



Nicola Giovanelli

Date of birth: 22/03/1985 | **Nationality:** Italian | **Gender:** Male | **Phone:** (+39)

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Vicolo del Mulino 18, 38050, Mezzano, Italy (Home)

● ABOUT MYSELF

I am originally from the Primiero Valley in Trentino, Italy. I have been involved in cross-country skiing since childhood and later took up orienteering, which allowed me to travel extensively and compete in two Junior World Championships.

My passion for the mountains and endurance sports naturally led me to skyrunning and trail running. Alongside my athletic career, I pursued an academic path in sports science, earning a Bachelor's degree in Sports Science from the University of Padua, a Master's degree from the University of Udine, and a PhD focused on the physiology and biomechanics of ultra-endurance activities, with a particular emphasis on trail running.

I currently live in Holzkirchen, Bavaria, where I founded [Nexthill Coaching](http://www.nexthillcoaching.com), a group of sport science professionals specializing in online endurance coaching. I also work as a coordinator for **Team La Sportiva (Trail Running)** and manage athlete sponsorships for **Petzl Running**.

● WORK EXPERIENCE

01/01/2024 - CURRENT - ZIANO DI FIEMME

ATHLETES COORDINATOR LA SPORTIVA S.P.A.

I collaborate with the marketing department in managing athletes of the International Team (mountain running). I organize logistics, conduct scouting, and act as a general consultant for the relationships between the company and sponsored athletes.

01/01/2023 - CURRENT

XC SKI INSTRUCTOR

I worked for two winters at the Alpi Giulie Ski School in Friuli Venezia Giulia. I am currently working with the Tegernsee Ski School in Bavaria.

01/06/2021 - CURRENT - TORINO, ITALY

PETZL COUNTRY MANAGER FOR ATHLETES PETZL – DINAMICHE VERTICALI SRL

Manager of the Petzl Running Hub

15/03/2016 - 31/12/2023 - UDINE, ITALY

POST-DOC IN EXERCISE PHYSIOLOGY AND BIOMECHANICS UNIVERSITÀ DI UDINE

Experience in exercise physiology and biomechanics, with a focus on trail running, uphill walking/running, pole walking, and cross-country skiing. After completing a university work placement, continued independent collaborations with the University of Udine.

01/01/2013 - 31/12/2015 - UDINE, ITALY

PHD IN MEDICAL AND BIOLOGICAL SCIENCES UNIVERSITÀ DI UDINE

My supervisors were Dr. Stefano Lazzer (stefano.lazzer@uniud.it) and Prof. Alessandro Gasparetto (gasparetto@uniud.it)

I have spent six months (January-June 2015) in USA-Colorado University, Boulder, Department of Integrative Physiology for a research project under the supervision of Dr. Rodger Kram

01/04/2005 - 30/09/2012 - PRIMIERO, ITALY

PERSONAL TRAINER, TOURIST GUIDE BRUNET HOTELS

Tourist guide in Primiero Valley (Dolomites) for trekking, biking and other sports

01/01/2001 - 31/12/2006 - PRIMIERO SAN MARTINO DI CASTROZZA, ITALY

JOINER FALEGNAMERIA F.LLI NAMI

Seasonal work during the summer and winter holidays, during school breaks

● **EDUCATION & TRAINING**

01/01/2013 - 31/12/2015 - UDINE, ITALY

PHD IN MEDICAL AND BIOLOGICAL SCIENCES (DEFENDED APRIL, 1ST 2016)- UNIVERSITÀ DI UDINE

Field(s) of study:Exercise physiology and biomechanics | **Level in EQF:** 8 | **Address:** P.le Kolbe 433100

01/11/2010 - 27/07/2012 - UDINE, ITALY

MASTER OF "SCIENZA DELLO SPORT" (SPORT SCIENCE)- UNIVERSITÀ DI UDINE

Field(s) of study:Exercise physiology, Running Biomechanics, Sport technique, Athletic training and coaching | **Final grade:** 108/110 | **Level in EQF:** 7 | **Thesis:** "Ultra endurance competitions: which factors affect the energy cost of running during a 100 km running race" | **Address:** P.le Kolbe 433100

