### DANIELA CASSOL, PH.D.

Contact Information	Advanced Analytics, DOE Joint Genome Institute 1 Cyclotron Road, Lawrence Berkeley National Lab, Berkeley, California, 94720	e-mail: danicassol@gmail.com Google Scholar Website / GitHub
Education	<ul> <li>Ph.D., Biological Sciences - Genetics</li> <li>2012–2016 - Federal University of Rio de Janeiro, Brazil</li> <li>M.S., Plant Physiology</li> <li>2010-2012 - Federal University of Viçosa, Brazil</li> <li>B.S., Biological Sciences and Teaching credentials in Biology</li> <li>2005-2010 - Federal University of Pelotas, Brazil</li> </ul>	
Postdoctoral Training	<b>Postdoctoral Research Fellow</b> 2017–2022 – University of California, Riverside, USA	
Professional Appointment	<ul> <li>Bioinformatics Computing Consultant 2022–Present – DOE Joint Genome Institute, Lawrence Berkeley National Lab</li> <li>Visiting Researcher 2019–Present – Federal University of Espírito Santo, São Mateus, ES, Brazil</li> <li>Postdoctoral Research Fellow 2017–2022 – University of California, Riverside, CA, USA</li> <li>Bioinformatics Analyst 2016–2017 – Biogenetika Diagnóstico Molecular e Medicina Genômica, SC, Brazil</li> </ul>	
Research Experience	<ul> <li>Federal University of Rio de Janeiro, Brazil 2012–2016 – Research Assistant</li> <li>Worked and assisted in a molecular laboratory extracting RNA, performed RT-qPCR, statistics analysis, global gene expression characterization, RNA-Seq sequencing, and bioin- formatics analysis.</li> <li>Federal University of Viçosa, Brazil 2010–2012 – Research Assistant</li> <li>The research was focused on "Production, accumulation, and exudation of organic acids on aluminum toxicity in <i>Stylosanthes</i>". Duties included data collection for different physio- logical analyses in plants exposed to toxic levels of aluminum, gas chromatography, HPLC chromatography, and statistical analysis.</li> <li>Federal University of Espírito Santo, Brazil 2009–2009 – Research Assistant</li> <li>Collected field data on plant physiological processes in the mangrove forest in Brazil. Duties included measuring plant physiological processes using fluorometers and portable photosynthesis equipment.</li> <li>Institute of Botany, São Paulo, Brazil 2007–2007 – Research Assistant</li> <li>Worked in the ecophysiology laboratory and collected field data on tree seedlings as part of a project to preserve the tropical forest. Received training in techniques for environmental preservation and restoration of degraded forests.</li> <li>Federal University of Pelotas, Brazil 2005–2010 – Research Assistant</li> <li>Worked and assisted in different projects focused on understanding the mechanisms of plant adaptation under different abiotic stresses. My duties included collecting plant physiological adata using fluorometers and portable photosynthesis system equipment and conducting experiments in greenhouses. Other duties included data entry, data analysis, and report writing.</li> </ul>	

#### Teaching and Mentoring Experience

#### Teaching

- Federal University of Espírito Santo, Brazil 2022 – Developed and lectured course for the Plant Biology Master Program Advanced R - Software Development for Plant Physiology
- BioC 2021: Where Software and Biology Connect, Online 2021 Workshop systemPipe: Workflow and Visualization Toolkit
- Federal University of Espírito Santo, Brazil 2020 – Developed and lectured course for the Plant Biology Master Program RPP2020 R for Plant Physiologists
- Association for Women in Science, Riverside, USA 2020 Workshop How to build your portfolio online
- BioC 2019: Where Software and Biology Connect, Toronto, Canada 2019 Workshop
  - Common Workflow Language (CWL) workshop
- Federal University of Viçosa, Brazil 2011 – Graduate Teaching Assistant BIO200 Biophysics
- Federal Institute of Rio Grande do Sul Campus Visconde da Graça, Brazil 2009 Teaching Assistant

I lectured Biology classes for High School students (12th Grade).

• Dr. Francisco Simões State Middle School, Brazil 2008 – Teaching Assistant

I lectured Biology classes for students in the Middle School (7th Grade).

• Federal University of Pelotas, Brazil 2006 – Teaching Assistant

I lectured Biology classes in a program called "Desafio Pré-Vestibular" to students improve their chances to attend college.

