

## CV of the Researcher

**PAOLO BOLLELLA**

### Personal information

---

**Home address:** 7581 US Highway 11, Potsdam 13676, NY, USA

**Work address:** Clarkson University

Department of Chemistry and Biomolecular Science

Office: 214 (Lab: 101-103-216) Science Center

Potsdam, NY 13699-5810, USA

Date and place of Birth: 28/06/1989, Rome (ITALY)

Scopus Author ID: 56512306300

e-mail: [pbollell@clarkson.edu](mailto:pbollell@clarkson.edu)

Phone: +1 315 2619480



### Employment

---

Sep, 2019 – Present	<b>Clarkson University, Potsdam, NY 13699-5810, USA</b> <b>Department of Chemistry and Biomolecular Science</b> <b>Research Assistant Professor (80 % research and 20 % teaching)</b>
Oct, 2018 – Sep 2019	<b>Clarkson University, Potsdam, NY 13699-5810, USA</b> <b>Department of Chemistry and Biomolecular Science</b> <b>PostDoc in Bioelectronic devices</b> (Advisor: Prof. Evgeny Katz)
Aug, 2018 – Sep 2018	<b>Åbo Akademi, Turku, FINLAND</b> <b>Johan Gadolin Process Chemistry Centre – PCC</b> <b>PostDoc in Analytical Chemistry</b> (Advisor: Prof. Johan Bobacka)
Jan, 2018 – Jun, 2018	<b>Sapienza University of Rome, Rome, ITALY</b> <b>Department of Chemistry and Drug Technologies</b> <b>PostDoc in Biosensor Group</b> (Advisor: Prof. Riccarda Antiochia)

### Education

---

Nov 2014- Dec 2017	<b>Sapienza University of Rome, Rome, ITALY</b> <b>PhD Degree in Pharmaceutical Sciences with specialization in Electroanalytical Chemistry</b> Supervisor: Prof. Riccarda Antiochia Co-Supervisor: Prof. Lo Gorton Department of Chemistry and Drug Technologies
Jan 2012- May 2014	<b>Sapienza University of Rome, Rome, ITALY</b> <b>MSc Degree in Analytical Chemistry</b> Supervisors: Prof. Marta Letizia Antonelli, Prof. Francesco Botrè

Co-Supervisor: Prof. Gabriele Favero  
Department of Chemistry

Oct 2008-  
Jan 2012

**Sapienza University of Rome , Rome, ITALY**  
**BSc Degree in Chemistry**  
Supervisor: Prof. Emilio Bottari  
Department of Chemistry

Oct 2006-  
Oct 2013

**Conservatory of Music “S. Cecilia”, Rome, ITALY**  
Diplome in Saxophone  
Supervisor: Prof. Enzo Filippetti

### **Research activities**

---

Oct 2018-  
Present

**Clarkson University, Potsdam, NY, USA**  
Advisor: Prof. Evgeny Katz  
*Research Topic:* Signal-Switchable Bioelectronics and Ezymatic  
Boolean Logic Gates

Aug 2018-  
Sep 2018

**Åbo Akademi, Turku, FINLAND**  
Advisor: Prof. Johan Bobacka  
*Research Topic:* Fructose dehydrogenase (FDH) based self-charging  
biosupercapacitor  
Department of Analytical Chemistry

Jan 2018-  
Jun 2018

**Sapienza University of Rome, Rome, ITALY**  
Advisor: Prof. Riccarda Antiochia  
*Research Topic:* Lactate Biosensor based on Microneedles Electrodes  
Department of Chemistry and Drug Technologies

Nov 2014-  
Dec 2017

**Sapienza University of Rome, Rome, ITALY**  
**Lund University, Lund, SWEDEN (9<sup>th</sup> Apr 2015-3<sup>rd</sup> Sept 2015,  
22<sup>nd</sup> Feb 2016-14<sup>th</sup> Jul 2017)**  
Supervisors: Prof. Riccarda Antiochia, Prof. Lo Gorton  
*Thesis Title:* Biosensors & Enzymatic Fuel Cells based on Direct  
Electron Transfer of Dehydrogenases: Characterization and  
Applications  
Department of Chemistry and Drug Technologies  
Department of Analytical Chemistry/Biochemistry and Structural  
Biology, Center for Molecular Protein Science (CMPS)

