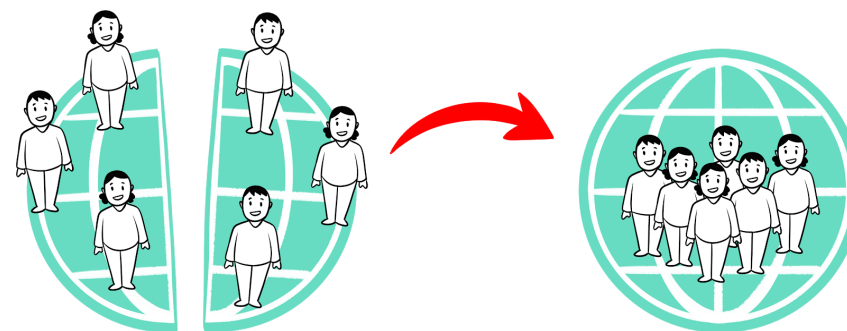
## In a nutshell

Breath is life. Knowledge about respiratory health can help make split second, life saving decisions. Today, one person in five is affected with a chronic respiratory disease.

**Breathing Games encourages everyone to take care of respiratory health with play. We experiment how a population can reclaim their health by collectively creating ludic technologies, and sharing them so that everyone can reproduce and improve them.**

We create an open access commons – collectively managed resources that can be used and enriched by everyone – by bringing together game designers, developers, visual artists, engineers, musicians, medical care professionals, and other passionate people.

Breathing Games is a global initiative hosted by the Breathing Games Association (Switzerland).



### Facts and figures

- 250 professionals and researchers mobilized across four countries
- 7500 hours of contributions
- 30 scientific communications
- 12 media interviews including the documentary A new Economy
- 300 K research funds and donations received
- 14 co-creation events organized
- 17 games prototyped
- 3 game controllers prototyped

### Key supporting organizations

- Canadian Institutes of Health Research, Ottawa
- Concordia University, Montreal
- French Hospitals Federation – Research & Innovation Fund, Paris
- Geneva Federation against Cystic Fibrosis, Geneva
- Geneva University Hospitals, Geneva
- Lift Events, Geneva
- Necker & Cochin University Hospitals, Paris
- Sainte-Justine University Hospital, Montreal
- Sensorica Open Innovation Lab, Montreal
- Sustainability Action Fund, Montreal
- Swiss Game Center, Fribourg

- University of Applied Sciences Western Switzerland, Neuchatel
- WeMake, Milan

## 2018

This year, we finalize seven games – Asthmonautes, Respi Heroes, LungLauncher, Bloïd, PeakFlow, PeakLeap and TikiFlow, see page 8 – that will be tested by children between November and February 2019.



### Co-creation events

- Apr 12-15 **Game jam**, OpenGeneva Festival, Geneva

### Communications

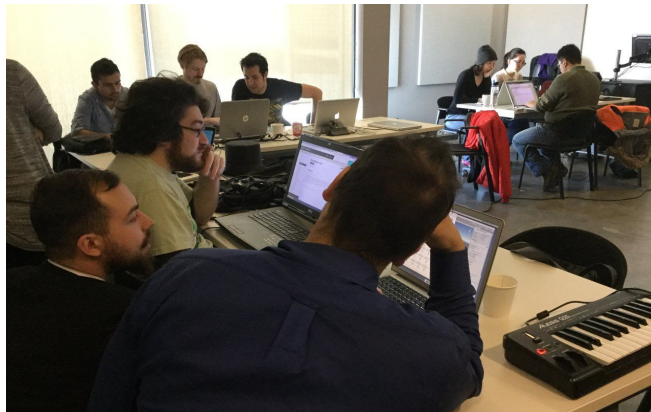
- Jan 13 Presenting to the research collective OMNSH, Paris
- Apr 3 Webinar at McGill University Game Lab, Montreal

# 2017

Breathing Games is funded by the Canadian Institutes of Health Research (strategy for patient-oriented research) and by the French Hospitals Federation (research and innovation fund). The first is a collaboration with Concordia University and CHU Sainte-Justine, the latter with Necker and Cochin hospitals.

Three game jams are held, as well as many scientific communications. A 3d-printed modular bed to test pressure and flow sensors is developed during a two-week maker in residence funded by the Horizon 2020 program of the European Union.

80 participants attend a screening of A new Economy, followed by a panel with social innovation experts Marguerite Mendell and Jean-Martin Aussant. The documentary is also released on Netflix. Breathing Games is also presented in an audio interview broadcasted by Les jeux sont faits.



## Co-creation events

- Feb 18-19 [Game jam](#), Concordia U, Montreal
- Mar 1-3 [Game jam](#), Lift:Lab, Geneva
- May 25-26 Workshops on blockchain, C2 Mtl, Montreal
- Jun 3-10 [Game jam](#), Concordia U, Montreal
- Jun 21-Jul 8 Maker in residence OpenCare, WeMake, Milan
- Nov 30- Dec 2 Keynote and workshops Collaborate and learn/teach differently, Concordia U + CHU Sainte-Justine, Montreal

