

Giovanna Bonadonna, Ph.D. | Curriculum Vitae

Department of Anthropology, Washington University in St. Louis
One Brookings Drive, St. Louis, MO 63130, USA

Email: giovanna@wustl.edu | bonadonnagiovanna@gmail.com
Phone number: 848-456-0138

Education

- June 2016

• **Ph.D.**
Biology and Applied Biotechnologies, University of Turin, Turin, Italy
Thesis: Inter and Intra Group Dynamics in *Indri indri*.
- July 2012

• **MSc.**
Evolution of Animal Behavior, Natural Science, University of Turin, Turin, Italy
Thesis: Singing Plasticity in *Indri indri* in Response to Playback (*cum laude*)
- October 2009

• **BSc.**
Natural Science, University of Turin, Turin, Italy
Thesis: Comparison of Female Reproductive Success in Two Species of Treefrog:
Hyla sarda and *Hyla intermedia*

Professional Appointments

<u>Postdoctoral Research Associate</u>	Washington University, St. Louis, MO	01/2021 – present
<u>Adjunct Professor</u>	Monmouth University, Long Branch, NJ	09/2017 – 01/2021
	Middlesex County College, Edison, NJ	03/2017 – 01/2021
<u>Community Garden Coordinator</u>	Monmouth University, Long Branch, NJ	05/2018 – 01/2021
<u>Research Affiliate</u>	University of Turin, Turin, Italy	07/2016 – 01/2021
<u>Fieldwork Supervisor</u>	GERP, Maromizaha Forest, Madagascar	04/2014 – 10/2014
<u>Research Affiliate</u>	New York University, New York, NY	03/2013 – 01/2014
<u>Research Guide Instructor</u>	University of Turin, Madagascar	09/2011 – 2/2011

Research Experience

- Long-term study on critically endangered lemur species (*Indri indri* and *Propithecus diadema*) in two rainforests in Central-Eastern Madagascar (Maromizaha and Analamazaotra)
- Specialization in behavioral and spatial ecology, bioacoustics, reproductive biology (in particular genetic monogamy), population monitoring, molecular analyses, and conservation biology.
- Experience in organizing and conducting fieldwork in remote locations.
- Laboratory research at New York University, Molecular Anthropology Lab, conducting molecular analysis (DNA extraction from fecal samples, PCR and microsatellite genotyping, paternity analyses). Collaborators: Drs. Todd Disotell, Luca Pozzi, Andrew Burrell.
- Strong quantitative analytical, database, and statistical skills and experience with SPSS and R-studio.

- Experience in conducting spatial analysis and acoustic analysis.
- Collaboration in international cooperation and conservation projects involving Italian and Malagasy non-governmental organizations and Malagasy Universities

Field Experience

- Fieldwork Supervisor 2014
University of Turin, GERP (Group d'étude et de recherche sur les primates de Madagascar)
Maromizaha and Andasibe, Madagascar
- Field research manager and supervisor of six Malagasy research guides, six Italian undergraduate students during a six-month research field activity in Maromizaha forest and Mitsinjo forest station.
 - Fieldwork activities: groups habituation, behavioral observations, fecal sample collection, spatial data collection, acoustic recordings, camera trapping, playback experiments, transmission experiments.

- Research Guide Instructor 2011
University of Turin - Maromizaha, Madagascar
- Instructor of the Malagasy Managers in Conservation Biology and Biodiversity within the European Project BIRD (Biodiversity Integration and Rural Development).
 - Collection of behavioral data, spatial data, ecological data, non-invasive sampling methods techniques (biological samples, camera trapping and passive bioacoustics monitoring)

Student Mentorship and Training

- Training and mentoring two students on behavioral and acoustic data collection protocols on a wild population of diademed sifaka in the Maromizaha forest, thesis finalization, and posters presentation.
- Training four students in conducting transmission experiments, playback experiments, behavioral, spatial, and acoustic data collection on a wild population of indris in Maromizaha.
- Mentoring two students during thesis elaboration on indris' spatial ecology and indris' rhythmic structure of the song.
- Mentoring one student for a study on degradation and attenuation of indris' calls in the rainforest environment.
- Mentoring one student in managing a multi-annual database of acoustic data, as well as to conduct acoustic analysis using the software Praat.