May 2014-  
Oct 2014

**Sapienza University of Rome, Rome, ITALY**  
**Project student (scholarship)**  
Supervisor: Prof. Marta Letizia Antonelli  
*Research topic:* Evaluation of New Cholinium-Amino Acids based  
Room Temperature Ionic Liquids (RTILs) as Immobilization Matrix  
for Electrochemical Biosensor Development  
Department of Chemistry

Feb 2013-  
May 2014

**Sapienza University of Rome, Rome, ITALY**  
**MSc thesis**

Supervisor: Prof. Marta Letizia Antonelli, Prof. Francesco Botrè  
Co-supervisor: Prof. Gabriele Favero  
*Thesis title:* A New Biosensor to study the interaction between liposomes and steroidal hormones  
Department of Chemistry, National Antidoping Group (FMSI)

Feb 2011-  
Nov 2011

**Sapienza University of Rome, Rome, ITALY**  
**BSc thesis**

Supervisor: Prof. Emilio Bottari  
*Thesis title:* Evaluation of Chelating properties of Humic Acid  
Department of Chemistry

### **Supervision of MSc, BSc and PhD students**

---

**Marinella Marziano**, Department of Chemistry and Drug Technologies, Sapienza University of Rome  
**Claudia Orabona**, Department of Chemistry and Drug Technologies, Sapienza University of Rome  
**Luca Medici**, Analytical Chemistry, Lund University  
**Parvin Rafighi**, PhD student, Analytical Chemistry, Lund University  
**Daniela Stevar**, Department of Chemistry and Drug Technologies, Sapienza University of Rome  
**Laura Lambertini**, Department of Chemistry and Drug Technologies, Sapienza University of Rome  
**Leonardo Cioqli**, Department of Chemistry, Sapienza University of Rome  
**Begi Petriti**, Department of Biotechnology, Sapienza University of Rome  
**Yaroslav Filipov**, Department of Physics, Clarkson University  
**Madeline Masi**, Department of Chemistry and Biomolecular Science, Clarkson University  
**Tobias Lennard Karschuck**, Department of Biomedical Engineering, Aachen University  
**Madhura Bellare**, Department of Chemistry and Biomolecular Science, Clarkson University  
**Vasantha Krishna K Kadambar**, Department of Chemistry and Biomolecular Science, Clarkson University  
**Daniel Massana**, Department of Chemistry and Biomolecular Science, Clarkson University  
**Paulina Kulpa**, Department of Chemistry and Biomolecular Science, Clarkson University  
**Dilan Rashid**, Department of Biomedical Engineering, Aachen University

### **Teaching Activity & PhD commission**

---

2019	<b>Commission Member</b> of PhD defense proposal. Candidate: Yaroslav Filipov
2019	<b>Commission Member</b> of PhD defense proposal. Candidate: Abraham S. Finny
2019	<b>Commission Member</b> of PhD defense. Candidate: Devika Channaveerappa
2019	<b>Separation &amp; Electrochemistry</b> , Undergraduate/Graduate Course Department of Chemistry and Biomolecular Science, Clarkson University
2015	<b>Sensors &amp; Biosensors</b> , Lecturer on Electrochemical, Optical, Piezoelectrical and FET sensors and biosensors; Lab assistant. Department of Chemistry, Sapienza University of Rome
2014	<b>Sensors &amp; Biosensors</b> , Lecturer on Electrochemical, Optical, Piezoelectrical and FET sensors and biosensors; Lab assistant. Department of Chemistry, Sapienza University of Rome