## Communications

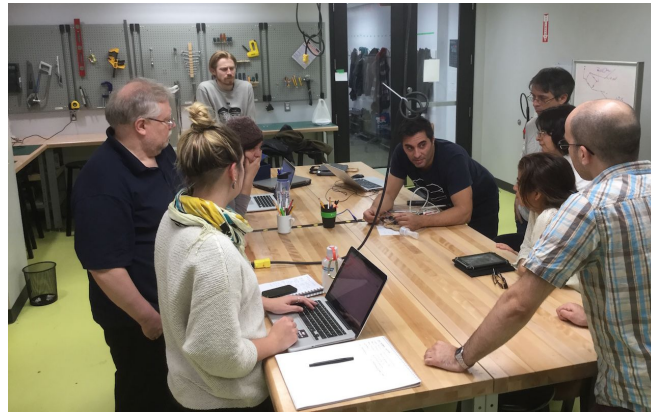
- Mar 24 Presentation, [Gathering Open Science Hardware](#), Chile
- Mar 24 Presentation, Global Goals Innovation Day, Geneva
- Mar 25 Presentation, Oxford U Global Challenge, Calgary
- Apr 12 Presentation, European Academy of Design, Rome
- May 10-12 Presentation and posters, ACFAS congress, Montreal
- Oct 6 Presentation on game jams, Lausanne U, Lausanne
- Oct 20 Presentation, OpenVillage Festival, Brussels
- Nov 3 Panel, [Canadian Science Policy Conference](#), Ottawa
- Nov 9 Poster, [meeting of WHO respiratory alliance](#), Brussels

## 2016

Breathing Games joins the [Open Source Initiative](#), and becomes a signatory of the [United Nations Global Compact](#), a commitment of organizations to “strive towards a world that benefits everyone, especially the future we borrow it from.”

Three game jams are held. An engineering student creates a core for different games, which centralizes data collection, settings and therapy patterns. Interviews from 16 contributors are released on our [YouTube channel](#).

In collaboration with the Lung Association of Québec, we apply to the Google Impact Challenge, a five million dollar grant to help ten initiatives tackle the biggest social challenges.



### Co-creation events

- Feb 10-12 [Game jam](#), Lift Conference, Geneva
- Aug 5-7 [Game jam](#), Concordia U, Montreal
- Aug 10-12 Workshop Health & Play, World Social Forum, Montreal
- Nov 7 Workshop Open Hardware, Concordia U, Montreal
- Nov 12-13 [Game jam](#), Concordia U, Montreal

### Communications

- May 12 Presentation, ACFAS congress, Montreal
- June 9 Presentation, European CF Conference, Basel
- Aug 17-19 Workshop, [Symposium on Open Collaboration](#), Berlin
- Oct 3 Poster, FRQS congress on respiratory health, Montreal
- Nov 21 Poster, [Quebec annual public health days](#), Montreal
- Nov 22 Presentation, Mobile health apps colloquium, Montreal

## 2015

Eight researchers from the University of Applied Sciences Western Switzerland (Arc) start a study to evaluate the adequacy and cost of a serious game to increase respiratory compliance. We also collaborate with Sainte-Justine hospital to develop and test games for children who have asthma.

Breathing Games collaborates with Sensorica, a peer-production network specialized in open source hardware. We adopt its Value Accounting System, a platform that allows to log contributions in time, money or material and to redistribute funds with an equation.

An engineering student documents the cystic fibrosis practice in Switzerland and does a thorough reflection on the game design. Another engineering student adapts a software library to capture the noise made by mouthpieces used in cystic fibrosis treatment.

News about Breathing Games appear in national and regional CF newsletters in Spain. The team of Domain 7 follows Sensorica and Breathing Games for a documentary about “people making a fresh start towards building a new Economy.”



### Co-creation events

- June 5-7 Hackathon, Arkathon, Sierre
- Aug 28-29 Hackathon, Sensorica, Montreal

### Communications

- June 11 Poster, European Cystic Fibrosis Conference, Brussels
- Oct 29 Presentation, symposium on collaboration, Montreal

## 2014

Begin of the initiative as part of graduate studies in game design at Montreal University. Fabio Balli and Yannick Gervais build on the work done previously by John Danger. After developing first prototype, a preliminary study is realized with ten children at Sainte-Justine hospital. The team is finalist of Forces Avenir, which aims to recognize socially conscious students.

A website is created, and receives the certification “Health on the Net,” which aims to foster quality, objective and transparent medical information.

A sociology student writes a dissertation about serious games, describing opportunities and limits of our initiative and another project. A blog article about the initiative is written by Canada Research Chair on Health Innovations.



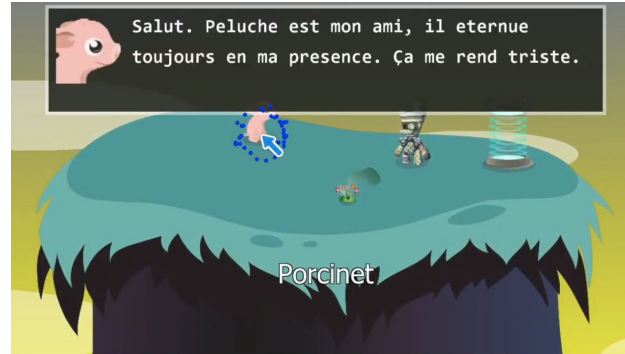
### Co-creation events

- Feb 21-23 Hackathon, CHU Sainte Justine, Montreal
- Nov 5-6 Hackathon, Montreal Summit on Innovation, Montreal