Teaching experience

- Adjunct Professor Monmouth University, Long Branch, NJ 2017- 2021
Courses: Environmental Science, Biology Department
First Year Seminar, School of Social Work
- Adjunct Professor Middlesex County College, Edison, NJ 2018- 2021
Course General Biology II, Natural Sciences Department
- Lecturer University of Turin, Turin, Italy 2013
Course "Evolution of Animal Behavior",
Master in Evolution of Animal and Human Behavior, Natural Sciences.

Internships

- EDISU Piemonte - Turin, Italy 2011
Support services for Extra-UE students enrolling in the scholarship and fee system of the University of Turin and Politecnico di Torino
- SafariPrak Pombia - Pombia, Italy 2010–2011
Behavioral study of the African antelope *Hippotragus equinus* in captivity. Introduction of two specimens in the Savanah exhibit of the Safari zoological park
- Chausia Botanical Garden - LaTouille, France 2008
Maintenance and management of the Alpine Botanical Garden and guided tours

Volunteering

- Education Specialist WCS, Bronx Zoo, New York, NY 2017 - 2019
- Steering Committee Member MU Community Garden, Long Branch, NJ 2017 - 2018

Invited Speaker

- 27th International Primatological Society Congress, Nairobi. 2018
Symposium: Dynamics in Intergroup Relationships in Primates.
- Summer Science Seminars, Wesleyan University 2017
Seminar “A Long-Term Study on the Behavioral Ecology of Indri: Research and Conservation Projects in Madagascar”. Hosted by Joyce Powzyk.

Organization of Scientific Events

- Sound and the City
CRT foundation, Turin, Italy 2017
Talks and workshops aimed to provide a new perspective on the effect of the urban acoustic environment in our lives and on the wellness of animal and the human population living in an urban context.
- Research in Practice: Projects, Cooperation, and Future
CRT foundation, Turin, Italy 2013
Event aimed to present researchers’ fieldwork in developing countries, and the activities dedicated to promoting International Cooperation without geographic limits.

Grants, awards, scholarships

- Doctoral fellowship. University of Turin 2013-2016: \$ 65,000
- UNITO for International Cooperation. UNI.COO. University of Antananarivo, 2014: \$ 2,000
- Organizing scientific popular outreach events. CRT Foundation 2014 and 2016: \$ 8,000
- International student mobility, Italian Ministry of University and Research. 2013 & 2014: \$ 1000
- Training Managers in Conservation Biology and Biodiversity, Department of Life Science and System Biology, UNITO. 2011: \$ 2,000

- ERASMUS Student Mobility. ISPA, Instituto Superior de Psicologia Aplicada, Lisbon. 2010: 3,000\$

Scientific Production

**joint primary authors*

Peer-Reviewed Publications

Zanoli A, De Gregorio C, Valente D, Torti V, **Bonadonna G**, Randrianarison RM, Giacoma C, Gamba M. (2020) Sex dimorphic phrase organization in the song of the indris (*Indri indri*). *American Journal of Primatology*. 82:e23132. (DOI: 10.1002/ajp.23132)

Bonadonna G*, Zaccagno M*, Torti V, Valente D, De Gregorio C, Randrianarison RM, Tan C, Gamba M, Giacoma C. (2020) Intra and intergroup spatial dynamics of a pair-living singing primate, Indri Indri. A multiannual study of three indri groups in Maromizaha forest, Madagascar. *International Journal of Primatology* (DOI : 10.1007/s10764-019-00127-5)

Bonadonna G, Torti V, De Gregorio C, Valente D, Randrianarison RM, Pozzi L, Gamba M, Giacoma C. (2019). Evidence of genetic monogamy in the lemur Indri (*Indri indri*). *American Journal of Primatology*, e22993 (DOI: 10.1002/ajp.22993)

De Gregorio C, Zanoli A, Valente D, Torti V, **Bonadonna G**, Randrianarison RM, Giacoma C, Gamba M. (2019). Female indris determine the rhythmic structure of the song and sustain a higher cost when the chorus size increases. *Current Zoology*, 65(1): 89–97 (DOI : 10.1093/cz/zoy058)