#### Mentoring

• Federal University of Espírito Santo, Brazil

Advisees (Co-advisor)

- Marcel Merlo Mendes, Ph.D. Candidate, Plant Biology (2022 Present)
- Lais Da Silva Magevski, Master's Candidate, Plant Biology (2020 2022)
- Liz Santos Nascimento, Master's Candidate, Tropical Agriculture (2020 2022)
- Igor Pires, Master's Candidate, Tropical Agriculture (2020 2022)
- Marcel Merlo Mendes, Master's Candidate, Tropical Biodiversity (2018 2019)
- University of California Riverside, CA, USA

Undergraduate and Graduate Student

- Le Zhang, Ph.D. Candidate, Genetics, Genomics, and Bioinformatics (2018 2022)
- Shiyuan Guo, Graduate Student, Genetics, Genomics, and Bioinformatics (Rotation Winter and Fall 2020)
- Ryan Gates, Undergraduate, Biochemistry (2020 2021)
- Ponmathi C. Ramasamy Jayaseelan, Undergraduate, Bioengineering and Biomedical Engineering (2019 2020)
- Gordon David Mosher, Undergraduate, Statistics (2018 2022)
- Cindy Nguyen, Undergraduate, Statistics (2018 2019)

#### • Federal University of Rio de Janeiro, Brazil

Undergraduate Research Assistant

- Kauê Espindola, Undergraduate, Agronomy (2012 2014)
- Rafaela Fagundes, Undergraduate, Biology (2014 2014)
- Moises de Oliveira Santos Junior, Undergraduate, Biology (2013 2013)
- Bruna Levy Pestana Fernandes, Undergraduate, Biology (2012 2012)

• Federal University of Viçosa, Brazil

Undergraduate Research Assistant

- Kauê Espindola, Undergraduate, Agronomy (2010 2012)
- Daniel Martins Canossa da Costa, Undergraduate, Agronomy (2011 2011)

#### Teaching Certification

- Software Carpentry and Data Carpentry. Licensed Instructor, 2021
- University Teaching Certificate, University of California Riverside, 2021