# Games



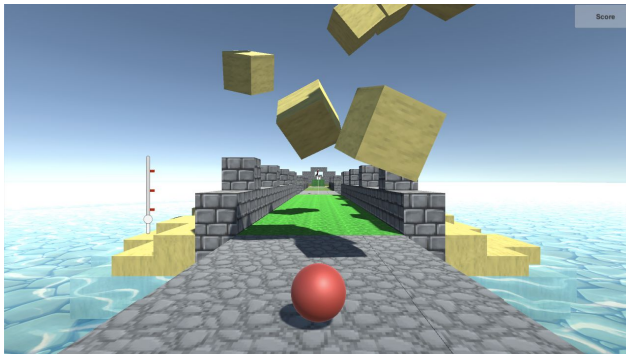
Respi Heroes  
Health promotion and care  
30 minutes, computer  
Actively developed



Asthmonautes  
Prevention and treatment of asthma crises  
30 minutes, computer  
Actively developed



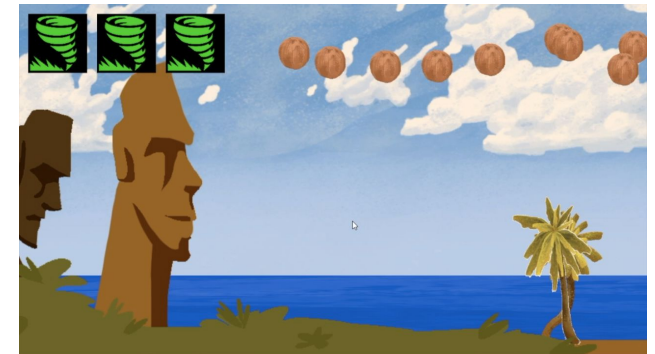
LungLauncher  
Prevention of asthma crises  
4 minutes, smartphone  
Actively developed



PeakFlow  
Self screening of lung capacity (peak flow)  
3 minutes, smartphone with game controller  
Prototyped

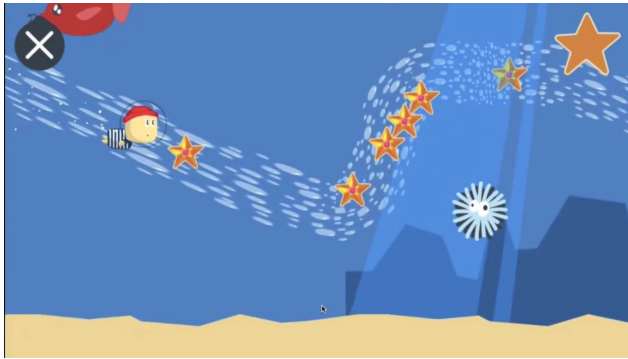


PeakLeap  
Self screening of lung capacity (peak flow)  
3 minutes, smartphone with game controller  
Prototyped



TikiFlow  
Self screening of lung capacity (peak flow)  
3 minutes, smartphone with game controller  
Actively developed