### **International Scientific Conferences and Seminars**

---

March 2014	1) Workshop QCM-D “Quartz Crystal Microbalance with Dissipation Monitoring” and MP-SPR “Multi Parametric Surface Plasmon Resonance” two complementary techniques and their application (Centro ENEA “La Casaccia”, Rome).
April 2014	2) Cost Thematic Workshop, Catania (28-30/04/2014).
June 2014	3) VI Youth Chemist Conference, Sapienza University of Rome, Rome
September 2014	4) XXV National Conference of the Italian Chemical Society, Rende (CS).
June 2015	5) BES 2015 “XXIII International Symposium on Bioelectrochemistry and Bioenergetics, Malmö (Sweden).
September 2015	6) XXV National Conference of the Italian Chemical Society (Analytical Chemistry Division), Trieste (TS).
September 2015	7) Internal Research Workshop at the Department of Chemistry and Drug Technologies, Sapienza University of Rome, Rome.
September 2015	8) BILOBA Workshop Rome.
November 2015	9) SMCBS, Pułtusk (Poland).
May 2016	10) Micronano System Workshop, Lund (Sweden).
May 2016	11) Biosensor 2016, Göthenborg (Sweden).
June 2016	12) ESEAC 2016, Bath (United Kingdom).
August 2016	13) 67th Annual Meeting ISE, The Hague (Netherlands).
September 2016	14) XXVI National Conference of the Italian Chemical Society (Analytical Chemistry Division), Gaiardini Naxos (ME).
September 2016	15) X PhD School in Analytical Chemistry, Rome “Villa Benedetta” (Italy).
March 2017	16) First European / 10th German BioSensor Symposium, Potsdam (Germany).
July 2017	17) BES 2017 “XXIV International Symposium on Bioelectrochemistry and Bioenergetics”, Lyon (France).
August 2017	18) XIX Euroanalysis, Stockholm (Sweden).
September 2017	19) XXVI National Conference of the Italian Chemical Society, Paestum (SA).
November 2017	20) 8th BEMM Symposium of BEMM PhD School, Rome.
December 2017	21) 1st Mini-Workshop on Bioelectrochemical Sensing, Sapienza University of Rome, Rome.
June 2018	22) Biosensor 2018, Miami, FL, USA
September 2018	23) 69 <sup>th</sup> ISE Annual Meeting, Bologna, Italy
May 2019	24) 32 <sup>nd</sup> Annual CAMP Meeting, East Syracuse, NY, USA

June 2019	25) GRC Bioelectronics, Andover, NH, USA
June 2019	26) 42 <sup>nd</sup> NERM ACS Conference, Saratoga Springs, NY, USA ( <b>Session Chair:</b> Bioelectronics & Bionanotechnology)

## **Reviewing & Editor activity**

---

I am a reviewer for ~**30 Journals** edited by Elsevier, Wiley, Royal Society of Chemistry (RSC), MDPI such as Biosensor & Bioelectronics, Journal of Power Sources, Electrochimica Acta, Electroanalysis, ChemElectroChem, Sensors and Actuators B: Chemical, Analytical Methods and Chemical Communications.

I am a reviewer of project proposals for the Czech Science Foundation (in Czech “Grantová agentura České republiky – GACR”).

I am guest editor of a SI entitled “Enzymatic Electrochemical Biosensors” in Biosensors MDPI (CiteScore: 2.83). I am guest editor of a SI entitled “Wearable/Implantable Enzymatic Bioelectronic Devices” in Biosensors MDPI (CiteScore: 2.83). I am guest editor of a SI entitled “Biosensors – Recent Advances and Future Challenges” in Sensors MDPI (IF 3.031).