#### PEER REVIEWED PUBLICATIONS

- I. Zenzen, D. Cassol, P. Westhoff, S. Kopriva, and D. Ristova, "Transcriptional and metabolic profiling of sulfur starvation response in two monocots," *BMC plant biology*, vol. 24, no. 1, p. 257, Apr. 2024.
- [2] M. M. d. Santos, M. G. Oliveira, D. Cassol, W. P. Rodrigues, A. R. Falqueto, J. C. Ramalho, and F. L. Partelli, "Genotypic diversity of *Coffea canephora* cv. conilon identified through leaf morpho-and eco-physiological traits," *Scientia horticulturae*, vol. 324, p. 112603, Jan. 2024.
- [3] D. Jardim-Messeder, D. Cassol, Y. Souza-Vieira, M. Ehlers Loureiro, T. Girke, M. Boroni, R. Lopes Corrêa, A. Coelho, and G. Sachetto-Martins, "Genome-wide identification of core components of ABA signaling and transcriptome analysis reveals gene circuits involved in castor bean (*Ricinus communis* l.) response to drought," *Gene*, vol. 883, no. 147668, p. 147668, Jul. 2023.
- [4] C. L. Pinheiro, J. B. Zampirollo, M. M. Mendes, V. F. dos Santos, J. P. R. Martins, D. M. Silva, M. M. P. Tognella, D. Cassol, and A. R. Falqueto, "Exposition of three *Cattleya* species (orchidaceae) to full sunlight: effect on their physiological plasticity and response to changes in light conditions," *Ornamental Horticulture*, vol. 29, no. 1, pp. 57–67, 2023.
- [5] D. Jardim-Messeder, Y. de Souza-Vieira, L. C. Lavaquial, D. Cassol, V. Galhego, G. A. Bastos, T. Felix-Cordeiro, R. L. Corrêa, M. Zámocký, M. Margis-Pinheiro, and G. Sachetto-Martins, "Ascorbate-Glutathione cycle genes families in euphorbiaceae: Characterization and evolutionary analysis," *Biology*, vol. 12, no. 1, Dec. 2022.
- [6] M. Merlo Mendes, A. C. R. Pinheiro, F. Ribeiro Pires, A. Alves Fernandes, L. F. Tavares de Menezes, I. Damasceno Pires Pereira, V. Fonsêca Dos Santos, L. de Almeida Leite, **D. Cassol**, and A. R. Falqueto, "Photosynthesis and leaf traits of tree species influenced by green manure associated with soil treatments," *Communications in soil science and plant analysis*, vol. 53, no. 16, pp. 2064–2081, Sep. 2022.
- [7] G. Torres-Silva, L. N. F. Correia, D. S. Batista, A. D. Koehler, S. V. Resende, E. Romanel, **D. Cassol**, A. M. R. Almeida, S. R. Strickler, C. D. Specht, and W. C. Otoni, "Transcriptome analysis of *Melocactus glaucescens* (cactaceae) reveals metabolic changes during *in vitro* shoot organogenesis induction," *Front. Plant Sci.*, vol. 12, p. 697556, Aug. 2021. [Online]. Available: http://dx.doi.org/10.3389/fpls.2021.697556
- [8] D. Jardim-Messeder, T. da Franca Silva, J. P. Fonseca, J. N. Junior, L. Barzilai, T. Felix-Cordeiro, J. C. Pereira, C. Rodrigues-Ferreira, I. Bastos, T. C. da Silva, V. de Abreu Waldow, D. Cassol, W. Pereira, B. Flausino, A. Carniel, J. Faria, T. Moraes, F. P. Cruz, R. Loh, M. Van Montagu, M. E. Loureiro, S. R. de Souza, A. Mangeon, and G. Sachetto-Martins, "Identification of genes from the general phenylpropanoid and monolignol-specific metabolism in two sugarcane lignin-contrasting genotypes," *Mol. Genet. Genomics*, vol. 295, no. 3, pp. 717–739, 2020.
- [9] P. C. S. Braga, J. P. R. Martins, M. V. Pacheco, R. M. Borges, R. Bonomo, D. Cassol, and A. R. Falqueto, "Germination and seedling growth of genotypes crambe abyssinica submitted to water deficit," J. Agric. Sci., vol. 11, no. 15, p. 23, 2019.
- [10] D. Cassol, F. P. Cruz, K. Espindola, A. Mangeon, C. Müller, M. E. Loureiro, R. L. Corrêa, and G. Sachetto-Martins, "Identification of reference genes for quantitative RT-PCR analysis of microRNAs and mRNAs in castor bean (*Ricinus communis* L.) under drought stress," *Plant Physiology and Biochemistry*, vol. 106, pp. 101–107, 2016.
- [11] D. Cassol, J. Cambraia, C. Ribeiro, J. A. Oliveira, and F. B. Cardoso, "Citric acid secretion induced by aluminum in two *Stylosanthes* species," *Biologia Plantarum*, vol. 60, pp. 572–578, 2016.