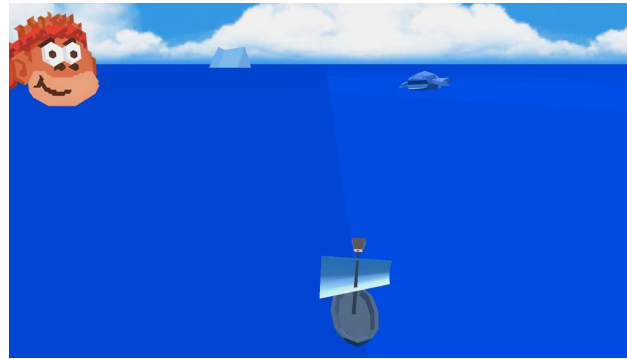


### Heritages

Airway clearance for cystic fibrosis

5 minutes, computer with pressure sensor

Actively developed

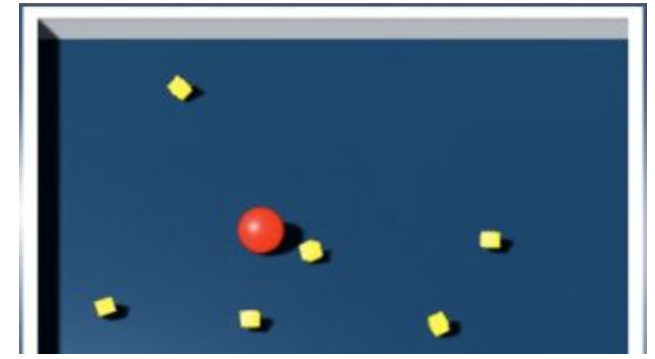


### Les aventures du Briand

Airway clearance for cystic fibrosis

5 minutes, computer with pressure sensor

Discontinued

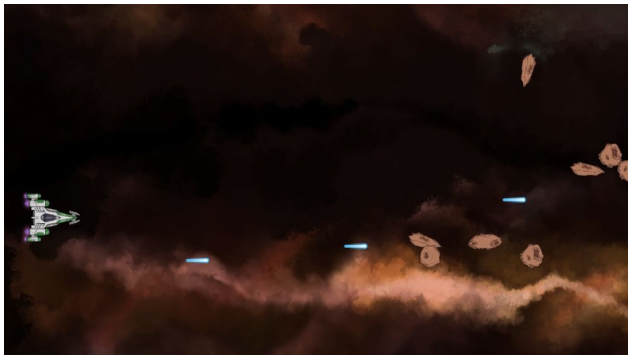


### RollABall

Airway clearance for cystic fibrosis

3 minutes, computer with pressure sensor

Discontinued

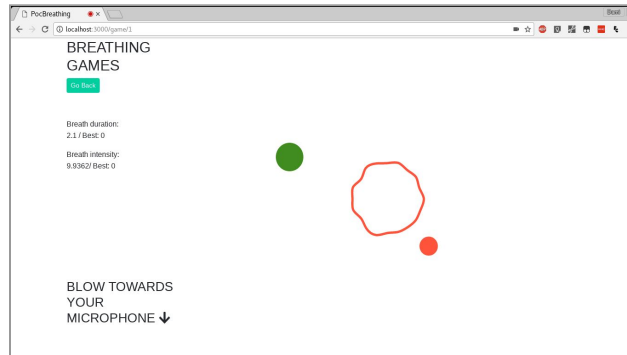


### Bloïd

Breathing exercise for stress reduction

3 minutes, computer with pressure sensor

Actively developed

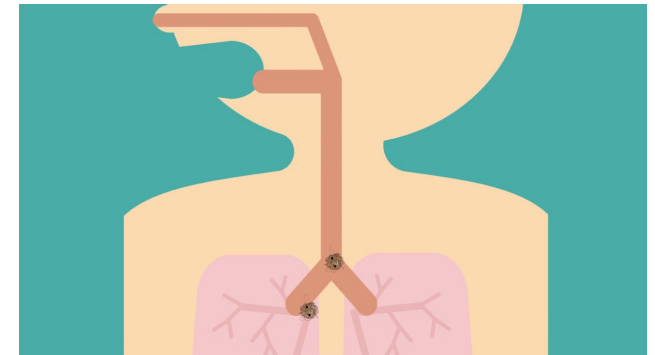


### PocBreath

Breathing toy

Smartphone with microphone

Actively developed



### Pulmination

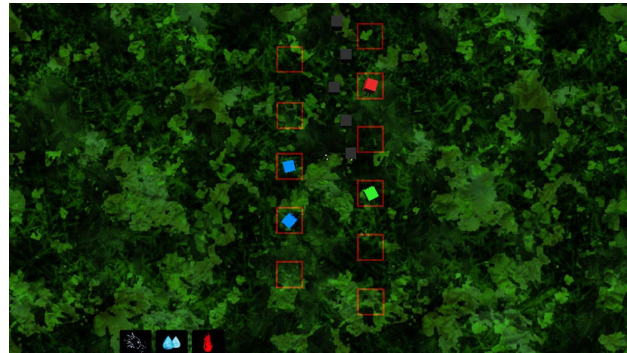
Removing allergens

3 minutes, smartphone

Discontinued



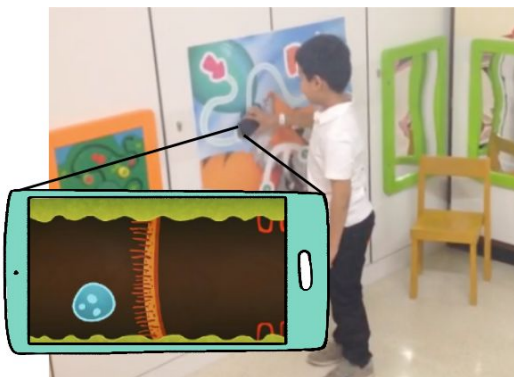
Globule  
 Airway clearance for cystic fibrosis  
 4 minutes, computer with pressure sensor  
 Discontinued



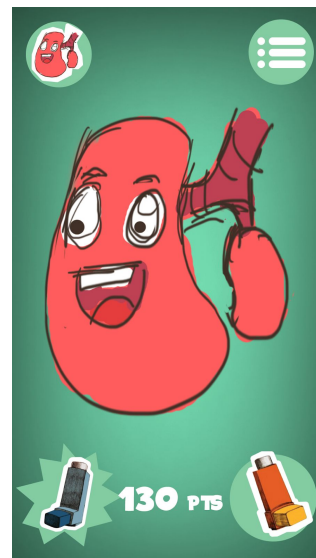
Ange-Gardien  
 Airway clearance for cystic fibrosis  
 5 minutes, computer with pressure sensor  
 Discontinued



PEP Hero  
 Airway clearance for cystic fibrosis  
 3 minutes, computer with pressure sensor  
 Discontinued

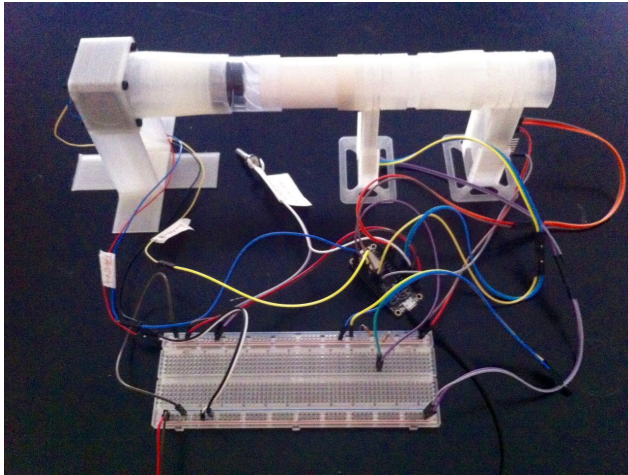


Pulmo  
 Respiratory health awareness  
 2-20 minutes, smartphone  
 Actively developed