Torti V*, **Bonadonna G***, De Gregorio C, Valente D, Randrianarison RM, Friard O, Pozzi L, Gamba M, Giacoma C (2017). Do primates have the melody in their genes? An intra-population analysis of song dissimilarity in the light of genetic distance. *Scientific Reports* 7: 10140 (DOI: 10.1038/s41598-017-10656-9)

Bonadonna G, Torti V, Sorrentino V, Randrianarison RM, Zaccagno M, Gamba M, Tan CL, Giacoma C (2017). Territory exclusivity and intergroup encounter in the indris (Mammalia: Primates: Indridae: *Indri indri*) upon methodological tuning. *The European Zoological Journal*. 84(1): 238-251. (DOI: 10.1080/24750263.2017.1318184)

Gamba M, Torti V, Estienne V, Randrianarison RM, Valente D, Rovara P, **Bonadonna G**, Friard O, Giacoma C (2016). The Indris Have Got Rhythm! Timing and Pitch Variation of a Primate Song Examined between Sexes and Age Classes. *Frontiers in Neuroscience*, 10: 249. (DOI: 10.3389/fnins.2016.00249)

Gamba M, Torti V, **Bonadonna G**, Guzzo G, Giacoma C (2014). Overlapping and synchronization in the song of the Indris (*Indri indri*). In: Cartmill E.A., Roberts S., Lyn H., Cornish H. *The Evolution of Language: Proceedings of the 10th international conference (EvoLangX)*. 14-17th April 2014, Vienna, Austria. Singapore. World Scientific Publishing. 90-97. ISBN/ISSN: 978-981-4603-62-1

Bonadonna G, Torti V, Randrianarison RM, Gamba M, Martinet N, Giacoma C (2014) Behavioral correlates of extra-pair copulation in *Indri indri*. *Primates* 55(1):119-23; (DOI: 10.1007/s10329-013-0376-0)

Abstracts Published in Peer-Reviewed Journals

Gamba M, Torti V, **Bonadonna G**, Randrianarison RM, Friard O, Giacoma C (2016). Melody in my head, melody in my genes? Acoustic similarity, individuality, and genetic relatedness in the indris of Eastern Madagascar. *The Journal of the Acoustical Society of America*, 140(4):3017-3018. (DOI: 10.1121/1.4969359)

Torti V, Gamba M, **Bonadonna G**, Randrianarison RM, Giacoma C (2015). Good Neighbourly or Teeth Grinding: Song Mediates the Interaction of Indri Groups in the Forest. 6th European Federation for Primatology Meeting, XXII Italian Association of Primatology Congress Rome, Italy, August 25-28. *Folia Primatol* 2015;86:235-386 (DOI:10.1159/000435825)

Gamba M, Friard O, **Bonadonna G**, Righini R, Nadhurou B, Riondato I, Torti V, Giacoma C (2015). Lemur Tunes and Researchers' Boon! Call and Song Classification in the Malagasy Primates. 6th European Federation for Primatology Meeting, XXII Italian Association of Primatology Congress Rome, Italy, August 25-28. *Folia Primatol* 86:235-386 (DOI:10.1159/000435825)

Anania A, Costa F, **Bonadonna G**, Friard O, Ratsimbazafy J, Cristina G, Gamba M (2015). Contextual Variation of the Vocalizations of *Propithecus diadema* in the Wild. 6th European Federation for Primatology Meeting, XXII Italian Association of Primatology Congress Rome, Italy, August 25-28. *Folia Primatol* 2015;86:235-386 (DOI:10.1159/000435825)

Oral Contributions

Bonadonna G, Torti V¹, Zaccagno M, Valente D, De Gregorio C, Randrianarison RM, Tan CL, Gamba¹ M, Giacoma C. Intra- and inter-group spatial dynamics of a monogamous singing primate, indri indri, in Maromizaha, Madagascar. 27th International Primatological Society Congress, Nairobi, August 2018

Bonadonna G, Torti V, Casto A, Ruggiero M, Friard O, Pozzi L, Randrianarison RM, Gamba M, Giacoma C. Identity cues and genetic relatedness in the indris' song. IV International Symposium on Acoustic Communication by Animals. Omaha Henry Doorly Zoo, Omaha, NE, 18-21 July 2018.