- [12] M. A. Bacarin, E. G. Martinazzo, D. Cassol, A. R. Falqueto, and D. M. Silva, "Daytime variations of chlorophyll a fluorescence in pau d' alho seedlings," *Revista Árvore*, vol. 40, pp. 1023–1030, 2016.
- [13] A. T. Perboni, D. Cassol, F. P. d. Silva, D. M. Silva, and M. A. Bacarin, "Chlorophyll a fluorescence study revealing effects of flooding in canola hybrids," *Biologia*, vol. 67, pp. 338–346, 2012.
- [14] M. A. Bacarin, S. Deuner, F. S. P. d. Silva, D. Cassol, and D. M. Silva, "Chlorophyll a fluorescence as indicative of the salt stress on *Brassica napus* L," *Brazilian Journal Plant Physiology*, vol. 23, pp. 245–253, 2011.
- [15] A. R. Falqueto, F. S. P. Silva, D. Cassol, A. M. Magalhães Júnior, A. C. Oliveira, and M. A. Bacarin, "Chlorophyll fluorescence in rice: probing of senescence driven changes of PSII activity on rice varieties differing in grain yield capacity," *Brazilian Journal Plant Physiology*, vol. 22, pp. 35–41, 2010.
- [16] A. R. Falqueto, D. Cassol, A. M. Magalhães Júnior, A. C. Oliveira, and M. A. Bacarin, "Growth and assimilate partitioning in rice cultivars difference in grain yield potential," *Bragantia*, vol. 68, pp. 563–571, 2009.
- [17] A. R. Falqueto, D. Cassol, A. M. d. Magalhães Júnior, A. C. d. Oliveira, and M. A. Bacarin, "Physiological analysis of leaf senescence of two rice cultivars with different yield potential," *Pesquisa Agropecuária Brasileira*, vol. 44, pp. 695–700, 2009.
- [18] D. Cassol, F. S. P. d. Silva, A. R. Falqueto, and M. A. Bacarin, "An evaluation of nondestructive methods to estimate total chlorophyll content," *Photosynthetica*, vol. 46, pp. 634–636, 2008.
- [19] M. A. Bacarin, D. D. Schmitz, A. R. Falqueto, D. Cassol, A. C. Torres, J. A. Peters, and E. J. B. Braga, "Photosynthetic characteristics of potato plants, cv. baronesa and its genetically transformed genotype for pvy resistance," *Horticultura Brasileira*, vol. 26, pp. 383–387, 2008.
- [20] A. R. Falqueto, D. Cassol, A. M. d. M. Júnior, A. C. d. Oliveira, and M. A. Bacarin, "Fluorescence characteristics of chlorophyll in rice cultivars with early, medium, and late cycle," *Brazilian Journal of Biosciences*, vol. 2, pp. 579–581, 2007.
- [21] A. Falqueto, D. Cassol, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Photosynthetic characteristics in rice cultivars with contrasting production," *Brazilian Journal of Biosciences*, vol. 2, pp. 582–584, 2007.
- [22] D. Cassol, A. Falqueto, and M. Bacarin, "Photosynthesis in Mentha piperita and Melissa officinalis under shading," Brazilian Journal of Biosciences, vol. 2, pp. 576–578, 2007.
- [23] D. Cassol, A. Falqueto, and M. Bacarin, "Influence of nitrogen fertilization on the characteristics of chlorophyll in rice," *Brazilian Journal of Biosciences*, vol. 2, pp. 573–575, 2007.

\* Peer-Reviewed Conference Articles

- [24] J. Bader, J. Belak, M. Bement, M. Berry, R. Carson, D. Cassol, S. Chan, and et al, "Novel approaches toward scalable composable workflows in Hyper-Heterogeneous computing environments," in *Proceedings of the SC '23 Workshops of The International Conference on High Performance Computing, Network, Storage, and Analysis*, ser. SC-W '23. New York, NY, USA: Association for Computing Machinery, Nov. 2023, pp. 2097–2108.
- [25] D. Cassol, A. Falqueto, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Biomass partition in cultivars of Oryza sativa L. with different grain yield," in XVIII Scientific Initiation Conference e XI Graduate Meeting, Pelotas, Brazil, 2009.
- [26] F. Silva, D. Cassol, and B. M. Moura, Andréa Bittencourt, "Transient fluorescence in irrigated rice plants from microbiolized seeds with different inoculants," in XVIII Scientific Initiation Conference e XI Graduate Meeting, Pelotas, Brazil, 2009.
- [27] I. Souza Junior, C. C. Schafer, J.T, A. Santos, S. F. Moura, A.B, D. Cassol, and M. Bacarin, "Chlorophyll fluorescence as an indicator for selection of growth-promoting rhizobacteria in rice," in VI Congresso Brasileiro de Arroz Irrigado, Pelotas, Brazil, 2009.

- [28] F. Silva, A. Falqueto, D. Cassol, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Analysis of transient fluorescence in two irrigated rice genotypes during the reproductive stage," in XVII Scientific Initiation Conference e X Graduate Meeting, Pelotas, Brazil, 2008.
- [29] A. Perboni, D. Cassol, F. Silva, D. Silva, and M. Bacarin, "Effect of salinity on transient fluorescence in canola plants," in XVII Scientific Initiation Conference e X Graduate Meeting, Pelotas, Brazil, 2008.
- [30] D. Cassol, F. Silva, A. Falqueto, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Fluorescence of chlorophyll a in rice genotypes with different cycle," in XVII Scientific Initiation Conference e X Graduate Meeting, Pelotas, Brazil, 2008.
- [31] A. Falqueto, D. Cassol, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Aspects of chlorophyll fluorescence in rice cultivars with contrasting production," in V Congresso Brasileiro de Arroz Irrigado e XXVII Reunião da Cultura do Arroz Irrigado, Pelotas, Brazil, 2007.
- [32] D. Cassol, A. Falqueto, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Differences in chlorophyll fluorescence production in rice cultivars with contrasting production," in XVI Scientific Initiation Conference e IX Encontro dos Programas de Pós-Graduação, Pelotas, Brazil, 2007.
- [33] F. A. Schmitz, D.D, **D. Cassol**, B. M. Peters, José Antonio, and E. Braga, "Fchlorophyll fluorescence and potato production components cv. monkey genetically transformed with a fungal resistance gene," in *57 Brazilian Botanical Conference*, Gramado, Brazil, 2006.
- [34] F. A. Schmitz, D.D, D. Cassol, J. Peters, M. Bacarin, and E. Braga, "Photosynthetic characteristics of potato plants, cv. baronesaand its genetically transformed genotype for pvy resistance," in 57 Brazilian Botanical Conference, Gramado, Brazil, 2006.