BreathingApp  
 Follow up in asthma  
 Smartphone  
 Discontinued

## Game controllers



### Test bed

Domestic, 3d-printed bluetooth device with pressure sensor, flowmeter and others

Direct use

Actively developed

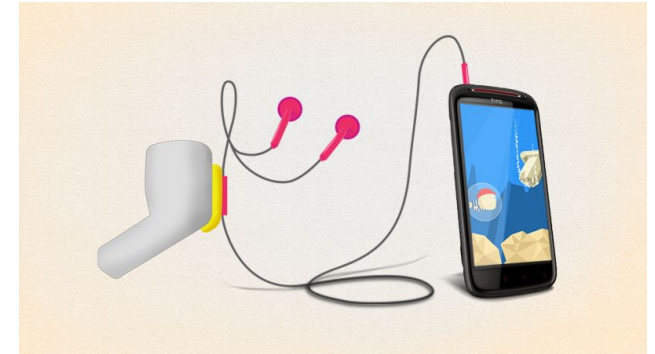


### 3d box

Domestic, 3d-printed bluetooth device with pressure sensor

Use with traditional PEP

Prototyped



### Sound-capture software library

Captures and analyzes the sound of a mouthpiece via a regular microphone set

Use with oscillating PEP and smartphone

Actively developed

“Knowing how we can start just from a group of people who is interested in building something together, each person bringing their own skills, is an amazing, eye-opening experience. We are coming together and working for a common goal, common values without having the same knowledge at the beginning, and we learn from each other. Having that collaboration is really key to developing any tool that will be useful for the patient at the end.”

Dr Sze Man Tse

Paediatric respirologist, Sainte-Justine university hospital

## Publications

### Scientific published articles

- Valderrama A, Tse SM, Balli F. Développer des compétences en maladies chroniques à travers une application mobile conçue de manière innovante. Forthcoming.
- Balli F. Game Jams to Co-Create Respiratory Health Games Prototypes as Participatory Research Methodology. To be published in Forum: Qualitative Social Research. [Preprint] 2018.
- Balli F. [Lessons learned from the use of a participatory design process to develop digital games addressing airway clearance therapy in children with cystic fibrosis](#). JMIR Serious Games 2018. DOI: [10.2196/games.8964](https://doi.org/10.2196/games.8964).

### Scientific abstracts

- Frangos M, Balli F. Breathing Games: Promoting Respiratory Health Through Co-creation. The Design Journal 2017;20(sup 1). DOI: [10.1080/14606925.2017.1352976](https://doi.org/10.1080/14606925.2017.1352976).
- Balli F. Health & Play – Addressing together the challenges of creating an open source standard for Breathing Games. In: Companion to the proceedings of the 12th International Symposium on Open Collaboration; 2016 Aug 17-19; Berlin. New York: ACM. DOI: [10.1145/2962132.2962138](https://doi.org/10.1145/2962132.2962138).
- Balli F, Gomez V. Therapeutic adherence: exploring Open Collaboration to mobilize all stakeholders behind children with CF. Journal of Cystic Fibrosis 2017; 15(1). DOI: [10.1016/S1569-1993\(16\)30478-7](https://doi.org/10.1016/S1569-1993(16)30478-7).
- Brochu A, Marcotte JE, Marquis N, Laberge S, Duguay D, Nataf P, Gervais Y, Balli F, Nguyen T. 2015. Video games for positive expiratory pressure (PEP) therapy in children with cystic fibrosis: a pilot study. Journal of Cystic Fibrosis 2015; 14(1). DOI: [10.1016/S1569-1993\(15\)30030-8](https://doi.org/10.1016/S1569-1993(15)30030-8).

### Scientific presentations

- Balli F. Game jams to co-design respiratory health games in Canada and Europe. Webinar. Participatory Research at McGill Game Lab; Montreal; 2018 Apr 3. On [youtu.be/IATVTHMIK8Q](https://youtu.be/IATVTHMIK8Q).
- Balli F. Commons and Breathing Games. General Assembly of Observatoire des Mondes Numériques en Sciences Humaines; Paris; 2018 Jan 13.
- Brastaviceanu T, Balli F, Frangos M. Open Science and Innovation. 9th Canadian Science Policy Conference; Ottawa; 2017 Nov 3. On [youtu.be/fP32bzSh-fs](https://youtu.be/fP32bzSh-fs).
- Balli F, Dugas B. Everyone should be able to adopt (lifesaving) health innovation. Presented at OpenVillage Festival; Brussels; 2017 Oct 20. [breathinggames.net/pub/bg\\_17\\_pres\\_openvillage.pdf](https://breathinggames.net/pub/bg_17_pres_openvillage.pdf).
- Balli F. Les game jams comme méthode d'apprentissage expérientiel et de co-création interdisciplinaire. Colloque international sur le jeu vidéo comme objet de recherche et médium pédagogique de l'Université de Lausanne; Lausanne; 2017 Oct 7. [breathinggames.net/pub/bg\\_17\\_pres\\_unil.pdf](https://breathinggames.net/pub/bg_17_pres_unil.pdf).
- Balli F, Caignon P. Apprentissage transformationnel en éducation de la santé : de la gestion de la maladie à l'appropriation de la santé par la communauté. Colloque La mesure et l'évaluation des apprentissages complexes en éducation médicale : défis et enjeux du Congrès ACFAS; Montreal; 2017 May 12. [breathinggames.net/pub/bg\\_17\\_poster\\_acfas\\_mixtes.pdf](https://breathinggames.net/pub/bg_17_poster_acfas_mixtes.pdf).
- Balli F, Simon L, Frangos M, Fan LT, Folie A. Take a deep breath. Canadian Finals of the Oxford University Global Challenge; Calgary; 2017 Mar 25. [breathinggames.net/pub/bg\\_17\\_pres\\_oxford.pdf](https://breathinggames.net/pub/bg_17_pres_oxford.pdf).
- Balli Fabio. Ensuring Everyone's Right to Respiratory Health: Participatory Research and Knowledge Co-Creation. INDI research day of Concordia University; Montreal; 2017 Mar 16.