Bonadonna G, Torti V, Gamba M, Randrianarison RM, Giacoma C. Home sweet home (range). A multiannual study on *Indri indri* spatial behavior. XXII meeting European Federation for Primatologist. Roma, Italy, 25-28 August 2015. *Folia Primatol* 2015;86:235-386 (DOI:10.1159/000435825)

Bonadonna G, Torti V, Gamba M, Randrianarison RM, Giacoma C. Spatial and territorial behavior in *Indri indri*. Primate day. Firenze, Italy October 25th 2014

Bonadonna G., Torti V, Gamba M, Giacoma C. Community based cooperation in Madagascar. La Ricerca in Pratica. Progetti, Cooperazione e Futuro (The Research in Practice. Projects, Cooperation, Future). Rettorato, University of Torino, Turin, Italy. December 16th 2014

Bonadonna G, Torti V, Gamba M, Giacoma C. Monogamy and extra-pair copulation: the case study of *Indri indri*. IV National Meeting of Research in the Parks. Parco Natura Viva. Verona, Italy, October 4th, 2013.

Bonadonna G, Bounous G. Les actions de l'Université de Turin en Madagascar: biodiversité, développement durable, instruction et formation. The Francophone University International Cooperation in Piemonte. AUF. Torino, Italy. March 3rd, 2014. Invited Speaker.

Bonadonna G, Torti V, Gamba M, Giacoma C. Changes in the behavioral and singing pattern of *Indri indri* in playback experiments. III National Meeting of Research in the Parks. Parco Natura Viva. Verona, Italy, October 2nd, 2012.

Bonadonna G, Gamba M, Giacoma C, Miasa E, Ouledi A, Randrianodiasana J, Rasamimanana H, Ratsimabazafy J, Torti V. Cooperation, Development, and Research in Madagascar. Madagascar Day July 2012. Ma-My Association, Turin, Italy

Posters

Anania A, Costa F, **Bonadonna G**, Friard O, Ratsimbazafy J, Giacoma C, Gamba M. Call Usage and Acoustic Structure in *Propithecus diadema*. 11th Annual Meeting of the Ethological Society, Göttingen, Germany, February 2016

Costa F, Anania A, **Bonadonna G**, Friard O, Ratsimbazafy J, Giacoma C, Gamba M. Quantitative Analysis of the Vocal Types of *Propithecus diadema*. 11th Annual Meeting of the Ethological Society, Göttingen, Germany, February 2016

Anania A, Costa F, **Bonadonna G**, Friard O, Ratsimbazafy J, Giacoma C, Gamba M. Contextual Variation of the Vocalizations of *Propithecus diadema* in the Wild. XXII meeting European Federation for Primatologist. Roma, Italy, August 2015

Torti V, **Bonadonna G**, Ratsimbazafy J, Randrianarison RM, Giacoma C, Gamba M. Volohasy. Options for highly specialized lemur species' conservation. Primate day. Firenze, Italy, October 2014

Bonadonna G, Torti V, Gamba M, Giacoma C. Vocal and behavioral plasticity in *Indri indri* lemur in response to playback experiments. XXV conference SIE (Italian Society of Ethology), Viterbo (Roma), Italy, September 2011.

Memberships

- IPS International Primatological Society
- API Associazione Primatologica Italiana – Italian Primatological Association
- Elected as 2015 Ph.D. students' representative of the Department of Life Science and System Biology (DBIOS), University of Turin.

Certificates

- “Fundraising Lab, Applied Training on Fundraising”. University of Turin and CRT Foundation, 2016.
- “Using Geographic Information Systems in the Field of Environmental and Territorial Analyses and Management”. MIUR, Italian Ministry of University and Research, 2011.
- “Naturalistic Photography” by the Italian Naturalist Association, 2010.

Skills

Computing and Software

- Microsoft Office
- Bash command language
- Statistic: SPSS; R-studio
- GIS: ArcGIS; QGis; CLASlite
- Graphic: Photoshop; Paint.NET
- Acoustic: Praat; Sound Forge
- Genetic: GeneMapper, Cervus

Social and Management

- Excellent predisposition to interpersonal relationships
- Public speaking
- Excellent to work with others in a fast-paced, team-oriented atmosphere
- Very flexible and adaptable
- Excellent problem-solving
- Work well under pressure
- Very good planning and organizing skills

Languages

- Italian: Native speaker
- English: Fluent
- French: Fluent
- Portuguese: Good Command
- Malagasy: Merina, Basic Communication