## SOFTWARE AND JAWS: JGI Analysis Workflow Service. [Documentation]. systemPipeR: Workflow and Visualization Toolkit. [Available on Bioconductor]. systemPipeRdata: Workflow templates and sample data. [Available on Bioconductor]. systemPipeShiny: An Interactive Framework for Workflow Management and Visualization. [Available on Bioconductor].

- systemPipeTools: Tools for data visualization. [Available on Bioconductor].
- **bioassayR**: Cross-target analysis of small molecule bioactivity. [Available on Bioconductor].

# AWARDS AND 2022 Awards - International Scholar Research Award - University of California, Riverside 2020 Research grant - Physiological Characterization, *in vitro* establishment, and transcriptome of *Zanthoxylum tingoassuiba* - FAPEMA, Brazil 2019 Travel grant - BioC 2019: Where Software and Biology Connect. New York, USA 2018 Travel grant - BioC 2018: Where Software and Biology Connect. Toronto, Canada 2014-2015 Rio de Janeiro Research Foundation, Brazil Doctoral Exchange Fellowship 2012-2016 National Council for Scientific and Technological Development, Brazil Ph.D. Research Fellowship

- 2010–2012 National Council for Scientific and Technological Development, Brazil M.Sc. Research Fellowship
- 2008 Travel grant XIII Reunión Latinoamericana y XXVII Reunión Nacional de Fisiología Vegetal. Rosario, Argentina
- 2006–2010 National Council for Scientific and Technological Development, Brazil Undergraduate Research Fellowship
- 2005–2006 Fellowship Rio Grande do Sul Research Foundation, Brazil Undergraduate Research Fellowship