- Balli F, Valderrama A. **Création collective de jeux libres en santé : communs, recherche participative et blockchain.** Colloque Applications mobiles en santé : des usages aux enjeux éthiques, déontologiques et juridiques du Réseau de recherche en santé des populations du Québec; Montreal; 2016 Nov 22. On [youtu.be/Mmx9GdQ8ZEA](https://youtu.be/Mmx9GdQ8ZEA).
- Balli F. **Health & Play – Addressing together the challenges of creating an open source standard for Breathing Games.** 12th International Symposium on Open Collaboration; Berlin; 2016 Aug 17-19. [breathinggames.net/pub/bg\\_16\\_pres\\_opensym.pdf](https://breathinggames.net/pub/bg_16_pres_opensym.pdf).
- Balli F. **Which psychosocial messages for a health game?** European Psychosocial Special Interest Group Meeting of the 39th European Cystic Fibrosis Conference; Basel; 2016 Jun 8. [breathinggames.net/pub/bg\\_16\\_pres\\_ecfs.pdf](https://breathinggames.net/pub/bg_16_pres_ecfs.pdf).
- Balli F. **Health & Play – Mobilizing citizens around breathing autonomy.** Forum social mondial; Montreal; 2016 Aug 3.
- Balli F, Voirol C. **breathinggames.net: vers un standard libre pour se soigner par le jeu.** Colloque Les sciences sociales et humaines au cœur de l'innovation – Innovation en santé du congrès ACFAS; Montreal; 2016 May 12. [breathinggames.net/pub/bg\\_16\\_pres\\_acfas.pdf](https://breathinggames.net/pub/bg_16_pres_acfas.pdf).
- Thai M, Brastaviceanu T, Balli F. **Nul n'est prophète en son pays - Pourquoi la Maison Blanche s'intéresse au modèle de Sensorica ?** Colloque de mobilisation des connaissances sur les thèmes de la collaboration et de l'innovation; Montreal; 2015 Oct 15. [breathinggames.net/pub/bg\\_15\\_pres\\_mobilisation.pdf](https://breathinggames.net/pub/bg_15_pres_mobilisation.pdf).

#### Scientific posters

- Balli F et al. **When populations care about their respiratory health: a scalable bottom-up model to foster self-care for all.** 11th General Meeting of the Global Alliance against Respiratory Diseases – World Health Organization; Brussels; 2017 Nov 11. [breathinggames.net/pub/bg\\_17\\_poster\\_gard.pdf](https://breathinggames.net/pub/bg_17_poster_gard.pdf).

- Balli F, Gomez V. **Science ouverte : les données de santé gérées par des réseaux d'utilisateurs.** Colloque Dédouaner les données! Accès, utilisation et retombées pour la recherche en santé du congrès ACFAS; Montreal; 2017 May 11. [breathinggames.net/pub/bg\\_17\\_poster\\_acfas\\_donnees.pdf](https://breathinggames.net/pub/bg_17_poster_acfas_donnees.pdf).
- Balli F, Maheu-Cadotte MA, Bouix J, Valderrama A, Vermeulen F, Wenk N, Tse SM, Burgel PR, Sermet-Gaudelus I, Martischang R, Kirszenbaum M, Frangos M, Ebnoether N, Gomez V, Gingras S. **Évaluation par des méthodes mixtes de l'impact sociétal de Breathing Games, une communauté interdisciplinaire co-crétant des technologies libres en santé.** Colloque Les innovations en méthodes mixtes en sciences sociales et de la santé du congrès ACFAS; Montreal; 2017 May 10. [breathinggames.net/pub/bg\\_17\\_poster\\_acfas\\_mixtes.pdf](https://breathinggames.net/pub/bg_17_poster_acfas_mixtes.pdf).
- Frangos M, Balli F. **Breathing Games: Promoting Respiratory Health Through Co-creation.** European Academy of Design Conference; 2017 Apr 12-14; Rome. [breathinggames.net/pub/bg\\_17\\_poster\\_ead.pdf](https://breathinggames.net/pub/bg_17_poster_ead.pdf).
- Valderrama A, Balli F, Tse SM, Gomez V. **Développer des compétences en maladies chroniques à travers une application mobile conçue de manière innovante.** Journées annuelles en santé publique; 2016 Nov 21-22. [breathinggames.net/pub/bg\\_16\\_poster\\_jasp.pdf](https://breathinggames.net/pub/bg_16_poster_jasp.pdf).
- Tse SM, Valderrama A, Balli F, Gomez V. **A free/libre mobile app in childhood asthma: knowledge transfer and self-assessment of symptoms and lung function.** Congrès québécois en Santé respiratoire; Montreal; 2016 Oct 11-14. [breathinggames.net/pub/bg\\_16\\_poster\\_cqsr.pdf](https://breathinggames.net/pub/bg_16_poster_cqsr.pdf).
- Balli F, Gomez V. **Therapeutic adherence: exploring Open Collaboration to mobilize all stakeholders behind children with CF.** European Cystic Fibrosis Conference; Basel; 2016 Jun 8-11. [breathinggames.net/pub/bg\\_16\\_poster\\_ecfs.pdf](https://breathinggames.net/pub/bg_16_poster_ecfs.pdf).