01/10/2004 - 24/03/2009 - PADOVA, ITALY

BACHELOR OF "SCIENZE MOTORIE"- UNIVERSITÀ DI PADOVA

Field(s) of study:Sport science | **Final grade:** 96/110 | **Level in EQF:** 6 | **Thesis:** Skyrunning: training methodology and planning | **Address:** P.le Kolbe 433100

● **LANGUAGE SKILLS**

Mother tongue(s): **ITALIAN**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B1	B2	B2	B2	B2
GERMAN	A2	A2	A2	A1	A2

● **SKILLS**

Microsoft Office | Google Drive | Social Media | Internet user | Good listener and communicator | Team-work oriented | Organizational and planning skills

- **PUBLICATIONS**

Actually I have thirty-one scientific publications (see "List of Publications" attached)

[Trail Running & Ultra Trail - 3rd edition](#) 2024

[Allenarsi per un nuovo alpinismo](#) 2021

Translated from English to Italian

[Allenarsi per gli sport di montagna](#) 2021

Translated from English to Italian

[Trail Running & Ultra Trail - 2nd edition](#) 2019

Trail Running & Ultra Trail 2017

- **HONOURS AND AWARDS**

02/09/2020

Literary award "Premio ITAS" 2020 for the book "Trail Running & Ultra Trail" – 2nd edition

12/03/2015 Forum Tecnologico NIDays - Milano

Best application "Advanced research" Boscarior P, Gasparetto A, **Giovanelli N**, Lazzer S, Taboga P, Shojaei Barjuei E. –

18/02/2022 Ministero dell'Università e della Ricerca

Italian National Scientific Qualification for the position of Associate Professor (Second Level) in the Competitive Academic Sector 06/N2 – Exercise and Sport Sciences

LIST OF PUBLICATIONS (updated December 2025)

- [The impact of pole use on vertical cost of transport and foot force during uphill treadmill walking before and after a simulated trail running competition](#) Giovanelli, N. Mari, L. Pellegrini, B. Bortolan, L. D'Alleva, M. Schena, F. Lazzer, S. *Eur J App Physiol* 2025
- [The Relationship Between Training Load and Acute Performance Decrements Following Different Types of Training Sessions in Well-Trained Runners](#) D'Alleva, M. Nicolò A. Bot, F. Rebellato, M. Voltolina, S. **Giovanelli, N.** De Martino, M. Isola, M. Mari, L. Rejc, E. Zaccaron, S. Stafuzza, J. Sacchetti, M. Lazzer, S. *Int J Sports Physiol Perform*
- [The influence of prolonged aerobic exercise on cardiac, muscular, and renal biomarkers in trained individuals with obesity](#) D'Alleva, M. Sanz, J. M. **Giovanelli, N.** Graniero, F. Mari, L. Spaggiari, R. Sergi, D. Ghisellini, S. Passaro, A. Lazzer, S. *Eur J Appl Physiol* 2025
- [Women Upward-Sex Differences in Uphill Performance in Speed Climbing, Ski Mountaineering, Trail Running, Cross-Country Skiing, and Cycling.](#) Millet, G. P. Raberin, A. Faiss, R. **Giovanelli, N.** Galindo, T. Place, N. Sandbakk, O. *Int J Sports Physiol Perform*
- [Effects of 24-week Polarized Training vs. Threshold Training in Obese Male Adults.](#) D'Alleva, M. **Giovanelli, N.** Graniero, F. Billat, V. L. Fiori, F. Marinoni, M. Parpinel, M. Lazzer, S. *Int J Sports Med*
- [Do poles really “save the legs” during uphill pole walking at different intensities?](#) **Giovanelli, N.** Pellegrini, B. Bortolan, L. Mari, L. Schena, F. Lazzer, S. *Eur J Appl Physiol* 2023
- [Effects of 12-week combined training versus high intensity interval training on cardiorespiratory fitness, body composition and fat metabolism in obese male adults.](#) D'Alleva, M. Vaccari, F. Graniero, F. **Giovanelli, N.** Floreani, M. Fiori, F. Marinoni, M. Parpinel, M. Lazzer, S. *J Exerc Sci Fit* 2023
- [High-intensity interval training: optimizing oxygen consumption and time to exhaustion taking advantage of the exponential reconstitution behaviour of D'.](#) Vaccari, F. Stafuzza, J. **Giovanelli, N.** Lazzer, S. *Eur J Sport Sci* 2022
- [Pole walking is faster but not cheaper during steep uphill walking.](#) **Giovanelli, N.** Mari, L. Patini, A. Lazzer, S. *Int J Sports Physiol Perform* 2022