Certifications & Specialization	• Advanced Certified Scrum Developer (R). 2024. Scrum Alliance. Credential ID 1938879.	
	• New Manager Boot Camp. 2024. UC Berkeley Executive Education. Credential ID 100113070	
	<ul> <li>Certified Scrum Product Owner (a). 2023. Scrum Alliance. Credential ID 1878822.</li> <li>Certified Scrum Developer (a). 2023. Scrum Alliance. Credential ID 1806995.</li> <li>Leading Teams: Developing as a Leader. 2023. University of Illinois at Urbana-Champaign. Credential ID L87HWAND2XY9.</li> </ul>	
Professional Activities	<ul> <li>Participation on Advisory Panels and Committees</li> <li>Lab Ambassador Program - LBNL. 2023–Present</li> <li>Member of Berkeley Lab Early Career Employee Resource Group. 2023–Present</li> <li>Member of Women's Support and Empowerment Council (WSEC). 2023–Present</li> <li>Board Member of Bioconductor Community Advisory Board. 2021–2024</li> <li>Member of International Student &amp; Scholars Advisory Committee (ISAC). 2020–2022</li> <li>Co-founder and co-organizer of R-Ladies Riverside and R-Ladies São Mateus: Ar organization to promote gender diversity in the R community. 2019–2024</li> <li>Vice-President of Riverside Postdoc Association. 2019–2020</li> </ul>	
	<ul> <li>Professional Memberships</li> <li>Association for Computing Machinery. 2023 – Present</li> <li>American Society of Plant Biologists. 2021–2022</li> <li>Sigma Xi - The Scientific Research Honor Society. 2021–2022</li> <li>American Association for the Advancement of Science. 2020–2022</li> <li>International Society for Computational Biology. 2019–2023</li> <li>Association for Women in Science. 2019–Present</li> <li>Brazilian Society of Plant Physiology. 2007–2010</li> </ul>	
CONFERENCE AND • 2022 – Bioconductor Conference 2022. Seattle, WA. Organizing Committee Memb		
Symposium Organization	<ul> <li>Website</li> <li>2021 - R for Data Science Book Club. Federal University of Espírito Santo, Brazil. Organizing Committee Member.</li> <li>2019 - Postdoc Symposium 2019 University of California Biverside Biverside - CA</li> </ul>	
	• 2019 – Postdoc Symposium 2019. University of Camorina, Riverside - CA, USA. Organizing Committee Member. <i>WebSite</i>	
	• 2018 – 5th Annual CEPCEB PostDoc Symposium. University of Camornia, Riverside. Riverside - CA, USA. Organizing Committee Member. Web Page	
	• 2009 – XVIII Scientific Initiation Conference and XI Graduate Meeting. Federal University of Pelotas, Brazil. Organizing Committee Member.	
	• 2008 – XVII Scientific Initiation Conference and X Graduate Meeting. Federal University of Pelotas, Brazil. Organizing Committee Member.	
	<ul> <li>2007 - XVI Scientific Initiation Conference and IX Graduate Meeting. Federal University of Pelotas, Brazil. Organizing Committee Member.</li> <li>2007 - XI Plant Physiology Conference. Gramado, RS, Brazil. Organizer.</li> </ul>	
	• 2006 – XV Scientific Initiation Conference and VIII Graduate Meeting. Federal University of Pelotas, Brazil. Organizing Committee Member.	
* Selected		
Conference Presentations	[35] D. Cassol, J. Froula, E. Kirton, SJ. Sul, M. Melara, R. Kothadia, E. Player, S. Sarrafan, S. Chan, and K. Fagnan, "Patterns and anti-patterns in migrating from legacy workflows to workflow management systems," in <i>SC23: The International Conference for High Performance Computing, Networking, Storage, and Analysis</i> , Conference, 2023, (Presentation).	
	[36] "D. Cassol, J. Froula, E. Kirton, A. Kollmer, R. Kothadia, M. Melara, G. Rath, K. Row- land, S. Sarrafan, SJ. Sul, S. Trong, S. Yao, S. Chan, and K. Fagnan", "JAWS: JGI analysis workflow service," in JGI User Meeting, Conference, 2022, (Poster).	