## Human rights principles

Since May 2016, Breathing Games is a signatory of the Global Compact. We commit to the principles of human and non-human rights and the right to do meaningful activities. The first article of the Declaration of Human Rights is essential to our vision:

*All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.”*

By aiming that health education and technologies are accessible to all, we align with the Global Goals: health for all (3) decent work (8), resilient infrastructure (9), reducing inequalities (10), and ensuring sustainable production patterns (12).

We encourage individuals and peer-to-peer communities to build on our work through following elements.

### Free software and open-source hardware

We use tools which respect the users' freedoms to use and share them, and modify their source code and design, when such tools provide the functions we need, and do not require an excessive time to acquire them:

- riot.im for coordination between contributors
- GIMP for image edition
- LibreOffice for offline documentation

### Copyfair licences

Instead of the traditional copyright, we use licences that preserve the right to reuse knowledge if reciprocity is provided:

- GNU Affero General Public License 3.0 (Free Software Foundation)
- Attribution-ShareAlike 4.0 International (Creative Commons)
- Open Hardware Licence 1.2 (CERN)
- Peer Production Licence (P2P Foundation)

### Accessible documentation

We document the co-creation process, the source code of software and designs of hardware created, and make this documentation freely accessible via:

- breathinggames.net
- gitlab.com/breathinggames
- full open access publications

### Participatory research

We do research with the participants rather than on or for them, to reduce power inequalities and encourage social transformation. We consider that not to have a positive impact when being privileged is unethical.

### Distributed data system and open governance

We log contributions in time, money and kind to acknowledge individual efforts towards the collective. This also provides a basis for transparency and traceability.

A system of distributed data and token is being developed to ease participatory decision-making, encourage communities to develop local projects, and let individuals decide how their data are used.

### Agility

We foster transdisciplinarity. We take advantage of existing infrastructures, use a frugal approach, and develop low-tech products.

Thus, we build a coherent ecosystem: an open access commons increasingly capable of sustaining communities in developing and sharing health knowledge, fostering social justice, reducing inequalities.

August 2018 – *F. Balli* lead coordinator

## Financial report

This report shows the funds invested in the commons by different entities. It does not take into account in-kind contributions.

### Investments from third parties with use and manager

– 2014 Jun	Forces Avenir Award	Redistribution	CAD	2'000	1'570	U Montreal
– 2015 Dec	Individual donations	Games and controllers	CAD	420	330	CAKE
– 2015 Aug	Research funds	Research			48'400	Not disclosed
– 2016 Jan	Donation from a foundation	Game jam			15'000	Lift
– 2016 Aug	CHU Sainte-Justine – Health promotion	Research	CAD	770	605	A Valderrama
– 2016 Oct	Concordia – Community Fund	Keynote speeches	CAD	3'000	2'360	P Caignon
– 2016 Nov	Concordia – Council on Student Life	Game jams	CAD	4'500	3'540	F Balli
– 2016 Dec	Concordia – Sustainability Action Fund	Game jams	CAD	7'800	6'135	F Balli
– 2017 Feb	Concordia – Alumni Association	Keynote speeches	CAD	1'000	785	F Balli
– 2017 Feb	Donation from a foundation	Game jam			30'000	Lift
– 2017 Mar	Canadian Institutes of Health Research	Game jams, keynotes, research	CAD	22'530	17'720	F Balli
– 2017 Mar	French Hospitals Federation – R&I Fund	Game jams, development, research	EUR	54'000	62'680	Necker hospital
– 2018 Feb	Donation from a foundation	Game jam			20'000	BG Association
	<b>Total in Swiss francs</b>				<b>209'125</b>	

### Use of the investments

	Canada		Switzerland		France		Total	
	used	left	used	left	used	left		
– <b>Managed by Breathing Games</b>							<b>115'725</b>	55 %
<b>redistributed to contributors</b>							<b>58'480</b>	29 %
food	2'495	2'555	1'215	0	0	1'880	8'145	4 %
hosting and space	500	1'060	1'155	0	0	4'040	6'755	3 %
transportation	3'615	1'340	1'315	0	0	6'730	13'000	6 %
electronic material	2'200	235	0	0	0	1'625	4'060	2 %
other material	600	0	410	0	0	350	1'360	1 %
research	4'875	1'730	0	0	0	6'965	13'570	6 %
third party contribution	0	0	4'085	0	0	6'270	10'355	4 %
– Managed independently by third party							93'400	45 %