- [Energetics and mechanics of steep treadmill vs. overground pole walking: a pilot study.](#) Giovanelli, N. Mari, L. Patini, A. Lazzer, S. *Int J Sports Physiol Perform* 2021
- [Running power: lab based vs. portable devices measurements and its relationship with aerobic power](#) Taboga, P. Giovanelli, N. Spinazzè, E. Cuzzolin, F. Fedele, G. Zanuso, S. Lazzer, S. *Eur J Sport Sci* 2021
- [Peripheral alterations affect the loss in force after a treadmill downhill run](#) Giovanelli, N. Floreani, M. Vaccari, F. Lazzer, S. *Int J Env Res Pub Health* 2021
- [Physical capacities and leisure activities are related with cognitive functions in older adults](#) Gonnelli, F. Giovanelli, N. Floreani, M. et al. *J Sports Med Phys Fitness* 2021
- [Effects of underweight-plyometric training on the neuromuscular characteristics in professional rugby players](#) Rejc, E. Floreani, M. Vaccari, F. Giovanelli, N. Botter, A. Ganzini, A. Lazzer, S. *Gazzetta Medica Italiana* 2021
- [Walking versus cycling test: physiological responses in normobaric hypoxia](#) Giovanelli, N. Cigalotto, A. Lesa, B. Lazzer, S. *Gazzetta Medica Italiana* 2021
- [Effects of NMES pulse width and intensity on muscle mechanical output and oxygen extraction in able-bodied and paraplegic individuals](#) Gonnelli, F. Rejc, E. Giovanelli, N. Floreani, M. Porcelli, S. Harkema, S. Willhite, A. Stills, S. Richardson, T. Lazzer, S. *Eur J Appl Physiol* 2021
- [High-intensity decreasing interval training \(HIDIT\) increases time above 90% VO₂peak](#) Vaccari, F. Giovanelli, N. Lazzer, S. *Eur J Appl Physiol* 2020
- [Muscle damage and inflammatory status biomarkers after a 3-stage trail running race](#) Giovanelli, N. Lazzer, S. Cauci, S. *J Sports Med Phys Fitness* 2020
- [Defining Off-road Running: A Position Statement from the Ultra Sports Science Foundation](#) Scheer, V. Basset, P. Giovanelli, N. Vernillo, G. Millet, G. P. Costa, R. J. S. *Int J Sports Med* 2020
- [A new field test to estimate the aerobic and anaerobic thresholds and maximum parameters](#) Giovanelli, N. Scaini, S. Billat, V. Lazzer, S. *Eur J Sport Sci* 2019