I wrote the editorial of a SI in ChemElectroChem (IF 4.446) honoring Prof. Gorton’s 70th birthday. The SI is devoted to Bioelectrochemistry, aiming to summarize the state-of-art regarding Electrode design for an efficient electron transfer in Bioelectrochemistry and Photobioelectrochemistry: from Fundamentals to Applications

## **International collaborations**

---

Prof. Artem Melman, Clarkson University, USA  
 Prof. Kirill Alexandrov, Queensland University of Technology, Australia  
 Prof. David Blaauw, University of Michigan, USA  
 Prof. Maher Abo Hachem, DTU University, Denmark  
 Prof. Dónal Leech, National University of Ireland, Galway  
 Prof. Roland Ludwig, BOKU University, Austria  
 Prof. Kenji Kano, Kyoto University, Japan  
 Prof. Anthony Cass, Imperial College London, UK  
 Dr. Maria Gabriela Almeida, Nova Universidade de Lisboa, Portugal  
 Dr. Cedric Dicko, Lund University, Sweden  
 Dr. Daniel Strand, Lund University, Sweden

## **Organization of scientific conferences/symposium**

---

Organization of 1st Mini-Workshop on Bioelectrochemical Sensing, Rome 19/12/2017.

Organization of 8th BEMM Symposium of BEMM PhD School, Rome 20/11/2017.

Helper Student for BES 2015 “XXIII International Symposium on Bioelectrochemistry and Bioenergetics”, Malmö (Sweden), (14-18/6/15).

Helper Student for “XIX Euroanalysis”, Stockholm (Sweden), (28/8-1/9/2017).

Helper Student for “69<sup>th</sup> ISE Annual Meeting”, Bologna (Italy), (2-7/9/2018).

## **Personal Competences**

---

- Independent in research project designing, planning, executing experimental work, critical data analysis in relevant field, eager to learn new topics.
- Self-regulating in scientific paper writing, editing and reviewing.
- Nicely fitted in collaborative work and open to make innovative collaboration.

### **Membership in scientific societies**

---

American Chemical Society ACS  
 International Society of Electrochemistry ISE  
 Bioelectrochemical Society BES  
 Italian Chemical Society SCI

### **Awards and Scholarship**

---

September 2014	1) Fellowship to join to XXV National Conference of the Italian Chemical Society, Rende (CS).
September 2015	2) Fellowship to join to XXV National Conference of the Italian Chemical Society (Analytical Chemistry Division), Trieste (TS).
September 2015	3) Award for the best Poster in “Electroanalytical session” during XXV National Conference of the Italian Chemical Society (Analytical Chemistry Division), Trieste (TS).
September 2016	4) Fellowship to join to XXVI National Conference of the Italian Chemical Society (Analytical Chemistry Division), Giardini Naxos (ME).
December 2016	5) Granted with Student Mobility Fellowship (project: UNIPHARMA-GRADUATES) within Erasmus+ program (2016/2017).
September 2017	6) Fellowship to join to XXVI National Conference of the Italian Chemical Society, Paestum (SA).
December 2017	7) PostDoc Fellowship for 5 months (ending May 2018) awarded by “Circolo Antico Tiro a Volo”, Rome.
February 2018	8) Awarded with Johan Gadolin PostDoc Fellowship at Åbo Academy for 2 months (ending September 2018)
March 2019	9) Awarded with Minerva Prize for the research during the PhD studies (Merit Mention)
March 2020	10) Awarded with 2020Travel Grant Sensors MDPI

## Citation report

---

### *According to Scopus*

Citation = 590

H-index = 13

Citation per year (scientific development)

### *According to Google Scholar*

Citation = 707

H-index = 14

I10-index = 19

## Reference

---

Professor Evgeny Katz, my Advisor  
Department of Chemistry and Biomolecular Science  
Clarkson University  
Potsdam, NY, USA  
Email: [ekatz@clarkson.edu](mailto:ekatz@clarkson.edu)

Professor Lo Gorton, my PhD Co-Supervisor  
Department of Analytical Chemistry / Biochemistry and Structural Biology  
Center for Molecular Protein Science (CMPS)  
Lund University, Sweden  
Email: [lo.gorton@biochemistry.lu.se](mailto:lo.gorton@biochemistry.lu.se)

Professor Johan Bobacka, my PostDoc Advisor  
Johan Gadolin Process Chemistry Centre – PCC  
Department of Analytical Chemistry  
Åbo Akademi, Turku, FINLAND  
Email: [jbobacka@abo.fi](mailto:jbobacka@abo.fi)