# Acknowledgements

Othmane Adnane  
Ahmed Akl  
Chris Altmikus  
Henrique Alves  
Jim Anastassiou  
Rania Aoun  
David Arango

Claudia Balli  
Fabio Balli \*<sup>o</sup>

Fanny Balsiger  
Jane Banks  
Marco Barahona  
Annick Bedard  
Kim Berthiaume  
Edmund Birkin  
Rhonda Boateng  
Matthias Bonnard  
Jérémy Bouchard  
Jocelyne Bouchard  
Amelie Bouita  
Julien Bouix  
Elise Boulay  
Myriam Bransi \*  
Daniel Brastaviceanu  
Tiberius Brastaviceanu  
Annie Brochu  
Mario Broeck  
Jurdak Brooke  
Francis Brosseau  
Gareth Brown  
Pierre Philippe Brûlé  
Pierre-Régis Burgel  
  
Philippe Caignon  
Lucile Chabre  
Frédérique Chedevergne  
Peter Chernoff

Antoine Chevalier  
Pamela Chiuppi  
Sonia Christ  
Wendy Chung  
Marlène Claricia  
Dominique Correia  
Kevin Cottier  
Marc-Arnaud Cotting  
Sophie Courchesne

Thomas Dagueneil  
John Danger <sup>o</sup>  
Quentin de Halleux  
Thierry de Reydet  
Alfredo de Romana  
Lucas Delvalle  
Emilie Desforges  
Guillaume Devaud  
Jonathan Dextraze  
Nicolas Dextraze  
Nicolas Doduik  
Clément Drévo  
Kadeem Dunn  
Bernard Dugas \*  
David Duguay  
Tony Duong  
François-Xavier Dupas  
Valérie Durand

Nathalie Ebnoether

Lai-Tze Fan  
Damien Fangous  
Léo Ferland  
Aurélien Folie  
Lynn Foster  
Maria Frangos \*  
Noah Frangos

Damien Galan  
Hafen Gaudenz  
Manon Gaudet  
Thomas Gaudy \*  
Stéphane Geiser  
Sylvie Gendreau  
Jean-Sébastien Gervais  
Yannick Gervais \*<sup>o</sup>  
Marc-Antoine Giguère  
Stéphane Gingras  
Tristan Glatard  
Stéphane Gobron  
Béatrice Godot  
Valentin Gomez  
Viviana Gozzi  
Alex Gray  
David Grunenwald  
Ivan Gulizia

Leo Hartman  
Maya Hartmeier  
Bob Haugen  
Alexander Havas  
Laurence Huber  
Gérald Huguenin  
Henry Hurtado

Calin Ionescu  
Manuel Izquierdo

Fabien Jeanneret  
Levan Jeanneret  
Povilas Jurgaitis \*  
Typhaine Juvet

Najmeh Khalili  
François-Eric King  
Maya Kirszenbaum

Flavien Knuchel  
Philip Koenig  
Cem Koker  
  
Sophie Laberge  
Béatrice Langellier  
Madeleine Laugeri  
Tomy-Richard Leboeuf  
Pierre-Mikael Legris  
Jonathan Lessard  
Giovanni Lo Presti  
Sarah Lozinski  
Aline Lustre

Naj Mahani  
Marc-André Maheu  
Marco Manca  
Cristina Mahneke  
Jacques-E. Marcotte

Nadia Marquis  
Nicole Martin  
Sebastian Martinez  
Romain Martischang  
Dominique Massie  
Nibe Mbumba  
Trevor Meier  
Jérémy Méjane  
Mark Melnykowycz  
Marguerite Mendell  
Sarah Meunier  
Pauline Meyer

Tammy-Lea Meyer  
Gregory Moullec  
Walid Miled  
Kostia Miteskyy  
Florian Moncomble  
Baher Mohamed  
Basem Mohamed

Patricia Morales  
Camille Morasse

Pascal Nataf  
Jonathan Ng  
Thanh-Diem Nguyen

Isis Ortiz  
Renaud Ory

Charly Pache \*  
Liliana Palomino  
Sandra Pelaez  
Véronique Pepin  
Kevin Piccand  
Aminata D Pierson  
Juan-Pablo Pimentel  
Laurent Pouget

Humberto Quintana

Evy Raelison  
Daniel Regazzoni  
Claire Reierson  
Simon Riverin  
Aïcha Rizzotti  
Aurelia Roman  
Andres Romero  
Laurent Ropers  
Pauline Rossel  
Patrice Roy

Samir Sangani  
Helder Santos  
Amélie Sauter  
Aurélie Schneider  
Megann Stephan  
Damien Sekularac

Isabelle Sermet  
Patricia Sigam  
Julien Silvestrini  
Leora Simon  
Cyriaque Skrapits  
Ruth Stauffer  
Justine Sun

Melissa Tamporello  
Mark Thompson  
Sze Man Tse \*

Alena Valderrama \*  
Sophie Varone  
Saskia Vellas  
Francois Vermuelen  
Yanick Vezina  
Christian Voirol

Alexandre Wegmuller  
Nicolas Wenk \*  
Peter Wilkinson  
John Willimann

Lulu Xing

Qahtan Yaroub

Alexis Zalini  
Claudio Zalini  
Andrei Zanescu  
Julyan Zeltner  
Yaxi Zhao

\* active core contributor

<sup>o</sup> co-founder