- [37] D. Cassol, J. Froula, E. Kirton, A. Kollmer, R. Kothadia, M. Melara, G. Rath, K. Rowland, S. Sarrafan, S.-J. Sul, S. Trong, S. Yao, S. Chan, and K. Fagnan, "JAWS: JGI analysis workflow service," in *BioC 2022: Where Software and Biology Connect*, Conference, 2022, (Poster).
- [38] D. Cassol, L. Zhang, and T. Girke, "systemPipeR: Workflow and visualization toolkit," in BioC 2021: Where Software and Biology Connect, Online Conference, 2021, (Workshop).
- [39] D. Cassol, L. Zhang, G. Mosher, P. Ramasamy, and T. Girke, "systemPipeR: a generic workflow environment federates r with command-line software," in *BioC 2020: Where* Software and Biology Connect, Boston, US - Online Conference, 2020, (Poster).
- [40] D. Cassol, T. Girke, M. Zecevic, and Q. Hu, "Common workflow language (cwl) workshop," in *BioC 2019: Where Software and Biology Connect*, New York, US, 2019, (Workshop).
- [41] D. Cassol and T. Girke, "systemPipeR: Ngs workflow environment with command-line interface," in *Bioconductor*, Toronto, Canada, 2018, (Poster).
- [42] D. Cassol and T. Girke, "systemPipeR: Ngs workflow and report generation environment," in International Scholar Research 2017, Riverside, California, 2017, (Poster).
- [43] D. Cassol, F. Cruz, K. Espindola, M. E. Loureiro, R. L. Correa, and G. Sachetto-Martins, "Selection and validation of reference genes for expression studies in castor beans (*Ricinus communis* L.) under drought stress using RT-qPCR," in 11th International Congress of Plant Molecular Biology, Foz do Iguaçu, Brazil, 2015, (Poster).
- [44] G. Jucoski, D. Cassol, J. Cambraia, C. Ribeiro, E. Fonseca Junior, L. Souza, and F. Cardoso, "Antioxidative metabolism in young plants of *Eugenia uniflora* L and submitted to toxic iron levels," in XIII Brazilian Congress of Plant Physiology and XIV Latin American Meeting of Plant Physiology, Buzios, Brazil, 2011, (Poster).
- [45] S. Deuner, F. Silva, D. Cassol, and M. Bacarin, "Salinity stress in canola plants," in XII Brazilian Congress of Plant Physiology, Fortaleza, Brazil, 2009, (Presentation).
- [46] D. Cassol, F. Silva, A. Perboni, M. Farias, A. Oliveira, and M. Bacarin, "Chlorophyll fluorescence of two oat cultivars grown in a greenhouse," in XII Brazilian Congress of Plant Physiology. Fortaleza, Brazil: Brazilian Society of Plant Physiology, 2009, (Poster).
- [47] D. Cassol, A. Falqueto, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Biomass partition in cultivars of *Oryza sativa* 1. with different grain yield," in XVIII Scientific Initiation Conference e X Graduate Meeting, Pelotas, Brazil, 2009, (Presentation).
- [48] D. Cassol, A. Falqueto, F. Silva, D. Silva, and M. Bacarin, "Daily variation of chlorophyll fluorescence parameters in garlic wood seedlings (*Gallesia integrifolia* (SPRENG.) HARMS)," in XIII Reunión Latinoamericana and XXVII Reunión Argentina de Fisiología Vegetal, Rosario, Argentina, 2008, (Poster).
- [49] D. Cassol, F. Silva, A. Falqueto, N. Santos Júnior, and M. Bacarin, "Growth analysis and fluorescence parameters of chlorophyll a in seedlings of three native forest species," in 17<sup>o</sup> Scientific Initiation Conference, Pelotas, Brazil, 2008, (Presentation).
- [50] D. Cassol, F. Silva, A. Perboni, and M. Bacarin, "Fluorescence parameters of chlorophyll in seedlings of two species of eucalyptus grown under natural conditions," in XVII Scientific Initiation Conference e X Graduate Meeting, Pelotas, Brazil, 2008, (Presentation).
- [51] D. Cassol, F. Silva, A. Falqueto, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Fluorescence of chlorophyll a of two rice genotypes with different cycle," in XVII Scientific Initiation Conference e X Graduate Meeting, Pelotas, Brazil, 2008, (Presentation).
- [52] D. Cassol, A. Falqueto, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Chlorophyll fluorescence in two rice cultivars with the difference in grain yield potential," in XI Brazilian Congress of Plant Physiology, Gramado, Brazil, 2007, (Poster).
- [53] D. Cassol, A. Falqueto, N. Santos Júnior, and M. Bacarin, "Seed germination of five native forest species," in XVI Scientific Initiation Conference e IX Graduate Meeting, Pelotas, Brazil, 2007, (Presentation).

- [54] D. Cassol, A. Falqueto, A. Magalhães Júnior, A. Oliveira, and M. Bacarin, "Differences in chlorophyll fluorescence production in rice cultivars with contrasting yield," in XVI Scientific Initiation Conference e IX Graduate Meeting, Pelotas, Brazil, 2007, (Presentation).
- [55] D. Cassol, "Aspects of chlorophyll fluorescence in rice cultivars with contrasting yield," in V Brazilian Irrigated Rice Conference, Pelotas, Brazil, 2007, (Poster).
- [56] D. Cassol, C. Giordani, R. Cunha, M. Provenci, L. Minello, M. Coimbra, and M. Pereira, "Nervous territories of thoracic limb of Amazonetta brasiliensis," in XVII Scientific Initiation Meeting e XIV Scientific Initiation Fair, Porto Alegre, Brazil, 2005, (Presentation).
- LANGUAGES Portuguese (native) and English (proficient).

#### TECHNICAL AND

Personal skills

- **Programming Languages:** R; bash; Python; RMarkdown; TeX.
- Software Development: Git; Docker; Singularity; CI/CD.
- **Biology:** Next Generation Sequencing; Nucleic Acid Isolation; RT-qPCR; Genotyping; Clinical Genetics Test and Statistical Analysis.
- **Strengths Skills:** Good presentation skills; Works well in a team; Able to master new skills quickly.