- [Changes in Skeletal Muscle Oxidative Capacity After a Trail Running Races.](#) **Giovanelli, N.** Biasutti, L. Salvadego, D. Alemayehu, H. K. Grassi, B. Lazzer, S. *Int J Sports Physiol Perform* 2019
- [Do poles save energy during steep uphill walking?](#) **Giovanelli, N.** Sulli, M. Kram, R. Lazzer, S., *Eur J Appl Physiol* 2019
- [Short-term effects of rolling massage on energy cost of running and power of the lower limbs.](#) **Giovanelli, N.;** Vaccari, F.; Floreani, M.; Rejc, E.; Copetti, J.; Garra, M.; Biasutti, L.; Lazzer, S. *Int J Sports Physiol Perform* 2018
- [Effects of hydrogen rich water on prolonged intermittent exercise.](#) Da Ponte, A. **Giovanelli, N.** Nigris, D. Lazzer, S. *J Sports Med Phys Fitness* 2018
- [The metabolic costs of walking and running up a 30-degree incline: implications for vertical kilometer foot races.](#) Ortiz, A. L. R. **Giovanelli, N.** Kram, R. *Eur J Appl Physiol* 2017
- [Effects of strength, explosive and plyometric training on energy cost of running in ultra-endurance athletes.](#) **Giovanelli, N.** Taboga, P. Rejc, E. Lazzer, S. *Eur J Sport Sci* 2017
- [Changes in cardiac and muscle biomarkers following an uphill-only marathon.](#) Da Ponte, A. **Giovanelli, N.** Antonutto, G. Nigris, D. Curcio, F. Cortese, P. Lazzer, S. *Res Sports Med* 2017
- [Changes in Running Mechanics During a Six Hours Running Race](#) **Giovanelli, N.** Taboga, P. Lazzer, S. *Int J Sports Physiol Perform* 2016
- [Energetics of vertical kilometer foot races; is steeper cheaper?](#) **Giovanelli, N.** Ortiz, A. L. Henninger, K. Kram, R. *J Appl Physiol* 2016
- [Effects of the Etna uphill ultramarathon on energy cost and mechanics of running](#) . Lazzer, S. Salvadego, D. Taboga, P. Rejc, E. **Giovanelli, N.** di Prampero, P. E. *Int J Sports Physiol Perform* 2015
- [Effects of an Uphill Marathon on Running Mechanics and Lower Limb Muscles Fatigue.](#) **Giovanelli, N.** Taboga, P. Rejc, E. Simunic, B. Antonutto, G. Lazzer, S. *Int J Sports Physiol Perform* 2015

- [Factors affecting metabolic cost of transport during a multi-stage running race](#) Lazzer, S. Taboga, P. Salvadego, D. Rejc, E. Simunic, B. Narici, M. V. Buglione, A. **Giovanelli**, N. Antonutto, G. Grassi, B. Pisot, R. di Prampero, P. E. *J Exp Biol* 2014

CONFERENCE PROCEEDINGS

- *Is pole walking beneficial for optimizing the maximal uphill performance?* **Giovanelli N.**, Mari L., Patini A. and Lazzer S. 26th annual Congress of the European College of Sport Science 1-3 September 2021, Virtual Congress
- *Effects of strength, explosive and plyometric training protocol on energy cost of running in high-level ultra-marathoners.* **Giovanelli, N.**, Taboga, P., Rejc, E., Lazzer, S. 21th annual Congress of the European College of Sport Science – 6th-9th July 2016, Vienna- Austria
- *Changes in spring-mass model parameters and lower limb muscle fatigue during an uphill ultra-marathon.* **Giovanelli N**, Taboga P, Rejc E, Simunic B, Antonutto G, Lazzer S. Presentation at the 2015 Rocky Mountain Regional American Society of Biomechanics Meeting. April 17th-18th, 2015. Estes Park, USA.
- *A mechatronic system mounted on insole for analyzing human gait.* Giovanelli D, **Giovanelli N**, Taboga P, Shojaei Bariuei E, Boscarior P, Vidoni R, Gasparetto A, Lazzer S. International Conference on Robotics and Mechatronics. October 15th-17th, 2014. Tehran, Iran.
- *Factors affecting energy cost of running during an ultra-endurance race.* Lazzer S, Taboga P, Salvadego D, Rejc E, Simunic B, Narici MV, Buglione A, **Giovanelli N**, Antonutto G, Grassi B, Pisot R, di Prampero PE. *Med Sci Sports Exerc.* 2014; 46(5):S733

AWARDS

- *Best application “Advanced research”*- Boscarior P, Gasparetto A, **Giovanelli N**, Lazzer S, Taboga P, Shojaei Barjuei E. – Forum Tecnologico NIDays 2015. March 12th Milan, Italy
- *Premio Itas del libro di montagna 2020 “Trail Running & Ultra Trail”* – Trento Film Festival – **Giovanelli N**, Mulatero Editore